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## Preface

These refereed proceedings contain all papers that have been accepted after anonymous review and their subsequent revisions by author(s) for presentation at the 13<sup>th</sup> Annual World Congress of the Academy for Global Business Advancement (AGBA), on November 26 - 28, 2016 and the 2016 AGBA—Indonesia Chapter's Inaugural Conference on August 3 - 4, 2016 that are being hosted by the Faculty of Economics and Business, Universitas Sebelas Maret, Indonesia.

These refereed proceedings have been edited by Dana-Nicoleta Lascu, (University of Richmond, USA), Eric Werker, (Simon Fraser University, Canada), Gary L. Frankwick, (University of Texas at El Paso, USA), Irwan Trinugroho, (Universitas Sebelas Maret, Indonesia), and Zafar U. Ahmed (Academy for Global Business Advancement, USA).

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AGBA also wishes to extend its heartfelt thanks to Conference Organizing Committee at the Faculty of Economics and Business Universitas Sebelas Maret, Indonesia for organizing two great conferences.

We place on record our sincere thanks for your participation and support, and look forward to having you with us next year at AGBA's 14<sup>th</sup> Annual World Congress.

Sincerely,

Dana-Nicoleta Lascu  
Eric Werker  
Gary L. Frankwick  
Irwan Trinugroho  
Zafar U. Ahmed

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## THE RELATIONSHIP BETWEEN INTEREST RATE AND STOCK PRICE: EMPIRICAL EVIDENCE FROM COLOMBO STOCK EXCHANGE

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### Abstract

This study examines the relationship between stock price and the interest rate during the period from July 2012 to December 2015. Average daily stock prices calculated by Colombo Stock Exchange (CSE) and Sri Lanka Interbank Offer Rates (SLIBOR) are used as dependant variable and independent variable respectively. Accordingly, All Share Price Index (ASPI) and the Standard of CSE is used to analyze the overall impact of interest rate on stock prices whereas Standard and Poor Price Index (S & P) of CSE is used to measure the relation between stock prices of selected companies (Blue Chips) and interest rate. Regression is mainly used to examine the relation between stock prices and interest rates. As theory suggest, the study finds that both share prices reflected by ASPI and S&P negatively correlate with the interest rate. The findings urge policy makers and other interested parties to assess the impact of interest rate as a significant macroeconomic variable.

**Keyword:** *All Share Price Index (ASPI), Standard and Poor Price Index(S&P), Sri Lanka Inter Bank Offer Rate (SLIBOR), Stock Price, Interest Rate*

### Introduction

Theory suggests that there is a negative relationship between the interest rate and the stock process in the financial markets. The policy makers and the other relevant investigators are attempting to understand the relationship of this dynamic interaction among the interest rate and the stock price. This study examines the dynamic relationship between interest rate and stock prices in order to identify the impact of interest rate changes on stock prices based Colombo Stock Exchange. Sri Lanka is an emerging market and therefore, it is worthwhile to examine whether impact of interest rate changes on stock prices is negative as the theory says or any other relation thus asking the main research question as what kind of relation can be seen between stock price as the main indicator of capital market in Sri Lanka and the macroeconomic variable of interest rate. Hence, the objective of the research study is to assess the nature of relation that exists between interest rate and stock prices on the ground that the outcome would be of value in terms of economic policy decisions are concerned.

Investors in financial markets are highly concerned about the interest rate as it is a major determinant of return on investment. Therefore, investors in the financial markets take interest rate into account when making investment dictions. Despite the fact that investors might have different objectives of investment, in general they try to maximize the returns while minimizing the risk of investment. Research has found that investments in fixed income securities and in equity securities are common vehicles for most of retail investor despite the fact that sophisticated financial instruments are available in the market. Therefore, it could be assumed that majority of investors either chose fixed income investment or equity investment. Interest rate can be regarded as a major variable that influences such investment decisions as well because investors can easily switch between equity investment and fixed income securities.

## Literature Review

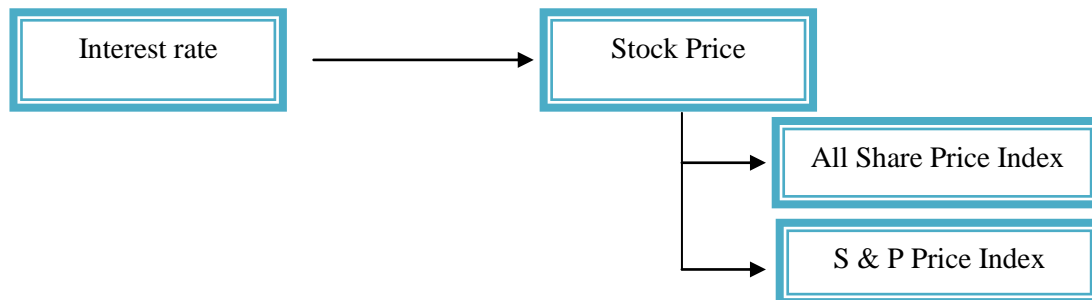
Finance theory explains interest rate as a measurement of time value of money which is one of the main determinants in stock prices. It plays a major role in any economy as a key macroeconomic variable defined as the cost of money. It is argued that any change in interest rate can cause difficulty for the investors and can affect the profitability of firms thereby fluctuating stock prices due to any change in this variable (Amarasinghe, 2015). Modern financial theory assumes that any firm generates a stream of future cash flows and the stock price of that firm is equal to the present value of all expected future cash flows discounted at the appropriate discount rate (Pablo Moya-Martínez *et al*, 2015). Therefore, interest is embedded in the value of stocks as it is used to discount the cash flows. Cash flows are attractive for investors in determining the return as it is already realized and more realistic in terms of profitability. Pablo Moya-Martínez *et al* (2015) explain the ways how interest rate influences stock prices. Accordingly, interest rates are said to influence stock prices through two primary channels. First, movements in interest rates have a direct impact on the discount rate used in equity valuation. Secondly, interest rate changes affect firms' expectations about future cash flows by altering the cost of financing, mainly in the highly geared companies. Therefore, it can be argued that interest rates a key determinant of stock prices and in turns on the returns on investment.

## Methodology

Data required for the study was collected from CSE and published data by the central bank of Sri Lanka about interest rates. Values of daily ASPI and S&P of CSE were extracted for the period from July 2012 to December 2015 as dependant variables. Sri Lanka Inter Bank Offer Rate (SLIBOR) was taken as the independent variable with the main argument that interest rates can be hypothesized to influence stock prices.

### Conceptual Framework

Study of the relation between interest rate and the stock prices can be explained as follow;



**Figure 1 Conceptual Framework**

For the purpose of investigating the relation between the interest rate and the stock price has are based on the variable of dependent and independent. There are two dependent variables explain such as ASPI and S&P. The changes in the stock prices have been evaluated through the ASPI and S&P price indexes.

### 1. Development of Hypotheses

In order to find the relationship between interest rate and stock prices the following hypothesis is formed.

H0:  $\beta_i = 0$ , the null hypothesis

H1:  $\beta_i \neq 0$ , alternative hypothesis

$\beta_i$  = coefficients of interest rate

Accordingly, hypothesis is explained in the following way.

H0: There is no relationship between interest rate and the stock prices  
H1: There is a relationship between interest rate and the stock price

Based on the results of the research most of the new investors can take their investing decisions. They can manage their positions and portfolios, if they can use news on interest rate changes as reliable information can be gathered from the research. And also it will benefit for the Investment analysts, fund managers and marginal investors can devise fundamentals based investment strategies.

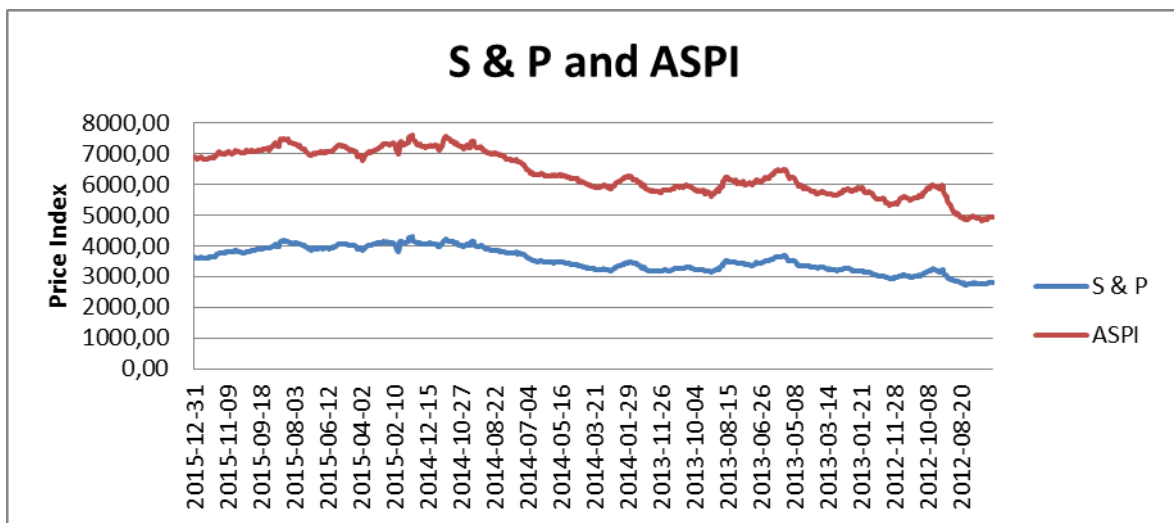
## 2. Data Analysis and Discussion

The data used in this study was sampled on a daily basis over the period from July 2012 to December 2015. The relationship in between the interest rate and the stock process were analyzed using the correlation and the regression of the variables. Simple linear regression was used to analyze the relationship between the variables individually.

S & P and ASPI prices indexes have the higher volume numbers in stock markets. When the investor is deciding to invest in the stock market investors consider the stock prices and the interest rate in the market for better decision on the investment.

### a. Numeric Summary

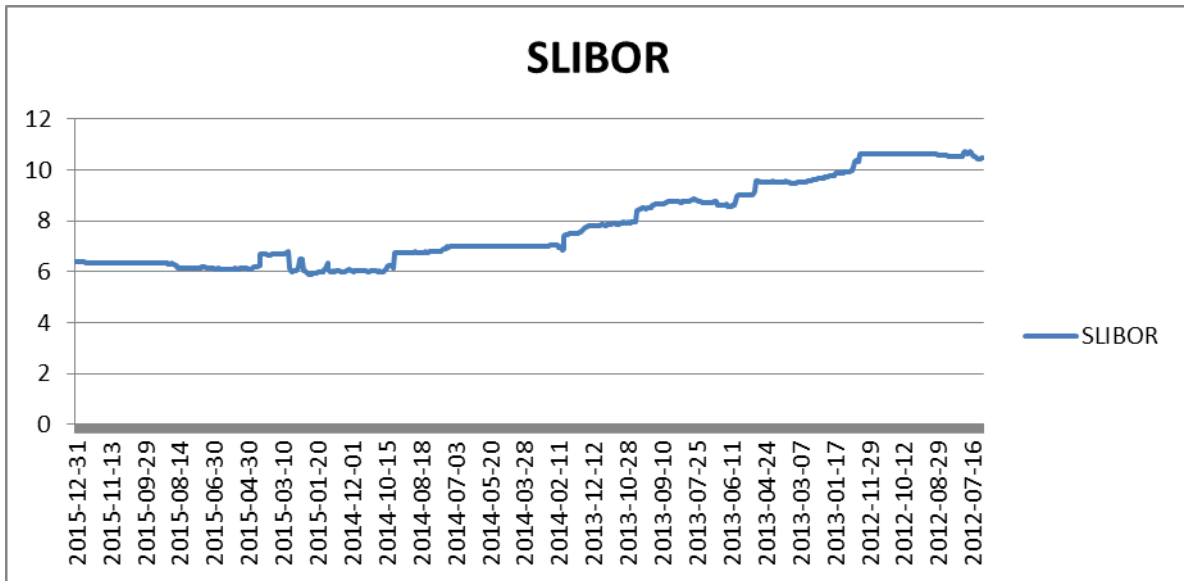
Following figure 2 explains the behavior of stock prices index (S & P and ASPI) in Colombo stock market in Sri Lanka.



**Figure 2: Stock Price Indexes**

Sri Lanka Inter Bank Offer Rate (SLIBOR) for the selected time period has been growing up. Figure 3 explains the behavior of SLIBOR





**Figure 3: Sri Lanka Inter Bank Offer Rate (SLIBOR)**

Based on the above two figures shows that SLIBOR has been grow up and the S & P and ASPI has been gone down. In the senior explain that the SLIBOR and S & P and ASPI have the negative relationship.

**b. Correlation**

Correlation explains the strength of the relationship in between the variables. Table 1 explains the correlation among the variables.

**Table 1: Correlation among variables**

Correlations				
		S & P	ASPI	SLIBOR
S & P	Pearson Correlation	1	.987 <sup>**</sup>	<b>-.859<sup>**</sup></b>
	Sig. (2-tailed)		.000	.000
	N	816	816	816
ASPI	Pearson Correlation		1	<b>-.882<sup>**</sup></b>
	Sig. (2-tailed)			.000
	N		816	816
SLIBOR	Pearson Correlation			1
	Sig. (2-tailed)			
	N			816

Based on the results explain that there are negative relationship among the interest rate and the stock prices. Correlation among the S & P and SLIBOR in -0.859, explain that the variables have the strong negative relationship because of the correlation value is closer to the -1. And also ASPI and the SLIBOR also display the strong and negative relationship. The relationship in between S & P and ASPI are strong and positive is 0.987. The conceptual model and the variables of the model are significant due the sig. value of the model is .000 is less than the 0.05. The negative relationships explain that when the interest rate increases investors will invest their money in deposits, debentures and treasury bills. So the price of the stocks will be decrease. When the prices of the stocks increase the interest rate of the deposits

will decrease. Based on the analysis of the data the relationship between stock and the price and the interest rate is highly negative.

**c. Regression**

Simple linear regression has been used to explain the regression among the variables due to the two dependent variables in the conceptual model. S & P and ASPI are the dependent variables on the independent variable of SLIBOR. Table 2 gives the model summary of price index and LIBOR.

**Table 2: S & P Price Index and SLIBOR**

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.859 <sup>a</sup>	.738	.737	203.64905		
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	5179.621	35.119		147.489	.000
	SLIBOR	-210.983	4.411	-.859	-47.833	.000

Predictors: (Constant), SLIBOR

Dependent Variable: S & P

The variables of independent are significant because of less value than the 0.05 significant level. The model is significant and be acceptable. According to the model explain the R<sup>2</sup> is 73.8%. Model explains the efficiency of the variable by 73.8%. As the R<sup>2</sup> is having the higher value, mode is more significant and efficient. The relationship between SLIBOR and S & P price index is negative and significant. Based on the results estimated model can be formed as follows and the data output of the model is given in table 3.

$$Y^{\wedge} = 5179.621 - 210.983_{(S \& P)}$$

**Table 3: ASPI and SLIBOR**

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.882 <sup>a</sup>	.778	.778	334.60825		
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	9393.161	57.702		162.787	.000
	SLIBOR	-386.891	7.247	-.882	-53.384	.000

a. Predictors: (Constant), SLIBOR

b. Dependent Variable: ASPI

Based on the results of the simple linear regression, model is significant and acceptable due to the sig. value is less than 0.005.  $R^2$  is 77.8% and the efficiency of the model of the variables is highly efficient. The relationship among the variable are significant and highly negative. Efficiency of the model explains by the 77.8%. Estimated model for the regression as follows;  

$$\hat{Y} = 9393.161 - 386.891_{(ASPI)}$$

**d. Hypothesis Testing**

Research hypothesis testing was formulated as follows,

$$H_0: \beta_{i1} = \beta_{i2} = 0$$

$$H_1: \beta_i \neq 0$$

$\beta_{i1}$  = S & P Price Index ,  $\beta_{i2}$  = ASPI

Based on the regression discussed in each dependent variables and the correlation of the variables can be summarized as follows in the table 4.

Table 4: Decision Table

H0	B	P value	Decision	Correlation	Conclusion
$\beta_{i1} = 0$	$\beta_1 \neq 0$	0.000	Reject H0	-0.859	There is negative relationship between S & P and SLIBOR
$\beta_{i2} = 0$	$\beta_2 \neq 0$	0.000	Reject H0	-0.882	There is negative relationship between ASPI and SLIBOR

**CONCLUSION**

Analyzed data conclude that there is a negative relationship in between interest rate and the stock price based on the data on daily basis over the period from July 2012 to December 2015. Model of the variables are significant and the acceptable. Results explain the high efficiency of the variables of both dependent variables. Regression and the correlation of the variable explain the higher negative relationship of the variables. Based on the evidence of results analyzed can be conclude that there is a strong negative relationship between stock price and interest rate.

**Limitation of The Research**

There might be some obstacles in collecting relevant needed data for this study and some of this are as follows.

- There is only few previous research has been done based on the Sri Lankan market
- Time factor is another serious constraint.

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**THE IMPACT OF OIL PRICE FLUCTUATION ON THE STOCK RETURNS OF  
FOOD, BEVERAGE, AND PHARMACEUTICAL COMPANIES LISTED ON  
INDONESIA STOCK EXCHANGE**

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**Abstract**

This research aims to examine and to analyze the present of abnormal stock returns of food, beverage and pharmacy companies listed on Indonesia Stock Exchange (IDX) before and after decreasing and increasing oil price announcements. Besides, the research also examines the differences on the abnormal stock returns before and after the announcements. The method used in this research is by computing and processing abnormal return data using market model and t test to examine the differences before and after the announcements. The results is that all hypotheses are accepted. There are abnormal stock returns following the announcements of increasing and decreasing oil prices issued by government. Besides, there are also the differences on abnormal stock returns before and after the announcements. Investors should be careful to absorb the information spread in the market in order to avoid mistakes in making decisions.

**Keywords:** *Abnormal Returns, Oil Price, IDX*

**Introduction**

Oil fuel has a big influence on Indonesia economy. It bring some effects on every companies' activities. Yet, the use of it in each company is different. Manufacture companies use it to transform raw materials into ready-to-sell goods requiring more than non-manufacture companies. The oil fuel remains as one of costs for companies. So, if the price of oil becomes higher, the cost to produce goods is to do so.

This also happens in a capital market. An increase of oil prices has an effect on stock trading activities including stock volumes and stock prices. The market will respond every single change on oil prices either an increase or a decrease. It can quickly or slowly respond to the information about the oil prices. It will quickly respond to every event which is crucial to economic condition. Yet, it will slowly respond to an event which has no direct effect on the country's economy. Investors perform investment activities aiming to generate returns by considering the effects of macroeconomic variables such as inflations, the increase of oil prices, and exchange values on stock prices in a capital market in Ghana (Kuwornu, 2012)

According to Mackinlay (1997), economists are often asked to measure the impact of economic events on companies' value. It seems difficult, but a measure can be easily developed by using event study. By using financial data in the market, the event study can measure the impact of specific events on companies' value. The use of it comes from the fact that given rationality in the market, the impact of the events will immediately reflect on stock prices. The measurement of the impacts of economic events uses stock prices observed in relatively short period. Yet, the direct impacts on productivities may require the same months or years of an observation.

The event study has many implementations on all fields. In the research of accounting and finance, the event study has been applied for varieties from big economic events and specific

companies. Examples of economic events and specific companies are merger and acquisition (M&A), earning disclosure, issuing new bonds and stocks, and an announcement of economic variables such as trade deficit. An example of event study used in the fields of law and economics is to measure the impact of environmental changes related to the set-up on companies' value (William Schwert, 1981) and in the case of legal debts, the event study is used to assess the damage (Mark Mitchell and Jeffry Netter, 1994).

Ray Ball and Philip Brown (1968) and Eugene Fama (1969) introduced information contents of earning disclosures, and Fama researched the impact of stock splits after removing the simultaneous impacts of an increase in dividends. The focus on this event-study research is to study abnormal returns during the announcements of oil prices.

The event-study research about the increase in oil prices in Indonesia has been done by some researchers. Ramadhan F.S. (2013) studied the effects of an increase in oil prices in 2013 on stock investments by using the event-study method in 12 automotive and component companies listed on Indonesia Stock Exchange. The result showed that the examination of abnormal stock returns and trading volume activities leads to a conclusion that the average abnormal returns during the days of a price increase describes a significant difference, but in the trading volume activities, there is no significant different. However, Suparsa, I Made Joni and Ratnadi, Ni made Dwi (2013) researched the abnormal returns of LQ45 stocks in IDX in relation to the announcement of an increase in oil prices in 2013. The result showed that there is no difference on trading volume activities and abnormal returns related to the announcement. Also, a research undertaken by Ningsih, E.R and Cahyaningdyah, Dwi (2014) showed that there is no significant different on abnormal stock returns before and after the announcement of an increase in oil prices on 22 June 2013, and there is a significant difference on average trading volume activities before and after the announcement.

The result of a study done by Astuti (2006) was that there is no difference on abnormal returns related to the announcement of an increase in oil prices in 2005. The result of a study done by Riskin (2008) showed that the announcement of an increase in oil prices in 2008 gives no effect on abnormal returns. Yet, a research undertaken by Paultje (2001) stated that market reactions before and after the event of an increase in oil prices causes a significant different on abnormal returns, but there is no significant effect on trading volume activities. The results of studies about abnormal returns during an increase of oil prices mentioned above are still different. Therefore, the influence of the announcement of an increase and a decrease in oil prices on stock returns is important to be examined.

This research examines and analyzes the existence of abnormal stock returns during the event of an increase and a decrease in oil prices in food, beverage and pharmacy companies in IDX, the different effect of the changes in oil prices on stock returns of food, beverage and pharmacy companies in IDX both before and after the announcement of an increase and a decrease in oil prices, the difference in stock returns of food, beverage and pharmacy companies in IDX before and after the announcement of an increase and a decrease in oil prices.

In this research, it is expected that the research can deliver information to companies' management in order to identify the impact of the announcement on their stock returns, so that it can be consideration in decision-making process, can help investors put investments in the right companies and being able to thoroughly see the prospect of companies' growth in the future, and can be a reference to do another research.

## THE CRITICAL REVIEW

### a. The Event Study

According to Fama (1991) the event study is a part of the efficient market hypothesis theory. The event study is a study to examine semi-strong market efficiency. Besides, there are also weak market efficiency and strong market efficiency.

The events that become the research focus can be classified into several types, as follows:

- Conventional Event
- Cluster Event
- Contingent Event
- Relevant and Series Event

### b. Stock Return

According to Jogiyanto (2000), return is an output that is gained from investment. The investors' goal in making investments is to maximize returns without ignoring risks from investments. Return is one of factors that motivate investors to invest as well as a yield for the courage to take risks of investment. Return earned by investors in the market is classified into two types which are current income and capital gain/loss. Capital gain (loss) is a difference on profit (loss) experienced by shareholders because the current price of stocks is relatively higher (lower) than the previous price of stocks. (Tandelilin, 2001:41).

Return can be in the form of real return that is already realized or expected return that is not yet realized but expected to realized in the future. Real return is really important because it is used as one of firm's performance measurements and as a basis to determine expected return and risk in the future. Expected return is return which is used to make investment decision. (Jogiyanto, 2000:107).

### c. Abnormal Stock Return

Information of an event is published as an announcement (Jogiyanto, 2009). Information is all good news inside or outside the capital market that is received by investors and is a matter that can be used as a basis or a reference to decision making. In this research, information that is used for the event is the published information, particularly regarding to the announcement of a decrease and an increase in oil prices. If the announcement of an increase in oil prices delivers information, it is said that the event has information content. Conversely, if the announcement of an increase in oil prices delivers no information, it is said that the event has no information content. According to Jogiyanto (2009), the event study is mostly used to examine market reaction to an event or an announcement. The event study is also called residual analysis or abnormal performance index test or market reaction test.

A model used to capture stock movement in this research is the market model which explains that return of a stock is influenced by market return, where the effect of market is equal to all stocks. The research is based on 10-day observation of the market during the event, which is 5 days before the event ( $t-1$  to  $t-5$ ) and 5 days after the event ( $t+1$  to  $t+5$ ).

### The Methodology of Abnormal Return Calculation

#### a. Calculating Abnormal Return Using Model 1 “Mean Adjusted Model”

Formula:

$$R_i \text{ Daily} = P_t - P_{t-1} / P_{t-1}$$

$$E(R_i) = R_i(\text{estimation period}) / t$$

$$\text{Abnormal Return (RTN)} = R_i - E(R_i)$$

#### b. Calculating Abnormal Return Using Model 2 “Market Model”

There are two steps to calculate abnormal return using Market Model:

- 1) Forming expectation model using realized data over estimated period. Calculating return with estimated period. Estimated period has been determined before event-observed period. The research uses estimated period 90 days before observed period, which is from July to October 2015. Estimated period takes 90 days because that range of time can be used to estimate market return before the event.
- 2) Using expectation model to estimate expected return during observed period (period before and after the oil price increase, which is  $t-5$  to  $t+5$ ).

#### Formula to calculate:

$$r_m = \text{IHSG}_t - \text{IHSG}_{t-1} / \text{IHSG}_{t-1}$$

Alpha can be taken from calculating intercept value of market return ( $r_m$ ) to stock return ( $r_i$ ), while Beta can be taken by defining the slope of market return ( $r_m$ ) to stock return ( $r_i$ ).

#### c. Calculating abnormal return using Model 3 (Market Adjusted Model)

Market adjusted model follows the concept that the best predictor to estimate return of a stock is a market return index at the moment by using estimated period to form estimation model because an estimated stock return is identical to a market return index.

Market adjusted model formula:

$$\text{RTN} = R_i - r_m$$

Description:

RTN : Abnormal Return

$R_i$  : Return of stock  $i$

$r_m$  : Return of Market

### Previous Studies and Hypothesis Construction

#### a. Abnormal Return during The Announcement of A decrease and An Increase in Oil Prices.

Paultje (2001) undertook a research and said that there is market reaction to the announcement of a decrease and an increase in oil prices with a significant difference on abnormal return.

A Kuwornu's research (2012) stated that the macroeconomic variable, oil prices, can effect on market stock return in Ghana Stock Exchange in 1992-2008. The increase in oil prices declined stock return in Ghana in 1992-2008.



Theoretically, an information content of an event will effect on stock prices in capital market and then influence stock return. Based on that explanation, a hypothesis can be constructed as follows:

H1: There is abnormal return during the announcement of a decrease and an increase in oil prices.

1. There Is A Difference in Abnormal Return before and after An Increase and A Decrease in Oil Prices

Paultje (2001) did an event-study research about an increase in oil prices and said that there is market reaction before and after the event of an increase in oil prices with a quite significant difference in abnormal return

A Kuwornu's research (2012) stated that the macroeconomic variable, oil prices, can effect on market stock return in Ghana Stock Exchange in 1992-2008. The increase in oil prices declined stock return in Ghana in 1992-2008. However, in Indonesia, Arisyahidin (2012) researched about the impact of an increase in oil prices on stock investment in IDX. This research found that there is a negatively significant different in stock return before and after the announcement of an increase in oil prices but nothing change in trading volume activities.

Theoretically, an information content of an event will effect on stock prices in capital market and then influence stock return. Based on that explanation, a hypothesis can be constructed as follows:

H2 : there is a difference in abnormal return before and after the announcement of an increase and a decrease in oil prices.

2. There is a difference on abnormal return between food and beverage companies and pharmacy companies before and after the announcement of an increase and a decrease in oil prices.

An increase in oil prices will effect on manufacture firms from the activity of transforming raw material into ready-to-sell goods. Manufacture firms require oil fuel. An increase in oil prices will increase production cost. So, this research selects manufacture firms in food and beverage sector and pharmacy sector. These two sectors consist of firms that mostly effect on people's primary needs which are food, beverage and medicine. The increase in oil prices will effect on primary needs of Indonesian people.

A Kuwornu's research (2012) stated that the macroeconomic variable, oil prices, can effect on market stock return in Ghana Stock Exchange in 1992-2008. The increase in oil prices declined stock return in Ghana in 1992-2008. However, in Indonesia, Arisyahidin (2012) researched about the impact of an increase in oil prices on stock investment in IDX. This research found that there is a negatively significant different in stock return before and after the announcement of an increase in oil prices but nothing change in trading volume activities.

Based on that explanation above, a hypothesis can be constructed as follows:

H3 : There is a difference on abnormal return between food and beverage companies and pharmacy companies before and after the announcement of an increase and a decrease in oil prices.

## Research Methodology

### a. Types of Research

This research is a quantitative research. A quantitative research (Sekaran, 2006 : 65) is a research whose formulation is in certain units or in numbers with using secondary data.

### b. Sample and Population

The population in this research is food and beverage and pharmacy firms in Indonesia Stock Exchange in 2015. The sample selection in this research uses purposive sampling method which is (Sekaran, 2006 :136) a sample selection method by applying certain purposes with some criteria or certain quota.

Consumer-good industry consists of:

- a. Food and Beverage
- b. Tobacco Industry
- c. Pharmacy
- d. Cosmetics and household goods
- e. Other sectors that are not classified

The sample criteria is as follows:

- a. Food and beverage firms and pharmacy firms that are registered in IDX from 2009 to 2015.
- b. Food and beverage firms and pharmacy firms in IDX which publish financial statement over the period of 2009-2015
- c. Food and beverage firms and pharmacy firms that are actively trading in IDX over the period of 2009-2015

### c. Data Collection Method

Data used in this research is secondary data (Sekaran, 2006 : 65). This is because the data is obtained not from the first party. The source of secondary data used in this research is stock price data and Jakarta Composite Index (JCI) from yahoofinance.com.

Observation time in this research is as follows:

The Oil Price Increase

The event period : 7 October 2015 (The Presidential Decree of Indonesia about oil price increase)

The window Period : 2 October 2015 (5 days before the event date)  
12 October 2015 (5 days after the event date)

The Estimation Period : 7 July 2015 (90 days)

The Decrease in Oil Prices

The event date : 14 October 2015 (The Presidential Decree of Indonesia about oil price decrease)

The window period : 9 October 2015 (5 days before the event date)  
19 October 2015 (5 days after the event date)

The estimation period: 7 July 2015 (90 days)

**d. Variable Measurement and Operational Definition**

The operational definition of each variable used in this research is as follows:

- a. The announcement of an oil price increase is one of information types which exists in society and also spreads over Indonesia Stock Exchange as an external fundamental factor.
- b. Abnormal return is the actual return surplus to expected return. The measurement uses percentage or decimal number.

**e. Data Analysis Technique**

Analysis technique used in this research is:

- a. Determining the time period of the event which is when the announcement of an oil price increase issues.
- b. Calculating abnormal return during the event period (some time before and after the announcement of an oil price increase)
- c. The estimation period (T-n-e until T-n) is period that is used to forecast expected return during the event period)
- d. The event period (T-n until T+n) is period during the event (T0) that is used to examine any change in abnormal return.
- e. Calculating abnormal return during the event period (some time before and after the announcement).

Formula according to Tandelilin (2010573):

$$RTN_{it} = R_{it} - E(R_{it})$$

Description:

$RTN_{it}$  = Abnormal return of i stock at t period

$R_{it}$  = Actual return of i stock at t period

$E(R_{it})$  = Expected return

Calculating Abnormal Return Using Model 2 “Market Model”.

There are two steps to calculate abnormal return using Market Model:

- 1) Forming expectation model using realized data over estimated period. Calculating return with estimated period. Estimated period has been determined before event-observed period. The research uses estimated period 90 days before observed period, which is from July to October 2015. Estimated period takes 90 days because that range of time can be used to estimate market return before the event.
- 2) Using expectation model to estimate expected return during observed period (period before and after the oil price increase, which is t-5 to t+5).

Formula to calculate:

$$r_m = \text{IHSG}_t - \text{IHSG}_{t-1} / \text{IHSG}_{t-1}$$

Alpha can be taken from calculating intercept value of market return ( $r_m$ ) to stock return ( $r_i$ ), while Beta can be taken by defining the slope of market return ( $r_m$ ) to stock return ( $r_i$ ).

### Calculating Average Abnormal Return

The abnormal return test is not applied for each stock, but it will be done by examining average abnormal return of all stock using cross section for each day in the period of the event.

The formula of average abnormal return is as follows:

$$RRTN_t = \frac{RTN}{k}$$

Description :

$RRTN_t$  = average abnormal return on the day of t

$RTN$  = abnormal stock return

$k$  = the number of stocks which is influenced by the announcement of the event

The abnormal return test uses t-test which examine that zero hypothesis states average abnormal return is equal to zero. The examination is done by calculating abnormal return of all sample stocks in the same day of the observation period.

### Calculating Average Abnormal Return

The abnormal return test is not applied for each stock, but it will be done by examining average abnormal return of all stock using cross section for each day in the period of the event.

The formula of average abnormal return is as folllows:

$$RRTN_t = \frac{RTN}{k}$$

Description :

$RRTN_t$  = average abnormal return on the day of t

$RTN$  = abnormal stock return

$k$  = the number of stocks which is influenced by the announcement of the event

Cumulative Abnormal Return

Some researches about event study using abnormal return or cumulative abnormal return (CAR) are the sum of abnormal return before the event for each stock. The formula is as follows:

$$ARTN = \sum RTNi$$

Description :

$ARTN$  : Cumulative abnormal return

$RTN$  : abnormal return

If there are k units of stocks, cumulative average abnormal return (CAAR) can be computed with a formula as follows:

$$ARRTN = \frac{\sum ARTNi}{k}$$

- Notes :  
 ARRTN : Cumulative average abnormal return  
 ARTN : Cumulative abnormal return  
 K : the total of stocks

#### f. Data Analysis Method

This research aims to identify linear relation between variables, so it uses statistic method to analyze it. The analysis method is quantitative method by using statistics.

#### 1. Hypothesis Test

Hypothesis test aims to know that hypothesis used in this research is accepted or rejected.

##### t-paired Test

T test is used to know how significant independent variables partially effect on dependent variables. Hypothesis test using t-paired test is done by some steps as follows:

- a. Defining hypothesis as follows:
  - 1)  $H_0: \mu_1 = \mu_2$ , there is no difference in firm performance before and after the announcement of an oil price increase.
  - 2)  $H_1: \mu_1 \neq \mu_2$ , there is a difference in firm performance before and after the announcement of an oil price increase.
- b. Using level of significance( $\alpha$ ) 5%
- c. The test rules are as follows:
  - 1) If the value of significance  $< 0,05$ ,  $H_0$  is rejected or  $H_1$  is accepted, which means there is a significant different.
  - 2) If the value of significance  $> 0,05$ ,  $H_0$  is accepted or  $H_1$  is rejected, which means there is no significant different

#### Data Analysis

Based on data processing and calculation in the research method chapter before, it gives some data analysis results that answer the research problems. The data analysis results refer to this research. The purpose of the research is to get empirical evidences related to the effect of an oil price increase and decrease on the stock return of food and beverage firms and pharmacy firms listed on Indonesia Stock Exchange.

##### a. Research Sample Selection

Sample used in this research is 17 food and beverage and pharmacy firms listed in Indonesia Stock Exchange (IDX). The period of observation is 90-day estimation, 11-day observation of an oil price increase and 11-day observation of an oil price decrease.

Consumer-good industry consists of:

- Food and Beverage
- Tobacco Industry
- Pharmacy
- Cosmetics and household goods
- Other sectors that are not classified

**b. Data Description**

The research observation is started from 90 days before the observation period (the window period) for estimation. Then, the time of observation is 5 days before and after the announcement of an oil price increase and decrease.

**Table 4.1 Sample Selection**

The total population of food and beverage firms and pharmacy firms in IDX	24
Food and beverage firms and pharmacy firms that are listed in IDX in the period of 2009-2015 but no trading activities	5
The total number after criterion 1	19
Food and beverage firms and pharmacy firms which are not publishing financial statements during 2009-2015	2
The total number after criterion 2	17

- a. Abnormal Return Calculation  
 1. Oil Price Increase

**Table 4.2 Average abnormal return market model during the oil price increase**

Date	Day -	RTN	RRTN	Description
12-Okt-15	5	0,0345	0,0020	Level of significance 1%
11-Okt-15	4	0,0000	0,0000	Level of significance 1%
10-Okt-15	3	0,0000	0,0000	Level of significance 1%
09-Okt-15	2	0,1665	0,0098	Level of significance 1%
08-Okt-15	1	-0,0281	-0,0017	Level of significance 1%
07-Okt-15	0	0,2420	0,0142	Level of significance 1%
06-Okt-	-1	0,0873	0,0051	Level of

15				significance 1%
05-Okt-15	-2	0,2199	0,0129	Level of significance 1%
04-Okt-15	-3	0,0000	0,0000	Level of significance 1%
03-Okt-15	-4	0,0000	0,0000	Level of significance 1%
02-Okt-15	-5	-0,1582	-0,0093	Level of significance 1%

Based on table 4.2, it can be seen that the value of RRTN D+2 to D+5 after the announcement of the oil price increase shows the value less than 5 %. It means that from D+2 to D+5, the market significantly respond to the announcement of the oil price increase. The significance value of abnormal stock return can be seen from the value of RRTN and ARRTN of food beverage and pharmacy firm stocks (Jogiyanto, 2009). On the D+1 after the announcement of the oil price increase, the market gives a significantly negative response. This can be seen from the value of RRTN D+1 which is at -0,0017. -0,0017 is less than 0,005, so it is significantly negative. There is abnormal stock return of food, beverage and pharmacy firms in the D+1 after the announcement of the oil price increase. The abnormal stock return of those firms has a negative value. This is because the increase in oil prices effects on food, beverage and pharmacy firms, so the stock value of those firms decreases.

In the D-1 of the announcement of the oil price increase, the value of RRTN is at 0,0051, so it is significant because it is less than 0,05. This means that the abnormal stock return of food, beverage and pharmacy has a positive value. The market still respond positively before the announcement of the oil price increase. In addition, a positive market response also occurs in the D-2 until D4 of the announcement of the oil price increase. The significance value of RRTN D-2 until D-4 for each one is less than 5%. The market respond significantly positive to food, beverage and pharmacy firm stocks before the announcement of the oil price increase. Yet, in the D-5 of the announcement of the oil price increase, the value of RRTN is at -0,0093 which is less than 0,05, so it is significantly negative. This shows that in the D-5 of the announcement of the oil price increase, the market respond significantly negative. This indicates that the market has already known the information about the announcement of the oil price increase before the time it is published., so the market gives a negative response. The sock price of food, beverage and pharmacy firms has negative abnormal return. The oil price brings an effect on food, beverage and pharmacy firms, so their stocks has negative abnormal return.

In the day of the announcement of the oil price increase, the value of RRTN is at 0,0142 which is less than 0,05, so it is significantly positive. The market has not given any response yet regarding to the announcement of the oil price increase. The market slowly responds to the announcement of the oil price increase, so the abnormal stock return of food, beverage and pharmacy firms still has a positive value.

## 2. The Oil Price Decrease

**Table 4.3 Average Abnormal Return Market Model during The Oil Price Decrease**

Date	Day to	SIGMA RTN	RRTN	Description
19-Okt-15	5	0,0480	0,00282505	Level of significance 1%

18-Okt-15	4	0,0000	0	Level of significance 1%
17-Okt-15	3	0,0000	0	Level of significance 1%
16-Okt-15	2	0,4790	0,02817501	Level of significance 1%
15-Okt-15	1	0,0000	0	Level of significance 1%
14-Okt-15	0	0,0128	0,00075571	Level of significance 1%
13-Okt-15	-1	-0,0891	-0,0052389	Level of significance 1%
12-Okt-15	-2	0,0337	0,0019802	Level of significance 1%
11-Okt-15	-3	0,0000	0	Level of significance 1%
10-Okt-15	-4	0,0000	0	Level of significance 1%
09-Okt-15	-5	0,1620	0,00952696	Level of significance 1%

Based on table 4.3, it can be identified that the RRTN value of food, beverage and pharmacy firm stock in the D+1 until D+5 of the announcement of the oil price decrease are less than 0,05 and positive. This means that the abnormal stock return of food, beverage and pharmacy firms in the D+1 until D+5 of the announcement of the oil price decrease is significantly positive. The market positively respond to the announcement of the oil price decrease.

The RRTN value of food, beverage and pharmacy firm stocks in the D-5 until D-2 of the announcement of the oil price decrease is less than 0,05 and positive. It means that the abnormal stock return of food, beverage and pharmacy firms in the D-5 until D-2 of the announcement of the oil price decrease is significantly positive. The market positively respond to the announcement of the oil price decrease. The announcement of the oil price decrease brings good news for food, beverage and pharmacy firms, so the value of their stocks has positive abnormal return. However, in the D-1 of the announcement of the oil price decrease, the value of RRTN is at -0,00523 which is less than 0,05, so it is significantly negative. The market still feels uncertain about the announcement of the oil prices issued by government. The market thinks that the government will announce again the oil price increase, so the market gives negative response. It indicates that there is no information leak about the oil price decrease.

The value of RRTN at the time of the announcement of the oil price decrease (D0) is at 0,0007 which is less than 0,05, so it is significantly positive. It shows that in the day of the announcement of the oil price decrease, the market gives positive response. In the day of the announcement, there is positive abnormal return. The market respond well to the announcement of the oil price decrease. The announcement of the oil price decrease brings positive effect on food, beverage and pharmacy firms, so the abnormal stock return of those firms has a positive value.

ii. Variance Test

1. Variance Test of the Oil Price Increase



**Table 4.4 Variance Test of Abnormal Return During The Oil Price Increase**

Day to	ARRTN_Bef	ARRTN_Af	RRTN_Bef	RRTN_Af
5	0,002	0,0051	0,0345	0,0873
4	0	0,0129	0	0,2199
3	0	0	0	0
2	0,0098	0	0,1665	0
1	-0,0017	-0,0093	-0,0281	-0,1582

Table 4.4 shows that there is a difference on abnormal stock return of food, beverage and pharmacy firms both before and after the announcement of the oil price increase. In the D-1 or D+1, the abnormal stock return of food, beverage and pharmacy firms is significantly negative. The market responds negatively to the announcement of the oil price increase. The market quickly responds to the event. Yet, in the D-2 until D-5 or D+2 until D+5, the abnormal stock return of those firms is positive. The market responds positively to the announcement of the oil price increase. It is because the firms have gained great trust from the public. The firms will potentially give positive return to investors.

2. ANOVA Test of The Oil Price Decrease

Tabel 4.5 Variance Test of Abnormal Return during The Oil Price Decrease

Day to	ARRTN_Tur_Bef	ARRTN_Tur_Af	RRTN_Tur_Bef	RRTN_Tur_Af
5	0,048	-0,0891	0,00283	-0,00524
4	0	0,0337	0	0,00198
3	0	0	0	0
2	0,479	0	0,02818	0
1	0	0,162	0	0,00953

Table 4.5 shows that there is a difference on abnormal stock return of food, beverage and pharmacy firms both before and after the announcement of the oil price decrease. In the D-1 or D+1, the abnormal stock return of food, beverage and pharmacy firms is significantly positive. The market responds positively to the announcement of the oil price decrease. The market quickly responds to the event. Also, in the D-2 until D-4 or D+2 until D+4, the abnormal stock return of those firms is positive. The market responds positively to the announcement of the oil price decrease. The announcement of the oil price decrease brings positive effect on food, beverage and pharmacy firms, so the abnormal stock return of those firms has a positive value.

Tabel 4.6 Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 RRTN_Bef - RRTN_AFT	,00028000	,00907508	,00405850	-,01098819	,01154819	,069	4	,948
Pair 2 ARRTN_Bef - ARRTN_AFT	,00478000	,15465920	,06916570	-,18725476	,19681476	,069	4	,948
Pair 3 ARRTN_Tur_Bef - ARRTN_Tur_Af	,08408000	,24508665	,10960608	-,22023527	,38839527	,767	4	,486
Pair 4 RRTN_Tur_Bef - RRTN_Tur_AF	,00494637	,01441536	,00644674	-,01295266	,02284540	,767	4	,486

Table 4.6 shows that pair 1 RRTN before and after the announcement of the oil price increase has t value at 0,069. The value of t table for df (5-1) 2 tailed is 2,776. 0,069 is less than 2,776, so the hypothesis is accepted. There is a difference in the abnormal stock return of food, beverage and pharmacy firms before and after the announcement.

Pair 2 RRTN before and after the announcement of the oil price increase has t value at 0,069. The value of t table for df (5-1) 2 tailed is 2,776. 0,069 is less than 2,776, so the hypothesis is

accepted. There is a difference in the abnormal stock return of food, beverage and pharmacy firms before and after the announcement.

Pair 3 RRTN before and after the announcement of the oil price decrease has t value at 0,767. The value of t table for df (5-1) 2 tailed is 2,776. 0,767 is less than 2,776, so the hypothesis is accepted. There is a difference in the abnormal stock return of food, beverage and pharmacy firms before and after the announcement.

Pair 4 RRTN before and after the announcement of the oil price decrease has t value at 0,767. The value of t table for df (5-1) 2 tailed is 2,776. 0,767 is less than 2,776, so the hypothesis is accepted. There is a difference in the abnormal stock return of food, beverage and pharmacy firms before and after the announcement.

### **Analysis and Discussion**

There is abnormal stock return of food, beverage and pharmacy firms in IDX during the event of the oil price increase or decrease. Hypothesis 1 is accepted. This result supports the reserach of Paultje's (2001), Arisyahidin (2012), Kuwornu (2012), and Herisiswanto, Agus Tri and Fitria, Astri (2014).

There is a difference in the effect of the oil price increase and decrease on stock return of food, beverage, and pharmacy firms in IDX before and after the announcement of the oil price increase and decrease. Hypothesis 2 is accepted. This result supports the research done by Paultje (2001), Arisyahidin (2012), dan Kuwornu (2012).

There is a difference in the stock return of food, beverage and pharmacy firms in IDX before and after the announcement of the oil price increase and decrease. Hypothesis 3 is accepted. This result supports the research done by Kuwornu (2012), which stated that the oil price can effect on stock return.

### **Conclusion and Recommendation**

#### **Conclusion**

1. There is significant results based on the value of RRTN and ARRTN of food, beverage and pharmacy firm stocks in IDX before and after the announcement of the oil price increase and decrease. There is abnormal stock return of food, beverage and pharmacy firms in IDX at the event of the oil price increase and decrease. Hypothesis 1 is accepted. This result supports the reserach of Paultje's (2001), Arisyahidin (2012), Kuwornu (2012), and Herisiswanto, Agus Tri and Fitria, Astri (2014).
2. T-test shows that the value of the calculated  $t < t$  table, so there is a difference in the abnormal stock return of food, beverage and pharmacy firms in IDX. There is a difference in the effect of the oil price increase and decrease on stock return of food, beverage, and pharmacy firms in IDX before and after the announcement of the oil price increase and decrease. Hypothesis 2 is accepted. This result supports the research done by Paultje (2001), Arisyahidin (2012), dan Kuwornu (2012).
3. T-test shows that the value of the calculated  $t < t$  table, so the abnormal return of two variables before and after the oil price increase is different. There is a difference in the stock return of food, beverage and pharmacy firms in IDX before and after the announcement of the oil price increase and decrease. Hypothesis 3 is accepted. This result supports the research done by Kuwornu (2012), which stated that the oil price can effect on stock return.

### Recommendation

1. Investors should be careful to absorb the information shared in the market. It is to avoid any mistake in decision making process which will effect on the stock price in the market.
2. Investors should not feel panic about the information in the market, primarily one that relates to government policy. The firms in IDX are firms which have good reputation, so they can quickly deal with the government policy.

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## EMPIRICAL STUDY ON PROBLEMS FACED BY FARMERS UNDER CONTRACT FARMING IN PUNJAB

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### Abstract

Contract farming is a process where the buyer and seller know each other, in other words seller sells its produce to the known buyer. Nowadays it is one of the most important strategic decision domains to match demand with supply. In this paper an attempt has been made to know the contract farming problems faced by farmers. A survey was conducted based on a structured questionnaire developed with the help of consultants and practitioners in this field. The data were digitized on SPSS sheet and factor analysis was done using Principal Component analysis of 497 farmer responses with stratified sampling. The results of the study reveal the problems faced by the as relating to the purchase, Inputs to crops, Agency, Facility, Credit and Processing. The findings of the study shall help the policy maker to understand the farmers' problems and developing strategies and policies for their betterment.

**Keywords:** *Contract Farming, Farming Problems, Punjab Farmers, Factor Analysis, PAFC.*

### Introduction

Punjab "*The land of five rivers*" is well known for its rich culture, heritage and fertile land with all over the world. Punjab produces almost 14% of the total cereals produced in the country. Punjab has earned the title of "*Granary of India*" or "*food basket of India*" (NABARD, SFP, 2015-16).

In the present day situation, it has been seen that due to the rotated cropping pattern of wheat and paddy has pushed the Punjab farmers in the dark days. It has led social, environmental and economic growth related problems in the Punjab. It has been realized that under the present condition due to the rising cost of production, production growth has become very challengeable. Over exploitation of water and land has been observed and now either stagnant or declining growth in the production of important crops has been seen (Sidhu and Johal 2002). Fall in the income of farmers, rising costs, declining ground water table, environment pollution and soil degradation have led discontent among farmers, which is putting the pressure on state government to take some serious steps to find the suitable solution of this problem.

To look after this problem, the state government has constituted an expert committee under the chairmanship of S.S. Johal in 1986, which is popularly known as the *Johal committee*. This committee recommended that the 20 percent of the cropped area under wheat and paddy should be replaced with the area for the production of some fruits, vegetables and some other cash crops. After a sixteen year again in 2002, this committee recommended that 1 million hectares of area under wheat and paddy must be replaced by the production of those crops, consuming less water and which are suitable ecologically and are in high demand in the country. Working on the Johal committee recommendations, the Government of Punjab, visualized contract farming as a means to achieve the objectives of sustainable agriculture.

Contract farming is a system where technical know-how, raw material such as seeds, pesticides, etc. and suitable marketing channel is provided to the farmers. In 2002, the State

Government launched a multi-crops, multi-year scheme. PAFC was designated as a nodal agency for the smooth working of contract farming system in the state. Apart from PAFC, there are also many local and multinational companies which are in this business directly with the farmers in the state for e.g. Pepsi is procuring Basmati and chilly from the farmers of Punjab under contract farming.

No doubt contract farming is playing an important role in state agriculture reforms, but still a number of problems are there reported by the farmers. Even number of studies are also indicating towards the problems as It has been discussed in many studies that the farmers which are engaged in contract farming, firms provide them *poor extension services, overprice their services*, pass on the risk to the producers, offer low price for the produce, delay payment, and *do not explain the pricing methods* has been discussed by Gorsh (1994), Glover and Kusterer (1990). The major problem that contract growers are facing developing countries are different contract for different class of farmers , *manipulation of quality related inspection standards*, burdens of costs due to any calamity put on producers only, *late payments*, out-right cheating in accounts, monopoly behavior of the companies and indebted to the companies. Has also been discussed by Glover (1987), Singh( 2000), Eaton and Shepherd,( 2001)in their studies on contract growers.

This study has been conducted in the four districts namely *Amritsar, Jalandhar, Hoshiarpur and Sangrur* of Punjab state, has reported the various constraints faced by the contract farmers. Lack of technical know-how, manipulated terms of the contract, unwanted quality cuts on crop produce, delayed payment for the produce, lack of credit for crop produce, low price for the produced crop etc. has been observed as the major constraints under contract farming.

### **Review of Studies on Contract Farming**

It is universally acknowledged fact that good research cannot be made without critically studying what already exists in relationship to it in the form of general literature and specific work done by researchers. So the review of related literature can be considered as a prerequisite to actual planning and execution of research work. Hence, for proper understanding of the research work sincere efforts have been made to review of the related literature. In the present paper due attempt has been made to summarize the results of the studies undertaken by the various researchers on the different aspects of Contract Farming.

Contract farming is the emerging concept among the farmers of Punjab. As has already been observed by the state Government that crop diversification is the need of the day for agriculture and environment sustainability and contract farming is the only way to get rid of the monoculture of wheat and paddy as has been recommended by Johal Committee, But still somewhere gap lies between the understanding of farmers and the contract companies which needs to be sorted out for the smooth working of this concept. In the present section attempt has been made to study the literature concerned with the problems faced by the farmers under contract farming in Punjab.

<i>Variables</i>	<i>Researchers</i>
1. V5 Degradation of fertility of soil	Singh(2002), Rangi and Sidhu(2000)
2. V4 Heavy use of Pesticides (Pest attack on crop)	Sukhpal Singh(2002), Rangi and Sidhu(2000), FAO(2006)
3. V3 Shortage of Labor at Peak season	NSSO, (2015),(FICCI, 2015)
4. V16 Lack of quality inputs	Dev(2005),Srivastva and Seetharaman(1989)
5. V19 Delay in arranging inputs	Srivastva and Seetharaman(1989)
6. V22 Delay in procurement of produce	S.S. Kalamkar (2012),Bijman,(2008),Parmod Kumar,(2007)
7. V2 Non-remunerative price for the crop under CF	Arun Kumar(2002),Shiva Kumar Gupta(2002)
8. V10 Lack of transparency in price determination	Gorsh,(1994), Glover and Kusterer,(1990), Arun Kumar(2002),
9. V20 Delayed payment for crop produce	Sukhpal Singh(2002), Arun Kumar(2002)
10. V1 Less bargaining power of farmers	Warning and Key(2002), Rangi and Sidhu(2000),Kirsten and Sartorius(2002),Birthal(2008), Singh(2005)
11. V15 Difficulty in meeting quality requirements	Banarjee et. al(2002), AsokGulati(2006), Dev and Rao(2005)
12. V14 Faulty grading by an agency	Arun Kumar(2002)
13. V25 Cheating by an agency	Warning and Key(2002), Sukhpal Singh(2002), Arun Kumar(2002), Shiva Kumar Gupta(2002)
14. V18 Poor service delivery by firms	Glover and Kusterer,(1990)
15. V7 No compensation of loss in case of natural calamities.	Sukhpal Singh(2002)
16. V6 Lack of technical know-how by the firms.	Arun Kumar(2002), Kattimani et.al.(2003)
17. V11 No free extension services by the firm.	Minnot(1986), Glover and Kusterer,(1990), Eaton and Shepherd(2001)
18. V21 No compensation if Market Price goes higher than the contract price of the crop produce	Nivedita Sharma et.al.(2013)
19. V8 High Investment	Fulton and Clark(1996), Coulter et.al (1999)
20. V9 Limited Access to credit	Dev(2005)
21. V13 Lack of credit to buy inputs for crop production	Marcus and Fredrick, (1994),Dev(2005)
22. V17 Provision of inputs at higher rate	Dev(2005),Kattimani et.al.(2003), S.S. Kalamkar (2012)
23. V23 Contract is written in English, which is difficult to understand	Arun Pandit et. al.(2009), Nivedita Sharma et.al.(2013)
24. V24 Lack of Government control	Arun Pandit et. al.(2009)
25. V12 Violation of the terms of the contract	Singh(2002), Warning and Key(2002)

by Companies.

**a. Summary of Variables Regarding Problems Faced by The Farmers Under Contract Farming**

Since the contract farming concept is still on the growth stage in Punjab. In the study of contract farming in tomato in Haryana, (Dileep et. al 2002) observed that the contract farming firms were biased towards large number of farmers while selecting the farmers for contract farming as the firms were giving preference to the big farmers as compared to the small and marginal farmers. He suggested that the contracting firms should be made legally obligatory on the part of contract farmers (Singh 2002) identified that series of problems associated with the contract vegetables production in Punjab. He observed violation of the terms of the agreements social differentiation and environmental sustainability and imbalance of power between farmers and firms. (Warning et. al.2002) in his study

explained that contract farming makes the farmers over dependent on contract crops, which leads to loss of bargaining power of the farmers. Singh sukhpal (2002)and Rangi et.al.(2002), revealed in their studies on contract farming that there was *no compensation* to the farmers on *crop quality failure due to natural calamity* in Punjab and Haryana. He also observed that *undue quality cut and pest attack on the crop*, delayed deliveries at the factory and *low price of the produce* by the firms has been seen. The small farmers' involvement in agricultural value chain is very limited (Barrett et. al 2011).High involvement of farmers in contract farming leads to less of autonomy, i.e. farmers fell exploited and dependent on the firms (Kirsten et. al 2002). The most negative effect on contract farming is, the terms of the contract are imposed forcefully on the small and marginal farmers (Poulton et. al 2008).

Decreasing the bargaining power of the small farmers can be considered as the most important problem of the farmers (Birthal 2008). *Vague terms and conditions of the contract* among farmers is the main cause of dispute among companies and farmers (Arun Pandit et. al 2009). Cost access to irrigated water, *lack of extension services* for commercial crops and exploitation of the farmers in the marketing of their produce, *costly and inadequate institutional credit, low quality input supply* are the main problems among small and marginal farmers in India (FAO 2006). The overexploitation of ground water, salination of soils, *decline in soil fertility* and pollution are the examples of environmental degradation due to contract farming has been discussed by Siddiqui (1998), Rickson and Burch (1996), USAID,(1994) in their studies on contract farming. S.S. Kalamkar (2012) analyzed in his paper broiler farming management and inputs provisions under contract and non-contract farming. He observed that most of the contracts are two or three years of duration and very few are of seven months duration. He also found that the average net income, per kg, is higher in non contract than that of contract farming. It is observed that none of the contract farmer possesses the copy of the contract.

Delay in supply of inputs, delay in payment, delay in produce lifting, low price of the produce and sometime even rejection of the produce on quality ground are the main problems faced by farmers under contract farming. Apart this high visiting charges, delay in providing checks and high deduction of tax at the source has also been reported by some farmers. Parmod Kumar (2007) and Nivedita Sharma et.al (2013) analyzed in his study on contract farming that the contract in most of the cases was written, but *without any legal obligations* both, on the part of firms as well as farmers. Only in the case of Chambal Agro-tech, all the farmers conformed that the company provided them a copy of the contract. Further, only in their case, the contract was formally done on a 'Stamp Paper' that is considered to be a legal document. The *medium of the written contract was mostly in English* that was *beyond the understanding of the local farmers*. Only in a few cases, the contract was written in the local language, i.e., Punjabi. It has also been found by Collins (1993) that at the time of surplus produce companies quits the agreements and do not compensate to the farmers for the losses due to



any natural calamities. Wilson, (1986) says that the terms of the contract are usually anti farmers, the market choices are limited and contracting tends to reinforce itself.

Glover and Ghee (1992), Burch (1996) discussed in their studies that the agribusiness firms also tend to practice "*Agribusiness Normalization*" over time which mean they reduce the prices and other benefits offered to the farmers with which they commence operations, when the procurement base is created and there are enough farmers to procure from. The contracting firms tend to aggravate the environmental crisis as most of the contracts are short term (one or two crop cycles) and the firms tend to move on to a new grower and lands *after exhausting the natural potential of the local resources*, particularly land and water, or productivity declines due to some other reason shared by Morvaridi (1995), and Torres, (1997) in their research papers. Srivastava and Seetharaman (1989) discussed while providing an overview of agro-processing industries in their study suggested that backward linkage is the key element for success of fruit processing units. They observed that larger processing units often faced the problems of severe under utilization of capacity due to *inadequate and unsuitable supply of raw materials*. They concluded that the *uncertainty in supply* was the major reason for private processing units to forge backward linkage with the farmers for ensuring supplies. Porter and Phillips-Howard (1997) found that most of the negative effects of contract farming resulting from the fact that the relationship between individual farmers and the contractor is uneven, the latter often in a position to exercise power and non-competitive conduct in imposing the terms of the contract and same has been revealed in his study on contract farming by Poulton et al. (1998).

Dev (2005) observed the major problems of small and marginal farmers in India include *spurious input supply, inadequate and costly institutional credit*, lack of irrigation water and costly access to it, *lack of extension services* for commercial crops, exploited in the marketing of their produce, high health expenditures, and lack of alternative (non-farm) sources of income. Arunkumar (2002) opined that major problems faced by the contract farmers were *low contract price and irregular payments*. The other problems faced were unaware of potentiality of crops, *poor technical assistance*, manipulation of norms by firms and *higher rejection rate*. He also opined that major problems faced by contract firms were land constraints and fixing of contract price. The other problems were farmers' discontent and holding up of vehicles. The contract farmers try to put a lower grade into higher grade and it was difficult to check and make sure of the grade as quantity handled surely fall under desired category was more. Farmers held up vehicles in the villages demanding that they should be paid higher prices even though the agreement does not say so. (FICCI, 2015) in their report on labor shortage identified, that however in reality, the magnitude and pace of the shift away from agriculture have been substantial as has been evidenced here. It also has begun to make an impact as the *shortage in agricultural labor is currently not being compensated* by adequate measures to reduce the overall labor intensity of the sector. As a result, the primary sector in many Indian states is experiencing a severe labor shortage and escalation in farm wages which are adversely impacting the profitability of the farmer.

NSSO (2015) - National Sample Survey Office's periodic surveys revealed that India's agriculture labor market is in a state of continuous outflow.

The 34 million workers left the agriculture sector between 2004-05 and 2011-12. This is the first time in India's living memory that the sector is reporting a decline in labor participation (see 'India's labor crisis'). It is a worrying situation because agriculture still employs close to half of India's workforce and accounts for 64 per cent of rural employment. The dip in the agricultural labor force has been acute in India's key grain-producing states like Uttar Pradesh and Madhya Pradesh. To make matters worse, the *labor shortage* is impacting the country's five staple crops: rice, wheat, sugarcane, groundnut and cotton. Such is the impact of the shortage that laborers are now earning more than the farmers. It is a simple play out of the

change in Indian economy where people have better-paying livelihood alternatives in non-farm sectors such as construction and service sectors.

### **Research Methodology**

To study the problems faced by the farmers under contract farming in Punjab, stratified sampling technique has been used to collect the data from the farmers. The data has been collected from the farmers of *Amritsar, Hoshiarpur, Jalandhar and Sangrur* district of Punjab as these are the main districts where farmers are engaged in contract farming to a large extent. The findings of the study are based on 497 farmers, selected from the above mentioned districts of Punjab. These farmers are having the experience of both contract farming and non-contract farming.

The farmers were selected from these districts, have been divided into four categories:

1. Small and semi-medium farmers with operational holding between 1 to 4 ha.
2. Medium farmers with operational holding between 4 to 10 ha.
3. Large farmers with operational holding above 10 ha.

*Source:* Vijay Paul Sharma (2007)

To get the response of the farmers (Respondents), 2 Block/ Tehsil/ Taluks were selected from each district mentioned above and four villages from each taluk were selected to get the data from the farmers. Sarpanch of each village was contacted to get the information for the farmers which are engaged in contract farming. Hence 32 villages were covered to get the data from the respondents, and a total of 544 survey questionnaire had been sent out to which only 497 have been included in the main study. After due screening and error checking, it was found that remaining 47 questionnaire were not suitable as 20 questionnaires were not received back from the respondents, though phone calls were made, but they did not give any positive response and remaining questionnaire had blank answers (less than 25% of the questions).

After carrying out screening process 497 responses were considered valid for data analysis. This represents a success rate of 91.36%, which is considered to be good in view of time and cost.

### **Analysis**

The factor analysis technique applied to the problems faced by the farmers under contract farming in Punjab, revealed specific factors, which clearly define the problems faced by the respondents (farmers). Six factors extracted from the 25 variables explained the 67.31% of variance and each factor was defined by at least three scale items. These specific extracted factors were unfair purchase practices, spurious quality of inputs, passive role of agency, lack of compensation, insufficient credit, and ineffective regulatory framework. All the problems related to the contract farming have been explained through these six factors, which were considered to be significant by the respondents.

*Scale Development and Refinement*

**Table 2: Scale Reliability Analysis (Contract farming Problems among Farmers)**

<i>Variables</i>	<i>Extraction</i>	<i>Initial</i>	<i>Corrected Item-to- Total Correl.</i>	<i>Mean</i>	<i>Standard Deviation</i>
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V1 Less bargaining power of farmers	1.000	.566	-.510	19.960	.69269
V2 Non-remunerative price for the crop under CF	1.000	.667	.523	19.235	.66462
V3 Shortage of Labor at peak season	1.000	.695	.665	20.060	.75266
V4 Heavy use of Pesticides(Pest Attack)	1.000	.714	.511	19.235	.71996
V5 Degradation of fertility of soil	1.000	.763	.512	18.954	.74401
V6 Lack of technical know-how by the firms.	1.000	.710	.527	18.370	.85170
V7 No compensation of loss in case of natural calamities.	1.000	.788	.525	19.899	.73087
V8 <i>Preference to big farmers with High Investment in agriculture</i>	1.000	.734	.393	19.276	.74514
V9 Limited Access to credit for small farmers	1.000	.726	.508	20.744	.79596
V10 Lack of transparency in price determination	1.000	.620	.590	19.477	.72212
V11 No free extension services by the firm.	1.000	.709	.546	19.235	.78171
V12 Violation of the terms of the contract by Companies.	1.000	.654	.574	18.410	.85247
V13 Lack of credit to buy inputs for crop production	1.000	.629	.586	21.187	.77511
V14 Faulty grading by an agency	1.000	.745	.584	20.060	.73641
V15 Difficulty in meeting quality requirements	1.000	.761	.540	18.793	.68503
V16 Lack of quality inputs	1.000	.668	.681	19.577	.69866
V17 Provision of inputs at higher rate	1.000	.563	.503	18.652	.83276
V18 Poor service delivery by firms	1.000	.630	.550	18.833	.72015
V19 Delay in arranging inputs	1.000	.517	.585	19.235	.74202
V20 Delayed payment for crop produce	1.000	.640	.505	20.342	.65749
V21 No compensation if Market Price goes higher than the contract price of the crop produce	1.000	.540	.581	21.650	.83819
V22 Delay in procurement of produce	1.000	.678	.889	20.020	.69415
V23 Contract is written in English, which is difficult to understand	1.000	.756	.614	20.241	.78508
V24 Lack of Government control	1.000	.715	.641	21.489	.82181
V25 Cheating by an agency	1.000	.641	.548	20.905	.73359

A scale was developed to identify the factors revealed the problems faced by the farmers under contract farming. The literature for the same was reviewed as shown in literature survey and variable were selected to define the problems faced by the respondents. During the discussion with experts in the field of contract farming many items were deleted and added. The final 25 items were selected for survey and these items were rated on three points Likert scale by the respondents. Item wise reliability analysis was performed on selected variables to retain and delete scale items for developing a reliable scale. The scale so generated to achieve the objective was refined for reliability, validity and undimensionality. To know the extent to which items were correlated with a set of items under consideration, Cronbach alpha statistics and Inter item correlation were employed.

### **Factor Analysis**

In order to reduce the data Exploratory Factor Analysis (EFA) was conducted to see if the face validity of items holds (Pallant, 2011). The item of the attitude scale was subject to principal component analysis (PCA) using SPSS. Prior to performing PCA the suitability of data for factor analysis was assessed. The correlation matrix revealed many coefficients of 0.3 and above as shown in Table 3. The Kaiser-Meyer-Olkin (KMO) measure was 0.835 exceeding the recommended value of 0.6 (Tabachnick and Fidell, 1996; and Kaiser,1974) and the Barlett's Test of Sphericity (Barlett, 1954) reached statistical significance, supporting the factorability of the correlation matrix. PCA revealed the presence of six components with Eigen value exceeding 1, explaining 67.311% of the variance. The variance explained by each factor is shown in Table 5. The value of communalities using principal component analysis ranged from .517 to 0.788 (Table2) Here it is pertinent to mention that communalities >0.5 is sufficient for explaining the constructs (Hair et. al 2009). All those values show factor analysis has extracted good quantity of variance in the items. Hence all the requirements of reliability, validity and undimensionality are met.

### *Pearson Correlation Analysis*

Correlation was used to measure the degree of relationship between 25 main independent variables of contract farming, in order to measure whether the 25 variables were independent from each other. If a correlation coefficient  $r$  indicates 0 to 0.2, there is a weak correlation among variables. If ' $r$ ' is between 0.3 to 0.6 it is considered moderate. A correlation coefficient value of and 0.7 to 1 is strong (Dancey and Reidy, 2007).

**Table 3: Correlation Matrix of Contract Farming Variables**

	V2	V10	V01	V20	V22	V19	V4	V16	V3	V5	V14	V15	V18	V25	V7	V6	V21	V11	V13	V8	V9	V17	V12	V23	V24
V2	1.000																								
V10	.518	1.000																							
V01	.529	.447	1.000																						
V20	.430	.560	.487	1.000																					
V22	.673	.543	.444	.530	1.000																				
V19	.028	.026	-.028	.171	-.031	1.000																			
V4	.009	-.008	-.025	-.050	.045	.487	1.000																		
V16	-.003	.060	-.092	.043	.017	.519	.591	1.000																	
V3	.061	-.040	-.093	-.086	.042	.427	.604	.591	1.000																
V5	.020	.009	-.103	-.034	.055	.537	.685	.616	.638	1.000															
V14	-.135	.020	-.190	-.046	-.103	.248	.259	.298	.182	.284	1.000														
V15	-.113	-.017	-.175	-.036	-.076	.236	.210	.246	.158	.193	.757	1.000													
V18	-.111	-.027	-.130	-.034	-.040	.123	.236	.191	.187	.195	.526	.580	1.000												
V25	-.068	.024	-.098	.111	.019	.253	.139	.110	.032	.139	.548	.539	.516	1.000											
V7	.036	.060	-.024	.085	.064	.166	.259	.252	.260	.228	.236	.183	.132	.107	1.000										
V6	.035	.071	-.087	.068	.099	.117	.134	.263	.266	.193	.211	.191	.120	.095	.655	1.000									
V21	-.061	-.022	-.030	.103	.024	.299	.198	.239	.238	.261	.220	.200	.162	.169	.562	.456	1.000								
V11	-.019	.104	-.060	.029	.075	.219	.255	.304	.220	.229	.320	.261	.120	.149	.669	.569	.524	1.000							
V13	-.096	-.003	-.119	.059	-.023	.184	.190	.251	.158	.168	.197	.168	.130	.077	.205	.145	.218	.245	1.000						
V8	-.052	-.067	-.063	.013	-.082	.205	.275	.250	.213	.194	.140	.117	.056	.082	.284	.159	.232	.209	.549	1.000					
V9	-.092	-.018	-.190	-.043	-.059	.249	.249	.328	.238	.248	.247	.246	.173	.130	.251	.161	.247	.281	.571	.638	1.000				
V17	-.022	-.035	-.071	.001	-.010	.208	.259	.274	.243	.286	.205	.176	.179	.139	.276	.157	.234	.241	.387	.517	.505	1.000			
V12	.007	.075	-.083	.035	.072	.204	.253	.283	.234	.263	.332	.281	.190	.197	.272	.270	.206	.369	.199	.131	.178	.092	1.000		
V23	.007	.112	-.063	.202	.059	.284	.217	.340	.228	.222	.265	.264	.215	.245	.253	.232	.288	.325	.178	.165	.226	.125	.623	1.000	
V24	-.108	-.004	-.105	.099	.010	.326	.196	.264	.162	.184	.325	.272	.237	.279	.201	.136	.298	.272	.197	.123	.233	.106	.529	.601	1.000

Inter-item correlation: Mean=1.975, Minimum=1.837, Maximum=2.165, Range=.328, Max / Min=1.179, Variance=.009, N=25

According to the scale used if all the 25 items get a rating of 3 each, the score would be 75. The mean score of the respondents was 49.384 (TABLE 4). The correlation matrix was computed as shown in Table 4. The mean correlation was 1.975 and it varies from 1.837 to 2.165 with a range .328. There was a sufficient correlation to go ahead with the factor analysis.

**Table 4: Factor Analysis of Problems Faced by farmers under CF (Varimax-Rotated Results and Scale Reliability)**

	Unfair Purchase Practices	Spurious quality of Inputs	Passive role of Agency	Lack of Compensation	Insufficient Credit	Ineffective Regulatory Framework
V2.Non-remunerative price for the crop under CF	.852					
V10. Lack of transparency in price determination	.818					
V1. Less bargaining power of farmers	.808					
V20. Delayed payment for crop produce	.753					
V22. Delay in procurement of produce	.640					
V19. Delay in arranging inputs	.816					
V4 Heavy use of Pesticides (Pest attack on crop)		.802				
V16 Lack of quality inputs		.782				
V3 Shortage of Labor at Peak season		.773				
V5. Degradation of fertility of soil		.729				

**Table 4 (Continued)**

Variables	Components			
	Passive role of Agency	Lack of Compensation	Insufficient Credit	Ineffective Regulatory Framework
V14.Faulty grading by an agency	.837			
V15.Difficulty in meeting quality requirements	.801			

V18. Poor service delivery by firms	.782			
V25. Cheating by an agency	.776			
V7No compensation of loss in case of natural calamities.	.856			
V6.Lack of technical knowhow by the firms.	.830			
V21. No compensation if mkt price is higher than crop produce contract price	.782			
V11. No free extensions services by the firm.	.671			
V13.Lack of credit to buy inputs for crop production	.835			

**Table 4 (Continued)**

Variables

Components

	Insufficient Credit	Ineffective Regulatory Framework
V8. Preference to big farmers with high Investment in agriculture	.807	
V9.Limited access to credit - small farmers	.766	
V17.Provision of inputs at higher rate	.683	
V12. Violation in terms of the contract by Companies.		.817
V23. Contract written in English, difficult to understand		.803
V24.Lack of Government control		.743

	Unfair Purchase Practices	Spurious quality of Inputs	Passive role of Agency	Lack of Compensation	Insufficient Credit	Ineffective Regulatory Framework
Eigen value	6.249	3.182	2.253	1.980	1.741	1.423
% Variance	24.998	12.726	9.010	7.922	6.963	5.691
Cumulative % Variance	24.998	37.724	46.734	54.656	61.619	67.311



Scale Reliability (Cronbachs Alpha)	.868	.841	.839	.815	.844	.807
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Cronbach’s Alpha =.852, Kaiser-Meyer-Olkin Measure of Sampling Adequacy =.835, Bartlett's Test of Sphericity (Approx.Chi-Square=5.940, Df=300, Sig=0.000, Mean= 49.384

*Extraction of Factors*

Exploratory Factor Analysis (EFA) was employed to identify the underlying dimensions of contract farming. The respondents were asked to rate the twenty five variables at three points Likert scale, ranging from Never to Always. All the factors having loading more than 0.5 were considered good and in the present concern the loading ranged from .640 to .856.Items with factor loading less than 0.5 were removed. The six factors, so generated have Eigen values ranging from 1.423 to 6.249. The factor analysis results are validated as shown in Table 4.

*Factor One: (Unfair Purchase Practices)*-Five variables have been loaded in factor one and this factor alone explains 24.998% of the total variance. The variables which have been included in this factor are (V2) *Non-remunerative price for the crop under CF*, (V10) *Lack of transparency in price determination*, (V1) *Less bargaining power of farmers*, (V22) *Delayed payment for crop produce*. The farmers considered that the contract farming is not meeting expectations of them as the price offered to them is not up to the level they put the efforts to produce the crop. Lack of transparency in price determination is the problem under contract farming; companies do not disclose the method of price fixing of their produce. Farmers even can’t force the companies to pay the market price or prevailing price for their produce because of the dominating attitude of the companies. Delayed payment for the produce is another demotivation factor to maintain long term relations with the companies. Companies should make ensure that there should be the timely procurement of the produced crop at a remunerative price, on a stipulated time, so that farmers can be motivated to remain in the contract with the companies in the long run. The factor loading ranges from .640 to .852 and the scale reliability alpha of this factor is .868. Non-remunerative price for the crop under CF has the highest loading under this factor. The inter-item correlation ranges from 0.427 to 0.685 and item to total correlation ranges from 0.581 to .685. It covers 6.249 of the Eigen values.

*Factor Two: (Spurious Quality of Inputs)*-Factor two explains 12.726% of the total variance and five variables, namely, (V19) *Delay in arranging inputs*, (V4) *Heavy use of pesticides (Pest attack on crops)*, (V16) *Lack of quality inputs*,(V3) *Shortage of labor at peak season* , (V5) *Degradation of the fertility of soil* have been included in this factor. The result indicates that the major problem reported by the farmers is of delay in arranging inputs on time, which leads to the mismatching of seasons to cultivate the crop. Heavy use of pesticides and insecticides is another problems faced by the farmers which is responsible in the infertility of soil in THE long run. Lack of good quality seeds, pesticides, etc. is observed by the farmers under contract growing. One of the major problems reported by the respondents is a shortage of labor during peak season of crop cultivation which causes them heavy cost. In order to maintain the long relationship with the farmers companies should provide the farmers with sufficient quantity and quality of seeds and other inputs on stipulated time so that the delayed cultivation can be avoided. The factor loading ranges from 0.776 to .816. The inter-item

correlation ranges from 0.430 to 0.673 and item to total correlation ranges from 0.628 to 0.694. It covers 3.182 of the Eigen values.

*Factor Three: (Passive Role of Agency)*-third factor is labeled as “Passive Role of Agency”. An agency is one sort of middlemen or representative of the company, which maintain the direct link with the farmers on behalf of the company. Four variables such as (V15) *Difficulty in meeting quality requirements*, (V14) *Faulty grading by an agency*, (V25) *Cheating by an agency*, (V18) *Poor service delivery by firms have been included*. It has been reported by the farmers that the quality parameters set by the agency are very difficult to meet. Despite the due care and instructions provided by the agency, it's still very difficult to meet the quality standards set by the agency. Most of the time it has been observed by the farmers that agency rejects the crop even if there is a very minor quality gap in the crop produce, when the same crop is available in the open market at less price. Hence farmers are cheated by the agency. Some farmers also reported that company representative do not come for inspection of the crop on the regular basis which leads to delay in taking action in quality improvement of the cultivated crop under contract. Factor three explains 9.010% of the total variance. The factor loading ranges from 0.837 to 0.776 and it covers 2.253 of the Eigenvalues. The inter-item correlation of this factor ranges from 0.516 to 0.757 and item to total correlation ranges from 0.728 to 0.755.

*Factor Four: (Lack of Compensation)*-the fourth factor has been labeled as “Lack of Compensation”. The four variables, namely, (V7) *No compensation of loss in case of natural calamities*, (V6) *Lack of technical know-how by the firms*, (V11) *No free extension services by the firm*, (V21) *No compensation if Market Price goes higher than the contract price of the crop produce* have been included and this factor explains 7.922% of the total variance. Under this factor, it has been observed that the farmers also facing the problems related to the facilities offered by the company as it has been reported by the farmers that no compensation offered by the company if the crop gets spoiled due to any natural calamity such as flood, fire or heavy rain. Companies even do not provide technical know-how free of cost at village level. Farmers feel themselves deprived if the market price of the produced crop gets higher than the contract price and the company in such case offers no compensation. Companies should follow the fair price policy and due compensation should be granted to the farmers as they have no other source of income except agriculture. The factor loading ranges from 0.856 to 0.671 and this factor covers 1.980 of the Eigen values. The inter-item correlation ranges from 0.456 to 0.669 and item to the total correlation range is from .589 to .654.

*Factor Five :( Insufficient Credit)* - the fifth factor has been labeled as “Insufficient Credit”. Four variables like, (V8) *Preference to big farmers with High Investment in agriculture*, (V9) *Limited Access to credit for small farmers*, (V13) *Lack of credit to buy inputs for crop production*, (V17) *Provision of inputs at higher rates*. Small and medium sized farmers have reported that they are also facing severe problem of limited access to credit as compared to big farmers. Big farmers are having their own sufficient funds to invest in agriculture equipment, so they are not bothered about credit offered by the companies. Many farmers reported that credit offered by the companies is not sufficient for farmers to buy inputs as well as equipment or some other things for farming and if that is offered, huge amount is charged at the time of repayment of that credit (loan). Apart from this, it has also been reported that huge formalities are performed to take the advances from the companies. So they reported that contract farming is the game of big farmers, that is beyond the approach of small and marginal farmers. This factor explains 6.963% of the total variance and factor loading ranges from 0.683 to 0.835 with a Eigen value 1.741. The inter-item correlation range of this factor is from 0.387 to 0.638 and item to total correlation ranges from 0.552 to 0.700.

*Factor Six: (Ineffective Regulatory Framework)* - sixth and the last factor of “*Problems faced by farmers under Contract farming in Punjab*” has been labeled as “Ineffective Regulatory Framework”. Three variables, namely, (V23) *Contract is written in English, which is difficult to understand*, (V24) *Lack of Government control*, (V12) *Violation of the terms of the contract by the companies*. Under this factor, it has been reported by the farmers that the contract is written in English, which seems difficult for the farmers to understand and along this it has also been discussed by the farmers that companies do not obey the terms of the contract due to lack of Government intervention which motivates the companies to manipulate the terms of the contract in their favor and farmers feel deprived and cheated by the companies in the lack of proper implementation the contract Act. Government should clearly instruct the companies to strictly follow the terms and conditions of the contract so that any sort of dispute may not arise at later stage and maximum number of farmers can be motivated towards the campaign of crop diversification to improve the economic condition of the farmers. This factor explains 5.691% of the total variance and the factor loading of variables ranges from 0.743 to 0.817. This factor covers 1.423 of the Eigen values. The inter-item correlation of this factor ranges from 0.529 to 0.623 and item to total correlations range is from 0.623 to 0.643.

**Table 5: Summary Table**

<u>Factors</u>	<u>No of Items</u>	<u>AVE*</u>	<u>Items</u>
Unfair Purchase Practices	5	0.60	V2,V10,V1,V20, V22.
Spurious Quality of Inputs	5	0.61	V19, V4, V16, V3, V5.
Passive role of Agency	4	0.64	V14,V15,V18,V25,
Lack of Compensation	4	0.62	V7, V6, V21, V11.
Insufficient credit	4	0.60	V13, V8, V9, V17.
Ineffective Regulatory Framework	3	0.62	V12, V23, V24.

\*Average variance explained.

Table 6 shows that average variance explained(AVE) by each construct is >0.50 which is suitable to validate the factors.

#### *Validation of Result of Factor Analysis*

Taking table 6 into account an attempt has been made to validate the factor analysis results by calculating “correlation between the summated scales” and “Correlation between representatives of factors and the summated scales”

**Table 6: Validation of Factor Analysis Results for Contract Farming:  
Table 6 (a) Correlation between the summated scales (Discriminant validity) constructs are distinct.**

Factors	Unfair Purchase Practices	Spurious Quality of Inputs	Passive role of Agency	Lack of Compensation	Insufficient credit	Ineffective Regulatory Framework
Unfair Purchase Practices	1					
Spurious Quality of Inputs	.36	1				
Passive role of Agency	.39	.24	1			
Lack of Compensation	.37	.29	.35	1		
Insufficient Credit	.31	.30	.37	.25	1	
Ineffective Regulatory Framework	.42	.16	.43	.44	.34	1

Table 6(a) shows that the correlation among factors is <.50 which shows that factors are distinct from each other.

**Table 6 (b): Correlation among factors and leading loading variables of Problems faced by farmers under contract farming**

Factors Variables	Unfair Purchase Practices	Spurious Quality of Inputs	Passive role of Agency	Lack of Compensation	Insufficient credit	Ineffective Regulatory Framework
V2 Non-remunerative price for the crop under CF	.908**	.084	.566**	.583**	.563**	.237**
V19 Delay in arranging inputs	.295**	.732**	.264**	.353**	.263**	.078
V14 Faulty grading by	.501**	.031	.903**	.492**	.424**	.255**

an agency							
V7 No	.506**	.116**	.507**	.902**	.485**	.282**	
compensati							
on of loss							
in case of							
natural							
calamities.							
V13 Lack	.564**	.033	.548**	.587**	.889**	.160**	
of credit to							
buy inputs							
for crop							
production							
V12	.352**	.076	.392**	.370**	.277**	.847**	
Violation							
of terms of							
the							
contract by							
<u>Companies</u>							

∴

\*\* 0.01 Level of significance

#### *Convergent Validity*

The correlation among the summated factor scales and their leading loading variables is shown in Table 6(b). The result shows that factor unfair purchase practices' has the highest correlation with its most loading variables(v2), i.e. 0.908 at 0.01 level of significance. However, the comparative loading of this factor is very low with the other variables of the other factors, Hence it validates factor analysis results as loading values are greater than 0.50 (Hair et. al. 2009).

#### **Limitations and Further Research Directions for Study**

\As we think this is the first ever research conduct only on the farmers of Punjab, so it sets the groundwork for the further research. “*Multistage Stratified Sampling Technique*” has been used to collect the data from villages of only four districts of Punjab. The area of study can be extended to cover the other districts of Punjab. Second the sample size of collected data was very small was even unable to cover even all tehsils of these four districts. Only those farmers have been covered which are engaged in both contract and non-contract farming of Wheat, Paddy, Basmati, Potatoes and Cotton crops. So apart from it there are other number of crops which are being cultivated under contract farming and those crops can also be covered to study the Pros and cons of contract farming at micro level. Hence this study can prove worthwhile to the farmers and state Government to make new policies for crop diversification while taking into consideration the interest of the farmers.

#### **Conclusion**

In the light of the above analysis and discussion it has been seen that contract farming has a great impact on the farmers' life and their employment opportunities, but as it has been observed from the study that farmers are facing the number of problems under contract farming in Punjab, and that is the sole cause of declining rate of participants in contract farming in Punjab. With the intervention of State Government some malpractices can be

restricted to make the contract farming business a sustainable source of income for farmers. It is crystal clear that the monoculture of paddy and wheat has degraded the fertility of soil and pushed the farmers in their dark days of their economic instability. The only way to rescue the farmers of this vicious circle of poverty is crop diversification, which is possible only through the promotion and support of contract farming. So State Government should actively participate and make strict laws to promote contract farming venture in the state for the welfare of the stakeholders involved in contract farming. Monoculture of traditional crops can be de-motivated while providing suitable alternate of these crops.

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## STRUCTURAL RELATIONSHIP MODEL OF FACTORS AFFECTING STORE'S CUSTOMER LOYALTY FOR RETAIL CONVENIENCE STORE BUSINESS IN BANGKOK, THAILAND

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### Abstract

The objectives of this research were (1) to develop and verify the structural relationship model of factors affecting customer loyalty for retail convenience store businesses in Bangkok and (2) to study the influence of perceived service quality, perceived price, perceived product quality and customer satisfaction on customer loyalty for retail convenience store businesses in Bangkok. The sample group comprised 400 customers at convenience stores in Bangkok, all of whom were selected on the basis of convenience sampling. A rating scale questionnaire with a reliability score between 0.911 and 0.967 was used as the research tool. The data were analyzed using percentage, average, standard deviation, Pearson's correlation coefficient, confirmatory factor analysis, and causal structural model analysis. The results revealed that the causal structural model under the hypothesis had a high relevance with empirical data ( $\chi^2 = 192.456$ ,  $\chi^2/df = 1.492$ ,  $df = 129$ ,  $GFI = 0.956$ ,  $CFI = 0.991$ ,  $NFI = 0.972$ ,  $IFI = 0.991$ ,  $AGFI = 0.929$ , and  $RMSEA = 0.035$ ). Causal variables were able to explain the fluctuation in loyalty for Bangkok convenience stores at the rate of 72.9%. This loyalty was directly influenced by customer satisfaction and perceived service quality. Meanwhile, perceived product quality and perceived price had an indirect influence on loyalty through customer satisfaction.

**Keywords:** *perceived service quality, perceived price, perceived product quality, customer satisfaction, store's customer loyalty, Thailand's convenience store industry*

### Introduction

Thailand is the second-largest economy in the ASEAN region, followed by Indonesia (Euromonitor, 2015). Bangkok, which is Thailand's capital and a commercial hub of Asia, is witnessing changes in lifestyle, with people having busier work schedules and smaller sized families. These factors have contributed to the popularity of retail businesses such as supermarkets and convenience stores (HKTDC, 2015). Retail business in Thailand grew rapidly as a result. By early 1990s, many Thai and foreign retailers entered into the industry as the market intensified. Local and international retail brands aggressively expanded their outlets in Bangkok and other parts of Thailand. That growth was set to continue in 2013, with the increased need to shop and the expanding suburban developments driving that growth. Convenience stores became the most competitive area of retail market, with a number of large firms opening many stores (Economic Review Year-Q1, 2013/). A form of retail, a convenience store is a small shop with extended hours of operation that offers a limited variety of grocery and beverages (Fernie et al., 2011). In 2014, convenience stores in Thailand had the most aggressive expansion and also contributed to highest sales turnover (Euromonitor, 2015). Their growth rate for the year was 7% - the highest among all forms of retail business. The growth rate for convenience stores was followed by the growth rate for specialty stores at 4.5%. Customer loyalty is a very important element obtained over time through the delivery of superior customer service, with the aim of reaping long-term profits. Convenience stores are highly competitive because competitors are aware of one another's position (Codrington, 2002). Customer loyalty occurs when shoppers frequent a selected convenience store. In fact, loyal customers repeat and increase their purchases, which in turn increases the sales revenue of business organizations (Li and Green, 2011).



Therefore, customer satisfaction and loyalty are the feedback of a successful retail marketing strategy in a competitive market where customers look for value in how they spend their money. Convenience stores and traditional outlets have successfully coexisted in Thailand without any discrimination from the customers (Abu and Roslin, 2008). Household income indicated which customers are attracted to which type of outlet (Zain and Rejab, 1989). In Thailand, traditional retail stores attract the low and mid-level income consumers. Modern retail formats attract the upper and middle-income shoppers. However, consumer lifestyles and preference are changing rapidly, as along with the education level of the population (Abu and Roslin, 2008). Tesco of the United Kingdom, Big C/Carrefour of France, Family Mart of Japan, and 7-Eleven of the United States all have a presence in Thailand. Nevertheless, the daily routines of city dwellers, particularly those in Bangkok, have changed drastically. According to the Siam Commercial Bank Research Center (2012), life became more fast-paced and thus, more convenience was needed. People buy less, but they buy more frequently. This behavior compelled entrepreneurs to open more convenience stores in Bangkok, to serve its residents. The intensity was such that saturation was nearly reached. This is consistent with an article by the Economy and Business Research Center (2014), which states that Bangkok families dwindled in size and typically lived in apartment or condominium buildings and that they rely more on convenience stores. Intense competition ensued. Each convenience store had to be competent to correspond to the needs of the consumers, particularly where customer service was concerned. This is a major factor contributing to the competitiveness and the survival of convenience stores. Given the above circumstances, the researchers wanted to study the influence of service quality on customer satisfaction, which in turn instilled loyalty, an important factor in succeeding in the increasingly competitive field of grocery retailing (Anderson et al., 1994).

### **Literature Review**

Previous research on factors affecting customer loyalty, such as the work of Richard and Dorah (2014), Chang and Tu (2005), and Rahim et al. (2012), led to the synthesis of factors affecting customer loyalty as follows: 1) perceived service quality (PSQ); 2) perceived price (PP); 3) perceived product quality (PPQ); and 4) customer satisfaction (CS). This led to the development of the model and the hypotheses of this research. The details of which are explained below.

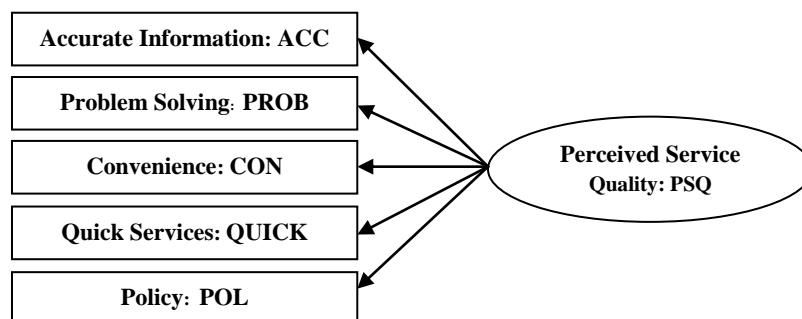
#### ***Perceived service quality***

Service quality is considered to be the most significant element for the evaluation of an organization's efficiency, including the product market and the service market (Reddy et al., 2011). Service quality is a comparison of expected service against perception from actual service received (Li and Krit, 2012). This corresponds with the concept of Cronin and Taylor (1992), who stated that the basic concept of service quality concerned the comparison of a service user's experience against the expectation at the time of service. Additionally, service quality could be measured by the level of satisfaction or dissatisfaction. Meanwhile, Rust and Anthony (1993) defined service quality as the extension of service, comprising service process and capable organization. The literature contains varying definitions for service quality. One common consensus is that service quality is achieved when one provides a service that is consistent with the needs of the customer or one matching their expectation (Asubonteng et al., 1996; Dotchin and Oakland, 1994; Lewis and Mitchell, 1990).

Based on the above concept, Muhammad and Ahasanul (2014) have conducted a study on factors affecting customer satisfaction and customer loyalty for retail stores in Malaysia. Involving 350 customers, the study found that service quality had statistical significance as it correlated with customer satisfaction, which had a direct influence on customer loyalty. Similarly, research by Rahim et al. (2010) indicated that bank customers in Tehran, Iran,

developed satisfaction and loyalty to the banks due to service quality. The above definitions and theoretical concepts on service quality suggested the need to define and deliver quality service to fulfill the needs and meet the expectations of the customers; further it suggested the need to provide guidelines for the determination of organizational strategies with the customers' needs as a key concern. There are five components of perceived service quality, as per the view of academics and diverse research findings. The first component is accurate information. The reliability of retail stores can be evaluated from their provision of correct, mistake-free service information (Huang, 2009). Correct information and clear pricing of products are equal to accurate correction of product information (Vázquez et al., 2001). The second component is problem solving. Several organizations use customer satisfaction as a supporting criterion for performance evaluation (Kotler and Keller, 2011).

This encompasses the ability to refund or replace products. Employees need to be genuinely concerned about and attentive to complaints, with quick and straightforward resolution of problems (Swanson and Kelley, 2001) and (Vázquez et al., 2001). The third component is Convenience. Convenience is defined as speed and ease for the customers with consideration for accessible location, proper parking space, operating hours and Internet-based communication. Easy access channels correlate with the choice of convenience stores by the customers (Bellenger et al., 1977). The fourth component is quick services. Transactions must be completed quickly and without complications. Payment methods, quick service, employee training, good service system design and time-saving at the counter all affect a customer's choice to use a particular convenience store (Lambert, 1979). The fifth component is policy. The policy must emphasize the development of service quality in five dimensions: physical aspects, reliability, personal interaction, problem solving and policy on merchandise quality (Dabholkar et al., 1996). Based on the information above, the research hypothesis was determined: perceived service quality directly affects customer satisfaction ( $H_1$ ). The model is shown in Figure 1 below.

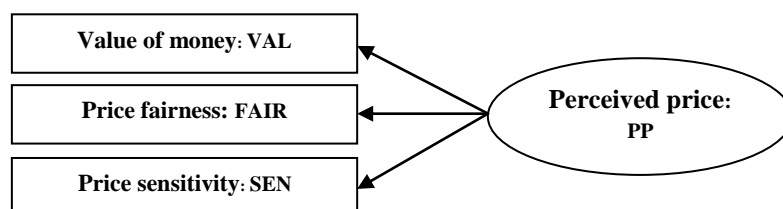


**Figure 1: Measurement model of perceived service quality**

### Perceived Price

Perceived price also plays an important role in determining post-purchase satisfaction (Jiang and Rosenbloom, 2005). Hence, the more favorable the perceived price, the higher the resulting satisfaction. According to Alvarez and Casielles (2005), if the consumer perceives a gain (as a result of his/her positive price perception), he or she will be more satisfied and become a repeat customer. In addition, it has been suggested that, after the establishment of purchase behavior and even after the establishment of new price information, price perception is found to be a process that is dynamically regenerated (Mendoza and Paul, 2012). A comprehensive price strategy can help retailers achieve distinctive business success. Furthermore, Frazier-Coleman (2008) posited that creating and implementing pricing rules and strategy help retailers increase sales volume and the resulting profit. Hinz et al. (2011) found that the threshold price can increase revenue by as much as 20 percent through the increase of customer satisfaction and loyalty. Meanwhile, Muhammad and Ahasanul (2014) studied factors affecting loyalty through customer satisfaction. They designed and used an empirical survey with 350 customers at convenience stores in Malaysia and discovered that product price had a direct influence on customer satisfaction.

Additionally, a study by Sumaedi et al. (2011) determined that perceived price had a direct effect on satisfaction when the effects of perceived product quality and perceived price on customer satisfaction of students at Indonesian universities were examined. The above definitions and theories on perceived price highlight the need to determine an appropriate price for products and services to fulfill the needs and meet the expectations of the customers who might be willing to pay for those products and services and to provide the guidelines for developing organizational strategies with customer needs as a key concern. As per the view of academics and diverse research findings, there are three components of perceived price. The first component is the value of money. The price perceived by consumers shapes their decisions Oosthuizen, (2015). Price value is a perception of quality in connection with the price paid for products or services as a result of price competition, discount and sales promotion. (Varki and Colgate, 2001). The second component of perceived price is price fairness. Customers assess whether the price set by the seller is appropriate or fair and whether it is ultimately acceptable (Xia et al., 2004). Fair price is determined, in one way, through comparison with the benchmark price of the society (Bolton et al., 2003). The third component of perceived price is price sensitivity. The willingness of customers to pay for products and services is based on their perception of cost against the lowest and highest prices (Anttila, 1990). Price sensitivity is determined by the unit of products or services sold at differing prices (Levy and Weitz, 2012). Based on the information above, the research hypothesis was determined: perceived price directly affects customer satisfaction ( $H_2$ ). The model is shown in Figure 2 below.



**Figure 2: Measurement model of Perceived price**

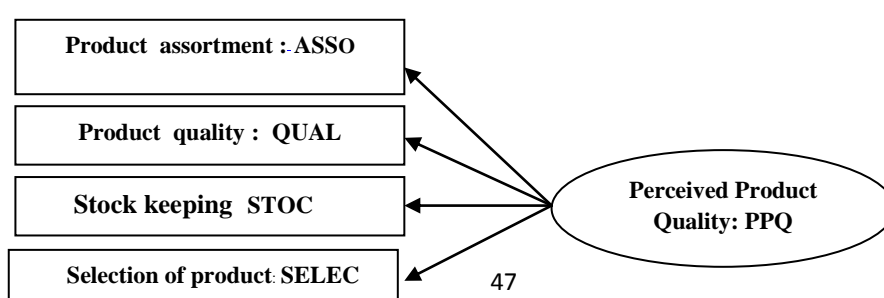
### Perceived Product Quality

Perceived product quality is central to the theory that strong brands or good quality products added points to how consumers evaluated their purchase (Low and Lamb, 2000). As retail

stores typically thrive on pushing or selling products produced by others, the retailers need to be determined to stock quality products in their stores. How a shopper perceives the quality of a product typically influences that shopper's value appraisal, which eventually influences their level of satisfaction and loyalty. Munger and Grewal (2001), Minguela-Rata (2011) and Minguela-Rata et al. (2006) noted that product quality was a key component through which retailers or business firms could differentiate themselves from their competitors and gain competitive business advantages. Muzondo and Mutandwa (2011) said that products had a significant influence on a consumer's choice of main store for grocery shopping.

Yavas and Babakus (2008) identified, in a study performed on national retailers, that merchandise quality was the second-most important antecedent in the formation of store loyalty. In a study to identify perceived quality constructs of consumers, durable goods and perceived merchandise quality played a crucial role in purchases (Cronin et al., 2000). However, the importance of the merchandise quality influencing satisfaction and store loyalty is largely ignored. Schiffman and Kanuk (2004) stated that customers often judged the quality of a product on the basis of a variety of informational cues (intrinsic, extrinsic or both) pertaining to the product. The above definitions and theories on perceived quality highlight the need to determine appropriate quality for products and services to fulfill the needs and meet the expectations of the customers who might be willing to decide on those products and services and to provide the guidelines for developing organizational strategies with the needs of the customers as a key concern. As per the view of academics and diverse research findings, there are four components of perceived product quality. The first component of perceived product quality is product assortment. Diversity must be a consideration when arranging the products, considering the breadth and the depth of the store as well as the color, size and price of products within each category (Gilbert, 2003). Good product arrangement should entice customers to walk around the store to encourage them to buy more than they had planned to buy. (Levy and Weitz, 2007). The second component of perceived product quality is product quality. Product quality encompasses eight dimensions: performance, features, conformance, reliability, durability, serviceability, aesthetics and customer-perceived quality (Garvin, 1988).

The degree to which a product meets a certain standard designation is its quality of conformance, which is an internal focus, as opposed to the external focus of the user-based approach. Quality is reflected in the outcome of both the engineering and the manufacturing processes (Crosby, 1980). The third component of perceived product quality is stock keeping. Stock keeping mainly involves the number of inventory units and the availability of favorite brands (Amine and Cadenat, 2003). This static substitution model simplifies the resulting inventory and variety analysis, but it is a considerably unsatisfying assumption for categories in which consumers substitute readily when products are out of stock, such as cigarettes, soft drinks and grocery items (Mahajan and van Ryzin, 2001). The fourth component of perceived product quality is the selection of product. This component covers all items offered to market and attract attention, acquisition or consumption, including physical objects, services, personalities, organizations and desires (Drummond and Ensor, 2005). Based on the information above, the research hypothesis was determined: perceived product quality directly affects customer satisfaction ( $H_3$ ). The model is shown in Figure 3 below.



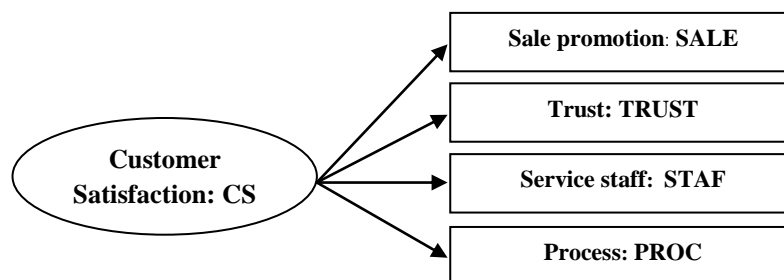
**Figure 3: Measurement model of Perceived Product Quality**

**Customer Satisfaction**

A widely observed element in business and commercial enterprises, customer satisfaction can be used as a measurement for products and services. Companies and stores need to be concerned about customer satisfaction and the growing range of diverse products and services to remain competitive, (Jayaraman et al., 2010). Customer satisfaction is explained as the feeling a customer has towards the value of the product or service (Sumit et al., 2013). It is achieved when the needs of the consumers are fulfilled and elevated to a level higher than the expectations of the customers (Oliver, 1997). Ching and Meng (2008) studied the perception of value when purchasing products from television programs. They found that customer satisfaction had a direct influence on loyalty. That corresponds with Richard and Dorah (2014), who studied the satisfaction of customers at 151 African retail stores, and found that satisfaction had a positive influence on customer loyalty. Meanwhile, Rahim et al. (2012) found that the positive relationship between satisfaction and loyalty was crucial to the customers. Satisfaction alone could not drive an organization to succeed or achieve the goals for them.

The above definitions and theories on customer satisfaction highlight the need to create one for the products and the services and to provide the guidelines for the development of organizational strategies with the needs of customers as a key concern. As per the view of academics and diverse research findings, there are four components of customer satisfaction. The first component is sale promotion. Promotion covers various forms of communication, including advertising, sales by staff and direct marketing media (Kerin et al., 2009). Enticement for repeat or multiple purchases with discounts, free handouts and introductory magazines may also be considered as sales promotion Reutenberg (2008). The second component of customer satisfaction is trust. Trust is earned from the genuineness with which a firm creates customer satisfaction. It is crucial to the building of a good relationship for the provider to meet the customer’s expectation of product/service delivery according to the terms under the agreement (Liang and Wang, 2008). The third component of customer service is service staff. Customers can appreciate how staff perform their duties and marketing roles, as well as how they offer facilitation and added value (Valarie et al., 1985). Staff are expected to be knowledgeable about new products and their prices, as well as to be able to offer diverse options within the store while managing any complaints from the customer (Darian et al., 2001). The fourth component of customer satisfaction is process. An operational process of an organization should have a positive contribution to the retention of customers. Customers who are satisfied are likely to be loyal and express that loyalty by recommending the store to others and by vouching for the store (Sirohi et al., 1998) and (Yuen and Chan, 2010).

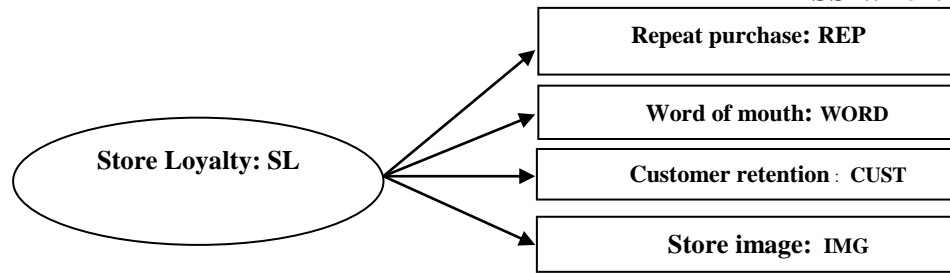
Based on the information above, the research hypothesis was determined: customer satisfaction directly affects store loyalty (H<sub>4</sub>). The model is shown in Figure 4 below.



**Figure 4: Measurement model of Customer Satisfaction****Store Loyalty**

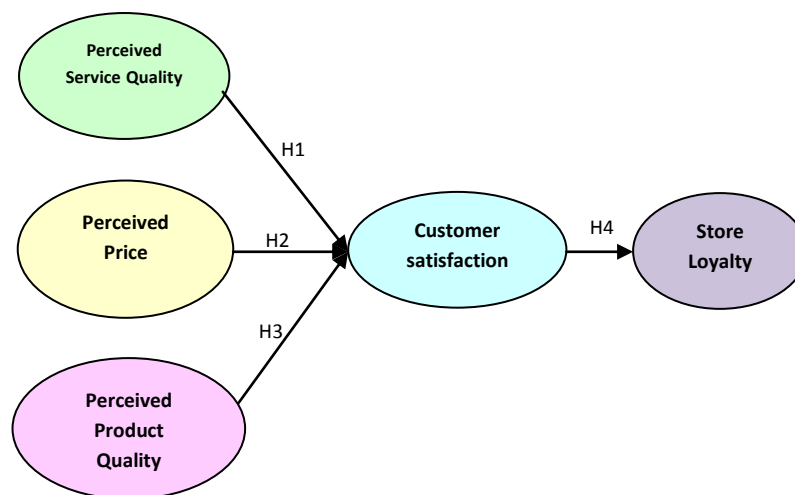
Studies have been conducted on customer loyalty since 1950, beginning from customer satisfaction with products and services (Rahim et al., 2012). Customer satisfaction is a main focus for efficient marketing campaigns. It is the sum of customer perception, customer evaluation and the customer's psychological experience with a product or a service. Customer satisfaction is an indication that they gain more benefits than the amount paid (Liu and Yen, 2010). Loyalty is the deepened commitment to purchase the same products or services with which they are satisfied again in the future, as may be influenced by marketing circumstances (Oliver, 1999). Loyalty can be determined from the level of relationship and repeated purchases (Pritchard and Howard, 1997). Dick and Basu (1994) stated that loyalty is the direct correlation between an individual's relative attitude and repeated patronage for a product or a service. Further, loyalty can be used to define and evaluate the attitudes and the behaviours of the customers purchasing a service or product. This can be measured from the continuity of the relationship a customer has had with a provider. Loyalty has a positive correlation with profitability and brings long-term growth to the company (Richard and Dorah, 2014). The above definitions and theories on customer loyalty highlight the need to create one, as well as the need to develop strategies for the creation of products and services that correspond with the needs of the customers, which in turn creates satisfaction and loyalty.

According to researchers who have studied product and service purchase behaviours with an aim to develop marketing strategies for successful and sustainably growing business Anton (1996), Singh (2006), Gupta and Cooper (2013), Bloemer and Odekerden (2002) Lin et al. (2005) Ranaweera and Prabhu (2003), Levy and Weitz (2009), Berman and Evans (2005), Chang and Tu (2005) and Omar (1999), there are four components of customer loyalty. The first component of customer loyalty is repeat purchase. A repeat purchase is when a person is satisfied with a previous purchase of product or service and decides to purchase the same item again from the store or the company. This satisfaction enhances the level of recommendation for products or services. The second component of customer loyalty is word of mouth. This type of communication is a testimonial for an organization, a product or a service. A positive word of mouth signifies loyalty and contributes to the confidence with which a business is run. Word of mouth has a direct correlation with service quality. The willingness of a customer to pass on this recommendation also has an influence on their decision to purchase. The third component of customer loyalty is customer retention. Business enterprises need to deploy advanced marketing tactics, out of economic concerns, to retain customers and to solicit sympathy. A true customer retention has the potential to create profit at a later time and lead to the type of loyalty that contributes to the success of an organization. The fourth component of customer loyalty is store image. Customers can be impressed by the image of a store and how it presents new products to attract them to come inside. For retail businesses, store image is generally defined by location, product, pricing, position level, customer service, target marketing, physical facilities and purchase experience as well as sales promotion tools such as advertising, sales by staff and community services. Therefore, the measurement model of store loyalty can be summarized as in Figure 5 below:



**Figure 5: Measurement model of Store Loyalty**

Based on the concepts, theories and research above, the researchers have defined the conceptual framework for this research as illustrated in Figure 6 below:



**Figure 6: Conceptual framework**

### Research Methodologies

**Population and sample group:** The populations studied were customers or users at convenience stores in Bangkok. As the analysis of latent variables in the analysis of structural relationship model requires the use of data from a large sample group, Schumacker and Lomax (2010) proposed to use a sample group 10 to 20 times per one observable variable. There were 20 observable variables in this research. Therefore, a sample group was 400 customers or users at convenience stores in Bangkok. In this study, convenience sampling was used to obtain the sample group.

**Research tool:** The tool used in this research was a questionnaire with content that was divided into five parts as follows:

- Part 1: Inquiry of perceived service quality, covering five aspects: accurate information, problem solving, convenience, quick service and policy
- Part 2: Inquiry of perceived price, covering three aspects: value of money, price fairness and price sensitivity
- Part 3: Inquiry of perceived product quality, covering four aspects: product assortment, product quality, stock keeping and selection of product
- Part 4: Inquiry of customer satisfaction, covering four aspects: sales promotion, trust, service staff and process
- Part 5: Inquiry of store loyalty, covering four aspects: repeat purchase, word of mouth, customer retention and store image

The research tool quality was tested as follows:

1) Validity: The research tool was tested for validity, with respect to the Item-objective Congruence Index. It appeared that the IOC was above .50 for all questions (.60-1.00). This indicated the high validity of the research tool 90 (Prasitrattasin, 2003).

2) Cronbach's alpha: The research tool was tested for confidence in measurements through determination of a confidence coefficient or Cronbach's alpha. It was found that confidence was high for all measurements, with a Cronbach's alpha value above 0.70 for all items (Prasitrattasin, 2007). Perceived product quality has the highest Cronbach's alpha (0.967), followed by store loyalty (0.953), customer satisfaction (0.947), perceived service quality (0.941) and perceived price (0.911), respectively.

For the collection of data, after the questionnaire was verified and improved until reliable quality was obtained, the researcher and assistants entered the target area to use this questionnaire with the sample group, which was selected on the basis of convenience. A total of 400 individuals were asked to conduct a self-evaluation until data collection was fully completed.

Data analysis: Data analysis was conducted as follows:

1. Preliminary data were analysed through the use of means, standard deviation, skewness and kurtosis. The correlation coefficient between observable variables within the model was analyzed.

2. Structural equation model (SEM) was analyzed and verified for goodness of fit measures using the following statistical values: Chi-square statistics ( $\chi^2$ ),  $\chi^2/df$  ratio, goodness of fit index (GFI), adjusted goodness of fit index (AGFI), standardized root mean square residual (SRMR), root mean squared error approximation (RMSEA) and comparative fit index (CFI). The criteria used to determine coherence of the overall model with empirical data were  $\chi^2/df \leq 2.00$ ,  $GFI \geq 0.90$ ,  $AGFI \geq 0.90$ ,  $CFI \geq 0.90$ ,  $NFI \geq 0.90$ ,  $IFI \geq 0.90$  and  $RMSEA \leq 0.05$  (Meyers et al., 2012).

## **Results and Discussion**

Analysis of inter-variable correlation: Inter-variable correlation was analysed using Pearson's correlation coefficient as detailed in Table 1.

Table 1 verified the correlation between all pairs of observable variables studied in the structural equation model using Pearson's correlation coefficient. It was determined that all observable variables were correlated with statistical significance at the level of 0.05. Upon verification of the correlation level, all pairs of observable variables had a correlation not exceeding 0.80. Therefore, observable variables were not overly correlated and did not result in the issues of multicollinearity or overlapping. Appropriateness of correlation was verified once again on the basis of the Kaiser-Meyer-Olkin test equalling 0.957, which was higher than 0.50 and indicated that observable variables of the structural equation model were suitably correlated. Further, with Bartlett's Test of Sphericity equalling 6,801.368,  $df$  equalling 190 and P-value equalling 0.000, the statistical significance was 0.95, indicating that the matrix of correlation between all observable variables was sufficient for analysis of the model for measurement of the latent variables above



Table 1: Correlation coefficient between variables affecting customer loyalty for convenience stores in Bangkok

variables	ACC	PROB	CON	QUICK	POL	VAL	FAIR	SEN	ASSO	QUAL	STOC	SELEC	SALE	TRUST	STAF	PROC	REP	WORD	CUST		
ACC	<b>1</b>																				
PROB	<b>.665*</b>	<b>1</b>																			
CON	<b>.670*</b>	<b>.551*</b>	<b>1</b>																		
QUICK	<b>.640*</b>	<b>.559*</b>	<b>.726*</b>	<b>1</b>																	
POL	<b>.620*</b>	<b>.514*</b>	<b>.650*</b>	<b>.655*</b>	<b>1</b>																
VAL	.619*	.579*	.622*	.572*	.626*	<b>1</b>															
FAIR	.494*	.510*	.520*	.480*	.503*	<b>.682*</b>	<b>1</b>														
SEN	.547*	.373*	.493*	.473*	.522*	<b>.554*</b>	<b>.452*</b>	<b>1</b>													
ASSO	.643*	.522*	.711*	.594*	.607*	.622*	.520*	.551*	<b>1</b>												
QUAL	.642*	.490*	.709*	.606*	.580*	.663*	.522*	.574*	<b>.776*</b>	<b>1</b>											
STOC	.652*	.555*	.655*	.643*	.588*	.631*	.557*	.539*	<b>.756*</b>	<b>.776*</b>	<b>1</b>										
SELEC	.607*	.482*	.634*	.585*	.569*	.611*	.505*	.528*	<b>.717*</b>	<b>.797*</b>	<b>.774*</b>	<b>1</b>									
SALE	.551*	.437*	.549*	.484*	.522*	.525*	.382*	.649*	.562*	.585*	.564*	.566*	<b>1</b>								
TRUST	.603*	.501*	.594*	.614*	.583*	.590*	.492*	.566*	.652*	.691*	.656*	.665*	<b>.648*</b>	<b>1</b>							
STAF	.617*	.605*	.541*	.634*	.541*	.562*	.531*	.441*	.562*	.601*	.624*	.620*	<b>.513*</b>	<b>.712*</b>	<b>1</b>						
PROC	.533*	.542*	.555*	.626*	.524*	.481*	.520*	.375*	.529*	.515*	.579*	.536*	<b>.453*</b>	<b>.589*</b>	<b>.796*</b>	<b>1</b>					
REP	.508*	.487*	.458*	.422*	.512*	.477*	.396*	.349*	.499*	.464*	.503*	.522*	.395*	.479*	.538*	.492*	<b>1</b>				
WORD	.570*	.485*	.562*	.515*	.597*	.551*	.452*	.534*	.563*	.592*	.564*	.606*	.622*	.590*	.540*	.513*	.700*	<b>1</b>			
CUST	.599*	.485*	.482*	.451*	.534*	.500*	.401*	.541*	.523*	.497*	.544*	.560*	.667*	.573*	.532*	.486*	.636*	.727*	<b>1</b>		
IMG	.605*	.545*	.540*	.544*	.537*	.505*	.446*	.495*	.526*	.549*	.580*	.599*	.618*	.619*	.599*	.574*	.662*	.752*	.777*	<b>1</b>	

\*p-value < .05

Kaiser-Meyer-Olkin = 0.957 Bartlett's Test of Sphericity = 6801.368, df = 190, p-value = 0.00

**Table 2: Correlation coefficient between latent variables**

latent variables		PSQ	PP	PPQ	CS
PSQ	Perceived service quality				
PP	Perceived price	0.751*			
PPQ	Perceived product quality	0.792*	0.745*		
CS	Customer satisfaction	0.789*	0.721*	0.777*	
SL	Store loyalty	0.705*	0.633*	0.674*	0.741*

The analysis of correlation coefficient between latent variables as shown Table 2 highlighted that all latent variables had a positive correlation with one another with a statistical significance at the level of 0.05. The pair of variables with highest correlation was perceived product quality (PPQ) and perceived service quality (PSQ) ( $r = 0.792$ ). The next three highest correlations were between customer satisfaction (CS) and perceived service quality (PSQ) ( $r = 0.789$ ); between customer satisfaction (CS) and perceived product quality (PPQ) ( $r = .777$ ); and between perceived service quality (PSQ) and perceived price (PP) ( $r = 0.751$ ).

The analysis of the model for the measurement of perceived service quality, perceived product quality, perceived price, customer satisfaction and customer loyalty for convenience stores in Bangkok. The confirmatory study of structural components (perceived service quality, perceived product quality, perceived price, customer satisfaction and customer loyalty for convenience stores in Bangkok) produced the results shown in Table 3.

**Table 3: Outcome of analysis of model for the measurement**

Measurement model	Observable variables	Beta) $\beta$ (	$R^2$
Perceived service quality (PSQ)	1. Accurate information (ACC)	0.90	0.77
	2. Problem solving (PROB)	0.72	0.81
	3. Convenience (CON)	0.88	0.87
	4. Quick service (QUICK)	0.90	0.88
	5. Policy (POL)	0.81	0.64
Perceived price (PP)	1. Value of money (VAL)	0.99	0.75
	2. Price fairness (FAIR)	0.80	0.89
	3. Price sensitivity (SEN)	0.62	0.80
$\chi^2 = 247.474$ , $df = 138$ , $\chi^2/df = 1.793$ , $GFI = 0.943$ , $CFI = 0.979$ , $NFI = 0.955$ , $IFI = 0.980$ , $AGFI = 0.913$ , $RMSEA = 0.045$			
Perceived product quality (PPQ)	1. Product assortment (ASSO)	0.88	0.90
	2. Product quality (QUAL)	0.94	0.91
	3. Stock keeping (STOC)	0.91	0.91
	4. Selection of product (SELEC)	0.91	0.90
$\chi^2 = 177.499$ , $df = 102$ , $Chi\text{-Square}/df = 1.740$ , $GFI = 0.951$ , $CFI = 0.989$ , $NFI = 0.974$ , $IFI = 0.989$ , $AGFI = 0.928$ , $RMSEA = 0.043$			
Customer satisfaction (CS)	1. Sales promotion (SALE)	0.59	0.81
	2. Trust (TRUST)	0.76	0.92
	3. Service staff (STAF)	0.99	0.89

4. Process (PROC)		0.88	0.90
$\chi^2 = 103.674$ , $df = 57$ , $\chi^2/df = 1.819$ , $GFI = 0.966$ , $CFI = 0.992$ , $NFI = 0.982$ , $IFI = 0.992$ , $AGFI = 0.929$ , $RMSEA = 0.045$			
Store loyalty (SL)	1. Repeat purchase (REP)	.77	.59
	2. Word of mouth (WORD)	.86	.74
	3. Customer retention (CUST)	.97	.95
	4. Store image (IMG)	.94	.89
$\chi^2 = 108.639$ , $df = 65$ , $\chi^2/df = 1.671$ , $GFI = 0.968$ , $CFI = 0.992$ , $NFI = 0.980$ , $IFI = 0.992$ , $AGFI = 0.933$ , $RMSEA = 0.041$			

The analysis results from Table 3 indicated that the model of measurement for the latent variables of perceived service quality, perceived product quality, perceived price, customer satisfaction and customer loyalty for convenience stores in Bangkok correlated with the empirical data, according to the criteria  $\chi^2/df \leq 2.00$ ,  $GFI \geq .90$ ,  $AGFI \geq .90$ ,  $CFI \geq .90$ ,  $NFI \geq .90$ ,  $IFI \geq .90$  and  $RMSEA \leq .05$ . It was consistent with the conceptual framework of the research. The factor loading of each variable was as follows:

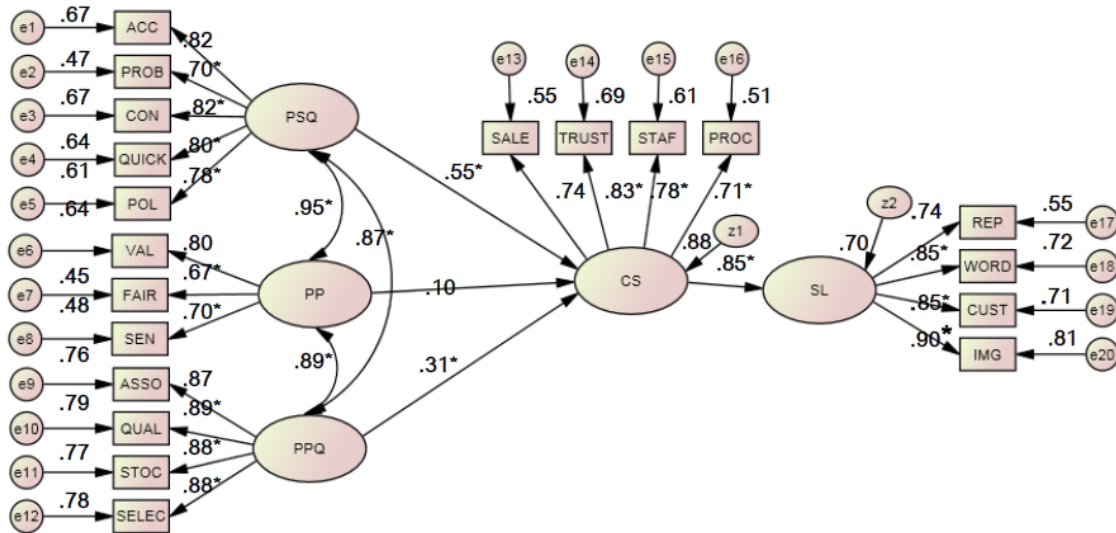
- Latent variables of perceived service quality (PSQ): accurate information (ACC = 0.90), problem solving (PROB = 0.72), convenience (CON = 0.88), quick service (QUICK = 0.90) and policy (POL = 0.81)
- Latent variables of perceived price (PP): value of money (VAL = 0.99), price fairness (FAIR = 0.80) and price sensitivity (SEN = 0.62)
- Latent variables of perceived product quality (PPQ): product assortment (ASSO = 0.88), product quality (QUAL = 0.94), stock keeping (STOC = 0.91) and selection of product (SELEC = 0.91)
- Latent variables of customer satisfaction (CS): sales promotion (SALE = 0.59), trust (TRUST = 0.76), service staff (STAF = 0.99) and process (PROC = 0.88)
- Latent variables of store loyalty (SL): repeat purchase (REP = 0.77), word of mouth (WORD = 0.86), customer retention (CUST = 0.97) and store image (IMG = 0.94)

Analysis of structural relationship model of customer loyalty for convenience stores in Bangkok: The analysis of structural relationship model of customer loyalty for convenience stores in Bangkok, as per Table 4 and Figure 7, revealed that Chi-square was 192.456 at the degree of freedom (df) of 129. The goodness of fit index (GFI) was 0.956, the adjusted goodness of fit index (AGFI) was 0.929, the comparative fit index (CFI) was 0.991, and the root mean squared error approximation (RMSEA) was 0.035. This indicated that the structural relationship model of customer loyalty for convenience stores in Bangkok correlated with empirical data, meaning that the developed model could effectively explain the causal relationship and the consequences of the various factors under the conceptual framework. It summarized the outcome of the research as follows:

Analysis of direct influence (DE), indirect influence (IE) and total influence (TE) of the factors studied in connection with customer loyalty for convenience stores in Bangkok (as shown in Figure 7 and Table 4 below) indicated that the store loyalty (SL) was positively influenced by the variable of customer satisfaction (CS) at the level of 0.85. Meanwhile, the variables of perceived service quality (PSQ), perceived product quality (PPQ) and perceived price (PP) only had positive influence on store loyalty (SL).

Perceived service quality (PSQ) was the variable with the highest indirect influence of 0.50, followed by perceived product quality (PPQ) and perceived price (PP) with indirect influences of 0.27 and 0.09, respectively. Perceived service quality, perceived product quality,

perceived price and customer satisfaction could explain customer loyalty for convenience stores in Bangkok at the percentage of 72.9 ( $R^2 = 0.729$ ).



\* $P < .05$ ,  $\chi^2 = 192.456$ ,  $df = 129$ ,  $\chi^2 / df = 1.492$ ,  $GFI = 0.956$ ,  $AGFI = 0.929$ ,  $CFI = 0.991$ ,  $NFI = 0.972$ ,  $IFI = 0.991$ ,  $RMSEA = 0.035$

Figure 7: Structural relationship model of customer loyalty for convenience store in Bangkok.

### Discussion and Conclusion

This study tested the structural equation model detailing the correlation of variables with influence on loyalty through customer satisfaction. These variables were perceived service quality, perceived price and perceived product quality. It was found that the key factor with statistical significance influencing satisfaction, which led to loyalty, was perceived product quality. Perceived service quality was another factor of statistical significance and influence on customer satisfaction. From the study, it was discovered that convenience stores in Bangkok should realize that their customers must be able to perceive the quality of their service and that they must procure products and develop a quality service pattern which corresponds with the needs of customers. It corresponded with the studies of Ullah (2012) and Jari and Jouni (2010), which similarly stated that quality management of service leads to customer satisfaction and repeat patronage.

Additionally, Chaniotakis and Lymperopoulos (2009) stated that customer satisfaction is derived from quality service and results in recommendations to other customers, which is a highly positive scenario for an organization. It corresponded with the study of Asma et al. (2015) on perceived product quality and purchase intention with consumer satisfaction that found that product quality had both direct and indirect influences on satisfaction. That study proposed for marketing managers to concern themselves with the continual enhancement of product quality, in part, as an organizational strategy to compete with others in the market.

### Limitation

First, this research used convenience sampling in Bangkok, where 70% of the convenience stores are 7-Elevens, with TESCO Lotus Expresses and Family Marts following in number. Therefore, the sample group of this research comprised mainly 7-Eleven customers. The outcome of the research may be biased because of limited time and research capital. Second,

this study is a static type of research, but store loyalty, customer satisfaction, perceived service quality, perceived price and perceived product quality are all dynamic processes. As time goes on, the customers' needs will change, thus their standards of store loyalty will change, and these values will also change. Therefore, this research needs to be both developing and changing because the best research is conducted under dynamic situations.

**Suggestions for Future Research**

1. This study only chooses perceived service quality, perceived price, and perceived product quality and customer satisfaction as the factors to research. There are other factors that could influence the relationships of the four variables, such as customer value, customer awareness, customer consumption, technology and facility, word of mouth, the number of parking places, sense of safety and others. Thus, in the future, it would be worth considering whether to add those factors to the current model to make the model more perfect.
2. A future study should identify a good service strategy guideline that contributes to loyalty. It may use a qualitative research direction in conjunction with a quantitative one to arrive at clearer research findings.
3. This study did not scrutinize the influence of business image. A future research study may compare the influence of business image with the influence of service quality to see which of those has more influence on customer satisfaction and loyalty. Alternatively, it may study the joint influence of business image and service quality on customer satisfaction and loyalty.
4. A future study should balance the sampling group with other convenience stores because the customer's point of view for different convenience stores may affect the research quality outcome.

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## A CONFIGURATION OF MARKETING PRACTICE FIT WITH MANAGERIAL ASSUMPTIONS AND BUSINESS STRATEGY

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### Abstract

This paper investigates how management perception and business strategy fits with the choice of the marketing practice. The study employs configuration approach from a data that were collected using three case studies in Palestine, and analyzed using informed coding method. The results showed that the three imperatives are inter-related, and internally coherent, resulting in viable configuration profiles. The research is unique and exploratory, and would help managers to carefully examine the internal logic of their marketing-related profiling, it can be used as an assessment tool of their marketing practices in relation to their frame of reference and business strategy, performance should be enhanced if the three variables are coherent.

### Introduction

One of the fundamental issues of strategic marketing is to explain the differences in marketing behavior of competing businesses in the marketplace 1. Specifically, why do competing companies approach the same market differently?

The plurality of marketing practices is self-evident, and several studies has documented different marketing practices employed by firms (e.g. Brodie et al., 2008, Coviello et al., 2002). In addition, mainstream marketing thinking did adopt the traditional contingency view to explain this plurality (Donaldson, 2001). While the contingency approach offers insights into some of the reasons for this diversity, several studies have contradicted this hypothesis and suggested that firms do relate to the same market in different ways (Brodie et al 2008). This gap between theory and empirical studies suggests that further research is needed to understand diversity of marketing practices (Day and Montgomery, 1999, Pels, 2010, Varadarajan, 2010). Accordingly, this exploratory research addresses the issue of marketing practice diversity in the “same macro environment”.

The first point of departure is found in strategic management literature since the presence of diversity and the search of archetypal order is well researched in this field. Earlier literature of strategic management argues that the strategic choices of firms are a reflection of the values and cognitive bases of powerful actors within the organization (e.g. Anderson and Paine, 1975, Elsbach, 2014, Hambrick and Mason, 1984, Kaplan, 2011). Researchers have reported that different strategic outcomes are a result of the diverse assumptions that managers make about their environment (e.g. Hambrick and Mason, 1984, Gallen, 2006, Schwenk, 2007). Surprisingly, marketing literature has ignored the effect of management assumptions on the choice of marketing practice (Pels, 2010).

Yet previous studies have provided evidence that the selection of functional strategies (e.g., marketing practice) flow from and are consistent with business strategy (Olson et al., 2005). Several studies found that strategic marketing responses differ with different strategic types (Mcdaniel and Kolari, 1987; McKee et al. 1989). Therefore, it is expected that business strategy would affect the marketing practice selection.

Drawing on the configuration approach which examines the multidimensional constellation of the strategic and organizational characteristics of a business (Meyer et al., 1993), this

exploratory paper integrates the organization's managerial assumptions, its business strategy, and marketing practices into a coherent framework that would help discover viable configuration profiles. Awareness of such profiles is important, not only for better understanding of marketing strategy formulation, but also to suggest a rationale for understanding its diversity (Miller, 1987) which is the main goal of this study.

This research examines the psychological and practical aspects of a unique cultural setting. The Palestinian market with its political, economic, and traditional orientation presents a unique setting for this exploratory research, which may complement or improve the predominant management and business models from the "developed" world. From a theoretical point of view, this paper may provide a better understanding of the reasons for diversity of marketing practice in a real business environment, through linking it to diversity of management assumptions and plurality of strategic business choice. In addition, it attempts to provide an integrative view of interfirm relationships as a means of value creation. From a managerial perspective, the findings should help firms to examine carefully the internal logic of their marketing-related profiling. Performance should be enhanced if the three elements are coherent.

The remaining parts of this paper are organized into three sections. First, the literature on management assumptions, business strategy, and marketing practice is reviewed, and an appropriate classification to represent each variable in the theoretical framework is selected. Next, the paper presents the findings of three case studies. Lastly, the paper concludes by discussing the findings, managerial implications, and future avenues for research.

## **Literature Review**

### **a. Managerial Assumptions**

The importance of managerial assumptions in the formulation of organizational strategies, and their role in explaining diversity of strategic behavior has been identified by management researchers (e.g. Child, 1997, Daft and Weick, 1984, Hambrick and Mason, 1984). This research stream suggested that organizational outcomes are a reflection of the values and cognitive bases of powerful actors within the organization (e.g. Gallen, 2006, Schwenk, 2007, Shrivastava and Mitroff, 1983). Several authors argued that the cognitive base affects the manager's field of vision, selectivity, and subsequent interpretation process thus "directly entering in the strategic choice" (Hambrick and Mason, 1984).

In the managerial discipline, different terms were used to refer to managerial assumptions: Frame of reference (Shrivastava and Mitroff 1983) Organizational culture (Good enough, 1971), Sense-making and sense-giving (Gioia and Chittipeddi, 1991). Taken Shrivastava and Mitroff (1983) Frame of reference (hereafter FoR) typology – clarity, clearness and the fact that an operation of its construct has been executed, and tested, this paper adopts it as a determinant of managerial assumption.

Shrivastava and Mitroff (1983, p. 163) described FoR as "the fundamental assumptions on which organizational inquiry into problems is based. They include methodological, epistemic, ontological, and ideological assumptions which enable organizational members to make consensual meaning out of social events". The authors identified four types of organizational FoR based on the following six constructs: cognitive elements: are the fundamental units of information – ideas, notions, concepts, and assumptions- which are taken for granted, and support a person inquiry system or concept of the world. cognitive operators: are the methods by which the vast amount of data obtained, ordered and rearranged to have a grasp and make a meaning of it. Reality tests: "They anchor organizational inquiry and resulting actions in specific rules and regulations, personal values, social ideologies, customs, or scientific knowledge, and thereby give them "truth" or reality" status"(Shrivastava & Mitroff, 1983, P.

165). Domain of inquiry: refers to the scope and boundaries of the inquiry process firms consider and address. Degree of articulation: it is not an element of FoR, but instead it pertains to the “degree to which the assumptions embodied in the other four elements have been articulated and codified”. Metaphors: are the symbolical construction of the firm’s world in meaningful ways.

Based on these constructs, they identified four organizational types: Political FoR, Entrepreneurial FoR, Bureaucratic FoR and Professional FoR. Table (1) clarifies these types with their main characteristics.

**b. Business level strategy**

A firm’s strategy reflects its short and long-term responses to the challenges and opportunities presented by the business environment (Porter, 1996). Strategies can be formulated at three different levels: corporate, business and functional . This paper focuses on business level strategies because it is at this level that firms determine the general direction for each unit to follow in a given market (Slater et al., 2011). And business level strategies thereby directly influence the type of functional strategies such as what type of marketing practice is adopted (Mcdaniel and Kolari, 1987).

**Table 1 Shrivastava & Mitroff’s FoR typology**

Elements of FoR	Entrepreneurial FoR	Bureaucratic FoR	Professional FoR	Political FoR
Cognitive Elements	Subjective information  Personal commitment	Objective information  Organizational commitment	Inter-subjective information  organizational commitment	Subjective and objective interest  group or coalition commitment
Cognitive Operators	Judgment/ Intuitive analysis  Limited short term problem formulation and solution	Computational analysis  Interpersonal inquiry	Planning and computational analysis  long range problem formulation and solution	Bargaining and negotiation  inter-personal problem solving
Reality Tests	Self-experience Facts are what work or get tasks accomplished	Organizational rules procedures procedural rigor	Empirical, experimental proofs methodological rigor	Popular wisdom social and organizational norms
Domain of inquiry	Problem specific changing continuously	Department fixed and well-drawn boundaries	Organizational fixed boundaries	Organizational and regional changes with stakeholder interests
Degree of articulation	Low through gestures	High through explicit	Medium explicit in the	Low through rhetoric

	and actions, non-verbal	statement of assumptions, rules	knowledge base utilized for decision making	and metaphorical communication
Metaphors	Economic/militaristic	Economic/ Social	Scientific	Political

To examine the business strategy, we adopt Porter (1980) typology, due to its wide acceptance to explain diversity and competition. Additionally, it values clarity, simplicity and existence of clear operationalizing of its constructs makes it a perfect choice (Miller, 1988). Porter (1980) proposed three strategies to overcome environmental threats and maximize organizations outcomes, which are differentiation, cost leadership and focus. Differentiation strategy helps a firm to distinguish itself from other competitors using products, services, technology, brands, and customer service. On the other hand, overall leadership centers on cost efficiency, by devoting much effort to cost control, permitting a firm to produce with the lowest cost, and making them appealing to buyers and competitors . The strategy of focus concentrates on being specialized within a specific range of products or serving a specific market segment, using one of the two previous strategies . Porter claimed that companies which try to seek both strategies at the same time may end up “stuck in the middle” with no competitive advantage.

**c. Marketing practice**

The current literature holds two perspectives on the types of marketing practice. The first approach takes a more dichotomous stand, and differentiates between transactional and relational marketing (Berry, 1983) , thereby seeing them as existing at opposite ends of a continuum (Grönroos, 1994), goods-centric marketing at one end and service at the other end (Vargo and Lusch, 2004). However The proponents of the second approach conceptualize marketing practice along a continuum and they adopt a more pluralistic view that looks at a range of marketing practices, including transaction marketing, database marketing, interactive marketing, and network marketing (The CMP group, e.g. Coviello et al., 1997), transactional exchanges, value-adding exchanges, and collaborative exchanges (Day, 2000), and also transactional, narrow, and broad relationship marketing (Sheth and Parvatiyar, 2000).

While the dichotomous approach is vital to differentiate and mark the relationship marketing terrain, it does not represent a variety or hybrid of practices that may appear in between (Pels, 2010). Therefore, we adopt a pluralistic view to treat marketing practices as complementary, rather than alternatives (Arndt, 1979). In doing so, this study adopts the Contemporary Marketing Practice group (CMP) work to demonstrate the diversity of marketing practice. CMP’s work was chosen for multiple reasons. Firstly, it emphasizes on both theoretical development (suggesting a typology) and empirical evidence (eliciting taxonomy). Secondly, it is the most developed, and contains an extensive amount of empirical work (e.g. Coviello et al., 2002).

Coviello et al. (1997) developed a classification scheme that contained two themes (relational exchange and management activities) which corresponded to nine dimensions, relating on how firms interact with its markets. Based on these indicators, they identified four types of marketing practices: (1) Transaction marketing (TM): this type of marketing practice is a reflection of the marketing management school, where the focus is on “attracting and satisfying potential buyers by managing the elements in the marketing mix” (p. 509). (2) Database marketing (DM): the goal is to retain customers using technology-based tools. The seller is still the active part, and communication is “to” customers. (3) Interaction marketing (IM): this practice seeks to develop interpersonal relationships with the customers to create cooperative interaction for mutual benefit. It implies face-to-face interaction with the

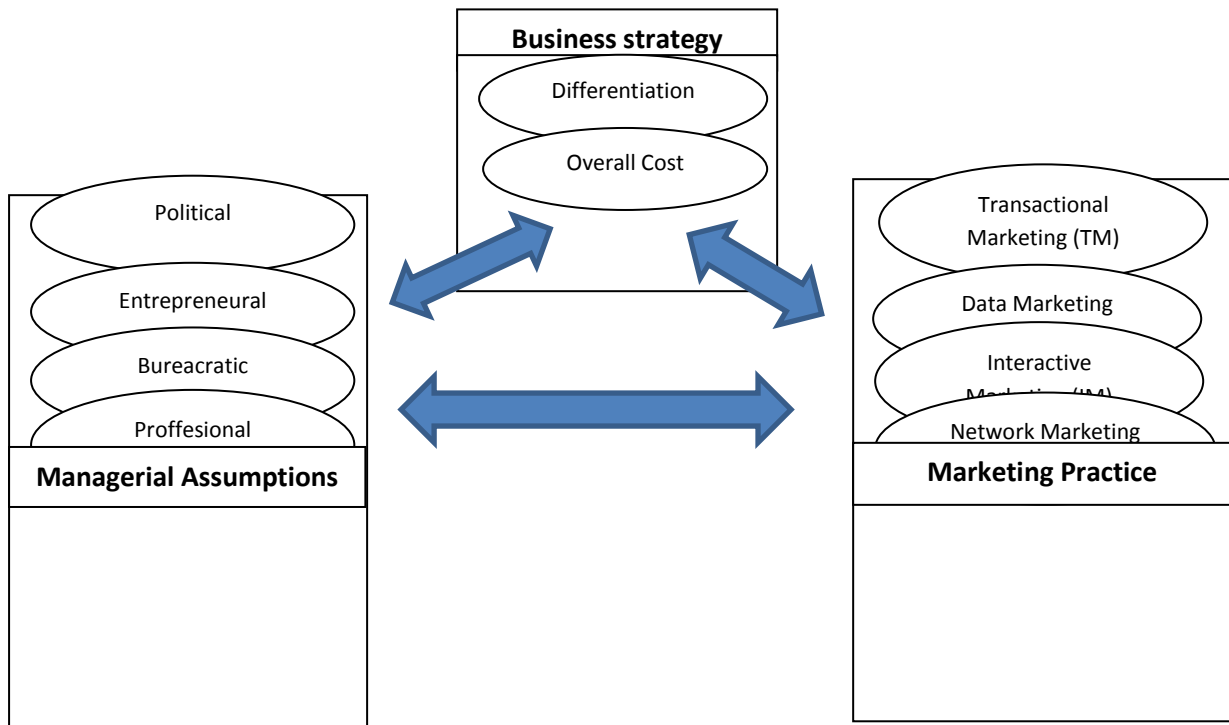
communication being “with” the customer, rather than “to” the customer, and the goal is to retain current customers by creating a cooperative mutual benefit. (4) Network marketing (NM): this practice carries the elements of IM, but looks to formulate relationships between firms at different levels to permit coordination of activities between multiple parties to build up the organization’s position within a network of several firm-level relationships.

### **Conceptual Framework**

The previous discussion established that managerial assumptions play a vital role in marketing decision-making and that they are influenced by the FoR of the dominant coalition. Organization FoR underlie problem formulation, the collection and interpretation of data, the identification of alternatives, and the choice of final solution (Schwenk, 2007, Shrivastava and Schneider, 1984). In addition, business strategy covers the general direction that each unit decides to follow, and functional marketing activities are intended to support such choices by gathering, dissemination and responsiveness to information on customers and competitors (Slater et al., 2011). Therefore, it’s expected that an interplay coherence between the three variables would occur.

The proposed framework presented in Figure 1 integrates the paper’s three variables: the organization’s FoR, business strategy, and marketing practices. Its function is to help identify viable configurational profiles. The resulted profiles should represent the different ways organizations relate to the market. Out of the interplay between the three variables 64 possible arrangements would appear. For example, one arrangement would be Political FoR, Differentiation strategy with Transactional marketing practice. However some of these profiles can be well aligned and some can be poorly aligned configurations (Ketchen et al., 1997). Therefore, only a reduced number of combinations are actually effective.

This paper and its suggested framework is exploratory in nature and it will not try to predict these profiles, rather it will inspect on how it is formed in a real business environment. As for almost any typology, the benefit of discovering such profiles is that it should fall into coherent patterns, where the presence of certain elements can lead to reliable predictions of the remaining components (Miller, 1987).



**Figure 1 Conceptual Framework**

## Methodology

This paper employs a case study methodology based on the advice of Yin (2008) who argues that the question of “how” implied the use of a case study, since it gives room for detailed observations that can unveil various nuances and subtleties of behavior, which other empirical methods might miss. In addition, researchers have recommended the use of a case study when the focus of the study is on contemporary phenomena within real life contexts (e.g. Morse, 1993). The following sections discuss the research design, which guide our investigation process of collecting, analyzing and interpreting observations.

### 1. Research Context

The selected cases operate in Palestine. Palestine is considered as a part of the liberal countries within the Arabic region, which can reflect these countries’ general criteria, their strong influence of religion and cultural factors, and most firms are family-owned, medium to small sized companies (Sabri, 2008).

### 2. Case number

Organizations are the units of analysis, since the three imperatives of this study occur at an organizational level. We investigated three cases following Perry (1998) suggestion that “the appropriate number of cases should fall between two and fifteen” (p. 791), and (Yin, 2008) who suggests considering multiple cases, that is to follow a “replication logic” not “sampling logic”.



### **3. Case selection**

Companies were not chosen arbitrarily. Instead, each had to fulfill three conditions: (1) They operate in different industries, a condition needed to reflect the coherence of the profile that is linked to marketing practices, rather than the size of the market share or which industry they operate in. (2) All companies operate in the “same macro environment”, which means that they are all influenced by the same socio-economic conditions. (3) Companies are leaders in their fields and they operate with different strategies, a condition needed to reflect plurality of practices.

### **4. Data Collection**

The data was collected using multiple collection techniques, including (in-depth interviews and documentary material) to allow for triangulation. Data was collected in the describe sequence as follows: first, two separate in-depth interviews with one of the top executives of the focal firms were conducted. The first meeting was to capture the three imperatives and their existence, and the second meeting was for further questions and to ensure the verbatim contained no mistakes. Secondly, several documents and secondary sources (such as company documentation, corporate websites, specialized press) were collected for further analysis.

### **5. Measures**

The case studies were performed through semi-structured interviews, a detailed questionnaire was developed based on; Shrivastava and Mitroff (1983)'s operationalization of the 'FoR; Miller's (1988) questionnaire on Porter's generic strategies and the CMP's standard questionnaire (Coviello et al., 1997) to reflect on the marketing practices.

### **6. Data Analysis**

Based on Morse (1993) suggestion of a 'conceptual template' to compare and contrast results, this paper employed an informed coding analysis method. This method checks the informed codes and constructs by linking the interview statements, data from the documents and answers from the discussion of questionnaires with the constructs, underlying dimensions and indicators. Pels (2010) described this style as “coding is analysis”. We conducted two levels of data analysis; Initially, interviews and documents were analyzed to reveal the verification and discovery of a relationship between the constructs; second, cross-case analysis was performed to suggest some theoretical explanations of similarities and differences, and to identify patterns of marketing profiles.

### **7. Quality of case study research**

Numerous researchers argue that the criteria to establish the quality of case studies included; conformability, credibility and transferability (Creswell, 2008, Yin, 2008, Perry, 1998). Conformability implies the certainty that what is being observed is supported by the data by using multiple sources (Yin, 2008). This study employed multiple sources of evidence (interviews, documents and internal reports). Credibility is the extent to which data and analysis are believable and trustworthy (Creswell, 2008). In this study, the verbatim of the interview was re-written and sent back to be read and discussed in separate meetings. Transferability: establishes the domain to which a study's findings can be generalized (Yin, 2008, Perry, 1998). The latter can be achieved through a robust theoretical support and replication of multiple case studies, which is the approach used in the presented study.

## Results

### **Sinokort (Food Company)**

Sinokort is a leading food company in Palestine. It has been operating since 1982, and has served 35 markets with over 60 products in the food industry, and has employed more than 430 people.

The data collected shows that Sinokort is compatible with Shrivastava and Mitroff's (1983, 1984) Political FoR. Managers in this company have an autocratic decision making style in which they operate with a low formal style and they trust internal sources of information, more than outside sources. As their marketing manager explained " ... *we prepare our plans in accordance with the owner's vision and beliefs for future expansion*". They rely on their subordinates and peers whom are the main source of information. This is clear from the marketing manager words on the CEO "...*he depends on his beliefs, the employees and the distributors words as a main source of information, more than on reports or studies*". Their reality tests are based on their personal experiences and education, and they have a broad domain of inquiry, with personal goals and coalition interest as the main drivers for their commitment.

Sinokort's business strategy reflects the overall cost leadership as a dominant strategy. Sinokort products sell at lower prices, as compared to its rivals in the market, and the company focuses on gaining profitability from building volume and reducing manufacturing costs ". the marketing manager explains " ... *we try to provide lower prices than our competitors by trying to keep out cost down by having fewer product lines and fewer customer types than outright differentiators*".

Sinokort's marketing practices are a reflection of TM. The conclusion is presented based on the firm's goal of attracting and satisfying potential buyers, the customer's passive in the relationship, and marketing activities were carried by functional marketing managers only. Their marketing practice can be shown by the comment of their marketing manager "*for us in the marketing department our emphasis is on sales because we believe in Gates philosophy that out of \$10 he would spend 9 on sales*".

### **NIC (Insurance Company)**

NIC is the largest insurance company in Palestine. It has been operating since 1992. It serve the local market with 8 branches, benefitting from the experience of over 186 employees.

The data provided shows that NIC approximates Shrivastava and Mitroff (1983, 1984) Professional FoR. Managers in NIC depend on their professional knowledge and have a long-term vision with a clear preference for models. They use objective factors to make their decisions from both internal and external sources. Furthermore, they emphasize self-experience and scientific rigor as their reality tests. To give an example, we quote the company business development manager "*we work in a highly risk field, so just depending on our feeling or intuitive may lead us to disaster consequences therefore our strategic decision is always based on quantitative data that is coming from reliable formal sources.*"

NIC's business strategy is a reflection of Porter's (1980) differentiation strategy. It seeks to provide services that distinguish them as unique from a customer's perspective. The business development manager claims that "*our service is better compared to any competitor in the market ...we strive to provide innovative products and to create a strong brand image.*"

The marketing practice of NIC is consistent with RM, since they have a strong attitude with interaction and network marketing styles. NIC's relationship with its customers takes two forms: formal and informal, and active and adaptive. Customers and distributors are active in the relationship, meaning communication is "with" the customer, not "to" the customer. The

business manager mentioned that *“through our offers or services we always try to build a relation with our customer to make them feel we are their partners more than a seller buyer relation”*. Marketing is practiced by all members of the company, The company business manager commented that in NIC *“everyone is a marketer”*.

**Al-Quds (Pharmaceutical Company)**

Al-Quds was established in 1969, and it now employs about 350 personnel specializing in different fields to serve the local and regional markets. Their product range spans the entire spectrum of ethical pharmaceuticals and over the counter products/nutritional supplements.

The data shows that Al-Quds combines criteria from different types of Shrivastava and Mitroff (1983, 1984) FoR typology. For space reasons we will show final results on the indicators without quotations. Al-Quds managers look at both short term and long term goals. They use priority models, while allowing space for intuitive and creative development. They use both formal and informal sources of information. They utilize both organizational norms and methodological rigors as reality tests. As for commitment, managers are committed to their own goals, with their domain of inquiry focused on the company.

Al-Quds uses a mixed business strategy. From one side, it aims to achieve differentiation by providing highly branded products, supplying high quality products, adopting the latest technologies and investing heavily in R&D. On the other hand, it tries to cut on its cost to attract and gain an advantage against its rivals for the price sensitive segment. The financial mangers explains this fact in the following words *“when setting the prices of our products we do take several elements into account beside the production cost, mainly the competition and frequent use of the drug.”*

Al-Quds marketing practices features aspects for all four categories from the typology of marketing practices, with no explicit preference for any. It combines traditional promotional tools when approaching end consumers, where emphasis is put on advertising and promotion. On the other hand, it employs relationship marketing when approaching doctors and pharmacists.

**Discussion**

A summary of the case findings in presented in table 2 ( full analysis on these companies is provided in Appendix 1). This table shows that the investigated companies responded to different configuration profiles, indicating that there is an archetypal order between these three imperatives. In other words, firms differed in their FoR, which indicates that dominant coalitions are directing managerial thinking and decision making choices in each firm. In relation to generic business strategy, each company conceived the environment in a different way, therefore, their strategic responses were different. As for the marketing practices, companies clearly employed different marketing practices in approaching their markets, which provides evidence of diverse characterizations of marketing practices.

**Table 2 Case studies results**

Company/ type	FoR	Strategy	Marketing Practice
Sinkorot	Political	Overall leadership	Transactional
NIC	Professional	Differentiation	Interactive & Network
Al-Quds	Mixed	Mixed	Plural

The data from the case studies helped to identify three viable types of marketing practices with its corresponding imperatives. While the proposed framework suggests that different relationships or profiles may exist, only few combinations are viable and able to survive according to the “fit” concept. Any miss match between the three different forces leads these profiles to be not feasible. In addition, these profiles were found in companies serving same “macro environment”, which indicate that configurations can coexist in the same environment.

A synthesis of the findings from the three case studies can help us to make the following assumptions. First, the data shows that the three companies had different understandings of the environment (different frames of reference) as well as different strategic orientation (different business strategies and marketing practices). These differences support the categories elicited from the literature and suggested in the conceptual framework.

Secondly, the profiles found are inter-related, which supports the holistic approach adopted in the conceptual framework. The configuration approach argues that “organizational configuration denotes any multidimensional constellation of conceptually distinct characteristics that commonly occur together” [where] “the parts of a social entity take their meaning from the whole and cannot be understood in isolation” (Meyer et al 1993, pp. 1175-1178).

Thirdly, the data from the three cases shows that managers’ assumptions and the choices of a given marketing practice were associated in ways that were internally coherent. This coherent suggests that a viable configuration profile will be produced. Thus, the set of viable configuration profiles represents the alternative marketing practices that can occur in the same market. In other words, this finding indicate that the choice of a marketing practice didn’t seem to be associated to a contingent rationale, but rather to difference with these imperatives.

In short, the findings from the case studies support the rationale provided by proposed framework for understanding the reasons for diversity of marketing practices across firms operating in the same market. This means that, from the configuration perspective, diverse marketing practices are viable when they integrate a coherent configuration profile.

## **Conclusion**

To date, studies have illustrated the existence of a diversity of marketing practices but there is no conceptual framework providing a rationale to help understand this plurality. This gap supports Day and Montgomery (1999) and Varadarajan (2010) calls for more research on a better understanding of how firm’s relate to their markets. This paper has sought to understand how management perception and business strategy can relate to marketing practice choice. It employed a configuration approach to check how these variables relate to each other in a systematic, detailed and holistic image of reality.

The results found can provide us with three major conclusions: Each firm that has a different FoR was coupled with a different business strategy, as well as with a different marketing practices. Moreover, these forces were internally coherent, resulting in viable configuration profiles, which explains the success of these companies in interacting with the demand of their diverse pool of customers and their success.

The findings can help in answering the paper main question concerning plurality of marketing practice by indicating that the configuration marketing profiles found represent the different, coherent ways of relating to a market, in which each profile implies a diverse marketing practice. In addition, The results show that it’s not the contingency factors that influence the marketing choice, otherwise how would we expect multiple successful marketing practices to

exist within the same environment, but rather it's due to an internal factors mainly the managerial assumptions.

The results are consistent with previous work in marketing, which shows there are different forms of marketing practices (e.g. Coviello et al., 2002) , and that managerial cognition strong influence marketing direction (Gallen, 2006, Pels, 2010) . It also confirms the strategic marketing theory prediction of the fit between business strategy and marketing strategy (Slater & Olson, 2001). The data found in the three case studies provide strong support for the paper's conceptual framework and suggest that when the combination of the imperatives is internally coherent, it will result into viable profiles which can be hypothesized and tested in future studies. The results affirm the strategic marketing theory prediction of the fit between business strategy and marketing strategy (Mcdaniel and Kolari, 1987). It also confirms previous results on the key role management styles play in marketing decisions (e.g. Hambrick and Mason, 1984, Gallen, 2006, Schwenk, 2007).

### **Contribution**

This study has taken an in-depth approach to investigating the effect of managerial assumptions and business strategy on the choice of marketing practice In particular the question raised in this paper has related to how far can diversity in frame of reference explain diversity of marketing practice mainly in same macro environment markets.

The rich data gathered raise some questions about the adequacy of existing marketing models to explain marketing practice diversity. In addition, it makes several contributions to enriching the marketing literature. First, this paper provided a novel view on the reasons for marketing practice diversity by linking it to inter-play it has with the management assumptions and business strategy. Which fills the gap on the reasons of plurality of marketing practices that existed in same environment. Secondly, it presented a new imperatives that has been linked to decision making but neglected in marketing literature, the frame of reference imperative. The in-depth research done in this paper shows that frame of reference is the underlying explanation as to why different assumptions exist, and the important role it plays in their decision making. Finally, this paper can help in resolving the transactional-relational marketing debate by showing that different modes of marketing practices can coexist thus converting contradictions into alternatives by adopting a double continuum.

From a managerial standpoint, the results identified different profiles that should help firms to examine carefully the internal logic of their marketing-related profiling, and to manage their marketing practice accordingly. In other words, this study can be used by managers as an assessment tool to understand that marketing practices are inter-related to the other imperatives and that the coherency between the three imperatives is what allows it to be viable for their marketing practices in relation to their FoR and Business strategy, in order to gain viable effective practice. Finally, the results presented here may help managers to read and understand their competitors better.

### **Limitations and Future Research**

In research design, there should be some tradeoffs. There are several limitations encountered in this study. This study sought to integrate knowledge from three fields: marketing, organizational theory and strategic management, which can be considered over ambitious, and may create some challenges. Second, the study was conducted in an emerging market context, using a case study framework, which may limit the generalization of its findings. Finally, this paper limited itself to identifying the different ideal profiles of FoR, business strategy and

marketing practice. However, explanation behind the occurrence of these profiles was not investigated due to limitations of space and time.

With these findings, we believe that the synthesis is incomplete at this point; What other viable profiles are there? How do these profiles occur? Do viable profiles vary in different environments? Finally, what is the effect of each configuration on performance? These are questions can be empirically examined in future research.

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**Appendix I Case study Constructs and indicators**

	<b>Construct</b>	<b>Underlin g dimensio n</b>	<b>Indicator</b>	<b>Sinkrot</b>	<b>NIC</b>	<b>Al-Quds</b>
<b>Frame of Reference</b>	Cognitive operator	Class. scheme	Short/Long	Short	Long	Both
		Analytical devices	Formal /Informal	Informal	Formal	Both
	Cognitive elements	Source of info.	Subjective/Object	Sub & Obj	Obj	Both
			Personal/Impersonal	Personal	Imperson	Both
			Internal/External	Internal	Both	Both
	Set of Reality tests	Intellectual commit	Personal/Interpersonal/orga nizational	Person/I nter	Self/Org	Peron/Org
			Self-exp/ org. norms/ Method	Self & Org	All	All
Domain of inquiry		Broad/Narrow	Broad	Broad	Both	
<b>FoR Type</b>			<b>Political</b>	<b>Prof</b>	<b>Mixed</b>	
<b>Porter Strategic Type</b>	Differentiation	Product-Service Innovation/R&D/Competitive aggressive	Low	High	High	
		extensive of adv./ segmentation/Prestige pricing	Low	High	Medium	
	Overall Leadership	Cost Control/ Price cutting and adv mini/ risk proclivity	high	High/Low	Medium	
	<b>Strategy Type</b>			<b>Cost leader</b>	<b>Differentiation</b>	<b>Mixed</b>
<b>CMP</b>	<b>Relational Exchange Dimensions</b>	Purpose of the Exchange	Economic/Info/ Interact buyer/ firms	Econ	Interactive	Econ/ Inter
		Nature of Communicat	- “to” or “with” individuals/Firms	“to” Indivd	“with”Individ& Firm	“to”&“with” individ
		Type of Contact	Arms-length/ impersono/ Personal/Face-to-face/	Arms length	Face to face	All
		Type of Exchange	Discrete/Continuous	Discrete	Continuous	Both
		Formality of	Formal/Informal	Both	Both	Both



	Exchange				
Managerial Dimensions	Managerial Intent	attraction/retention/Interaction	Attract	Retention	Attract/Retain
	Managerial Focus	Product / Customer/ Firms Relations	Product	All	Product/ Customer
	Managerial Investment	Internal assets/ External	Internal	External	Internal
	Managerial Implement level	Functional/Specialist/Managing across function/ CEO	Functional	Functional/Managers	All
<b>CMP Taxonomy Type</b>			<b>TM</b>	<b>RM</b>	<b>Plural</b>

## ETHNICITY, CONSUMER ANIMOSITY AND PREFERENCES: THE CASE OF STUDENTS IN PENANG

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### Abstract

The importance of the concept of consumer animosity in the field of international research is increasingly. This study aims to test the significant differences between ethnic groups on their consumer animosity and their preferences towards different product categories-brands' countries of origin associations. Therefore, measurements that measure consumer animosity towards European countries, Singapore and USA that fit in Malaysia context were developed. The samples of this study were students in Penang and the sampling method was convenience sampling. Usable responses were 255 responses. SPSS version 17 was used data analysis purpose. The results of this study revealed that consumers with different ethnic groups displayed difference level of consumer animosity and preferences towards different product categories-brands' countries of origin, significantly. These findings brought some insights to market practitioners, where marketers of domestic and foreign brands are encouraged to take ethnicity, consumer animosity and product category in their consideration when designing marketing programs. Research contributions, limitations and suggestions for future studies were discussed.

**Keywords:** *Consumer animosity, Ethnicity, Brand' country of origin, Students in Penang, Preferences towards different product categories-brands' countries of origin associations*

### Introduction

Nowadays, Malaysian consumers are increasingly exposed to and choosing from a wider range of products, brands, quality and process (Mokhlis, 2009). However, in this age of globalization, tensions stem from territory disputes, economic arguments, diplomatic disagreements or religious conflicts are presented throughout the world (Riefler & Diamantopoulos, 2007). Thus, Leong et al. (2008) pointed out that it is necessary for marketers to have a better understanding of foreign consumer reactions towards their brands in this expanding globalization era. Moreover, Bhaskaran and Sukumaran (2007) pointed out that researchers study on the influence of nationality while ignoring the sub-cultures within countries. Therefore, this study seeks to test the significant differences between ethnic groups on their consumer animosity and preferences towards different product categories-brands' countries of origin among students in Penang.

### *Malaysia in Context*

The economy of Malaysia record one of Asia's best, while Malaysia's per capita GNP reached US\$3,640 in 2001 (Naguib & Smucker, 2009). Malaysia is a multiracial country with the total population of Malaysia of 28.31 million in 2009 (Department of Statistics Malaysia, 2010). There are three major ethnic groups in Malaysia, with the largest group of Malay and other indigenous people (65.1%), followed by Chinese (26%) and Indian (7.7%) (Selvarajah & Meyer, 2008).

Muslim is one who practices Islam (Fam et al., 2004), while Malay was defined as the people who speak in Malay, lead the Malay way of life and is of the Islamic faith, and endogamy

seems to be the rule (Asmah, 1983; Run, 2007). The trade winds brought the Indian and Chinese traders to Malaysia, along with their cultural and religious, social and political influences (Selvarajah & Meyer, 2008). Besides, British colonization in mid-1800s attracted migrants from Southern China and South India (Bhaskaran & Sukumaran, 2007). The Chinese in Malaysia, descendents of the sojourners, came to Malaysia from China in the late nineteenth century (Selvarajah & Meyer, 2008). They are mainly immigrants from the southern part of coastal provinces of China (Lee & Tan, 2000; Run, 2007), such as Fujian, and Hainan. Majority of them are multilingual where they can speak in Malay, English, Mandarin and their respective dialect (Lam & Yeoh, 2004). Initially they were serving as labor force in tin mining and railway construction; however they have developed in Malaysia's businessman (Soontiens, 2007). According to Selvarajah and Meyer (2008), the large-scale mobilization of Indians to Malaysia commenced in 1870 when British controlling Malaya, which happen during the colonization of European in Asia. They were mainly Tamil or Hindu origin, and worked in the plantation and building of country's transport systems.

The Malays are recognized as *Bumiputras*, son of soil, and have a privileged position in Malaysian society, where their position is protected by the Constitution (Selvarajah & Meyer, 2008). The Malaysian government is sensitive to the need of the Muslim majority, while promoting religious freedom and it strive to offer products and services that conforming to Islamic principles (Salleh et al., 1998). Many countries have introduced policies that assist the mainstream indigenous communities, including Malaysia (Bhaskaran & Sukumaran, 2007). During the adoption of laissez-faire economic model in Malaya, the Chinese became intermediaries to foreign companies and several large Chinese enterprises grew and diversified business in construction, plantation, trading, finance and other sectors. They highlighted the economic power of the Chinese minority has fostered nationality based affirmative economic policies to assist the Malays, where the new economic policy (NEP) was introduced and the government provide a wide range of generous incentives to the Malays as well as help to increase their role and position in the country economy.

Different ethnic groups hold different values of life. In the cross-cultural comparison study that undertaken by Rashid and Ibrahim (2008); the Malays were characterized as a group that valued self-respect or face, politeness, sensitivity to feelings and relationship. Besides, the Chinese uphold the value of hard work or diligent, pragmatic, wealth or prosperity, face, harmony and risk taking. Lastly, the Indians also value face, as well as fear of God, sense of belonging, 'karma', champion of causes and filial piety. They believed that Chinese and Indian Malaysian still upholding similar fundamental values with Chinese in China as well as Indian in India, respectively. However, it is also believed that their cultural beliefs and practices also shaped by the interaction with other ethnic groups as well as the presence of British.

The multi-ethnicity background of Malaysia brought many challenges as well as market opportunity to marketers of both local and foreign brands. Within one nation, consumers in different ethnic act response differently to different marketing strategy and product cue. *Halal*, which means permissible", is one of the most important concepts in Islam that covers slaughtering, storage, display, preparation, hygiene and sanitation aspects (Shafie & Othman 2006). *Halal* logo plays a crucial role for Malay Muslim consumers in Malaysia. The introduction of *halal* logo has generated more awareness among Malay Muslims about the importance to make consumption that follow Islamic guidelines and principles, where it provides an avenue for manufacturers to indicate their target consumers that their products are *halal* and shariah-compliant, and meet the Islamic standard (Shafie & Othman, 2006). For example, all fast-food businesses in Malaysia are gazette under Malaysia law to serve only *halal* food and non-alcoholic beverages (Salleh et al., 1998). In the study of Shafie and Othman (2006) that investigated the impact of *halal* phenomenon to the consumers in

Malaysia, 89% respondent indicated that *halal* logo played role in their purchase decision. However, the effect of *halal* logo might do not have any impact on Chinese and Indian Malaysian's purchase decision.

Other than that, Chinese have different preferences as compared with consumers from another ethnicity, as in a similar fashion, Chinese are more readily accept goods colour or packaged in red or gold colors that signify good luck and prosperity (Salleh et al., 1998). Furthermore, they tend to show favorable behavioral intentions for the Bahasa Malaysia advertisements, as compared with Chinese language (Run, 2007). Nonetheless, the dominant ethnic group of Malaysia, Malay, reacted similarly to Chinese when viewing a Chinese advertisement, but they tend to react negatively to Chinese language advertisement. The study of Ong and Tan (2010) revealed that Malays were less likely to travel by Air Asia as compared to Chinese.

### *Penang in Context*

The focus of this study was Penang students, as Penang achieved the highest economic growth, which is 9.9% and recorded the second highest GDP per capita, at RM30, 490 in year 2009 (Department of Statistics Malaysia, 2009). Moreover, Penang continues to be an attractive foreign direct investment destination, and this prove by the evidence that Pulau Pinang recorded its highest investment growth in the manufacturing and service related sectors in 26 years (Penang State Government Official Portal, 2007). Indeed, Penang students were selected as the sample of this study as Verlegh and Steenkamp (1999) identified that there were no statistically different effects between the studies using student samples as compared to those studies using consumer samples. Moreover, they represent the young consumers group that have been a growing population (Ramly et al., 2008).

## **Literature Review**

### **a. Consumer Animosity**

Consumers might avoid products from the offending nation because of exporting nation has engaged in military, political, or economic acts, which consumers difficult to forgive, where Klein et al. (1998) regarded this as consumer animosity, which relate tensions between nations to consumers' buying behavior (Riefler & Diamantopoulos, 2007). Klein et al. (1998) refers consumer animosity as the remnants of antipathy related to previous or ongoing military, political or economic events that will influence consumers' purchase behavior in international marketplace. For example, Ahmed and d'Atous (2008) found that Taiwanese's displayed some animosity towards China. In their research conducted in China, Klein et al. (1998) found that Chinese consumers demonstrated animosity towards Japanese products because of cruelties committed by the Japanese during their occupation of China. This animosity influenced their actual purchase decision, but did not influence their judgment of Japanese products as Japanese products were still evaluated better than local products.

Consumer animosity a construct different with consumer ethnocentrism, a construct that introduced by Shimp & Sharma (1987) that refers to the belief held by consumers about the appropriateness and morality of purchasing foreign-made products. In their proposed animosity model, Klein et al. (1998) proposed consumer animosity influenced willingness to purchase directly; whereas consumer ethnocentrism has direct and indirect (through product judgments) impacts on willingness to purchase foreign products. They found consumer animosity and consumer ethnocentrism were different constructs, but the effect of animosity on consumer preferences existed even when consumer ethnocentrism held constant.

Consumer ethnocentrism is a construct about consumers' general beliefs about buying foreign products, whereas consumer animosity is a country-specific construct (Klein et al., 1998).

High ethnocentric consumers perceived imported goods as inferior but perceived own products favorable. They tended to purchase domestic products instead of foreign goods, as they believed they purchase of imported goods will bring negative outcome to their country. Nonetheless, high animosity consumers might be able to accept imported products from foreign countries generally, but reject products from certain countries. They recognize the quality of products from dislike nations, but tended to reject their products (Riefler & Diamantopoulos, 2007).

There are four types of consumer animosity, namely national stable animosity, national situational animosity, personal stable animosity and personal situational animosity. National stable animosity arises from general historical background; national situational animosity temporarily arises caused by specific circumstance; personal stable animosity refers to the general negative feeling due to personal experience; and lastly, personal situational animosity refers to temporary negative sentiments caused by specific circumstance (Ang et al., 2004). For example, 'Japan is taking advantage of Malaysia' (national stable animosity); 'Japan s taking advantage of Malaysia during Asian economic crisis' (national situational animosity); 'I feel upset towards the Japanese' (personal stable animosity); and, 'I feel angry towards Japan for occupying Malaysia during World War II' (personal situational animosity).

### **Inter-Nation Conflicts**

There are some conflicting issues between Malaysia and these countries, and the Malaysian governments and Non-Government Organizations (NGOs) have initiated some policies and campaigns that ban products from the abovementioned nations that influenced the purchase decision of Malaysian, such as Buy British Last Policy, Boycott Danish Products Campaign, Boycott Dutch Products Campaign and Boycott US Product Campaign. (Please refer Appendix for further information). This study seeks to examine consumer animosities of Penang students towards European countries, Singapore and USA, and significant differences between different ethnic groups.

### **Methodology**

This is a cross-sectional study. Data collection method was self-administered survey, where a structured questionnaire was distributed to students in Penang. The sampling method was convenience sampling. A total of 300 questionnaires were distributed, and the usable responses of this study were 255 responses.

A questionnaire was designed to collect data needed. The questionnaire consisted 3 parts. The first part was designed to collect socio-demographic related information. Questions consisted age, gender, ethnicity, marital status, education and household income. Second, the questionnaire was designed to capture respondents' consumer animosity related information. A total of 15 items, based on economic, political, religion, military and social issues, were developed to measure subjects' national situational animosity level towards Europe countries, Singapore and USA, which were 5 items, 3 items and 7 items, accordingly. A five point Likert-scale ranging from 1=strongly disagree to 5=strongly agree was used to measure consumer animosity level.

The measure was developed after a discussion with a Professor of Marketing and nine PhD students from internationalization research cluster. Some corrections were made after a second and third discussion with a Professor in Finance and Economic and an expert in Political science. A five-point Likert scale was used to measure consumer animosity. A pilot study was conducted before the launch of data collection activity to check the content reliability of the measure. A total of 55 questionnaires were distributed to 55 Universiti Sains Malaysia students age ranged from 16 to 30 years old. A total of 52 questionnaires were usable responses. Reliability estimates (Cronbach's alpha) for consumer animosity was .87.

This value indicated good, where Sekaran (2003) suggested reliability coefficient above .80 considered good.

Lastly, the questionnaire was designed to capture respondents' preferences towards different product categories-brands' countries of origin associations. The measure consisted 5 products categories, namely fashion apparels and textiles, electrical goods and appliances, chocolate/confectionery's products, dairy goods and healthcare products, while the brands' countries of origin included Malaysia, Singapore, Holland and Malaysia. A five point Likert-scale ranging from 1=least preferred to 5=most preferred was used to capture respondents' preference towards different product categories-brands' countries of origin associations. Moreover, Statistical Package for the Social Sciences (SPSS) version 17 was used to analyze the data of this study.

There were five stages of data analysis process. First, frequency analysis was undertaken to measure respondents' socio-demographic background. Second, reliability analysis was conducted to measure the Cronbach's alphas of the measure of national situational animosity. Third, descriptive analysis was undertaken to measure the mean values and standard deviations of the overall measure of national situational animosity as well as its single items. Fourth, the analysis of compare means, namely one-way ANOVA was used to test the significant differences of consumer animosity between three ethnicity groups, namely Malay, Chinese and Indian. Lastly, one-way ANOVA was undertaken to test the significant differences between ethnic groups on their preferences towards different product categories-brands' countries of origin associations.

**Results and Findings**

Table 1 presented respondents' profile, which contained their age, gender, ethnicity, marital status, education and household income. Most of the respondents aged 21-25 (69.8%), female (60.4%), Chinese (38.2%), single (96%), tertiary degree's holders (60.8%) and household income RM1001 but less than RM3000 (41.3%).

**Table 1 Sample Characteristics**

Socio-demographic	Categories	Frequency (n=255)	Percentage (%)
Age	16-20	49	21.8
	21-25	157	69.8
	26-30	19	8.4
Gender	Male	89	39.6
	Female	136	60.4
Ethnicity	Malay	65	28.9
	Chinese	86	38.2
	Indian	74	32.9
Marital status	Single	216	96.0
	Married	9	4.0
Education	Secondary	48	21.4
	Tertiary	137	60.8

	Postgraduate	40	17.8
Household income	RM 1000 and below	92	40.9
	RM 1001 but less than RM 3000	93	41.3
	RM 3000 and above	40	17.8

Next, the Cronbach's alphas, mean values and standard deviations of the overall measure of consumer animosity and based on nation as well as its every single item were presented in Table 2. The Cronbach for overall measure of consumer animosity (15 items) was .92, which indicated good content reliability. Moreover, the Cronbach's alphas for consumer animosity towards Europe countries (5 items), Singapore (3 items) and USA (7 items) were .81, .76 and .87, accordingly. These coefficient reliabilities were accepted.

**Table 2 Mean and standard deviation of consumer animosity**

No.	Item	Mean value	Standard deviation
1	I feel angry that some European countries discriminates immigrants in their countries.	3.59	1.01
2	I feel upset that the European NGOs are blaming Malaysia for destroying the environment by planting oil palm trees.	3.52	1.01
3	I feel angry towards some European countries for their negative perception about Islam.	3.52	1.06
4	I resent the European Community for banning the import of our marine-based products.	3.38	1.22
5	I am very upset that the European Community has introduced measures to discriminate our palm oil products.	3.32	.89
	Europe countries	3.47	.80
	Cronbach's alpha	5 items	.81
1	I resent the World Court's decision in granting the legal right over the Pulau Batu Putih (Pedra Branca) to the Singapore.	3.52	1.05
2	I resent the way Singapore government has occasionally trespassed into Malaysian territory.	3.33	1.03
3	I am unhappy towards the way Singapore government treats Malaysia over the water issue.	3.24	.99
	Singapore	3.37	.78
	Cronbach's alpha	3 items	.76
1	I am unhappy with the US want to control Malaysian economy with their unfair terms through Malaysian-United States Free Trade Agreement (MUSFTA).	3.54	1.12
2	I resent towards the US for accusing Malaysia as a transit of human trafficking.	3.52	1.16
3	I feel angry towards the US for supporting the Zionist regime in Israel.	3.49	1.08
4	I am unhappy with the Americans as they are responsible for a lot of the world economic problems.	3.47	1.10
5	I resent the US for imposing unreasonable restriction on the issuance of VISA for visitors from the Muslim countries.	3.42	1.20
6	I feel angry whenever the US gets involved with other	3.41	1.09

	countries' internal affairs.		
7	I feel upset that the Americans are exporting American culture to other countries through television, movie, music, etc.	3.02	1.16
	USA	3.41	.85
	Cronbach's alpha	7 items	.87
	Overall	3.44	.76
	Cronbach's alpha	15 items	.92

Note: 5-point scale ranged from 1=strongly disagree to 5=strongly agree

The mean value for the overall measure of national situational animosity was 3.44 and the standard deviation was .76, while the mean values and standard deviations for their animosity towards Europe countries, consumer animosity towards Singapore and consumer animosity towards USA were 3.47 (.80), 3.37 (.78) and 3.41 (.85), respectively. These results imply that respondents displayed relatively high consumer animosity, indeed their posed highest animosity towards Europe countries, followed by USA and Singapore.

The mean value for the measure of consumer animosity towards Europe countries ranged from 3.32 to 3.59, where item "I feel angry that some European countries discriminates immigrants in their countries" recorded the highest mean value, while item "I am very upset that the European Community has introduced measures to discriminate our palm oil products" recorded the lowest mean value. Moreover, the mean value for the measure of consumer animosity towards Singapore ranged from 3.42 to 3.53. Item "I resent the World Court's decision in granting the legal right over the Pulau Batu Putih (Pedra Branca) to the Singapore scored the highest mean value, nonetheless item "I am unhappy towards the way Singapore government treats Malaysia over the water issue" noted the lowest mean score. In terms of consumer animosity towards USA, respondents scored the highest mean value for item "I am unhappy with the US want to control Malaysian economy with their unfair terms through Malaysian-United States Free Trade Agreement (MUSFTA)", nevertheless item "I feel upset that the Americans are exporting American culture to other countries through television, movie, music, etc." scored the lowest mean value.

Subsequently, the results of one-way ANOVA that test the significant different differences between ethnic groups (Malay, Chinese and Indian) and their consumer animosity level were presented in Table 3. Significant differences were found between groups on overall consumer animosity as well as their animosities towards European countries, Singapore and USA. In terms of overall consumer animosity, the mean values for Malay was 3.86, followed by Indian (3.37) and Chinese (3.18), where the mean value was 17.42. The mean score for Malay, Chinese and Indian for their animosity towards Europe countries were 3.80, 3.23 and 3.47, respectively, while the F-value was 10.35. Next, the mean values of consumer animosity towards Singapore for Malay, Chinese and Indian were 3.72, 3.10 and 3.36, accordingly. F-value was 11.26. Subsequently, the mean values for Malay, Chinese and Indian on their animosity towards USA were 3.91, 3.14 and 3.30, accordingly, where the F-value was 18.74. In addition, Duncan's range test was undertaken to capture the significant differences between three ethnic groups. The results of Duncan's range test revealed that Malays are significant different from Chinese and Indian, where Malay demonstrated significant high overall animosity and animosities towards Europe countries, Singapore and USA, as compared to Chinese and Indian. In general, Table 3 showed that Malay presented the highest consumer animosity, followed by Indian, while Chinese displayed the lowest level of consumer animosity.



**Table 3 One- way ANOVA: Ethnicity and consumer animosity**

Consumer animosity	Ethnicity			F-value	Duncan's range test
	Malay (G1) (n=65)	Chinese (G2) (n=86)	Indian (G3) (n=74)		
Overall consumer animosity	3.86	3.18	3.37	17.42*	G1 vs. G2 & G3
Consumer animosity towards Europe countries	3.80	3.23	3.47	10.35*	G1 vs. G2 & G3
Consumer animosity towards Singapore	3.72	3.10	3.36	11.26*	G1 vs. G2 & G3
Consumer animosity towards USA	3.91	3.14	3.30	18.74*	G1 vs. G2 & G3

Lastly, one-way ANOVA was undertaken to test the significant differences between ethnic groups and their preferences towards different product categories-brands' countries of origin associations. The results of analysis were presented in Table 4. In terms of fashion apparels and textiles, Indian (3.73) showed significant high preferences towards brands from USA, followed by Chinese while Malay displayed the lowest preferences. The F-value was 6.26. However, Malay demonstrated significant high preferences towards Malaysian brands, followed by Indian and Chinese, where the F-value was 7.08. The results of Duncan's range test revealed that Malay significance different from Chinese and Indian on their preferences towards fashion apparels and textiles from USA and Singapore; nonetheless Chinese significance different from Malay and Indian on their preferences towards Malaysian brands. Chinese (3.83) showed the highest preferences towards electrical goods and appliances from USA, followed by Malay (3.65), while Indian (3.23) showed the least preferences. The F-value was 5.56 and significant. Besides, Indian (3.64) showed the highest preferences towards Malaysian brands, followed by Malay (3.22) and Chinese (2.98), where F-value was 7.06. The results of Duncan's range test revealed that Indian was significance different from Malay and Chinese on their preferences towards the brands of electrical goods and appliances from USA and Malaysia; nonetheless, Malay was significance different from Chinese and Indian towards brands from Holland and Singapore.

In terms of chocolate/confectionery's product, significant differences between ethnic groups were found on their preferences towards brands from USA, Holland and Singapore, where the F-values were 18.10, 12.58 and 13.72, accordingly. The results of Duncan's range test showed that Malay was significance different from Chinese and Indian on. However, no significant result was found on their preferences towards chocolate/confectionery's product from Malaysia. Significant differences were found on preferences towards the brands of dairy products from USA, Holland and Singapore, where the F-values were 5.88, 2.64, 3.43 and 8.47. The results of Duncan's range test exhibited that Malay significance different from Chinese and Indian on USA and Singaporean brands; while Indian significance different from Malay and Chinese on their preferences towards Malaysian brands.

**Table 4 One- way ANOVA: Ethnicity and preferences towards different product categories-brands' countries of origin associations**

Preferences towards different product categories-brands' countries of origin associations	Ethnicity			F-value	Duncan's range test
	Malay (G1) (n=65)	Chinese (G2) (n=86)	Indian (G3) (n=74)		
<i>Fashion (apparel &amp; textiles)</i>					
USA	3.17	3.72	3.73	6.26*	G1 vs. G2 & G3
Malaysia	3.60	2.91	3.26	7.08*	G1 & G3 vs. G2
Holland	2.78	3.15	3.09	2.60	-
Singapore	2.62	3.33	3.30	10.59*	G1 vs. G2 & G3
<i>Electrical goods and appliances</i>					
USA	3.65	3.83	3.23	5.56*	G1 & G2 vs. G3
Malaysia	3.22	2.98	3.64	7.06*	G1 & G2 vs. G3
Holland	2.89	3.22	2.91	2.39	-
Singapore	2.77	3.35	3.11	5.66*	G1 vs. G2 & G3
<i>Chocolate /confectionery's product</i>					
USA	2.97	3.88	4.07	18.10*	G1 vs. G2 & G3
Malaysia	3.29	2.87	3.23	2.41	-
Holland	2.89	3.80	3.61	12.58*	G1 vs. G2 & G3
Singapore	2.49	3.23	3.45	13.72*	G1 vs. G2 & G3
<i>Dairy products</i>					
USA	2.97	3.57	3.55	5.88*	G1 vs. G2 & G3
Malaysia	3.80	3.59	3.41	2.64	-
Holland	3.89	3.35	3.14	3.43*	G1 vs. G2 & G3
Singapore	2.57	3.22	3.20	8.47*	G1 vs. G2 & G3
<i>Healthcare product</i>					
USA	3.80	4.01	3.85	.87	-
Malaysia	3.55	2.93	3.69	10.24*	G1 & G3 vs. G2
Holland	2.89	3.52	3.47	8.14*	G1 vs. G2 & G3
Singapore	2.78	3.50	3.68	14.70*	G1 vs. G2 & G3

Note: 5-point scale ranged from 1=least preferred to 5=most preferred

In terms of healthcare products, significant results were found on respondents preferences towards Malaysian, Holland and Singaporean brands, where the F-values were 10.24, 8.14 and 14.70, accordingly. Nonetheless, no significant result was found on USA brands. Moreover, the results of Duncan's range test indicated that Malay was significance different from Chinese and Indian on their preferences towards Holland and Singaporean brands; nevertheless Chinese was significance different from Malay and Indian on their preferences towards Malaysian brands.

Overall, Malay displayed the least preferences towards foreign brands but prefer domestic brands the most. For example, Malay prefer local brands while least prefer foreign brands in the cases of fashion apparels and textiles, chocolate/confectionery's products, dairy goods and healthcare products, with the exception of brands of dairy goods from Holland where they prefer the most as compared with Chinese and Indian. On the other hand, Chinese presented the least preferences towards home grown brands, in the cases of fashion apparels and textiles, electrical goods and appliance, chocolate/confectionery's products and healthcare products. Additionally, Indian demonstrated the least preferences towards domestic brands of dairy products, while they tended to display least preferences towards the brands of fashion apparels and textiles, electrical goods and appliances, chocolate/confectionery's product and healthcare products from Holland.

### **Discussions and Implications**

This study aimed to test significant differences between ethnic groups on consumer animosity and their preferences towards different product categories-brands' countries of origin associations. This section will discuss consumer animosity of students in Penang, followed by the significance difference between ethnic groups on their consumer animosity and preferences.

In overall, students in Penang displayed relatively high consumer animosity; particularly they demonstrated the highest animosity towards European countries, followed by USA and Singapore. These results imply that students in Penang are sensitive to the international issue, especially conflict between nations. Marketers of the brands from these countries must take these results into account in the design and formulation of international marketing strategies, especially when they targeting or aim to target these groups of consumers. High animosity consumers tend to reject products/brands from dislike nations.

Additionally, in terms of consumer animosity based on ethnicity, Malay students tended to demonstrate the highest animosities, namely overall consumer animosity, consumer animosity towards Europe countries, consumer animosity towards Singapore and consumer animosity towards USA. Nonetheless, Chinese students exhibited the least level of consumer animosity. Indeed, Malay students were significance different from Chinese and Indian samples.

Marketers of brands from these countries are encouraged to mask their brands' countries of origin information when targeting Malay students, as their origin information will bring negative outcome on consumers' purchase decision. However, they are encouraged to associate their brands with favorable country image or focus on product attribute-related information when marketing their brands to this segment. On the other hand, when targeting Chinese students, marketers of brands from these nations are encouraged to incorporate their brands' countries of origin information in their marketing communication, as this segment displayed moderate animosity level towards Europe countries, Singapore and USA, particularly lower level of animosities towards Singapore and USA. Indeed, the brand origin information might bring favorable outcome on the purchase decision of this segment. Additionally, marketers are also encouraged to incorporate the brand origin information when targeting Indian students, as they hold relatively low animosity as compared with the Malay segment.

Marketers are encouraged to consider product category and brand's country of origin cues when targeting different ethnic groups. Students are significance different on their preferences towards different product categories-brands' countries of origin associations. Malay students were significance different to Chinese and Indian samples in most of the cases. Indeed, Malay students tended to display the highest preferences towards Malaysian brands, while Chinese students showed the least preferences towards home grown brand in all product categories, with the exception of dairy products when Indian prefer the least. Therefore, marketers of

domestic brands that target Malay students are encouraged to incorporate brand origin information when marketing their brands/products, as this will bring positive impact on consumer purchase decision. Nonetheless, marketers that targeting Chinese and Indian students are encouraged to focus on product attribute-related information and dissociate their brands with its origin, as their brand origin information will bring negative outcome on the purchase decision of these segments.

Furthermore, in terms of foreign brands, students in Penang tended to display highest preferences towards brands from USA, with the exception of dairy products for Malay students. Moreover, the preferences towards brands from Holland and Singapore for three ethnic groups were based on product categories. For example, Malay samples showed higher preference towards Holland brands rather than Singaporean brands in the cases of fashion apparels and textiles as well as electrical goods and appliances, nevertheless Chinese and Indian samples prefer brands from Holland rather than Singaporean brands. These results brought some insights to marketer of brands from these nations, where they are encouraged to design different marketing strategies that based on product categories when targeting different segment, but not standardized their international marketing strategies.

It is believed that consumer animosity of all three ethnic groups are related with their preferences towards different product categories-brands' countries of origin associations. For example, Malay students displayed the highest animosities level, while Chinese students showed the least consumer animosity. Therefore, Malay students demonstrated the highest level of preferences towards home grown brands in most of the cases; nevertheless, Chinese students displayed the least preferences towards domestic brands. Consequently, marketers should take all these three information, namely ethnicity, consumer animosity and product category, into their considerations when formulating and designing marketing strategies and programs. It is believed that the missing of either one consideration will results unwanted outcome on consumer attitude, behavior as well as purchase decision.

### **Contributions, Limitations and Recommendations**

This study contributes to the body of knowledge by incorporate ethnicity and product categories in the study of consumer animosity. Previous studies studied examined the concept of consumer animosity generally based on nationality (e.g. Klein et al., 1998; Klein & Ettenson, 1999; Leong et al., 2007; Wansink et al. 2009; Funk et al., 2010; Smith & Li, 2010), but did not further explore consumer animosity based on ethnic group within a nation. Indeed, the results of this study revealed that consumers within a nation displayed significantly different level of consumer animosity. Additionally, they displayed different level of consumer animosity towards different dislike nations.

This study is not without limitations. This study focused only on ethnicity and consumers' preferences, but not their actual purchase decision. It is believed that different ethnic groups might significance different on their actual purchase behavior. Therefore, future researchers are encouraged to extend this study by examining ethnicity and consumers' actually purchase decision. In addition, they are also encouraged to explore the relation between ethnicity, consumer animosity and actual purchase decision.

Moreover, this study revealed that different ethnic groups presented significance different level of consume animosity towards different countries. However, this is not sufficient in providing a comprehensive picture how ethnicity works on consumer animosity. Hence, future researches are called to examine the mediating role play of two concepts, namely world mindedness and national identification. It is believed that consumers in different ethnic group with different level of world mindedness and national identification will demonstrate different level of consumer animosity. Indeed, these affect their attitude and behaviors towards the dislike nations.

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## Appendix

Buy British Last Policy initiated by the Malaysian government in 1981, when the UK press, *Financial Times*, reported the US government and companies used alleged tactics to win a Malaysian contract. Besides, Boycott Danish Products Campaign launched by NGOs in 2006

when Danish newspaper, *Jyllands-Posten*, abuse Islam by publishing twelve cartoons ridiculing Prophet Muhammad (The Brussels Journal, 2006). In 2008, Boycott Dutch Products Campaign was initiated, as a Dutch legislator posted a film that portrayed Islam as a violent religion (Kuwait Times, 2008). As a result, Malay Muslims were called to boycott Dutch-made products (The Star, 2008). In addition, Boycott US Product Campaign was initiated in 2009, as US support Israel that mounted the offensive in Gaze (BBC News, 2009). A boycott list includes over 150 products ranging from food and beverage to household and skincare items were introduced (Asia Pacific News, 2009). Indeed, there are also some boycotts from European Union to Malaysia. The European Union has initiated a ban on palm oil products from Malaysian in 2007 that resulted by some sensitive ecosystems issue, where they claimed Malaysian oil palm plantations cause to global warming by cutting down forest (The Star, 2007). Additionally, they initiated a ban on Malaysia seafood in the following year, where they found some Malaysian companies lack in health standards and practices set by the European Union (The Star, 2009). Moreover, the conflicting issues between Malaysia and Singapore related to the political right of Pulau Putih (Pedra Branca), water issue as well as territory issue.

## LEARNING ORGANIZATION AND KNOWLEDGE MANAGEMENT FOR KNOWLEDGE ENTREPRENEUR: EMPIRICAL EVIDENCES FROM HIGHER LEARNING INSTITUTIONS

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### Abstract

Public and private higher learning Institutions should invest in intangibles such as human capital and research and development capacity through the integrative concept of Learning Organization and Knowledge Management in order to create and increase their knowledge creation and innovation from their academic and research excellence. Hence, the research objective of this paper is to empirically investigate the conceptual relationship between learning organization and knowledge management process of tacit knowledge which can contribute to the concept of knowledge entrepreneur of the higher learning institutions. A survey questionnaire was employed as the main instrument to collect data for statistical analysis from the academicians in the selected public and private higher learning institution in Malaysia. The empirical comparative findings of this study provide an initial step forward in identifying the significant conceptual relationship between the relevant dimensions of a learning organization and the effective knowledge management process of tacit knowledge which can enhance knowledge performance and innovation for the intellectual entrepreneurship of both public and private higher learning organization in Malaysia. This research paper adapts the studies of Watkins and Marsick (1993:1996), Hernandez (2000) and Salleh (2014) to identify the ways in which the seven dimensions of the LO and the transfer of tacit knowledge through knowledge management process (KMP) that could improve the knowledge performance and innovation of the selected public and private higher learning institution in Malaysia from the concept of learning organization to knowledge entrepreneur.

**Keywords:** *Learning Organization, Knowledge Management, Tacit Knowledge, Knowledge Entrepreneur, Higher Learning Institutions*

Paper Type: **Research Paper**

### Introduction

The need for organizations to survive in a changing environment has led to the development of the concept of the learning organization (LO) and knowledge management (KM). When knowledge becomes core competency of the organization, a successful organization is one that pays greater attention to the development and preservation of internal skills and capabilities through the process of learning and sharing knowledge among individuals (Misha & Bhaskar, 2010; Salleh, Chong, Syed Ahmad & Syed-Ikhsan, 2012; Salleh, Syed Ahmad, Syed-Ikhsan & Lin, 2011).

To strive for academic and research excellence, it is imperative for a public or private university in Malaysia to become a LO (Hussein et al., 2016). The university needs to undergo the transformation process of LO by adopting the knowledge management process (KMP) of transferring tacit knowledge for its future value driven of academic excellence (Salleh, 2014 & Hernandez, 2000).

Hence, the objective of this research paper is to empirically investigate the conceptual relationship between the seven dimensions of the LO and the transfer of tacit knowledge through KMP for the future value driven of academic excellence of the selected public university and private university. This research objective adapts the studies of Watkins and Marsick (1993; 1996) and Hernandez (2000; 2003) to identify the ways in which the seven



dimensions of the LO and the transfer process of tacit knowledge which are deemed important in influencing and improving the knowledge performance and innovation.

The motivation of this study and its expected contribution is to develop an integrated conceptual model of LO and KM for intellectual entrepreneurship in the context of a selected public and private university in Malaysia which can be used as replication studies for other public and private universities in Malaysia and in other countries.

### **Literature Review and Research Model**

LO is defined by Watkins (1996) (p.32) as one in which learning and work are integrated in an ongoing and systematic fashion to support continuous improvement at the individual, group and organizational levels. In other words, learning takes place in the individuals, teams and organization and even the communities with which the organization interacts. LO is also said to be about increasing an organization's problem solving capability and about changing behavior in ways leading to improved performance at the individual, team and organizational level (Buckler, 1998).

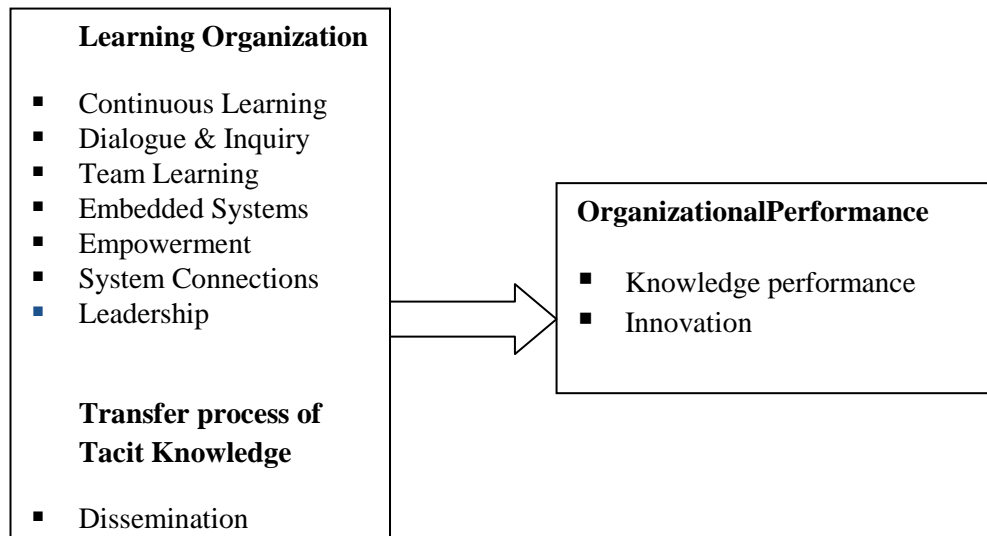
According to Watkins & Marsick (1993;1996) and (Selden & Watkins, 2001), the characteristics or the seven complementary action imperatives of LO are to:

- 1) create continuous learning opportunities,
- 2) promote inquiry and dialogue,
- 3) encourage collaboration and team learning,
- 4) establish systems to capture and share learning,
- 5) empower people toward a collective vision,
- 6) connect the organization to its environment and
- 7) provide strategic leadership for learning

KM is defined as the process of capturing the collective expertise and intelligence in a LO and using them to foster innovation through continued organizational learning (Davenport, DeLong & Beers, 1998; Meso & Smith, 2000; Nonaka & Takeuchi, 1995; Quinn, Anderson & Finkelstein, 1996, Salleh, 2013a & Salleh, Chong, Syed Ahmad & Syed-Ikhsan, 2013b). The ultimate goal of KM is to convert tacit knowledge (personal ideas and experiences) from individual knowledge to explicit organizational knowledge (documents, products and procedures) and utilized shared knowledge across organization effectively (Bennet & Bennet, 2003; Davenport, et al. 1998; Gupta, Iyer & Aronson, 2000, Nonaka & Takeuchi, 1995; Quinn, et al. 1996). Tacit knowledge transfer is the process by which tacit knowledge is moved and shared throughout organization through individuals and groups across various functions by personal, mechanical and electronic means (Hernandez, 2000; 2003). Hernandez (2000 ; 2003) had carried out an empirical study to identify the ways the LO dimensions impact the transfer process of tacit knowledge which can improve the knowledge and financial performance within the private manufacturing companies in Colombia. The findings showed the positive structural relationship between the seven LO dimensions and the transfer of tacit knowledge process for a positive influence on knowledge performance.

According to Rowley (2000), a number of characteristics of knowledge need to be recognized and accommodated in learning processes and knowledge management. The concept of Knowledge Entrepreneur is proposed by Rowley (2000) which recognizes the multi-faceted nature of knowledge and defines cultures, values and systems that encourage appropriate organizational learning. Knowledge entrepreneurship cannot be achieved without an understanding of the knowledge which an organization and its learners need to achieve its vision. The key competence for the knowledge entrepreneur is the ability to learn how manage systems evolution to support individual and organizational learning for the articulation of tacit knowledge.

The following research model (see Figure 1) is proposed for the hypothesis development to test the conceptual relationship between LO and KM in terms of the impact between the seven dimensions of LO and the KM process of tacit knowledge transfer on the organizational performance in terms of knowledge entrepreneur for this comparative study of a selected public and private university in Malaysia.



**Figure 1: Research Model**

**Research Methodology**

In this study, a survey questionnaire was used as the main instrument to collect data from all academicians employed by the selected public university and private university in Malaysia. The selected case evidence for a public university is a Malaysia's largest institution of higher learning in terms of size and population. It has experienced phenomenal growth since its inception in 1956 and has expanded nationwide with numerous branch campuses, city campuses and affiliated colleges. This university attempts to become the new centre of academic and research excellence and expected to become a world class university by 2020. On the other hand, the selected case evidence for a private university is a Malaysia's leading university in engineering technology established on 20 August 2002. Its vision is to become the leading entrepreneurial technical university in the country by 2020 through excellence in research, education, training, entrepreneurship, consultancy and community services.

Questionnaires were posted to a total of 900 academicians from 26 faculties of a public university which are grouped for the three clusters of programs i.e. 1) science and technology, 2) business and management and 3) social sciences and humanities. Only 99 questionnaires (10%) were received and usable for data analysis purposes. For the selected private university, 500 questionnaires were distributed to academicians from its 13 branch institutes which offer various foundation, diploma, undergraduate and postgraduate programs. Similarly, 144 questionnaires only (29%) were received and usable for further data analysis.

The multiple question items in the questionnaire were adapted from the studies of Watkins and Marsick (1993;1996) and Hernandez (2000 ; 2003) to identify the ways in which the seven dimensions of the LO and the KMP of tacit knowledge can improve the organizational performance of a public university and private university. Besides demographic data, a seven-point scale from 1 to 7 was used for all questions concerning respondents' perceptions on the seven dimensions in the LO environment (42 items), the level of tacit knowledge (12 items) being disseminated and documented for information accessibility and usability and the organizational performance in terms of the knowledge performance and innovation (7 items). The Likert-point scale used ranges from 1 is for almost never, 2 is for seldom, 3 is for occasionally, 4 is for not sure, 5 is for frequently, 6 is for usually and 7 is for almost always. Statistical Package for Social Sciences (SPSS) version 23 was used to analyze data collected for statistical analysis and results.

**Data Analysis and Results**

The Cronbach's Alpha is computed to verify the reliability of the data collected and the study variables of this empirical research. According to Sekaran (2000), the closer the Cronbach's Alpha to 1, the higher the internal consistency reliability. The Cronbach's Alpha coefficient for each research variable of this study is presented in Table 1.

**Table 1: Coefficient of Cronbach's Alpha**

Variables	Number of Items	Cronbach's Alpha Coefficients	Cronbach's Alpha Coefficients
		Public University (N = 99)	Private University (N= 144)
<b>Learning Organization Dimensions</b>	<b>42</b>	0.974	0.983
1. Create continuous learning	5	0.767	0.838
2. Promote inquiry and dialogue	7	0.899	0.909
3. Team learning	6	0.907	0.911
4. Embedded Systems	6	0.886	0.922
5. Empowerment	6	0.900	0.938
6. System connection	6	0.922	0.923
7. Leadership	6	0.943	0.949
<b>KM Process of Tacit Knowledge</b>	<b>12</b>	0.943	0.942
<b>Organizational Performance</b>	<b>7</b>	0.927	0.920

The demographic questions for this study consist of the gender of the respondents, the levels of academic qualification and the type of faculties/institutes in the university. As for the gender of the respondents, 56% of the respondents are females and 44% are males in the public university and 49% of the respondents in the private university are male and 51% are female.

Table 2 reveals the academic qualification of the respondents. The majority (53.53%) of the respondents in a public university holds a Masters degree and 34.34% have a Doctoral degree. Likewise, the majority (44%) of respondents in a private university holds a Masters degree and 30% have a Doctoral degree. Most of the respondents (88% in a public university and 74% in a private university) are highly educated and thus, their responses are useful and relevant to this study.

**Table 2: Academic Qualification of Respondents**

Universities	Public University		Private University	
Current Position	Number	Percentage (%)	Number	Percentage (%)
Doctorate Degree (PhD)	34	34.34	43	30
Masters Degree	53	53.53	64	44
Professional Degree	5	5.05	19	13
Degree	3	3.03	15	11
Diploma	-	-	2	1.30
Not Stated	4	4.04	1	0.70
<b>Total</b>	<b>99</b>	<b>100</b>	<b>144</b>	<b>100</b>

The main objective of this paper is to investigate the effect of seven dimensions of the LO and the KMP of tacit knowledge which are deemed important in improving the knowledge performance and innovation in this selected public university and private university in Malaysia. Thus, the following statistical analysis such as factor analysis and standard multiple regression analysis (Tabachnick and Fidell, 2001) are used to extract the valid factors and to investigate the relationships between LO components and KMP of tacit knowledge (independent variables) and the organizational performance of the public university and private university in terms of knowledge performance and innovation (dependent variable).

Factor Analysis was used to confirm that only six (6) out of seven (7) LO components are in conformity to the literature review and are valid for this study of a selected public university. This is due to fact that factor analysis for this study has combined or grouped the two (2) components of LO i.e. empowerment and system connections as one (1) appropriate LO component. Table 3A shows the summary of factor analysis results, factors and Cronbach's alpha scores to justify that the study variables in this study of a public university were reliable for hypotheses testing via the standard multiple regression analysis.

**Table 3A: Summary of Factor Analysis Results, Factors and Cronbach’s Alpha Scores for a Public University**

Factors	Items	Factor Loadings	Eigenvalue (%)	Cronbach’s alpha
<b>LO Components</b>	<b>KMO = 0.899, Sig. = 0.000, Eigenvalue= 71.6%</b>			
Leadership	8	0.612 – 0.792	51.95	0.951
Team Learning	7	0.593 – 0.764	5.233	0.915
Empowerment and System Connection	8	0.521 – 0.737	4.462	0.934
Promote Inquiry and Dialogue	6	0.509 – 0.707	3.727	0.881
Embedded System	4	0.512 – 0.668	3.123	0.862
Create Continous Learning	3	0.661 – 0.730	3.105	0.744
<b>KM Process</b>	<b>KMO = 0.917 Sig. = 0.000, Eigenvalue= 72.7%</b>			
Tranfer of Tacit Knowledge	12	0.870 – 0.710	72.7	0.944
<b>Organizational Performance</b>	<b>KMO = 0.934 Sig. = 0.000, Eigenvalue= 74.76%</b>			
Knowledge Performance and Innovation	7	0.933 – 0.778	74.76	0.942

Table 3B shows the summary of factor analysis results, factors and Cronbach’s alpha scores to justify the study variables used in the study of a private university which were reliable for hypotheses testing via the standard multiple regression analysis. Factor Analysis was used to confirm that only five (5) out of seven (7) LO components are in conformity to the literature review and are valid for this study of a selected private university. The factor analysis for this study has combined or grouped the three (3) components of LO i.e. leadership, empowerment and system connections as one (1) appropriate LO component, the three (3) components of LO i.e. Promoting Dialogue and Inquiry, Team Learning and Creating Continuous Learning as another two (2) appropriate variables i.e. Promote Dialogue and Team Learning and Continuous Learning & Inquiry/Feedback. In addition, the factor analysis has also created the new study variable with a new title known as Recognition and Rewards based on the literature evidence.

**Table 3B: Summary of Factor Analysis Results, Factors and Cronbach’s Alpha Scores for a Private University**

Factors	Items	Factor Loadings	Eigenvalue (%)	Cronbach’s alpha
<b>LO Components</b>	<b>KMO = 0.950, Sig. = 0.000, Eigenvalue= 73.5%</b>			
Leadership & Empowerment & System Connections	21	0.459 – 0.767	60.025	0.976
Promote Dialogue and Team Learning	9	0.480 – 0.777	4.852	0.945

Continuous Learning & Inquiry/Feedback	5	0.562 – 0.700	3.272	0.894
Embedded System	4	0.635 – 0.715	2.808	0.924
Recognition & Rewards	3	0.644 – 0.747	2.589	0.809
<b>KM Process of Tacit Knowledge</b>	<b>KMO = 0.925 Sig. = 0.000, Eigenvalue= 73.80%</b>			
Knowledge Disemination	9	0.564 - 0.863	61.688	0.944
Knowledge documentation	3	0.859 - 0.889	12.116	0.905
<b>Organizational Performance</b>	<b>KMO = 0.888 Sig. = 0.000, Eigenvalue= 67.915%</b>			
Knowledge Performance and Innovation	7	0.763 – 0.879	67.915	0.920

Standard Multiple Regression Analysis was used for finding the relationship model between LO components and KMP of tacit knowledge being identified as independent variables and the organizational performance as dependent variable. This statistical technique also helps to identify the significant predictors between LO components and the KMP of tacit knowledge that could contribute to the knowledge performance improvement of the selected public university. Table 4A shows the summary of regression results for the research model on the conceptual relationship between LO Components and KMP of tacit knowledge (independent variables) on the organizational performance (dependent variable) in the selected Public University.

**Table 4A: Summary of Regression Results of Relationship Model for a Public University**

<b>An Integrtated Model of LO Components, KMP of Tacit Knowledge and Organizational Performance</b>	
Standard Multiple Regression Result	<b>R<sup>2</sup> = 0.714</b> F = 32.170 Sig. = 0.000***
<b>LO Components</b>	<b>B = Beta Coefficients</b> <b>P = P-Value</b>
Leadership	B = 0.239 <b>p = 0.036**</b>
Team Learning	B = 0.228 <b>p = 0.024**</b>
Empowerment and System Connection	B = - 0.032 p = 0.789
Promote Inquiry and Dialogue	B = - 0.110 p = 0.230
Embedded System	B = 0.062 p = 0.547
Create Continous Study	B = 0.181

	<b>p = 0.021**</b>
<b>KMP of Tacit Knowledge</b>	B = 0.398 <b>p = 0.000***</b>
Dependent Variable	Organizational Performance
<b>Note: Supported Hypotheses in boldface type:***p&lt;0.01, **p&lt;0.05, * p&lt; 0.1</b>	

The regression model in Table 4A had presented the integrated model of LO, KMP of tacit knowledge and organizational performance in the selected public university in Malaysia. This regression model shows the value of R-Square is 0.714 or 71.4%. This indicates that the regression model for LO components and KMP of tacit knowledge explains 71.4% of the variances in the organizational performance in terms of knowledge performance and innovation indicators. When both the LO components and KMP of tacit knowledge are regarded as antecedents of organizational performance, KMP of tacit knowledge is found as the highly significant predictor with p-value = 0.000. The creation of continuous study, team learning and leadership with p-values of less than 5% are among those of moderately significant LO components that have positive and significant relationship to the organizational performance of the selected public university.

The result of this study shows that three LO components i.e. continuous study, team learning and leadership characteristics are important LO dimensions for the integration concept of the seven LO dimensions with the transfer process of tacit knowledge to improve knowledge performance and innovation in the selected public university in Malaysia. This survey research discovered that the integration of LO and KM process of tacit knowledge can improve 1) individual's learning new skills, 2) increase the number of research products and patents, 3) increase level of innovation and improve processes, 4) increase percentage of skilled workers/expertise and 5) increase percentage of total spending devoted to technology and information processing. The academicians (questionnaires' respondents) had placed greater importance on both human and innovation capital for the significant effect of LO and KMP of tacit knowledge in improving the intellectual entrepreneurship of their university.

The following are the top ranked information of KM process of tacit knowledge dissemination and documentation which can contribute to the concept of knowledge entrepreneur of the selected public university:

1. Existence of documentation describing administrative procedures,
2. New ideas or methods are disseminated and spread to other colleagues in helping to articulate the problem,
3. Insights from colleagues across departments were obtained when dealing with complex problems,
4. When encountering operational problems, attempts were made to look at other departments' experience for critical information and knowledge,
5. Faculty/Unit/Institute share with other members what works and what does not work when developing new ideas,
6. Parts of the work processes are embodied in software that have been modified/customized,
7. Cross-functional teams are used to transfer important learning across groups, divisions and departments,
8. Technology in faculty/unit/institute creates a database that is accessible to the entire organization
9. Recognition given to the value of the ideas and methods which have been made available to employees and organization.



The spirit of continuous study, team learning and good leadership style are among the moderately significant LO components that are regarded as paramount importance to the integration concept of LO and the KMP of tacit knowledge for the intellectual entrepreneurship of the selected public university in Malaysia. The following components for creating the environment of continuous study, team learning and leadership approach are considered to be critically important by the respondents for the integration concept of LO and KM in the selected public university in Malaysia.

1. Employees help each other to learn through continuous study and learning environment
2. Team learning can revise their thinking as a result of group discussions or information collected
3. Team learning can focus on both the group's task and on how well the group is working
4. Leaders empower employees to help carry out the organization's vision
5. Leaders generally support requests for learning opportunities and training
6. Leaders share up to date information with employees about competitors, industry trends and organizational directions
7. Leaders ensure that the organization's action are consistent with its values
8. Leaders continually look for opportunities to learn

The regression model in Table 4B had presented the integrated model of LO, KMP of tacit knowledge and organizational performance in the selected private university in Malaysia. This regression model shows the value of R-Square is 0.663 or 66.3% which indicates that 66.3% of the variances in the organizational performance in terms of knowledge performance and innovation had been explained by the regression model for LO components and KMP of tacit knowledge. When both the LO components and KMP of tacit knowledge are regarded as antecedents of organizational performance, KMP of tacit knowledge dissemination is found as the highly significant predictor with p-value = 0.001. The co-existence of leadership, empowerment and system connections with p-values of less than 10% are found to be the more moderately significant LO component that has a positive and significant relationship to the organizational performance of the selected private university.

**Table 4B: Summary of Regression Results of Relationship Model for a Private University**

<b>An Integrated Model of LO Components, KMP of Tacit Knowledge and Organizational Performance</b>	
Standard Multiple Regression Result	<b>R<sup>2</sup> = 0.663</b> F = 38.221 Sig. = 0.000***
<b>LO Components</b>	<b>B = Beta Coefficients</b> <b>P = P-Value</b>
Leadership & Empowerment & System Connections	B = 0.239 <b>p = 0.096*</b>
Promote Dialogue and Team Learning	B = 0.022 p = 0.833
Continuous Learning and Inquiry/Feedback	B = 0.062 p = 0.552

Embedded System	B = 0.140 p = 0.129
Recognition and Rewards	B = 0.017 p = 0.816
<b>KMP of Tacit Knowledge</b>	<b>B = Beta Coefficients</b> <b>P = P-Value</b>
Knowledge Dissemination	B = 0.423 <b>p = 0.001***</b>
Knowledge Documentation	B = - 0.051 p = 0.450
Dependent Variable	Organizational Performance
<b>Note: Supported Hypotheses in boldface type:***p&lt;0.01, **p&lt;0.05, * p&lt; 0.1</b>	

The following are the top ranked information of tacit knowledge dissemination through KMP which can contribute to the concept of knowledge entrepreneur of the selected private university:

1. When encountering operational problems, attempts were made to look at other departments' experience for critical information and knowledge
2. New ideas or methods are disseminated and spread to other colleagues in helping to articulate the problem
3. Organisation shares with other members what works and what does not work when developing new ideas
4. Cross-functional teams are used to transfer important learning across groups, divisions and departments
5. Insights from colleagues across departments were obtained when dealing with complex problems
6. Recognition given to the value of the ideas and methods which have been made available to employees and organization

The co-existence of leadership, empowerment and system connections are among the moderately significant LO components that are regarded as paramount importance to the integration concept of LO and the KMP of tacit knowledge dissemination for the intellectual entrepreneurship of the selected private university in Malaysia. The following components for creating the environment of co-existence of leadership, empowerment and system connections approach is considered to be critically important by the respondents of the selected private university in Malaysia for the integration concept of LO and KM and for the way forward concept of knowledge entrepreneur:

1. Leaders continually look for opportunities to learn
2. Leaders mentor and coach those they lead
3. Leaders ensure that the organization's action are consistent with its values
4. Organization invites employees to contribute to the organization's vision
5. Organization works together with the outside community to meet mutual needs
6. Organization encourages employees to think from a global perspective
7. Organization helps employees balance work and family
8. Organization builds alignment of visions across different levels and work groups
9. Leaders generally support requests for learning opportunities and training
10. Organization gives employees choices in their work assignment

11. Leaders share up-to-date information with employees about competitors, industry trends, and organizational directions
12. Organization supports employees who take calculated risks

## 5. CONCLUSION

This survey research has found that the integration of LO and KMP of tacit knowledge as antecedents to organizational performance of a public and private university can improve the percentage of skilled workers /expertise, improve individual's learning new skills, greater levels of innovation and improved processes and increase in research products and patents.

KMP of tacit knowledge dissemination and documentation in a selected public university is found to be highly significance in this integrated model. Knowledge sharing when developing new ideas, dissemination of new ideas/methods for solving complex problem, cross-functional teams, database technology and recognition given to the value of new ideas are found to have significant values for thenew integrated concept of learning organization and knowledge management towards knowledge entrepreneur of the selected public university.The spirit of continuous study, team learning and leadership are among the moderately significant LO components in this integrated conceptual model for the knowledge performance and innovation of this selected public university in Malaysia.

KMP of tacit knowledge dissemination in a selected private university is found to be the highly significant predictor with p-value = 0.001 for the integrated concept of LO and KM for the intellectual entrepreneurship environment from the knowledge performance and innovation management perspective. The co-existence of leadership, empowerment and system connections is found to be the more moderately significant LO component that has a positive and significant relationship to the organizational performance of the selected private university.

The empirical findingsfrom this comparative study of LO and KM for knowledge entrepreneur of the selected private and private university in Malaysia appears to be consistent with the integration study of LO dimensions and KM process of tacit knowledge carried out by Hernandez (2000; 2003)on the organizational performance of the manufacturing companies. Hernandez (2000; 2003)had discovered that the structural relationship between the seven LO dimensions and the transfer process of tacit knowledge consecutively showed a positive influence on knowledge performance of the manufacturing organizations in Colombia.

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**THE INFLUENCE OF CASH FLOW, INVENTORY TURNOVER, AND CAPITAL EXPENDITURE ON CASH HOLDING IN MANUFACTURING COMPANY LISTED ON INDONESIAN STOCK EXCHANGE FOR THE YEAR OF 2010-2014**

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**Abstract**

The research examines the effect of cash flow, inventory turnover, and capital expenditure on cash holding in the manufacturing companies listed on Indonesia Stock Exchange for the year of 2010-2014.

This research employs secondary data of which the sources data are deriving from the financial statements published by the capital market reference centre at the Indonesian Stock Exchange Agency. The research type used in this research is hypothesis testing, by using purposive sampling method. There are 275 samples of the data that selected to be become the object to be researched. This research uses multiple linear regression analysis to test the hypothesis.

The result of this research shows that cash flow, inventory turnover, and capital expenditure have a simultaneous significant influence on cash holding. Meanwhile, tested partially, it indicated that both cash flow and inventory turnover has a significant positive influence on cash holding but in contrast capital expenditure has a significant negative influence on cash holding.

**Keywords:** *Cash Flow, Inventory Turnover, Capital Expenditure, and Cash Holding.*

**Introduction**

Each company was established with the aim of going concern, achieving optimal profit, gain owner revenue, and the prosperity returns to the shareholder. In order to achieve the aim, each company has obstacles or problems that can be expected and unexpected.

According to Syamsudin (2007), there are two main problems that commonly occur in any business entities. Firstly, fund allocation which can be seen in the statement of financial position on the side of its assets. Second, the fulfilment of the funds that can be observed in the statement of financial position on the liability and the equity side. The financial manager will always try to achieve a balance between assets and liabilities + equity in the statement of financial position. Managing funds seems the best way that can affect the balance of the company. In manufacturing companies we need the fund to operate the company, such as purchase of raw materials, payment of wages, and other payments (Soemarso, 2005). To effectively fulfil the fund we need to manage the cash. Cash principally is a liquid asset that can be used for payment (Suhayati, 2009). While cash is considered as the most current working capital. cash items that company, potential investors, investors, and analysts concerned is called cash holding.

Cash holding can be used for dividends distributed to shareholders, to repurchase shares, to repay debt, to finance the investment opportunities that are profitable, as a backup if there is a danger of unexpected, and save it for the benefit of the company in the future (Gill and Shah, 2012). The financial manager needs to maintain optimal cash holding in order to be going concern. If cash holding is too large is not productive and if cash holding is too small it is considered not good as well, because liquidity will be reduced. Cash holding is measured by

comparing the ratio between the amount of cash and cash equivalents of the company divided by total assets of the company (Teruel et al., 2009).

Every year cash holding in manufacturing company changes which is increase and decrease. The holding cash phenomenon occurs in companies listed on the Stock Exchange in 2010-2014 can be seen in Table 1.1 below. Based on preliminary observations of a total population of 125 manufacturing companies that suitable for the study criteria, it randomly selected 10 companies as the unit of observation of the research as shown below:

**Table 1.1**  
**Sample of Cash Holding in Manufacturing Company**

No.	Companies	Cash Holding				
		2010	2011	2012	2013	2014
1.	GGRM	2.0830	1.2080	2.1340	0.2980	2.5320
2.	HMSP	0.6450	0.4080	1.0840	1.1480	2.4890
3.	DVLA	2.1310	2.3020	0.6360	0.5650	0.0210
4.	KLBF	0.1730	1.2930	1.4780	0.3050	0.6870
5.	MERK	2.8000	0.4770	0.4630	0.5700	2.3800
6.	PYFA	0.5450	0.1570	4.9670	1.2090	0.7640
7.	TPSC	0.5420	0.1820	4.0880	0.8730	4.6250
8.	MBTO	3.7570	1.5580	0.2550	1.9110	0.6450
9.	TCID	1.2360	0.5640	1.2120	0.3100	1.1620
10.	KDSI	0.6910	0.1640	0.5510	0.4240	0.0760
<b>Total</b>		<b>14.603</b>	<b>8.313</b>	<b>16.868</b>	<b>7.613</b>	<b>15.381</b>
<b>Mean</b>		<b>1.4603</b>	<b>0.8313</b>	<b>1.6868</b>	<b>0.7613</b>	<b>1.5381</b>

Source: Data Processed (2015)

Based on observations as shown in Table 1.1, it indicated that the level of cash holding has fluctuated annually. The average of cash holding in 2010-2011 decreased from 1.4603 to 0.8313, but the average of cash holding for 2012 has increased to 1.6868. In 2013, the average of cash holding decreased again to 0.7613 and even lower than in 2011. Not stable cash holding is caused by unstable cash flow, inventory turnover, and capital expenditure.

According to Bates et al. (2009) there are three motives of holding cash. First, transaction motive of which related to the operation of such companies providing cash for the payment of salaries and wages, debt payments, bill payments to creditors, and purchases of merchandise. High operational needs in the companies frequently lead to the funds or the cash need to be higher.

The daily activities of manufacturing companies closely related with inventory of which will be processed to finance the daily operations (Husnan, 1998; Atniati, 2010). High inventory turnover may generate low cash holding because the inventory can be converted into cash, otherwise low inventory turnover can generate higher cash holding because there is a risk in inventories value (Dittmar, 2003; Ogundipe et al., 2012).

Secondly, precaution motive, where the company maintain liquidity to face unexpected contingencies. Things may unexpectedly be experienced by the company is a business risk. Business risk is the risk that is affected by the activities of the business or operations of the company such as changes in prices of raw materials, machinery breakdown, fire, and accidents. This motif is related to the capital expenditure.

Capital expenditures are costs incurred by the company in order to acquire fixed assets (Hery, 2014). According to Bates et al. (2009), because of the need to hold cash, capital expenditure is expected to reduce cash holdings. Capital expenditure increases or creating new assets for the company since these assets can be guaranteed if needed. Capital expenditure also increased its capacity and weaken the need to hold cash. In addition, this

motif is also related to the trade-off theory which states that the company will be in debt to reduce the amount of cash holding.

The trade-off theory confirmed the positive relationship between capital expenditure with cash holding because of the capital expenditure can be guarantee as collateral for the debt, and therefore the cash holding in the company does not need to be too big. However, the results of Kim et al. (2011) and Jinkar (2013) stated that the capital expenditure and cash holdings are negatively related.

Third, the speculative motive that take advantage when the opportunity was there. For example, a company uses its cash to invest in securities (stocks or bonds) in the hope after buying these securities price will go up (Husnan, 1999; Atniati, 2010). This motif is supported by the pecking order theory which states that the financing comes from retained earnings, debt, and equity, also opportunity managerial theory stated that managers may prefer not to pay dividends to shareholders and use it for personal gain.

Theory and the motive justify the positive influence between cash flow with cash holding, where companies prefer internal financing compared with external funding, as was said earlier on speculation the motive, the company will use its cash and not by borrowing from creditors (Kim et al., 1998; Almeida, 2004; Kalcheva and Lins, 2007; Ogundipe et al., 2012).

Based on the pecking order theory, cash flow positively correlated with cash holdings, as well as results of research Ozkan and Ozkan (2004), Kim et al. (2011), Gill and Shah (2012), and Jinkar (2013). However, in contrast to the results of research Almeida et al. (2004) and Daher (2010) which states that cash flow and cash holdings are negatively related.

Referring to the problems above, the research examines the effect of cash flow, inventory turnover, and capital expenditure on cash holding in the manufacturing companies listed on Indonesia Stock Exchange for the year of 2010-2014.

## **Literature review and hypotheses**

### **Cash Flow Effect on Cash Holding**

According Opler et al., (1999) companies that have an increase cash flow tends to withhold their earning. The cash collecting can later be used to fund investment or utilized in the event of financial distress. According to Ozkan and Ozkan (2004) companies that have high cash flow will hold large amounts of cash as a result of their tendency to prioritize internal funding than external funding.

Companies prefer internal financing compared with external round of funding based on the motives of speculation, the company will use the cash that they have and not by borrowing from creditors(Kim et al., 1998; Almeida, 2004; Kalcheva and Lins, 2007; Ogundipe et al., 2012).

Based on the pecking order theory theory which states that the financing comes from retained earnings, debt, and equity, cash flow positive associated with holding cash, as well as results of research Ozkan and Ozkan (2004), Kim et al. (2011), Gill and Shah (2012), and Jinkar (2013). However, in contrast to the results of research Almeida et al. (2004) and Daher (2010) which stated that cash flow and cash holdings are negatively related.

### **Inventory Turnover Effect on Cash Holding**

Based on transaction motive,highoperational needs will cause the funds or the cash needed become higher. The daily activities of companies closely related to the sale of inventory. According to Ogundipe (2012), high inventory turnover can generate low cash holding because the inventory can be converted into cash, otherwise low inventory turnover can generate highcash holding because there will be a risk in inventories value.



**Capital Expenditure Effect on Cash Holding**

Capital expenditure can increase debt capacity so as to reduce the level of cash. This is caused by companies that have more capital expenditure which can create more assets that can be used as collateral for the company in debt, so capital expenditure is a deduction for cash holding companies (Bates et al., 2009).

The trade-off theory confirmed the positive relationship between capital expenditure with cash holding because of the capital expenditure will be able to serve as collateral for the debt if required, and therefore the cash holding in the company does not need to be too big. However, the results of Kim et al. (2011) and Jinkar (2013) stated that the capital expenditure and cash holdings are negatively related.

**Hypothesis**

H1: Cash flow, inventory turnover, and capital expenditure have positive effect on cash holding.

H2: Cash flow has a positive effect on cash holding.

H3: Inventory turnover has a positive effect on cash holding.

H4: Capital expenditures has a negative effect on cash holding.

**Results and discussion**

**Normality Test**

Normality test is used to see whether the regression model, dependent variable and independent variables, normally distributed or not. A good regression model is a model with normal or near-normal distribution. Normality test in this test uses Kolmogorov-Smirnov test to determine whether the value of the residuals in the regression equation distribute normally or not. The criteria that should be fulfilled in this test if the significance value (p-value) is greater than alpha value 0.05 or 5%, and the variables are distributed normally(Ghozali, 2009).

Classic assumption test was first conducted by normality test of which can be seen on the Table 3.1 below:

**Table 3.1  
One-Sample Kolmogorov-Smirnov Test**

		Unstandardized Residual
N		275
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	.99963227
Most Extreme Differences	Absolute	.062
	Positive	.062
	Negative	-.061
Kolmogorov-Smirnov Z		1.035
Asymp. Sig. (2-tailed)		.234

a. Test distribution is Normal.

b. Calculated from data.

Source: Output of SPSS23 (2016)

The outcome of research above concluded that the significance value (p-value) is greater than alpha value 0.05 or 5%, and the variables are distributed normally. Hence, this data can be used in the model

**Multicollinearity Test**

Multicollinearity test aims to test whether the regression model found a correlation among the independent variables. A good regression model does not have any correlation between the independent variables (Ghozali, 2009). Multicollinearity can be seen from the Tolerance Value and Variance Inflation Factor (VIF). If tolerance < 0.10, or equal to the value of VIF > 10 then, there is multicollinearity that cannot be tolerated and those variables should be excluded from the regression model for obtained the unbiased results. The outcome of the test may be seen on the table 3.2 below:

**Table 3.2**  
**Multicolonierity Test**  
**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant	-1.706	.192		-8.88	.000		
)	1.363	.269	.203	5.075	.000	.964	1.037
1 CF	.532	.028	.758	19.06	.000	.974	1.027
IT	-1.536	.649	-.093	-	.019	.988	1.012
CAPEX				2.366			

a. Dependent Variable: CH

Source: Output of SPSS 23 (2016)

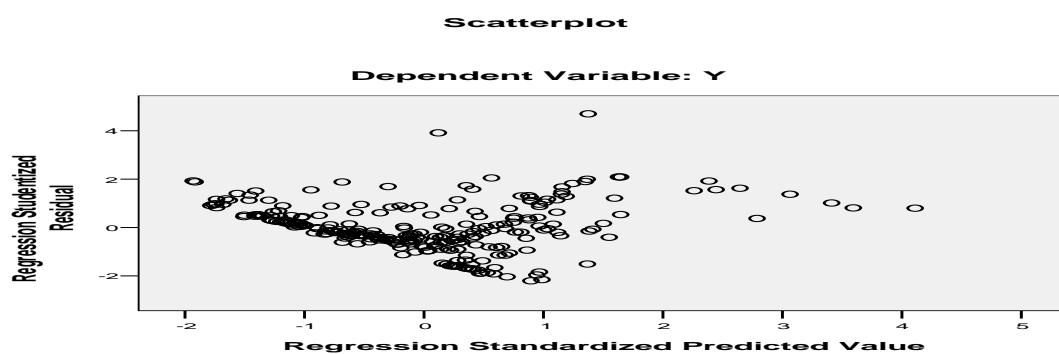
Based on the result above, the tolerance value of all variables is greater than 0.10 and also the VIF values is less than 10. Therefore, there is no multicollinearity between each independent variable in this regression model.

### Heteroscedasticity Test

Heteroscedasticity test aims to test whether the regression model occurred inequality residual variance of an observation to another or not (Ghozali, 2006). This research uses scatterplot to test whether there is heteroscedasticity or not. "If there is a pattern like dots that not form the specific of a regular pattern (wavy, widened, and narrowed) then it indicates that there is heteroscedasticity. On contrary, if there is no clear pattern, as well as the existing points spread above and below the number 0 on the Y axis, then the heteroscedasticity is not occurred. The outcome of heteroscedasticity test can be seen on the diagram 3.1:

Diagram 3.1

### Test of Heteroscedasticity



From the diagram above, it shows that the spread of residual data is irregular. In addition, the dots are spread above and below 0 on the Y axis and does not form the clear pattern. Therefore, the heteroscedasticity is not occurred in this regression test.

**Autocorrelation Test**

“Autocorrelation test is defined as the correlation between the members of a series of observations, sorted by time (as in the data row of the time) or space, as in a cross-sectional” (Gujarati, 2003). To test of autocorrelation in this research employs the Durbin-Watson Test. The result of autocorrelation test can be seen in table 3.4 below:

**Table 3.4**  
**Autocorrelation Teste**  
**Model Summary<sup>a</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.763 <sup>a</sup>	.583	.578	1.00515006	1.964

a. Predictors: (Constant), CF, IT, CAPEX

b. Dependent Variable: CH

Source: Output of SPSS 23 (2016)

The outcome of the table 3.4 above shows that the Durbin-Watson (DW) value is 1.964. The DW value will be compared with the Durbin-Watson table value that has the significance value 5% with the total sample (n) 275 and 3 variables (k). According to the Durbin-Watson table, the upper limit score (du) score is 1.7536, while (4-du) value is 2,2464. The provision equation of there is not any correlation between the residual is equation is  $du < DW < 4-du$ .

$$du < DW < 4-du = 1.7536 < 1.964 < 2,2464$$

Therefore, with the DW value 1.964, there are no any autocorrelation pattern between the residuals in this research.

**Hypothesis Testing**

**Multiple Regressions Linear Analysis**

This research is to test the hypothesis that using multiple linear regression analysis to determine whether there is influence of cash flow, inventory turnover, and capital expenditure on cash holding either simultaneously or partially. Multiple linear regression analysis is used to obtain the regression coefficients that will determine whether the hypothesis made will be accepted or rejected using a significance level of 0.05 (5%). The results of hypotheses can be seen in Table 3.5 below:

**Table 3.5**  
**Multiple Linear Regression Analysis**  
**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.706	.192		-8.88	.000
	CF	1.363	.269	.203	5.075	.000
	IT	.532	.028	.758	19.06	.000
	CAPEX	-1.536	.649	-.093	-2.366	.019

Source: Output of SPSS 23 (2016)

Based on the outcome of regression analysis from the table 3.5 above, it can be formulated the equation as follows:

$$Y = -1.706 + 1.363X1 + 0.532X2 - 1.536X3 + e$$

The results of the regression equation above can be further explained as follows:

- 1) The Constant Value (a) is -1706. It means that if cash flow, inventory turnover, and capital expenditure assumed to be constant, then the amount of cash holding companies listed in Indonesia Stock Exchange 2010-2014 period decreased by 170.6%.
- 2) The regression coefficient of cash flow amounting 1,363 indicated that every increase of 100% in cash flow will raise cash holding of companies listed in Indonesia Stock Exchange 2010-2014 period by 136.3%.
- 3) The regression coefficient of inventory turnover is 0532. It reveals that any increase in inventory turnover by 100%, it will raise cash holding companies listed in Indonesia Stock Exchange 2010-2014 period amounted to 53.2%.
- 4) The regression coefficient of capital expenditure is -1.536. This figure reveals that every increase of capital expenditure by 100% , it will lower cash holding companies listed in Indonesia Stock Exchange 2010-2014 period by 153%.

### 3.2.2 F- Statistical Test Result

F-statistical test is basically used to examine the simultaneous effect of all independent variables on the dependent variable. The results of F-Test can be seen in the Table 3.6 below:

**Table 3.6**  
**F-Statistical Test**  
**ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	328.287	3	127.429	126.127	,000 <sup>a</sup>
	Residual	273.799	271	1.010		
	Total	656.086	274			

a. Dependent Variable: CH

b. Predictors: (Constant), CF, IT, CAPEX

Source: Output SPSS 23 (2016)

As it can be seen on the table 3.6 above, since the significant value of which is 0,000 lower than the significance level of 0.05 (5%), the first hypothesis (H1) stated that independent variables have a simultaneous effect on cash holding. is therefore can be accepted

### T- Test Result

T statistical test basically shows how far the influence of the independent explanatory variables individually or in explaining the variation of the dependent variable (Ghozali, 2009). T-statistic test is particularly used to examine how far the effect of one independent variable on the dependent variable. The results of T-test as shown on the table 3.5 indicated that:

- 1) The variable of cash flow (X1) has a significance value of 0.000 of which it is less than 0.05 (5%). Hence, it shows that the cash flow has a significant effect on cash holding. Thus, the second hypothesis (H2) which states that the cash flow effect on cash holding is accepted.

2) Inventory turnover variable (X2) have a significance value of 0.000 less than 0.05 (5%). This suggests that the inventory turnover affect the capital structure. Thus, the third hypothesis (H3) stating that inventory turnover affect the cash holding is accepted.

3) Variable capital expenditure (X3) has a 0,019 significance value less than 0.05 (5%). This suggests that capital expenditure affect the cash holding. Thus, the fourth hypothesis (H4) stating that the capital expenditure effect on holding cash is accepted.

**Coefficient Determination Testing**

This test is done to identify at what extend the independent variables can explain the dependent variable. The coefficient of determination can be seen from the R Square value from the Table 3.7 as follow:

**Table 3.7**  
**Coefficient Determination Result**  
**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.763 <sup>a</sup>	.583	.578	1.00515006

a. Predictors: (Constant), CF, IT, CAPEX

b. Dependent Variable: CH

: *Output of SPSS 23.0 (2016)*

The table above shows that the R Square value is 0.58. It means that 58% from the change in dependent variable can be explained by the cash flow (X1), inventory turnover (X2), and capital expenditure (X3). Meanwhile, the others 42% can be influenced by other variables that are not used in this research.

**Discussion**

**Cash Flow Effect on Cash Holding**

Based on the statistical test results, partially cash flow has an effect on cash holding in the companies listed in the Indonesia Stock Exchange. It can be seen from the significant value of cash flow by 0000 (0%) or below 0.05 significance level. This positive relationship by 5.075 shown by the cash flow to capital structure indicated that the higher the cash flow in a company, the greater the cash holding. The outcome of the research is consistent with the study of Gill and Shah (2012), whose research regarding Canadian companies listed on the Toronto Stock Exchange 2008-2010 period of which revealed that cash flow has a positive and significant effect on cash holding. The research also confirm the research outcome of Ozkan and Ozkan (2004) which proved that cash flow also has a positive and significant effect on cash holding.

**Inventory Turnover Effect on Cash Holding**

The outcome of statistical test indicated that partially inventory turnover affect the cash holding in the companies listed in the Indonesia Stock Exchange. It can be seen from the significant value or profitability by 0,000 of which is below 0.05 (5%). The coeffecience of 19.068 indicated a positive relationship between inventory turnover and cash holding. It means that if the inventory turnover increase by 100%, cash holding also will increase by 19%. The high degree of Inventory turnover enhance company's ability to acquire future stocks without having to have liability with the thirt party. The result of this study is consistent with the results of research of Ogundipe et al. (2012), whose research conducted r on listed companies in Nigerian Stock Exchange in the period from 1995 to 2009 which showed that inventory and a significant positive effect on cash holding.

### Capital Expenditure Effect on Cash Holding

The outcome of statistical test indicated that expenditure affect the cash holding in the companies listed in the Indonesia Stock Exchange. It reveals by the significant value of liquidity by 0,019 or below the rate of 0.05 (5%). The negative relationship of -2.366 indicated by capital expenditure on holding cash means that the higher the capital expenditure in a company, the less cash holding will be. Company that financed by a high capital expenditure normally has most of the cash invested or used in the long term investment, thereby decreasing the company's cash holding. The result of this study is in line with the research results done by Kim et al. (2011), whose research conducted on the company's restaurants in the United States in 1997 to 2008. Their research show that capital expenditure has a significant negative effect on cash holding. This result also confirm the early research conducted by Jinkar (2013) on companies listed on the Stock Exchange in 2007 to 2011 whose findings reveals that capital expenditure has a significant negative effect on cash holding.

### Conclusion

- 1) Cash flow, inventory turnover, and capital expenditure have a simultaneous effect on the cash holding
- 2) Cash flow has a positive effect on cash holding in the companies
- 3) Inventory turnover has a positive effect on cash holding
- 4) Capital expenditure has a negative effect on cash holding

### Recomendations for future researched

- 1) It is expected that in future studies to add some other variables that may have influenced the cash holding such as financial leverage and good corporate governance.
- 2) The study was only performed on the companies listed in the Indonesia Stock Exchange. For further research, it is therefore expected to expand the object of study to other industries beyond merely manufacturing sectors.

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## THE EFFECT OF NET INTEREST MARGIN, OWNERSHIP CONCENTRATION, BANK-SPECIFIC AND MACRO FACTORS ON LISTED BANKS IN INDONESIA STOCK EXCHANGE

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### Abstract

Net Interest Margin (NIM) reflects the level of bank's efficiency (clayes and Vennet, 2007), risk (Hellman, Murdock and Stiglitz, 2000), competition (Kunt, 2003) and profitability (Chen and Liao, 2011; and Angbazo, 1997) , NIM can be influenced by bank-specific and macro factors (Ikhida and Yinusa, 2012; Tarusa et al, 2012 and Kunt, 2003). The purpose of this study is to examine the influence of Ownership Concentration, bank-specific and macro factors on NIM on listed banks in Indonesia Stock Exchange (IDX). Based on the multiple regression analysis, the results show that Ownership Concentration, Non Performing Loan (NPL), Size, Age, Exchange Rate and Inflation simultaneously have a significant effects on NIM. Furthermore, t-test shows that Ownership Concentration, Age, and Exchange Rate partially have a significant effects on NIM. This research can be used by investors as well as the bank's management in controlling the level of bank's NIM.

**Keywords :** *Net Interest Margin, Ownership Concentration, Macro and Specific Factors, IDX*

### Introduction

The Indonesian government through the Financial Services Authority (OJK) announced that the Net Interest Margin (NIM) of banking in Indonesia is the highest in Asia. Indonesia generated NIM at around 5%, while the countries of ASEAN and ASIA generated NIM at around 4%. The high NIM relatively indicates the high level of profitability of a bank. The high NIM also indicates that a bank is increasingly efficient in managing funding costs (cost of Fund) and the cost of borrowing. On the other hand, the government intends that the public can gain access to credit at low interest so as to encourage economic activities. Therefore, the government plans to lower the interest rate of Bank Indonesia (BI rate), so NIM of banking in Indonesia can go down.

If the government lowers the BI rate in order to lower banks' NIM, the profitability of banks will also decrease. Net Interest margin is the difference between interest income and interest expense (both showing a percentage of average earnings assets). So, it is important for banks to manage and control NIM that is, in turn, profitable for banks. In controlling NIM, banks are also required to conform to the government regulations in the form of BI rate policy.

Moreover, the impact of a decrease in NIM can also be felt by banks' investors. If the banks' NIM tends to fall, the profit those investors receive will also decrease, such as in terms of the distribution of dividends. In addition, the low level of NIM may have an impact on the stock price of the banks. The stock price tends to fall if the banks' NIM declines.

Banking in Indonesia is impacted by the government's efforts to reduce the level of NIM of banking in Indonesia. Bank Mandiri is impacted by government regulations to lower NIM in Indonesia at around 3-4%. Bank Mandiri recorded NIM at around 5% in early 2016 and is the lowest NIM compared to other state-owned banks. The average state-owned banks' NIM in Indonesia is around 7-8%. The average NIM of banks in Indonesia is recorded at 5.39% and is the highest NIM in ASIA. Bank Indonesia cut down its interest rate (BI Rate) from 7% to 6.5% driving NIM to be low.



Ndiame Diop (The Jakarta Post, February 2016) said that the NIM in Indonesia currently stands at 5% above the other countries that are at a level of less than 4%. Furthermore, he said that overhead cost in Indonesia is higher than those of countries. This may be due to particular geographical challenges in Indonesia and, perhaps, the low level of financial inclusion.

Net interest margin is the profit of a bank earned from asset management and intermediary function in the form of interest on loans and deposits. NIM is a measure of a bank's efficiency level (Drakos, 2003; Beck and Hesse, 2009; Lopez Espinosa et al, 2011) and profitability (Chen and Liao, 2011).

NIM is a summary to measure net interest return, an important component of a bank's profit (Angbazo, 1997). To identify the accounting, the bank's net interest margin (before tax) is equal to profit plus banks' operating costs, plus losses on loan, minus non-interest income (Demirguc-Kunt and Huizinga, 2000).

Micco (2007) said that the state-owned banks have a relatively higher interest rate margin. However Dracos (2003) stated that the state-owned banks in the countries of Central and Eastern Europe (CEECs) and the Former Soviet Union countries (FSU) tend to have a lower margin.

Research in bank-specific factors and macroeconomic factors toward NIM are Ikhide and Yinusa (2012), Tarusa et al (2012) and Kunt (2003). The results showed that bank-specific factors significantly influence the bank's NIM. Exchange rate and inflation significantly effect on NIM (Ikhide and Yinusa, 2012, and Ariefianto and Supomo, 2011).

Research about NIM in Indonesia Sidabalok and Viverita (2011), Manurung (2012) and Trinugroho (2014) said that NIM in Indonesia tends to be high. In addition, NIM in Indonesia is influenced by market power of banks, credit risk, liquidity level of banks, bank size, bank efficiency (cost to income), bank-specific factors, and the extent of the interest rate spread.

**Table 1.1**  
**NIM of Indonesia and other neighboring countries in 2014**

<b>Negara</b>	<b>NIM</b>
Indonesia	5,49
Malaysia	1,77
India	2,85
Kamboja	1,11
Thailand	2,86
Pilipina	2,21
Vietnam	1,43
Papua Nugini	6,96
Australia	1,96
China	2,18
Jepang	0,9
Korea	0,72
US	3,47

**Source : World Bank**

Table 1.1 shows NIM of Indonesia and some other neighboring countries in 2014. NIM of Indonesia was higher than of US, Australia, China, India, and ASEAN. However, NIM of Indonesia in 2014 at 5.49 was lower than Papua New Guinea which reached at 6.96. The economic condition and system and the different level of competition among these countries are presumably causing the difference level of NIM between those of countries.

**Table 1.2**  
**NIM of Indonesia in 2006-2014**

<b>Tahun</b>	<b>NIM</b>
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2006-01-01	6,1706400
2007-01-01	6,502743000
2008-01-01	5,633601000
2009-01-01	6,6001700
2010-01-01	6,776053000
2011-01-01	6,349160
2012-01-01	5,9009960
2013-01-01	5,18055100
2014-01-01	5,48711200

Source : <https://fred.stlouisfed.org/help-faq>

Table 1.2 shows that NIM in Indonesia was around 5-6% in 2006-2014. The NIM had fluctuated annually. Indonesia remained as the highest NIM of some neighboring countries such as ASEAN, India, China and even the highest in Asia. NIM in Indonesia is influenced by several factors, both bank-specific factors and macro factors.

Based on results of previous research in NIM, factors that influence NIM show different results. The differences indicate that there is still a gap in theory and empirical testing. In addition, the research related to NIM accounts only a little number compared to the differences in economic conditions, economic system and level of banking industry competition among countries in the world. Variables effecting on NIM have not been thoroughly tested. Similarly, in Indonesia, research in NIM is not so many. For the reasons, the author is interested in examining the effect of ownership concentration, the macro and bank-specific factors toward NIM in Indonesia Stock Exchange (IDX).

This study is to examine and to analyze the effect of ownership concentration, NPL, size, firm age, exchange rate, inflation on net interest margin for listed banks on Indonesia Stock Exchange. This research is expected to benefit banks' management in controlling their NIM. In addition, investors can use the research as a reference in placing investment funds and for their investment decisions. Also, for banks' customers, this study brings a good influence related to banking service transactions.

## 2. Theoretical Review and Hypothesis Construction

### 2.1 Theoretical Review

#### 2.1.1 Net Interest Margin (NIM)

Kunt et al (2003) said that net interest margin (NIM) in the traditional lending and borrowing operations of banks reflects the pure operational efficiency of banks and the competitive environment of banking markets. Inefficiency and market conditions tend to increase overhead costs instead of a great interest margin. The differences between the bank's interest margins may represent the choice of whether selecting high overhead costs or great margins rather than reflecting the differences in efficiency and competition. Furthermore, the bank's interest margin reflects asset allocations and risk level of the bank.

The high level of NIM can be interpreted in two viewpoints (clayes and Vennet, 2007). First, the high level of NIM reflects the low level of efficiency of banks and banking market condition which is not competitive. Second, the high level of interest margin reflects the inadequacy of banking regulation and high information asymmetry. In addition, it also indicates a high risk premium meaning that when the level of competition increases, it will encourage speculative behavior of the banking system that could lead the financial stability (Hellman, Murdock and Stiglitz, 2000).

#### 2.1.2 Ownership Concentration (OC)

Kunt et al (2003) said that the impact of bank regulation and the use of concentration are to capture signal and to understand the role of government institutions in the regulation and market structure, one needing to test the operation of individual banks in different regulatory and institutional environment.

### **2.1.3 Non Performing Loan (NPL)**

This study uses NPL to measure the quality of bank loans (Fungacova and Poghosyan, 2011). Banks facing greater credit risk have higher premium risk in their borrowing (Maudos and De Guevara, 2004) thereby increasing interest margins. On the other hand, Fungacova and Poghosyan (2011) said that depositors may require a higher interest rate on their deposits because they feel that banks are riskier, therefore, making interest margin lower.

### **2.1.4 Bank Size**

Bank Size is the size of the bank in terms of total assets of the bank. Beck and Hesse (2009) said that the smaller banks could face higher costs and, therefore, set a higher margin. Bank Size can be measured by Ln (total assets).

### **2.1.5 Age Firm**

Age shows how long the bank has operated. Age also reflects the experience of banks in managing their operation. The longer the life of the bank, the more experience the operation of the bank.

### **2.1.6 Exchange Rate**

Exchange Rate is the value of rupiah against US dollar. Value Exchange rate indicates the macroeconomic condition in a country. Exchange rate influences the activity of trading and banking transactions in the country. Exchange rate of BI transactions is presented in the form of selling and buying rate toward rupiah currency, used as a reference to BI transactions with third parties such as governments (Bank Indonesia, 2007).

### **2.1.7 Inflation**

Inflation is the rising prices simultaneously and continuously thereby increasing prices of other items (Bank Indonesia, 2007). Inflation can also be interpreted as the spreading effect of price increases. An indicator frequently used to measure the rate of inflation is the Consumer Price Index (CPI). Changes in CPI from time to time represent the price movement of a set of goods and services consumed by society.

## **2.2 Hypothesis Construction**

### **2.2.1 Ownership Concentration and NIM**

Niskanen (2010) found that managerial ownership tends to increase agency cost thereby lowering the availability of loans and increasing interest rate and loan terms. Furthermore, Muller and Inderst (2001) and Fillatotchev and Mickiwitz (2001) said that diversified ownership tends to have low agency cost and to use financial resources efficiently. The number of owners makes loans so available that it increases the availability of loans and lowers interest rate and loan terms.

Kunt et al (2003) found that the level of concentration of bank ownership has a significantly positive effect on the level of net interest margin. Claeys and Vennet (2008) found that the high level of industry concentration of a bank causes the high level of the interest margin. Ho and Saunders (1981) said that avoiding higher managerial risk will increase the interest

margin. State-owned banks tend to have NIM greater than private banks in banking sector in Indonesia (Trinugroho, 2014).

**H1 : Ownership Concentration has a significantly positive effect on NIM**

### **2.2.2 Non Performing Loan (NPL) Dan NIM**

Beck and Hesse (2009) found that the level of risk that constitutes in bank loans effects on margin level. Media et al (2013) said that NPL has a significantly negative effect on the banks' NIM in Indonesia. Fungáčová and Poghosyan (2011), Ariyanto (2011) and Trinugroho, et al (2014) said that NPL has a significantly negative effect on net interest margin.

**H2 : Non Performing Loan (NPL) has a significantly negative effect on NIM.**

### **2.2.3 Firm Size Dan NIM**

Large banks have low margin than small banks. Large banks are more efficient than small banks. So, it has low NIM. Maudos and Solis (2009) found that greater market power measured by the Lerner Index drives NIM to be higher in Mexico bank. Fungacova and Poghosyan (2011) said that large banks relatively have higher margins. That is because the banks can achieve economies of scale that allow them to reduce their margins. Large banks tend to grow in the low-margin loan market (Lopez Espinosa et al, 2011). Manurung (2012) found that the Size has a negative influence on NIM, and market power has a positive influence on NIM.

Beck and Hesse (2009) and Fungáčová and Poghosyan (2011) found that a bank with larger scale (bank size) has a significantly negative impact on NIM. Further research NIM in Indonesia, Manurung (2012) and Trinugroho (2014) found that Bank Size has a significantly negative impact on NIM.

**H3 : Firm Size has a significantly negative effect on NIM**

### **2.2.4 Firm Age Dan NIM**

Aydogan (1996) stated that a bank with more experience has a lower interest margin. State-owned banks with longer experience in banking industry have a lower interest margin than private banks.

**H4: Firm Age has a significantly negative effect on NIM**

### **2.2.5 Exchange Rate Dan NIM**

Ikhide and Yinusa (2012) found that Exchange Rate Depreciation effects significantly negative on net interest margins for banks in Botswana. Ariefianto and Supomo (2011) said that the Exchange rate has a significant effect on NIM.

**H5 : Exchange Rate has a significantly negative effect on net interest margin.**

### **2.2.6 Inflasi Dan NIM**

Honohan (2003), Gelos (2009) and Husni (2008) found that inflation has a significantly positive effect on net interest margin (NIM). Furthermore, the same result was also found by Demirgüç-Kunt, Laeven, and Levine (2003). Kunt (2003) found that inflation has a significantly positive effect on NIM and regulations which are so stricter that hampering banks to enter through industry concentration. Similarly, a research conducted by Tarusa et al (2012) found that a higher inflation rate will increase the bank's net interest margin. Ariefianto and Supomo (2011) said that inflation has a significantly positive effect on NIM in Indonesia after crisis.

Based on those results, the research hypothesis is as follows:

**H7: Inflasi has a significantly positive effect on NIM****3. RESEARCH METHODOLOGY****3.1 Research Design**

This study uses quantitative methods. Quantitative method is a method of research that can be calculated by the number of specific units or presented with numbers using secondary data (Sekaran, 2006: 65). This research is a causality relationship research that is the influence of independent variables on dependent variables.

**3.2 Population, Sample, and Research Sampling Technique**

The population in this study is a conventional bank both state-owned and private listed in the Indonesia Stock Exchange (BEI) from 2010 to 2015. Meanwhile, the sampling technique uses purposive sampling method, sample selection method with specific purposes, criteria or certain quota (Sekaran, 2006: 136). The data is obtained from Bank Indonesia website, IDX, and banks' website.

**3.3 Operational Definition and Variable Measurement****3.3.1 Net Interest Margin (NIM)**

Net Interest Margin (NIM) is the difference between interest income and interest expense divided by interest earning assets.

$$\text{NIM} = \frac{\text{interest income} - \text{interest expense}}{\text{Average earning assets}}$$

**3.3.2 Ownership Concentration (OC)**

Ownership Concentration (OC) is a dummy variable. OC is 1 if the percentage of concentrated ownership is more than 50%, while the OC is 0 if the percentage of concentrated ownership amounted to less than 50%.

**3.3.3 Non Performing Loan (NPL)**

Non-Performing Loan (NPL) is a proxy from the measure of loan quality and bank soundness. According to Bank Indonesia Circular Letter No. 6/23 / DPNP / 2004, the formula of gross non-performing loan as follows:

$$\text{NPL gross} = \frac{\sum (\text{substandard loans} + \text{doubtful loans} + \text{default loans})}{\text{Total loans}}$$

Bank Indonesia states that the maximum limit is 5% for non-performing loans of banks. If a bank exceeds that figure, it will effect on the soundness level of the bank.

**3.3.4 Bank Size**

Bank Size is a measure of how large assets are owned by banks. The greater the total assets are owned by the bank, the larger the bank is categorized. Bank Size is measured by Total Assets LN.

$$\text{Bank Size} = \text{LN} (\text{Total Asset})$$

**3.3.5 Age**

Age is the amount of time since the bank was established until the present day. Age is to measure how long the bank has operated. Age also reflects a bank's level of experience.

### 3.3.6 Exchange Rate

Exchange Rate is the value of rupiah against US dollar. Value Exchange Rate uses selling rate. Data is obtained from the exchange rate published by Bank Indonesia.

### 3.3.7 Inflation

Inflation is the rate of inflation in a country. Inflation is measured by the percentage of inflation rate in Indonesia. The inflation data is obtained from Bank Indonesia.

## 3.4 Teknik Analisis Data

### Regression Analysis

Data analysis technique used in this study is multiple regression analysis because the independent variables in this study are more than one. Multiple regression analysis technique is a testing technique used to determine the effect of independent variables on dependent variables. Multiple linear regression equation is

$$Y_{NIM} = \alpha + \beta_1 OC + \beta_2 NPL + \beta_3 Size + \beta_4 Age + \beta_5 Exchange Rate + \beta_6 Inflation + e$$

### Information:

Y NIM	= Dependent Variable (Net Interest Margin)
$\alpha$	= Alpha
$\beta$	= Coefficient of Independent Variables
OC	= Ownership Concentration
NPL	= Non Performing Loan
Size	= Bank size
Age	= Bank age
Exchange Rate	= rupiah against US Dollar
Inflation	= Inflation in Indonesia
e	= Error

### Hypothesis Test

A hypothesis test aims to determine the hypothesis used in the study is accepted or rejected. A hypothesis test consists of three tests which are f-test, coefficient of determination (R<sup>2</sup>) test, and t-test. Here are three kinds of the hypothesis tests:

### Analysis of Variance (ANOVA)/ F-Test

An F-test is used to determine the significance level of the influence of independent variables on dependent variables simultaneously. The level of statistical significance used in this study is 0.05. If the value of F calculation is greater than the value of F table, then all independent variables have a significant effect on dependent variables simultaneously. If the significance value of an independent variable toward a dependent variable is less than 0.05, then the independent variable significantly influences the dependent variable.

### Coefficient of Determination (R<sup>2</sup>) or R Square

A coefficient of determination test indicates that how much the independent variables can influence or explain the dependent variable used in the study.

**T-Test**

A T-test is used to determine the significance level of the influence of an independent variable on a dependent variable partially.

**Table 4.1**  
**Descriptive Statistics of Banks in IDX 2010-2015**

	N	Minimum	Maximum	Mean		Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Std. Error	Statistic	Std. Error
Nim	132	,01890	,14000	,0597871	,00198305	,02278355	1,550	,211	2,246	,419
Oc	132	0	1	,70	,040	,458	-,907	,211	-1,196	,419
Npl	132	,00210	,08900	,0245409	,00124777	,01433580	1,529	,211	3,642	,419
Size	132	12,14450	29,93000	18,2650545	,23139619	2,65853978	2,138	,211	8,289	,419
Age	132	12	120	56,00	2,583	29,679	,771	,211	-,281	,419
Exchange	132	9036,0000	12378,0000	10324,03030	122,23890819	1404,41813188	,555	,211	-1,587	,419
Inflation	132	,03350	,08380	,0585667	,00184753	,02122645	,085	,211	-1,815	,419
Valid N (listwise)	132									

Based on Table 4.1, Descriptive statistics shows that the number of observations is 132 observational studies. The number of samples is 22 listed banks in Indonesia Stock Exchange (IDX) 2010-2015. The research sample passes the classical assumption tests that are heteroscedasticity, normality, autocorrelation and multicollinearity. Net interest margin (NIM) of banks in Indonesia has the minimum value of 0.0189, the maximum value of 0.14, and the average value of 0.059. Ownership Concentration (OC) is a dummy variable. OC of banks in Indonesia has the minimum value of 0 indicating that ownership of the bank is spread (less than 50%), while the maximum value of 1 indicating that ownership of the bank is concentrated (over 50%). Non-Performing Loan (NPLs) of banks in Indonesia has the minimum value of 0.0021, the maximum value of 0.089, and the average value of 0,024. Bank size in Indonesia has the minimum value of 12.1445, the maximum value of 29.93, and the average value of 18.265. Bank age in Indonesia has the minimum value of 12 years, the maximum value of 120 years and the average value of 56 years. Exchange rate in Indonesia has the minimum value of Rp9036, the maximum value of Rp12378, and the average value of Rp10324.0303. Inflation has the minimum value of 0.0335, the maximum value of 0.0838, and the average value of 0.0585667.

**Table 4.2**  
**Coefficient of Determination Test (Adj R Square)**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,310 <sup>a</sup>	,096	,053	,02217271	1,623

a. Predictors: (Constant), Inflasi, age, npl, exchange, size, oc

b. Dependent Variable: nim

Based on table 4.2, the value of Adjusted R Square is 0.053. This implies that the independent variables which are NPL, OC, Size, Age, Exchange Rate and Inflation can influence NIM at 5.3%, while 94.7% NIM is influenced by other variables outside this study.

**Table 4.3**  
**F-Test of Banks in IDX 2010-2015**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	,007	6	,001	2,220	,045 <sup>b</sup>
	Residual	,061	125	,000		
	Total	,068	131			

a. Dependent Variable: nim

b. Predictors: (Constant), Inflasi, age, npl, exchange, size, oc

Based on table 4.3, the significant level of F-test is 0.045. The significant level is  $0.045 < 0.05$  meaning that the independent variables which are NPLs, OC, Size, Age, Exchange Rate and Inflation simultaneously have a significant effect on the dependent variable NIM. F value of 2.22 implies that the NPL, OC, Size, Age, Exchange Rate and Inflation can increase NIM at 2.22.

**Table 4.4**  
**T-Test of Banks in IDX 2010-2015**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	,090	,020		4,460	,000		
	oc	-,009	,004	-,186	-2,098	,038	,917	1,091
	npl	,051	,139	,032	,369	,713	,943	1,061
	size	,000	,001	,044	,499	,619	,932	1,073
	age	,000	,000	,180	2,063	,041	,946	1,058
	exchange	-3,549E-6	,000	-,219	-2,541	,012	,975	1,025
	Inflasi	-,046	,092	-,043	-,504	,615	,990	1,010

a. Dependent Variable: nim

Based on table 4.4, t-test shows that OC has a significantly negative effect on NIM. The significance value of OC is 0.038. The significance level is  $0.038 < 0.05$  meaning that OC has



a significant effect on NIM. The t-value of OC is -2.098 meaning that OC has a significantly negative effect on NIM. Every single unit of OC will reduce NIM by 2,098. Ownership concentration can make the bank more efficient, so that it can lower the interest margin of the bank. Ownership concentration require low margin. These results do not support the research hypothesis which states that OC has a significantly positive effect on NIM (Muller and Inderst, 2001; Fillatotchev and Mickiwitz, 2001; Kunt et al, 2003; Ho and Saunders, 1981).

NPL shows the significance level of 0.713, and t-value of 0.369. The significance level is  $0.713 > 0.05$  meaning that the NPL has no effect on NIM. The level of NPLs of banks in Indonesia does not influence the level of NIM. It shows that NPL of banks in IDX tends to be low. Although the banks have NPL, they can still earn interest margin. Banks is more efficient in managing their income. This result does not support the research hypothesis which states that NPL has a significantly negative effect on NIM. The result of this study is inconsistent with the results of Fungáčová and Poghosyan (2011), Ariyanto (2011) Trinugroho, et al (2014), and Beck and Hesse (2009). The second hypothesis is rejected.

Size shows the significance level of 0.619 and t-value of 0.499. The significance level is  $0.619 > 0.05$  meaning that Size does not influence NIM. The level of bank size does not effect on NIM of banks in IDX. Capitalization of large and small banks does not effect on NIM of banks in IDX. This is because the level of efficiency and management between banks is different. The result of this study is inconsistent with the results of Beck and Hesse (2009), Fungáčová and Poghosyan (2011), Manurutng (2012), and Trinugroho (2014). The research hypothesis is rejected.

Age shows the significance level of 0.041 and t value of 2.063. The significance level of  $0.041 < 0.05$  implies that Age has a significantly positive effect on NIM. Every single unit of Age can increase NIM of banks by 2,063 in IDX. The longer the bank has operated, the greater the level of NIM increases. Banks with more experience can gain larger NIM. Banks which operate longer gain more customers, so they can have larger NIM. This result is inconsistent with the result of the research conducted by Aydogan (1996).

Exchange Rate shows the significance level of 0.012 and t value of -2.541. The significance level of  $0.012 < 0.05$  implies that exchange rate has a significantly negative effect on NIM. Exchange rate can decrease the level of NIM of banks in IDX. The macroeconomic conditions also influence the level of NIM. This is because banking activities on the Stock Exchange cannot be separated from transactions of foreign currency, especially US dollars. This result is consistent with the research conducted by Ikhida and Yinusa (2012). The research hypothesis in this study is accepted.

Inflation shows the significance value of 0.615 and t value of -0.504. This implies that inflation does not effect on NIM of banks in IDX. The inflation rate of banks does not effect on the level of bank NIM. The movement of the inflation rate in Indonesia does not effect on the banks in generating NIM. The macroeconomic conditions do not effect on the level of bank NIM. With any level of inflation rate in Indonesia, the banks can still generate NIM. The level of bank NIM in IDX is relatively stable from year to year. This result is not inconsistent with the research conducted by Honohan (2003), Gelos (2009), Husni (2008), and Kunt (2003). The research hypothesis in this study is rejected.

## **Conclusion and Recommendation**

### **Conclusion**

Net Interest Margin (NIM) can be interpreted as the efficiency and profitability level of banks. Claeyns and Vennet (2007) said that the high NIM can be interpreted as a low efficiency level of banks and banking market condition. They also said that the High NIM reflects high information asymmetry and strict bank regulation. NIM can be influenced by the bank's

internal and external factors which include the bank's non-performing loan (NPL), Ownership Concentration (OC), Size, Age, Exchange Rate and Inflation. Internal factors come from the bank itself consisting of the bank's NPL, OC, Size, and Age while external factors are macroeconomic factors including the bank's Exchange Rate and Inflation. Based on the multiple linear regression analysis, the results show that the variables such as Non-Performing Loan (NPL), Ownership Concentration (OC), Size, Age, Exchange Rate and Inflation simultaneously have a significant effect on NIM. Furthermore, t-test shows that the variables such as OC, Age and Exchange Rate partially give a significant effect on NIM.

### Recommendation

Further research is expected to add other variables that may effect on NIM in Indonesia. Total sample can be expanded into banks in Indonesia, so bank NIM in Indonesia can be thoroughly examined.

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**THE SHIFTING OF HOUSEHOLD WELFARE IN URBAN AND RURAL AREA  
VIEWS FROM THE CHANGES OF INCOME ELASTICITY OVER THE TIME ON  
A COMMODITY CONTRIBUTOR TO INFLATION IN THE PROVINCE OF ACEH-  
INDONESIA**

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**Abstract**

This paper tried to identify the shifting of public welfare in rural and urban areas in Aceh Province by observing a shifting point on income elasticity of demand over time. The data used in this study is a cross sectional data over the period 2009 to 2013. Data for the analyses are gathered from Susenas routine survey (National Social Economic Survey) in the province of Aceh which is routinely conducted in every March. Data are divided into two groups: rural and urban data. The empirical model used in this study is an Almost Ideal Demand System model (AIDS). Then, process of estimation will be generated using SUR approach (Seemingly Unrelated Regression). Whereas, for the calculating of elasticity AIDS model's it also applied significance tests. Data will be estimated per year and differentiated between rural and urban areas. The result shows that shifting in welfare due to inflation over the period of 2009 to 2013. Moreover, inflation greatly affect the income elasticity change, where rising inflation is causing the share of income for the greater food needs, while the share of income for non-food needs are decrease. In this case the government needs to maintain price stability for basic needs, and constantly develop policies to increase the income of societies.

**Key Words:** *Income Elasticity, An Almost Ideal Demand System model, Inflation.*

**Background**

Economic welfare can be measured from the levels of income. If the income is higher, then the economic welfare also higher. The problem is rising incomes will not increase welfare if inflation also increased. The increase in inflation very closely related to the level of welfare. According to Nogueira et.al. (2012), inflation will reduce economic welfare of households, especially those people with low income. The increasing of price will lead the household to loss of their income. It can be seen from the growing percentage of household expenditure for food. In line with this, Bosch and Koch (2009) argued that in general, inflation lowers the purchasing power of the societies because households will spend more money to buy necessary commodities. Moreover, Skoufias et.al. (2011) argues that inflation will reduce the real income of low-income societies. On the other hand, manufacturers do not have the time to increase their production in response to price changes. In the long term rise in prices will reduce the welfare of middle-class households.

Aceh Province becomes a local contributor of the high inflation. In the period 2008-2009, the rate of inflation in Aceh were above the national inflation rate, it is 11.92 percent in 2008 and decreased to of 3.72 percent in 2009 (The Aceh Province Regional Economic Analysis on the fourth quarter, 2009). In the period 2010 to 2013 the rate of inflation in Aceh is under the national inflation rate and continued to decline. Aceh inflation rate increased again in 2013, it is 7.52 per cent. The high inflation in national and regional level in that period are more affected by the increase in world food prices which resulted in higher prices for imported food, such as; rice, onion, soy, fruits and other foods. Furthermore, the seasonal factors and problems of distribution of goods also contributed to the rise in prices of

agricultural commodities. Administered price policies also play a role in contributing to inflation during the year. Lowest inflation was recorded in 2012, where the inflation in Aceh is at a level of 0.22 percent. Some commodity deflation and significantly lower the rate of inflation in that period.

Table 1. The Inflation Based on Household Expenditure Commodities in Aceh Province over the period 2010-2013 (in Percent)

Household Expenditure Commodities	Inflation (December 2010)	Inflation (December 2011)	Inflation (December 2012)	Inflation (November 2013)
General	5,86	3,43	0,22	7,52
1) Food Material	12,37	3,14	-3,94	16,23
2) Manufactured goods, Beverages and Tobacco	3,63	3,03	2,85	3,66
3) Housing	2,76	2,90	1,36	2,68
4) Clothing and Footwear	6,56	8,19	3,07	-0,61
5) Health	1,05	8,25	1,59	2,10
6) Education and Sport	4,02	2,92	2,99	4,29
	0,35	0,69	1,25	10,81

Source: BPS, 2009-2013 (Crunched).

The cause of inflation in the Province of Aceh was relatively similar to other regions, which is the average dominant due to increases in the price of food material, such as; rice, fresh fish, onion, chili, chicken, and beef. If it is seen from the development of annual inflation in Table 1, the contribution of food inflation has declined after reaching a fairly high level in 2010, it is around 12.37 percent. The food category is even deflation in some specific commodities in 2012. In 2013, food has increased again and it is quite high until reaching 16.23 percent.

In Table 1, stated that the manufactured food, beverages and tobacco contributed a significant inflation, especially rice, side dishes and cigarettes. Then, other commodities which dominantly contributed to inflation, there are; gold jewelry, fuel, and tuition fees in colleges / universities. The government policy to increase the price of fuel and household fuels are also very significant in contributing to inflation over the period. Table 2 illustrates the key contributor to inflation of food and non-food group.

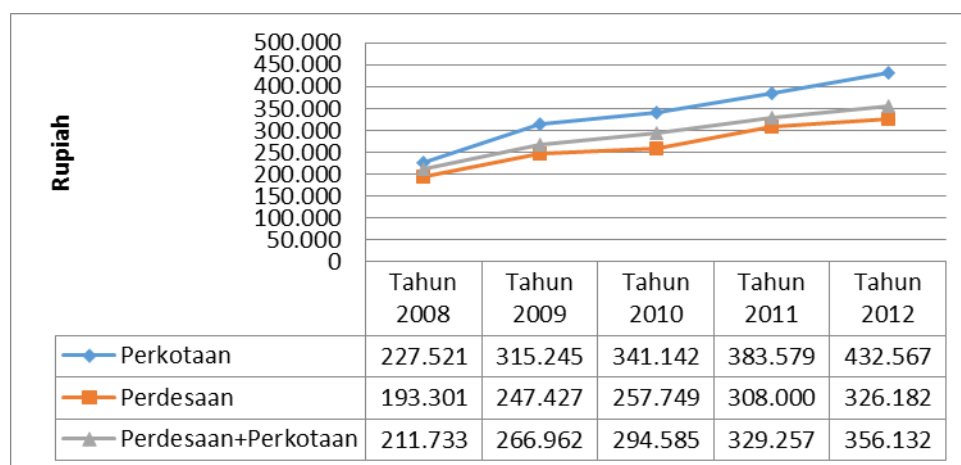
**Table 2. Dominant Commodities Caused the Inflation in 2009 to 2013 in Aceh Province**

No	Food Commodities	Non-Food Commodities
1	Rice	Electricity Rate
2	Fresh Fish	Gas and oil
3	Cigarettes	Tuition fees for schools and universities
4	Chicken	Outpatient Service/Clinic
5	Beef	Fuel
6	Dishes	Transportation Service (Airplane Ticket)
7	Egg	Rentals for housing
8	Chili	Gold and Jewelry
9	Onion	Furnitures

Source: BPS, 2009-2013 (Crunched).

In term of food commodity, rice is always dominant assisted for the highest inflation rate. Often agricultural commodities contribute for more inflation rate caused by the dispropotion between demand and supply. Agricultural commodities classified as a food group that are volatile, which is highly dependent on seasonal factors. Additionally the Aceh Province is still dependent on imports of goods from Medan (North Sumatra), it also affect fluctuations in agricultural commodity prices in Aceh. Meanwhile, non-food commodities are the dominant cause of inflation is still driven by increased electricity and energy, increases of education expense, transport, housing and health.

The increasing of population and rising up the income per capita in Aceh Province effect on growing of demand for commodities contributor to inflation. This cases can be indentified from the intensity of household spending on average per capita for food and non-food. Figure 1 shows the average expenditure of rural and urban households. When compared with Figure 2, it clearly stated the expenditures for food is greater than non-food spending, especially for rural communities. In urban areas, they spend more on foods and drinks, following the consumption of rice, fish and tobacco. It is slightly different from the consumption in rural areas, where spending is for the main food commodities of rice, then food and beverages, tobacco and betel, as well as fish and vegetables.

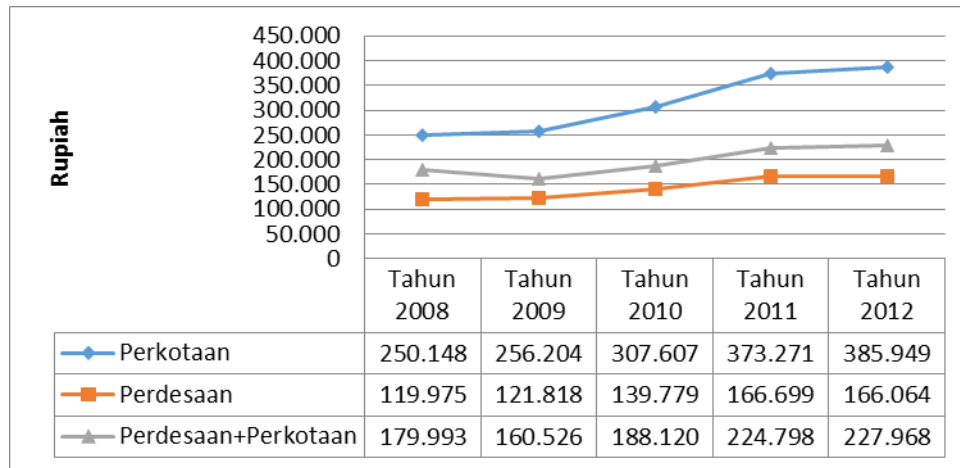


Source: Susenas-BPS, 2008-2012 (Crunched)

Figure 1.1

Monthly Average Expenditure Per Kapita (Rp) of Food Group in Aceh Province  
Over the Year 2008 to 2012

Figure 2 shows the average expenditure per capita of non-food group. For non-food commodities in urban areas, it is spending closely to the expenditures for food, where the dominance of the expenditure is for housing and household items as well as goods and services. In the other hand, those expenses are smaller in rural areas, regarding to the consumption patterns of the rural population is still on basic need such as rice and fish. This condition reflects the actual welfare differences between urban and rural communities in Aceh.



Sources: Susenas-BPS, 2008-2012 (Crunched).

Figure 2

Monthly Average Expenditure Per Kapita (Rp) of Non-Food Group in Aceh Province  
Over the Year 2008 to 2012

The fluctuations of basic goods price could lead to inflation or deflation. This situation could affect the coefficient of elasticity of each good. Elasticity is associated with the level of social welfare. There are a lot of the literature and empirical studies that look well-being by looking at the magnitude of price elasticity and income elasticity. In almost ideal demand model, known as AIDS model (Almost Ideal Demand System), total spending for all commodities studied were deflated by the index Stone became a proxy for household income. The income elasticity or also known as the expenditure elasticity is a tool for measuring changes in welfare as a result of rising incomes. The characteristic of elastic indicates that the commodity purchased is a luxury commodity. The higher the income, the demand for luxury commodities will increase in larger quantities. While inelastic condition characterized by a relatively small revenue allocated to commodities. Some particular commodities are inferior even reduced their consumption if their incomes increase. This is evident from the negative income elasticity.

The AIDS model's introduced the first time by Deaton and Muellbauer (1980), which examined the request of the households in the United Kingdom Year 1954-1974 post-World War II. Results of elasticity that are analyzed in this paper are elasticity on the model of first differences with homogeneity restriction. Income elasticity of demand reflects the changes in the state due to changes in income. The rising of revenue caused increasing high demand on commodities of clothing, beverages and cigarettes. It looks from the income elasticity which is elastic. Whereas, transport and communication, as well as other services are normal goods which elasticity coefficient closed to one. Food commodities and housing are classify as

inferior goods with the elasticity close to zero, even negative (housing). This condition shows that after world war, the demand shifting has been occurred there is the changes of the demand on basic need commodities to luxury commodities. It needs to be underscore that the welfare is increasing in Britain after the world war II.

Pons (2011), observed the level of prosperity in India are classified as emerging country using a model approach of AIDS. Pons indicated that changes in the price elasticity and income elasticity of urban and rural households over the period 1993 to 2004. In the period of the households in India, rising real incomes have led to changes in demand from 1993 to 2004. The expenditure on non-food commodities are increased, where households are more selective in food consumption.

The shifting of welfare over the time in developing countries in the period before and after the financial crisis of 1997/1998 one of them examined by Skoufias (2003). The research reported on how the effects of inflation as a result of the crisis on changes in income elasticity of demand for basic commodities (calorie foods, such as rice, maize, yam and cassava) in 1996 and 1999 in Indonesia. Rising inflation led to the income elasticity of demand for calories increases seen from a comparison before the crisis in 1996 and after the crisis of 1999. The elasticity of the highest income was Nusa Tenggara, but the elasticity coefficient is inelastic and it does not shift after the crisis (fixed). While, the increasing of inflation most influential in the region of Sumatra, where a shift in the income elasticity is quite large, following the other regions. The lowest changes occurred in households in East Java, where the coefficient of the income elasticity is the lowest compared to other regions. From these findings it appears that rising inflation is causing the income elasticity of demand for commodities increased calorie. Increases in the prices of basic foods cause household spending too much on food, this case reflects a decline in the welfare of the people in Indonesia due to the financial crisis of 1997/1998 ago.

Based on the previous research has been done on the income elasticity in various countries and regions. However, there are no studies on the comparison of the income elasticity of intertemporal particularly in the Province of Aceh. This research is important in order to analyze the effect of changes in the intertemporal elasticity coefficient between urban and rural areas, thus determine its effect on the level of welfare in the Province of Aceh. Some of the advantages of this study, among others, are; Firstly, this research has not been done in the Province of Aceh, especially in-depth study on urban areas and rural areas by using a model of AIDS (Almost Ideal Demand System). Secondly, there are no studies on the elasticity of intertemporal shifting to describe the shift in the level of welfare, especially in the Province of Aceh. Based on this background, writer is interested to further examine the study entitled: "The shifting of household welfare in urban and rural area views from the changes of income elasticity over the time on a commodity contributor to inflation in the Province of Aceh-Indonesia".

### **Research Problem**

The research question is; Whether there was a shifting of household welfare in urban and rural area views from the changes of income elasticity over the time on a commodity contributor to inflation in the Province of Aceh?

### **Literature Review**

#### **1. Consumer Price Index (CPI) and Commodities Contributor to Inflation**

To calculate the amount of inflation is usually calculation used is the percentage change in the Consumer Price Index (CPI) or known as the Indeks Harga Konsumen (IHK).



According to Akram et.al. (2010), Consumer Price Index (CPI) is an important tool in the approach to price changes as well as changes in the cost of purchasing approach that represents a set of goods and services. There are two ways of calculating inflation, with CPI calculation and calculation of core and non-core inflation (Seftarita, et.al., 2013). The first way is using the percentage change in CPI, in which the CPI value obtained from the calculation of the seven types of household expenditure, which consists of: 1. Food category, 2. Manufactured foods, beverages, and tobacco, 3. Housing, 4. Clothing and footwear, 5. Health, 6. Education and sports, 7. Transport and communications.

In general, there are many types of commodities that are included in seven of household expenditure above (approximately four hundred kinds of goods and services). These commodities are commodities contributor to inflation, where there are some of them become the dominant commodity accounts for the highest inflation (often the biggest cause of inflation). As an example of this commodity are rice, fresh fish, beef, cigarette filters, the fees of education, health, and others.

## 2. Welfare Economics Theory

According to Hanninger (1998), the indicators of welfare and poverty can be grouped in three dimensions. There are economic, social, and environmental access. In the economic dimension, welfare measures and poverty can be seen from consumption spending, income, and wealth (input variables). Consumer spending has been the foundation of the welfare theory, where household spending is an approximation of the standard of living. Further developments said that household consumption has become one of the indicators of poverty. In the social dimension, the welfare approach include; the availability of food and nutrition, energy, water and sanitation, health and family planning, and education.

In line with the above explanation, the pattern of household consumption expenditure is one of the variables that can be used to measure the level of welfare (economic) population, while shifting the composition of spending may indicate changes in the level of welfare of the population (IDHS 2012).

According to Ravallion (1992), the analysis of a welfare look more deeply about the welfare aspects of the economy, it is the level of living standards and incomes. There are important things according to the welfare approaches, the assessment of a person's welfare must be consistent with the order of preference expressed by the person. This approach analyzes deeply the level of satisfaction (utility) person. It is quite difficult to remember a person's choice to another very heterogeneous and depends on various conditions, such as individual characteristics, needs and consumption patterns, the size of households, and prices. The person with a high income do not necessarily have a high level of welfare if it has a high utility standards, and vice versa on someone with limited incomes may not necessarily uneasy (Maipita, 2013).

## 3. Income Elasticity of Demand and Welfare

Income elasticity of demand indicates the magnitude of changes in demand for a commodity as a result of the change in household income. The nature of the income elasticity of significance includes:

1. The nature of inelastic income elasticity means that the revenue increase does not significantly affect the increase in household welfare. Demand for commodities that have these properties classified as essential goods, inferior even if it is negative. Examples of these commodities, among others; rice, household fuel, side dishes, and others.
2. The elastic nature of the income elasticity means that the increase in income is very influential on the growing prosperity of the household. Demand for commodities that have

these properties are classified as luxury goods will increase demand with increasing income. Examples of these commodities, among others; jewelery, goods / services other and others.

3. The nature of the unitary income elasticity (unity) means that when the revenue increase proportionally increase household welfare. Demand for commodities that have these properties classified as normal goods. Examples of these commodities, among others are; health and education.

#### 4. Previous Research

Ernest Engel (1821-1896) who was a Russian economist discovered the relationship between income and consumption of various types of expenditure, namely food, clothing, shelter, lighting and fuel, education services, legal and health, as well as the fun and recreation. This discovery shows that, wealthy families provide a smaller proportion of their purchasing power for food compared to the proportion of the purchasing power of poor households incurred. This discovery was later known as the law of Engel and an overview of the income elasticity (Nicholson, 2002).

Deaton and Muellbauer (1980) look at the welfare of the magnitude of price and income elasticities. This research was conducted in British years 1954-1974 and is the first paper that uses a model of AIDS. The results showed that the price is not too big impact on people's welfare. This is evident from the nature of inelastic price elasticity and even on some commodities looks perfectly inelastic. Observing from the income elasticity, it has improved welfare in British evident from the increasing demand for commodities outside of their primary needs.

Brockwell (2013) is seeing at welfare in developed countries, those are Sweden, Denmark, and the United Kingdom (UK) in 1970-2009. Judging from the price elasticity of basic commodities, rising inflation does not significantly affect household welfare, seen from the average price elasticity tends to be inelastic. The characterised of price elasticity can be seen in demand for commodities beyond basic needs. Therefore, the nature of the income elasticity, increased income led to the proportion of expenditure on basic goods even had a small proportion. In countries that have achieved a high level of welfare, the allocation of income tends to be dominated by the demand for non-food, luxury goods and services.

Tahs et.al. (2012) indicates the changes in the welfare of rural households in Iran over the period 1971-2008. It considered from the price elasticity, price increases continue to occur in Iran over the study period had an impact on the welfare of the decline of rural households in Iran. The increase in revenue over the period of the study was to improve the welfare of households in Iran. The level of welfare is evident from the elasticity of the average income elastic commodities beyond the basic necessities, such as food, drink, and clothing.

Pons (2011), saw the level of prosperity in India are classified as emerging country. In general, rising prices affect the declining levels of household welfare, especially in rural households. Rising real incomes have led to changes in welfare, in which spending on non-food commodities (non-food) increases. Increased household income causes more selective in food consumption. This evolution affects the reaction of demand to changes in price elasticity and income elasticity and further change in the welfare of the country.

Kahar (2010) analysed the welfare of urban and rural areas in Banten Province in 2007-2008. Increased commodity prices surveyed have lowered the welfare of rural and urban households. The greatest impact was seen from the declining demand for education and health services in the province of Banten. When viewed from the income elasticity, in general it can be concluded that in Banten province, household spending is still preferable to the needs of staple foods such as rice, this implies that prosperity is still relatively low in the province.

The shifting of intertemporal welfare by using a model of AIDS in the period before and after the financial crisis of 1997/1998 one of them examined by Skoufias (2003). The

subject of this study only discusses changes to the income elasticity in some regional areas in Indonesia. From these findings it appears that rising inflation is causing the income elasticity of demand for commodities increased calorie. The largest increase occurred in the province of a relatively low income. This reflects the decline in welfare in Indonesia as a result of the monetary crisis in 1997/1998.

## Research Method

### 1. Field of the Research

This research analyzes the shifting of household welfare in urban and rural area views from the changes of income elasticity over the time on a commodity contributor to inflation in the Aceh Province over the period 2009 to 2013.

### 2. Source and Type of Data

The data used in this research are secondary data from 2009 to 2013 with time horizons is cross sectional. The data extracted from the sample on the activities of the household survey conducted by Susenas (National Social Economic Survey) in the Province of Aceh, one of the main activities are the publication of the data on Indonesian consumption per province. The data used in this study are the overall sample data which is used on Susenas household surveys in Aceh Province on March each year from 2009 to 2013. Data consisted of two groups of data. There are urban households and rural households, as shown in Table 3.1.

There are the commodities observed included commodities contributor to inflation over the period of the study, those are: rice, fish, cigarette, the cost of education (Tuition for School / or college / academy), household fuels (LPG), and healthcare services (Outpatient Service or / clinic). The researched commodities are commodities that are dominant and contribute to causing of inflation in the province of Aceh over the period from 2009 to 2013.

### 3. Empirical Model

The model applied in calculating the income elasticity is a model Almost Ideal Demand System (AIDS). This model was introduced by Deaton and Meullbauer (1980) where domestic demand can be measured from the proportion of the budget allocated for a particular item. AIDS gives a demand function models are as follows:

$$w_i = \alpha_i + \sum_j \gamma_{ij} \log P_j + \beta_i \log(x/p) \text{ for all } i, j=1, 2, \dots, 7 \dots \dots \dots (1)$$

With P is an price index that determined by:

$$\log P = \alpha_0 + \sum_i \alpha_i \log P_i + \frac{1}{2} \sum_i \sum_j \gamma_{ij} + \log P_i P_j \dots \dots \dots (2)$$

By using the Stone price index, equation (1) becomes linear and easy to estimate. AIDS Model will be regressed using a model Iterative Seemingly Unrelated Regression (SUR). The following models of AIDS were used in this study:

$$w_i = \delta_i + \sum_j \gamma_{ij} \log P_j + \beta_i \log (x/p^*) + \mu_i \dots \dots \dots (3)$$

Where:

- $w_i$  : share consumption commodity i to the total of expenditure j commodity
- $i = j$  : 1, 2, ... (7 commodity contributor to inflation)
- $\log P_j$  : commodity price j (where  $j=1, 2, \dots, 7$ )

log (x/ p\*): log of the total expenditure which deflated to Stone Index

$\mu_i$  : error term

$\partial_i$  : constanta

$\gamma_{ij}, \beta_i$  : regression coefficient

The third equation (3) estimated using the SUR model, then it found the  $\beta_i$  coefficient on the variable log(x/p\*) to calculating income elasticity. The following calculation formula based on the estimated income elasticity model of AIDS (Aliasuddin, 2003):

$$\text{Formula to calculate an Income Elasticity } \eta_i = 1 + \frac{\beta_i}{w_i} \dots\dots\dots(4)$$

To test the significance of elasticities will be used variance and standard error of each of elasticities, that is:

$$\text{Var}(\eta_i) = \frac{\text{Var}(\beta_i)}{w_i^2} \dots\dots\dots(5)$$

**Result of income elasticity estimation**

Table 3 shows the income elasticity over the period 2009 to 2013. In general, the income elasticity is statistically significant. It means there is strong influence between income and increasing demand. In 2009, Aceh's economy experienced relatively slow growth and relatively low. Contribution of the oil and gas sector decreased, even with oil and gas fuel the economy is negative (-5.51 percent). Conditions that will encourage economic activity are the rehabilitation and reconstruction that occurred after the tsunami in 2006. The process of rehabilitation and reconstruction would be enough to absorb employment and impact on increasing purchasing power in urban areas. Thus, in 2009 the income elasticity on various commodities greater in urban than in rural areas. This condition reflects the level of prosperity which is quite good in urban areas.

In the year of 2010, the first quarter of 2013 economic growth in Aceh devoided oil and gas continues to grow in line with the declining of inflation. The coefficient of the income elasticity are very much influenced by the rate of inflation and price elasticity of each commodity, especially in basic commodity such as rice, cigarettes, fish and electricity. However, in rural area, they are more prosperous in fulfill the basic necessities such as rice, tuna, and electricity, but it is declining the welfare of fulfillment the needs of non-food commodities such as LPG, education and health.

Table 3.  
Income Elasticity of Demand

Year	Commodities Demand		Rural	Urban
2009	1.	Rice	0.634	0.890***
	2.	Fish	0.789	1.018
	3.	Cigarettes	0.102	0.885
	4.	Electricity	0.565***	0.601
	5.	Tuition	0.643	0.811
		Fees	-	-
	6.	Gas and	11.86***	1.424***
	Oil		-	-

	7.	Health	4.325***	5.151***
	Services			
2010	1.	Rice	0.739***	1.012
	2.	Fish	1.067	1.109***
	3.	Cigarettes	1.057	1.207***
	4.	Electricity	0.456	0.313
	5.	Tuition	0.441	0.723***
	Fees		-	-1.038
	6.	Gas and	7.123***	0.482
	Oil		-	
	7.	Health	1.735***	
	Services			
2011	1.	Rice	0.524	0.833***
	2.	Fish	0.599***	0.993***
	3.	Cigarettes	-0.258	0.762***
	4.	Electricity	0.562***	0.259
	5.	Tuition	0.643***	0.347
	Fees		0.709	0.985***
	6.	Gas and	-0.39	1.346***
	Oil			
	7.	Health		
	Services			
2012	1.	Rice	0.508	0.821***
	2.	Fish	0.526***	0.988***
	3.	Cigarettes	-0.107	0.003
	4.	Electricity	0.705***	0.116
	5.	Tuition	0.429***	0.655***
	Fees		1.015***	1.068***
	6.	Gas and	0.547	0.683***
	Oil			
	7.	Health		
	Services			
2013	1.	Rice	0.672***	0.897***
	2.	Fish	0.393	0.949***
	3.	Cigarettes	0.039	0.156
	4.	Electricity	0.364	0.245
	5.	Tuition	0.724***	0.632***
	Fees		0.025	0.730***
	6.	Gas and	-0.464	0.006
	Oil			
	7.	Health		
	Services			

Source: Regression Result of Model AIDS (Crunched)

\*\*\*:Significance on the accuracy 95 percent (on t calculated 1.96)

Table 4 indicates the shifting of the income elasticity of commodity rice. Consumption of rice per household is usually not too much changed, that depending on the number of household members and family eating patterns. Usually if a higher household income, the household will often eat outside the home so that the use of rice is not too much, compared to the poor families are heavily dependent on rice. However, the quantity amount can be expected considering the human body is also very limited in eating food. It is causing increased rice expenditure is due to price changes. The higher the price of rice, the expenditure on rice has also increased.

Table 4.  
Shifting of Income Elasticity  
on Rice Commodity

Rice Commodity	2009	2010	2011	2012	2013
Rural	0.634	0.739***	0.524	0.508	0.672***
Urban	0.890***	1.012	0.833***	0.821***	0.897***

Source: Regression Result of AIDS Model (Crunched), \*\*\*:significance on accuracy 95%

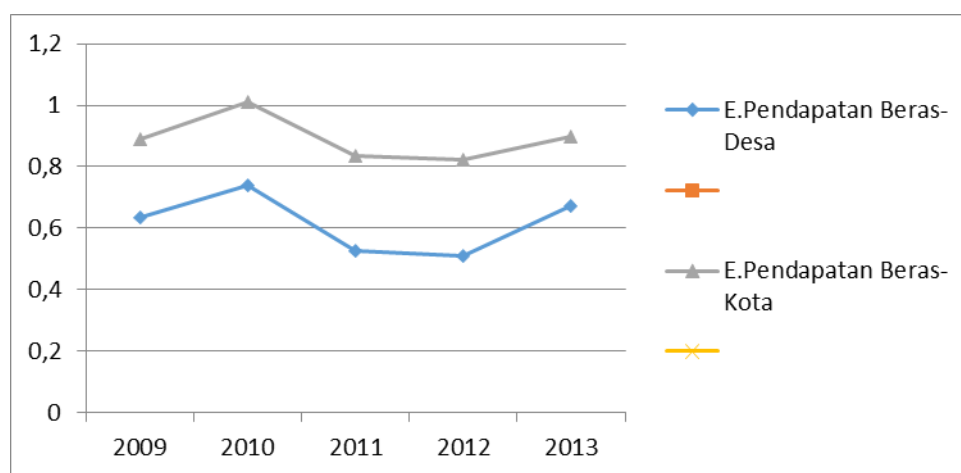


Figure 3. Shifting of Income Elasticity on Rice Commodity over the period 2009 to 2013

In general, the elasticity of income in urban areas is greater than the value of elasticity in rural areas. There are several reasons why these differences occur, first; most of the rural areas can satisfy its own needs without having to buy rice, given that most households in rural areas work in agriculture, other than that they were not the rice farmers can buy at a cheaper price. This is in contrast to the urban areas that are pure consumers and should always issue income to buy rice at higher prices compared to the prices in the village. Second; rising prices or inflation in the food group will cause a portion of disposable income for rice growing. The greater the elasticity of the staple food is actually not a positive thing, even an indication of declining welfare.

In 2009 through 2010, inflation in food led to the increasing a coefficient of the income elasticity of rice both in rural and urban areas. This condition indicates a decrease in the welfare of both rural and urban areas. Urban area are measured less welfare from the point of view elasticity coefficient, which is 1,012 in 2010. This means an increase in income of 10 percent will increase the demand for rice by 10:12 per cent, but the value of this elasticity is

not statistically significant. Inflation declining in 2011 and 2012 caused the value of the income elasticity of rice commodities decreased both in rural and urban areas. This situation shows that the welfare of households in the province improved because of declining inflation. In 2013, the value of elasticity in urban and rural areas is increasing, this is due to rising inflation is quite high for the year. Widespread crop failure due to weather causes the agricultural sector contribution to Aceh's economic decline, even scarcity cause inflation in food commodity (agricultural). These conditions decrease the welfare of households in rural and urban area.

Table 5.  
Shifting of Income Elasticity  
on Fish Commodity

Fish Commodity	2009	2010	2011	2012	2013
Rural	0.789	1.067	0.599***	0.526***	0.393
Urban	1.018	1.109***	0.993***	0.988***	0.949***

Source: Regression Result of AIDS Model (Crunched), \*\*\*: significance on accuracy 95%

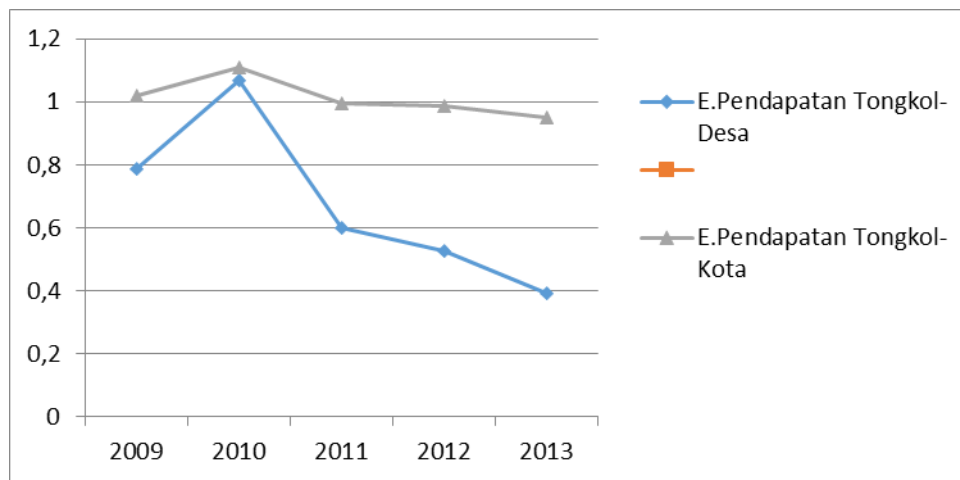


Figure 4. Shifting of Income Elasticity  
on Fish Commodity over the period 2009 to 2013

Table 5 illustrates the shifting in the income elasticity of fish commodity. It is almost the same as rice, the value of the income elasticity of fish in the larger urban areas than in rural areas. In 2010 the value of the income elasticity of commodity swordfish increase, which becomes 1,109 in urban areas. The elasticity stretcher relatively elastic and showed that tuna is a luxury commodity. In 2011 through 2012, an income elasticity of commodity fish has declined in both rural and urban, this condition shows that swordfish is not a luxury commodity, but shifted into staples. In 2013 the value of this elasticity back slightly decreased both in urban and rural areas, but the elasticity is not significant in rural areas. In general, income elastisity coefficient for fish commodity is larger in urban areas than in rural areas. This situation shows that the demand for tuna is greater in urban than in rural areas.

Table 6.  
Shifting of Income Elasticity  
on Cigarette Commodity

Cigarette Commodity	2009	2010	2011	2012	2013
Rural	0.102	1.057	-0.258	-0.107	0.039
Urban	0.885	1.207***	0.762***	0.003	0.156

Source: Regression Result from the AIDS Model (Crunched), \*\*\*:significance on accuracy 95%

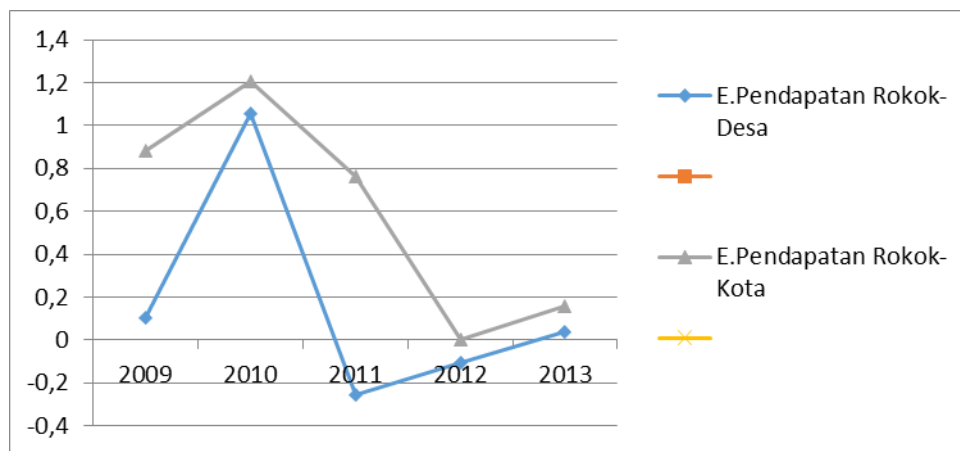


Figure 5. Shifting of Income Elasticity  
on Cigarette Commodity over the period 2009 to 2013

Table 6 point the shifting of income elasticity on cigarette commodity. In general, the elasticity of cigarette commodities are greater in urban than in rural areas. But the coefficient of elasticity in rural areas is not statistically significant and therefore can not be concluded whether these coefficient represent actual conditions. In 2010 the coefficient of the income elasticity on three cigarettes in urban areas increased becomes elastic that is equal to 1.207. This means that commodities are non luxuries demand increased if revenue increases. In 2011, the value of the income elasticity of cigarette commodities in urban is decreased to inelastic reflecting the declining allocation of household expenditure on tobacco consumption.

Table 7. Shifting of Income Elasticity  
on Electricity Commodity

Electricity Commodity	2009	2010	2011	2012	2013
Rural	0.565***	0.456	0.562***	0.429***	0.364
Urban	0.601	0.313	0.259	0.116	0.245

Source: Regression Result of AIDS Model (Crunched), \*\*\*:significance on accuracy 95%



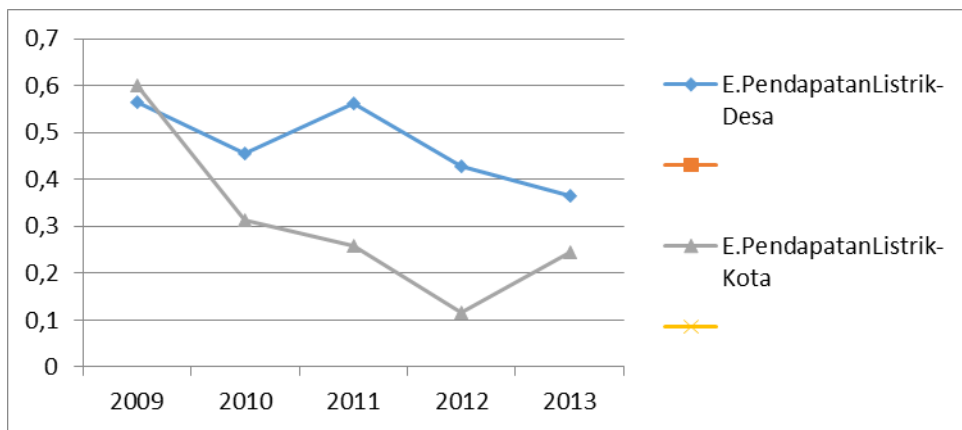


Figure 6. Shifting of Income Elasticity on Electricity Commodity over the period 2009 to 2013

Table 7 indicates the shifting of income elasticity on electricity commodity. In general, the elasticity of electricity commodities are relatively inelastic and positive, which means that electricity is classified as normal goods and basic needs. From the results of the income elasticity of electricity commodity, seen in urban elasticity value is not statistically significant, so it can not be deduced how a shift in electricity demand seen from the income elasticity. In rural areas, there is significant value in 2009, 2011 and 2012. In general decline in the value of the income elasticity of electricity commodities in rural areas over the period. These conditions reflect a decrease in the welfare of rural households. Electricity is a basic requirement household allocation of household income must be provided for these commodities, despite an increase in the price of this commodity. Rising inflation will reduce the amount of electricity consumption, but demand for these commodities continue to increase with increasing population.

Table 8.  
 Shifting of Income Elasticity on Gasoil Commodity

Gasoil	2009	2010	2011	2012	2013
Rural	-11.86***	-7.123***	0.709	1.015***	0.025
Urban	-1.424***	-1.038	0.985***	1.068***	0.730***

Source: Regression Result of AIDS Model (Crunched), \*\*\*: significance on accuracy 95%

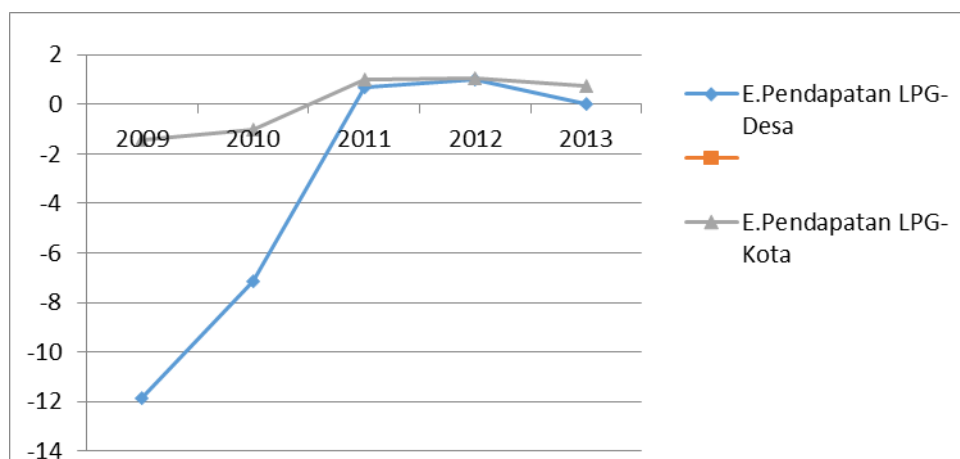


Figure 7. Shifting of Income Elasticity

on Gasoil Commodity over the period 2009 to 2013

Table 8 addresses the shifting the income elasticity of commodity LPG (liquified petroleum gas). LPG is the fuel of households had some substitutes such as kerosene and firewood, substitute goods is increasingly rare, so the dependence on LPG increased. In 2009 through 2010 the value of the income elasticity of commodity LPG is negative and relatively elastic. The highest value found in rural areas. This means that an increase in income will reduce the demand for LPG. This elasticity results look very unrealistic, but there are several reasons that quite unacceptable. Rising inflation, including rising prices of LPG in 2009 and 2010 led to rural and urban households prefer other alternative fuels that are still available for the period. The relatively low income and high poverty rate causing the household budget allocation is limited to the needs of the food, and very little for other needs. Housekeeping is winning big with lots of replacement goods that are cheaper LPG. In 2011 and 2012, the welfare of households is getting better it can be seen from the increased value of the income elasticity of commodity LPG. Even in 2012 the coefficient of the income elasticity for LPG are relatively elastic, which means that LPG is a luxury commodity. In 2013 the value of the income elasticity of commodity LPG decreased reflecting the declining welfare. The decline was highest in rural areas close to the value that is perfectly inelastic, but in rural areas the value is not statistically significant.

Table 9.  
Shifting of Income Elasticity  
on Education Commodity

Education Commodity	2009	2010	2011	2012	2013
Rural	0.643	0.441	0.642***	0.429***	0.724***
Urban	0.811	0.723***	0.347	0.655***	0.632***

Source: Regression Result of AIDS Model (Crunched), \*\*\*: significance on accuracy 95%

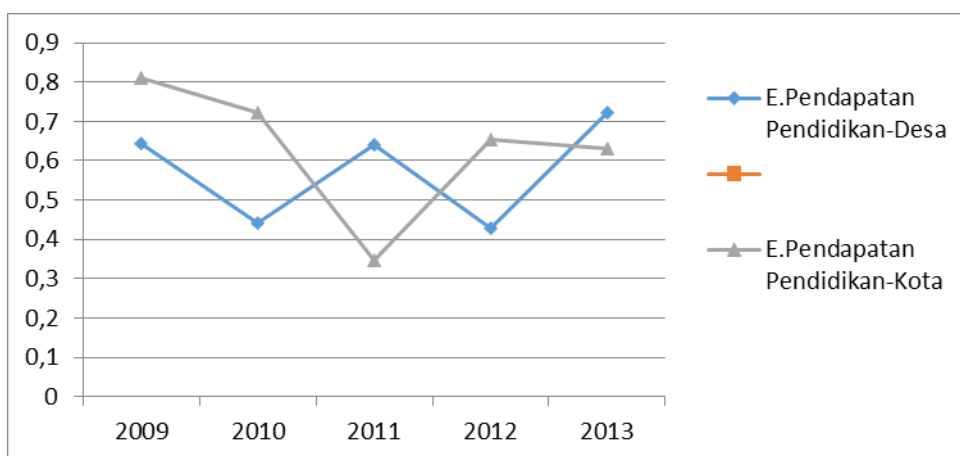


Figure 8. Shifting of Income Elasticity  
on Education Commodity over the period 2009 to 2013

Table 9 shows the shifting of the income elasticity for education commodity at the college. In general, education is a normal good commodity (not a luxury) both in urban and in rural areas, this condition shows that education is not the main thing for households in Aceh. This condition can be seen from the comparison between the elasticity of food commodities such as rice and tuna with education commodities, where the value of the elasticity of the larger food commodities. Ideally, in some cases in developed countries, the income elasticity for education, health, and other non-food commodities has elastic properties, while food commodities has a value smaller elasticity and inelastic. The period between 2009 and 2011, the value of the elasticity of education has declined in both rural and urban areas. It reflects the level of welfare and concern for the importance of education in higher education is getting decreased. In 2012, the income elasticity of education commodities increased slightly in urban areas and stagnant in 2013. Slightly different where in rural areas, the elasticity of commodities increased education in 2013 which amounted to 0724 per cent. This situation shows that, the welfare of rural households was slightly better than in urban areas.

Table 10.  
Shifting of Income Elasticity  
on Education Commodity

Health Commodity	2009	2010	2011	2012	2013
Rural	-4.325***	-1.735***	-0.390	0.547	-0.464
Urban	-5.151***	0.482	1.346***	0.683***	0.006

Source: Regression Result of AIDS Model (Crunched), \*\*\*: significance on accuracy 95%

Table 10 states the shifting in the income elasticity of health commodities (Outpatient Service). In 2009 demand for health services in Aceh is inferior both in rural and urban areas, visible from a negative income elasticity. In 2010, in rural area physician services has a negative income elasticity is caused by the presence JKRA program. Inferior usually defined as a commodity that has a low quality which demand decreases when income increases. But in this case the conditions are slightly different, where physician services are relatively expensive is no longer an option because no other alternative is the enactment of government programs such as the Health Insurance Rakyat Aceh (JKRA) are given for free to the people of Aceh. Besides rising inflation caused real household income decreased, so that although nominal incomes rise this will not increase household demand because prices also have risen.

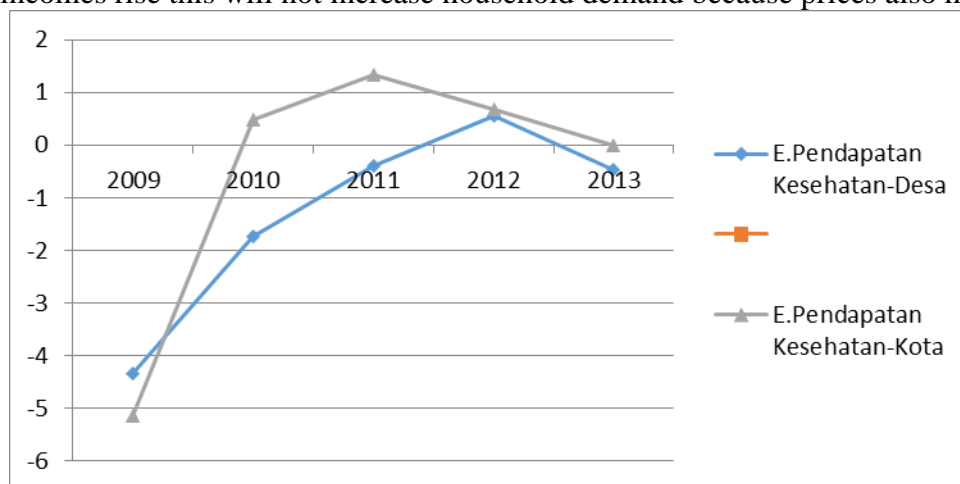


Figure 9. Shifting of Income Elasticity

on Health Commodity over the period 2009 to 2013

The increasing income per capita in urban areas cause the coefficient of the income elasticity of physician services increased positive, even in 2011 the commodity physician services is a luxury item seen on the income elasticity is relatively elastic in the amount of 1,346. This means that the increase in revenue of 10 percent would increase the demand for physician services amounted to 13:46 percent. In 2012, the income elasticity of commodity physician services dropped to inelastic. This situation shows the declining welfare of urban households. In 2013 decline in real income due to inflation menyebabkan people value the income elasticity of declining commodity physician services and even close to perfectly inelastic. Income elasticity of 2013 amounted to 0006 and classified as approaching the perfectly inelastic, but this value is not statistically significant ( $t < t$  table). Rising inflation causes commodity physician services become expensive goods that are not included in the calculation of household expenditure, and household re-use alternative to other health JKRA program. This situation shows the declining welfare of urban household.

### Conclusion And Suggestion

A shift in welfare due to inflation over the period 2009 to 2013, where rising commodity prices cause inflation contributor to the decline in household wealth both urban and rural areas in the province of Aceh. Inflation greatly affected the income elasticity change, where rising inflation is causing the share of income for the greater food needs. Both in rural and urban areas, the increase in commodity prices caused inflation contributor allocation of income to buy food commodities increases, reverse allocation of income to buy non-food commodities is getting smaller, even on health commodities is negative. This situation shows that rising prices cause households in the province of Aceh increasingly prosperous.

The higher the inflation, the spending will be increased (this is closely related to the decline in real incomes due to inflation). In this case is necessary to control inflation by the monetary authority, Bank Indonesia. The caused of the inflation in food commodities are likely due to the demand side. One solution is to attempt self-sufficiency, especially commodities which have potentially owned by Aceh, for example, rice and fisheries. Then, advised on local authorities to continue to encourage development in the agricultural sector, especially since these sector provide a major contribution to the growth of non-oil economy in Aceh over the period 2009 to 2013. Finally, the government should focus on promoting food self-sufficiency program, such as rice and other agricultural commodities.

For non-food commodities, the local government should regulate commodity distribution smoothly every vital needs of society, including LPG. Education and health commodity are increasingly becoming less noticed by households. It is related to the low income households and low awareness of the importance of education, and health. Regarding this condition, we need the efforts of the government to create policies to boost household income.

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## MARKETING CAPABILITY FOR THE SMES: A MEASUREMENT SCALE

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### Abstract

This study developed a measurement scale for marketing capability of the SMEs. The study used marketing capability theory as the theoretical foundation for the bases of creating the scale item. A total of 315 survey responses collected from the business owners of the SMEs in Indonesia and were used to examine the factor structure of the scale using Exploratory Factor Analysis and Confirmatory Factor Analysis. Three factors emerge to measure marketing capability of the SMES: marketing intelligence, marketing execution and marketing strategy. Results from this study suggest that the concept of marketing capability for the SMEs provides an attractive avenue for better understanding of how business owners of the SMEs perceive their marketing capability. This research is one of the first to investigate simultaneously the measurement of marketing capability of the SMEs.

**Keywords:** *marketing capability, SMEs, measurement, scale*

### Introduction

There are several challenges in developing the small and medium size enterprises (SMEs). These challenges have not been resolved to date, and continues to be fought. Global business has been entered the era of free trade for decades, making it mandatory for all stakeholders to provide strong support for the SMEs. One thing that must be continuously done is to enhance ability to penetrate various market. The ability of marketing the products or namely as marketing capability is very interesting and attractive topic for the last three decades.

Marketing capability studies have been carried by many scholars in various field of study as well as at different type of organizations. Dutta et al (1999) testing the successfulness in high-technology markets as depended on the marketing capability. DeSarbo et al (2005) identified the sources of heterogeneity for empirically deriving strategic types in organization. They stated that capabilities in marketing, management, and IT are related to increased performance (e.g., profitability). Their study adopted Miles & Snow's (1978) model on strategic type. It found out that successful prospecting strategic type should strengthen technology and IT capabilities, and successful defending strategic type should strengthen market linking and marketing capabilities. They also referred to Conant et al's study (1990) about strategic types, distinctive marketing competencies and organizational performance as a multiple-measures-based study.

Foss (2006) studied the knowledge elements in the Multinational Corporation. He referred marketing capability in a subsidiary in a certain country, or a patent held by the corporate center as part of knowledge element.

Hwang & Tong-Liang (2006)'s study investigated whether a company's managerial efficiency primarily depend on its marketing capability or investment capability in Non-Life Insurance Companies. Wang et al (2006) used the term of marketing competency instead of marketing capability in examining technological capability that influences business performance. Firms that work with stable (mature) technologies must rely on other kinds of capability (e.g. marketing capability) to a greater extent.

Kim (2006) studied the effect of supply chain integration on the alignment between corporate competitive capability and supply chain operational capability. His study found out that innovative marketing capability interrelated with the logistical supply chain capabilities, differentiation, and customer service capabilities for performance improvement.

Singer (2006) used the term of digital marketing capability in his study that assuming all players have access to virtually the same information and information technologies and can therefore equally target a demographic with precision. He argued that there is no compelling competitive advantage in any digital-marketing capability, regardless of how deeply it can reach to personalize a message.

Wang & Kess (2006) examined the partnering motives and partner selection among exporters. They agreed to what Shipley et al. (1989) point out that most exporters emphasize marketing capability and commitment while undervaluing the risk criteria; and established selection criteria in recruiting overseas distributor, which consists of sales and market factors, product and service factors, and risk factors.

Adam & Featherstone (2007) examined a comparison of web use in marketing by local government in the United States and Australia, found that based on the population size and economic performance, Californian counties exhibit a greater degree of sophistication in terms of their marketing capability than counties in Alabama.

Curtis et al (2007) investigated the role of marketing in bringing private sector skills to public health partnerships. Their study explore the contribution that the marketing capability of the private sector can make to health partnerships.

Fisher et.al (2006 in Endres 2008) stated that a number of things are required by different types of organizations to be competitive including marketing capability, physical resources, financial resources, and human resources. Sharma & Srinivasan (2008) argued that marketing capability of the firm is required at international level. Capron & Mitchell (2009) believe that marketing capabilities as important factor in the business that consists of the capability in mastering the customer knowledge, branding, and pricing.

Based on the aforementioned extant literature, very few studies of marketing capability amongst SMEs. So that, this study encourages to investigate marketing capabilities among SMEs. In this background, the study aims to test an empirical model of marketing capability dimension that could form the basis for a better understanding of the determinants of the construct.

The subsequent section summarizes the existing literature on marketing capability. Drawing from the literature, the study, firstly, conduct a qualitative study that generates attributes of marketing capability amongst SMEs. The proceeding section, as the second stage, describes the quantitative part, in exploring the purification and the validation of marketing capability scale and its psychometric properties. The article then validates the scale to generate an empirically founded definition of marketing capability for the SMEs (MC-SME). The final section discusses the limitations of the study, offers directions for future research and discusses managerial implications.

## **Literature review**

This paper provides a background on marketing capability by reviewing relevant literature and attempts to propose an operational definition of marketing capability. The term of ‘marketing capabilities’ oftenly has been used within various business types. But there is still no consistent definition for the term itself. Prior research stated that marketing capability is an “integrated process” designed using corporate knowledge, skills and resources to take advantage of market opportunities (Vorhies, 1998:4; Guenzi & Troilo, 2006: 975; Azizi *et al.*, 2009: 312). While Azizi *et al.* (2009: 311) alone state that marketing capability is a company’s various marketing-related abilities and capacities.



Krasnikov & Jayachandran (2008: 1) see marketing capability as organization's ability to determine the need and demand of customers and effectively link it to what organization offers to customer better than competitors so as to take advantage of market opportunities. Marketing capabilities include market orientation in it, but apart from that, it cover another important aspect of marketing, i.e. business relationship marketing (Nguyen & Nguyen, 2011: 715).

On the other hand, Santos-Vijandeet *al.* (2012: 26) defined marketing capabilities as complex processes that involve combining market knowledge and organizational resources to generate added value. Marketing capabilities aim to fulfill the market-related needs of the business, allowing firms to provide superior added value and to adapt better to changing market conditions (Vorhies, 1998: 16). Santos-Vijandeet *al.* (2012: 26) cited Vorhies (1998), Weerawardena (2003), and Tsai & Shih (2004), then stated that marketing capabilities are evident when individuals use accumulated knowledge of clients, markets, and the environment; their experience; and the company's resources to resolve commercial problems, to generate higher value for the organization's clients, and to be competitive.

Nath *et al.* (2010: 319) defined marketing capability as the integrative process in which a firm uses its tangible and intangible resources to understand complex specific needs, archieve product differentiation relative to competition, and achieve superior brand equity. In the challenging and dynamic global marketplace, marketers must attain the agility and clarity to be able address these changes and this can only be achieved via building unique marketing capabilities (Day, 2011).

Kamasak (2014: 234) identify marketing capabilities as major determinants of firm performance because they address the so-called VRIN (Valuable, Rare Imitable, Non-substituable) criteria for strategic assets. Three distinct sets of marketing capabilities can be identified (Morgan *et al.*, 2009; Vorhies *et al.*, 2009; Kamasak, 2014) as: specialized marketing capabilities, architectural marketing capabilities, and market information processing capabilities.

In the context of SMEs, Pratono & Mahmood (2015: 10) in their paper concluded that SMEs should pay more attention on marketing capability as marketing capability has significant impact on organization performance (Para-Requenaet *al.*, 2012: 49). This supported further by Coviello *et al.* (2006: 49-50), Lam & Harker (2013) and O'Cass & Sok (2013), they stated that marketing capabilities are key to success for small firms. Within the scope of SMEs, Snell *et al.* (2015: 530) conceptualizemarketing capabilities as a portofolio of practices (transaction, database, interaction, network, and e-marketing) available to small firms.

Based on above mentioned literature review, lack of scientific instruments to measure marketing capability for the SMEs, this study aimed to propose a measurement approach of marketing capability for the SMEs (MC-SME). Thus, the important question of this study is how MC-SME is measured as a proposed measurement approach.

## Measurement

The indicators used for marketing capability in the recent studies differ among the researches. Such studies who confirmed a positive link between marketing capabilities and organizational performance jointly measured using financial indicators (profits, returns, etc.) and market-related (sales, market share, etc.) indicators (i.e. Tsai & Shih, 2004 andKyrych & Kuzhda, 2015). While the other study, e.g. Snell *et al.* (2015) had adapting marketing capability's measurement from Coviello *et al.* (2006) consisted of six components (purpose of exchange, managerial intent, type of contact, duration of exchange, nature of communication, and managerial investment).

Nguyen & Nguyen (2011: 715) explain that marketing capability helps the firm to effectively implement marketing plans in rapidly responding to the needs of customers, competitive actions and macro-environment. While Pratono & Mahmood (2015: 4) state that marketing capability refer to capability in managing marketing mix strategy (i.e. covering pricing, selling, communication, channel management and product development).Wherein marketing mix has generally well-known as essential in building marketing plan, marketing mix itself is considered as a capability that may enable firm to set and implement new strategies to meet firm performance as organizational goal through responding market-changing conditions (Morgan *et al.*, 2009: 910-911).

However, Morgan *et al.* (2009: 910-911) considers not only marketing mix but also marketing strategy development and execution as two interrelated marketing capability areas. They stated futher that these capabilities may be rare, valuable, non-substituable, and inimitable sources of advantage that can lead to superior firm performance.

Jiang *et al.* (2015: 1190) used Vorhies and Morgan (2005) scale to measure marketing capability including dimensions of marketing research, pricing, channel management and market communication. While we agreed that according to Pratono & Mahmood (2015) pricing, channel management and market communication are indicators measured marketing mix.

So that, based on the aforementioned extant literature review, this study defines marketing capability as the ability of the firm to analyze the competitive environment of the market, formulate strategy of marketing and execute various strategical marketing decision in order to enhance the marketing performance ofthe firm.

Thus, the research question of the study is as follows: first, whether marketing capability of SMEs is determined by the dimensions of competitive market environment, marketing strategy and marketing execution. Second, whether the proposed model of marketing capability is a valid measure. Based on the preceding discussion, the following hypotheses is investigated in this study: firstly, that there is a relationship between the dimensions of marketing capability and their underlying latent constructs. Secondly, the model of marketing capability is a fit model. In other word, the hypotheses is as follows: $H_0 : \chi^2 = \chi^2(\chi^2)$ , the structural equation model (SEM) is a fit model.  $H_1 : \chi^2 > \chi^2(\chi^2)$ , the structural equation model (SEM) is not a fit model.

## Methodology

### Scale Development

The present study is part of larger study that investigated the relationship amongst entrepreneurial marketing, tourism competitive advantage and destination world of mouth marketing. In order to validate empirically the marketing capability scale, this study adopted scale development that was presented based on the suggestions of Churchill (1979). Churchill's scale development has been adopted by many scholars in marketing as one of the most comprehensive steps (Rufaidah 2006, in press). The first step involved was specifying the domain of the construct to portraying exactly what is included in the definition i.e. marketing capability definition. The construct of marketing capability has already been specifically defined in the literature review section to make clear what is included in that construct.

The second stage included was generating a sample of items. Generating an initial item pool through qualitative research by conducting individual in-depth interviews with 30 business owners of the SMEs. The author of the study was incharged as the consultant and training instructor for the The New 100.000 Entrepreneurs Formation Program of West Java Provincial Government in the periode of 2013-2018.

The program is implemented by the Department of Cooperative, Micro, Small and Medium Enterprises (DCM-SME) of West Java Province. The author in charged as a researcher in this study and have had direct access toward respondents of the study. The respondents were the business owners of the SMEs in West Java Province who recruited under the abovementioned program. They were invited to participate in the training held by the DCM-SME of West Java Province. The interviews were conducted after the training session for the SMEs is finished.

The third stage involved was developing questionnaire scaling and development. Furthermore, the stage of collecting the data was executed. Finally, the last stage of scale development was assessing the validity and reliability.

Content validity or face validity was implemented by inviting comments, suggestions and feedback from experts (academicians, researchers and business practitioners) so as to effectively address all the aspects of marketing capability of the SMEs. After this process, the original 19 items developed to measure marketing capability for the SMEs was approved. Results of the pretest items revealed none instances of ambiguous wording (which were subsequently retained). The instrument also is confirmed for the completion based on the feedback from experts.

This study also has completed the purification step using exploratory factor analysis (EFA). Then, it applied the assessment of the scale using validity and reliability test. The results of the tests is presented after the descriptive statistics is discussed.

### **Data collection**

Paper based questionnaires were distributed to the respondents and they were asked to give their answer on a five-point Likert scale (ranging from 1, indicating very strongly disagree to 5, indicating strongly disagree).

Exploratory and descriptive research were adopted for this study. The descriptive research used in this study to describe the characteristics of phenomena (Malhotra, 2010), such as, the frequency of the occurrence of the activities of the SMEs in evaluating their marketing capability as entrepreneurs.

The respondents of the study were the business owners of the SMEs. The sample of 315 respondents was provided by the Department of Cooperative, Micro, Small and Medium Enterprises (DCM-SME) of West Java Province from more than 10.000 databases of the SMEs in West Java Province.

According to Hair *et al.* (1998), the sample size needed to conduct CFA is five observations per scale item. Thus, the sample size for the validation stage of the study of 315 qualified responses exceeds the requirements to achieve a high level of statistical power.

The 315 respondents were invited by the DCM-SME to participate in the training session where the author in charged as an instructor of the training. The DCM-SME gave the author an opportunity to obtain direct contact with the respondents. The corresponding survey generated 100% response rate. The data collected were subsequently analyzed utilizing the software packages SPSS and LISREL.

### **Descriptive statistics**

The background information of the surveyed respondents is shown in Table 1. The male respondents outnumbered the female respondents (56,5% and 43,5%). More than 73% of them are aged above 25 years old. The category of the SMEs as respondents studied were classified based on on their product produced: as food/drinks producers (33,7%), fashion/garments makers (14,9%), services providers (13,7%) and others type of service businesses (37,8%). More than 46.7% of them are highly educated in their educational background i.e., college graduate and

postgraduate. More than 52.0% of them have been running the business for more than one year.

**Table 1** Respondents Characteristics (N=315)

Demography		F	(%)
Gender	Male	178	56,5%
	Female	137	43,5%
Age (years)	<18	10	3,8%
	18-24	72	22,9%
	25-34	86	27,3%
	35-44	93	29,5%
	45-54	36	11,4%
	≥54	16	5,1%
Product Produced	1. Food/Drinks	106	33,7%
	2. Fashion	47	14,9%
	3. Services	43	13,7%
	4. Others	119	37,8%
Education	Elementary School Graduate	12	3,8%
	Junior High School Graduate	27	8,6%
	Senior High School Graduate	131	41,6%
	College Graduate	30	9,5%
	University Graduate	112	35,6%
	Other	3	1%
Length in the business	0-1 year	151	47,9%
	1-2 years	35	11,1%
	2-3 years	32	10,2%
	>4 years	97	30,8%
Education	High School Graduate	55	26.6
	Diploma Graduate	5	2.4
	College Graduate	56	27.1
	Posgraduate (Master)	86	41.5
	Posgraduate (Doctoral)	5	2.4

**Results and discussions**

Before performing statistical analysis, data preparation procedures were done, following the recommendations of Hair et al. (1998): assessment of missing values, outliers, and normal distribution. The results of the assessment shows that the database ready for the quantitative analysis.

The following section discussed the testing of the measurement model, which is performed through exploratory factor analysis (EFA) and confirmatory factor analysis.

(CFA). The EFA is used as part of the purification stage, whilst the CFA is used as part of the structural equations modeling (SEM).

EFA is particularly appropriate for scale development i.e, finding the factors of dimension of marketing capability or when there is little theoretical basis for specifying a priori the number and patterns of common factors (Hurley et al., 1997).The CFA is particularly used to test the power a specific set of indicators in measuring causal relationships between latent variables (Garson, 2002).

**Result of the EFA**

In the stage of applying the EFA, the data test the appropriateness of the 19 items for generating the dimensions of marketing capability of the SMEs, hence refining the scale.

The principal component analysis was used as the extraction method and the factors were rotated using the varimax rotation method with Kaiser normalization. Prior to that, reliability test was performed and only items with an index greater than 0.4 were considered for factor analysis.

Using Kaiser's (1960) criterion to retain the components with eigenvalues greater than 1.0, the EFA provides a 3-factor solution with 46,813% Total Variance Explained (TVE). The factor loadings exceeded 0.50 and, since items did not cross load, these results demonstrate discriminant validity of three scales (F-1: Factor-1; F-2: Factor-2; F-3: Factor-3).

**Table 2 Result of EFA**

No	Code Item	C	Component		
			F-1	F-2	F-3
1.	MC1	0,668	0,717		
2.	MC2	0,561	0,713		
3.	MC3	0,536	0,644		
4.	MC4	0,539	0,529		
5.	MC5	0,614	0,721		
6.	MC6	0,654	0,577		
7.	MC7	0,637		0,587	
8.	MC8	0,506		0,534	
9.	MC17	0,622		0,619	
10.	MC18	0,714		0,772	
11.	MC19	0,692		0,763	
12.	MC9	0,630			0,679
13.	MC10	0,587			0,711

14.	MC11	0,66 7			0,755
15.	MC12	0,62 0			0,724
16.	MC13	0,53 9			0,643
17.	MC14	0,59 5			0,564
18.	MC15	0,48 7			0,538
19.	MC16	0,50 3			0,607
Variance Explained		5,73 8%	7,30 1%	46,81 3%	

Note: C: Communalities, F-1: Factor-1 (Dimension-1); F-2: Factor-2 (Dimension-2); F-3: Factor-3 (Dimension-3).

The Bartlett Test of Sphericity shows a very small p-value (0.000), indicating that there is a statistical probability that the correlation matrix has a significant correlation among at least some of the variable (Hair *et al.*, 1998). Furthermore the Kaiser-Meyer-Olkin Measure of Sampling Adequacy is also very high, 0.937, indicating that the latent constructs can predict the variability in the responses on the observed variables. Kaiser-Meyer-Olkin (KMO) was calculated to determine sampling adequacy for factor analysis of the marketing capability' items in terms of homogeneity of variables. Both the test provides evidence that support factor analysis.

Table 3 displays the results of the KMO and Bartlett's Test. All items with factor loading greater than 0.4 were used for the final run of the factor analysis. Looking at the communalities score, the lowest score was the item of MC15 0,487; it illustrated that the loadings nearly closed to the threshold of 0.50. Therefore, researcher decided to retain the abovementioned item as the factor loading score was above 0.500.

**Table 3 Results of KMO and Bartlett's Test**

No.	Factors	KMO	Bartlett's Test of Sphericity
1.	Factor-1	0,862	647,371 (p = 0,000)
2.	Factor-2	0,830	625,179 (p = 0,000)
3.	Factor-3	0,902	1201,138 (p = 0,000)
4.	Marketing Capability	0,937	3238,615 (p = 0,000)

Note: Significant at level 5%

The resulting three factors and corresponding items were presented to three marketing academics familiar with the research. Klaus & Maklan's (2012) steps was adopted for this study, in order to label the appropriate label for each dimension. The expert panel was given the conceptual description of the three dimensions and asked to rate the three dimensions

description as either "very applicable," "somewhat applicable," or "not applicable" relative to the dimension and its items. Dimension descriptions needed to be rated at least as "somewhat applicable" to be retained. This procedure resulted in the labeling of the following dimensions of marketing capability of SMEs, namely, marketing intelligence, marketing strategy and marketing execution.

Factor-1 is composed of 6 items that focuses on the level of existing marketing competencies as entrepreneurs in the following aspects i.e., MC1: Knowledge of consumer preference for similar products offered by their business; MC2: Knowledge of competitor products that have similar characteristics with their products offered; MC3: Knowledge of product trends preferred by growing consumer; MC4: Skills in predicting or forecasting profits accurately; MC5: Awareness of the major strengths of business that is currently occupied; MC6: Knowledge of competitors' product marketing planning process. This factor was labeled marketing intelligence.

Factor-2 was defined by 5 items that related with the level of existing marketing competencies as entrepreneurs in the following aspects i.e., MC7: Knowledge to allocate resources to marketing activities; MC8: The ability to integrate marketing activities with the rest of business activity; MC17: The ability to set the location of production facilities / business; MC18: The ability to mix used in the cost-effectiveness of doing business; MC19: Ability to evaluate the activity of marketing for future improvements. This factor was labeled marketing execution.

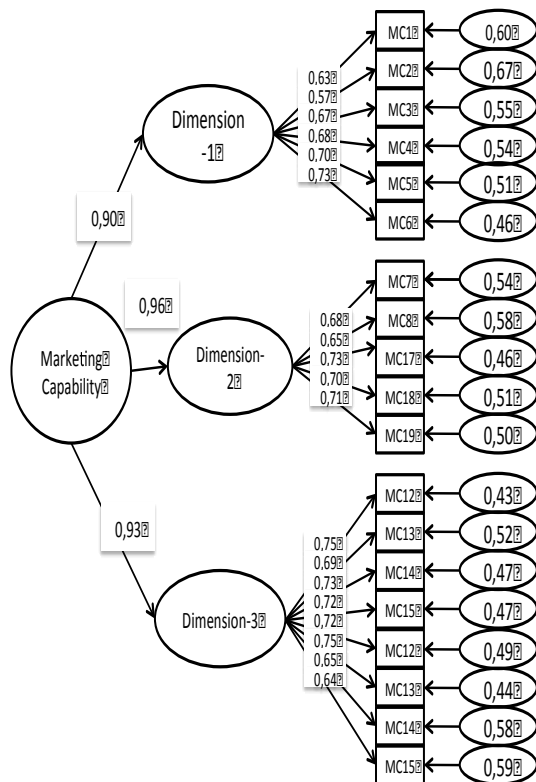
Factor-3 was strongly the reflection of the items that measures the level of existing marketing competencies as entrepreneurs in the following aspects i.e., MC9: Skills to segment market served; MC10: The ability to establish the uniqueness of the product / service business offered; MC11: The ability to develop products / services of the new business; MC12: The ability to improve the quality of service of their business; MC13: The ability to set prices according to the market being served; MC14: The ability to design messages for product promotion; MC15: The ability to establish a media campaign that match the capabilities of business; MC16: Knowledge of the current image of the product / business based on customers' impression. This factor was labeled marketing strategy.

### **Result of the CFA**

CFA is employed to test whether the measures of a construct of marketing capability of the SMEs are consistent with researcher's understanding of the nature of that construct. CFA is often used in data analysis to examine the expected causal connections between variables (Hurley et al 1997). The CFA is executed using the Structural Equation Modeling (SEM). SEM is a statistical methodology that takes a confirmatory i.e., hypothesis testing approach to the analysis of a structural theory (marketing capability of the SMEs) bearing on some phenomenon.

The present study involved using SEM on the survey data to test the initially conceptualized model (Figure 1) for overall data-model fit.

In a test of validity, significance of the contribution of each variable to each manifest latent variables can be seen from the t-value of its loading factor / t-value (factor loading). The current model of SEM have had a critical t-value  $\geq 1,96$ . This shows that all the indicators or manifest variables significant in reflecting their respective latent variables. However, based on the above figure, it can be seen that not all indicators have standardized loading factor (SLF)  $\geq 0.7$ . MC2 has the lowest indicators (SLF is 0.57). So, in other word that the contribution of indicators MC2 is not strong enough in explaining Dimension-1, when it compared with other indicators that make up the dimension-1. However, the rest of the indicators are strong enough to explain the other two dimensions.



**Figure 1. Measurement Model – Three Factors**

A two-step analysis process was conducted using LISREL as recommended by Byrne (1998). Firstly, a CFA was performed to assure that each latent variable was measured appropriately. The second step was assessing the overall data-model fit of the model. A measurement model was specified and the model's overall fit was assessed to determine to which degree the model was consistent with data.

### Reliability

Reliability is defined as the probability of obtaining similar results with independent observations. The study determined the reliability dimensions from the factor analysis by computing the internal consistency coefficient, Cronbach's alpha coefficient. A magnitude of 0.5 to 0.6 for the Cronbach alpha statistic was sufficient in the early stages of basic research (Nunnally 1967), but that an alpha of 0.8 is more desirable. The results of the Cronbach's alpha levels for 3 factors items (Factor-1, Factor-2 and Factor-3) showed acceptable alphas (D-1: .843, D-2: .844, D-3: .892). High scores on all three scale indicate respondents' positive attitude toward all three dimension of the scale.

The convergent validity of the research instrument can be assessed by three measures: item reliability, construct (composite) reliability and average variance extracted (Fornell&Larcker, 1981 in Chau 1997). In this process, the examination of the convergent validity adopted Chau's (1997) explanation.

Item reliability specifies the amount of variance in an item due to the underlying construct rather than to error and can be obtained by squaring the factor loading (Fornell and Larcker, 1981 in Chau 1997) i.e., item of MC14 that measures the level of existing marketing competencies as entrepreneurs in designing the messages for product promotion; is measures



individually. Either an item reliability of at least .50, a significant t value, or both, observed for each item in marketing capability measurement is considered to be evidence of convergent validity.

**Table 4 Result of Validity and Reliability Tests**

No.	Factor, TVE & CR	Code	Validity	$\alpha$
1.	Marketing Intelligence (Factor1) AVE = 0,44 CR = 0,83	MC1	0,751	0,843
		MC2	0,726	
		MC3	0,753	
		MC4	0,731	
		MC5	0,771	
		MC6	0,758	
2.	Marketing Strategy (Factor3) AVE = 0,50 CR = 0,88	MC9	0,780	0,892
		MC10	0,744	
		MC11	0,785	
		MC12	0,778	
		MC13	0,737	
		MC14	0,783	
		MC15	0,729	
		MC16	0,707	
3.	Marketing Execution (Factor2) AVE = 0,48 CR = 0,82	MC7	0,737	0,844
		MC8	0,738	
		MC17	0,789	
		MC18	0,837	
		MC19	0,823	

*Note: AVE=Average Variance Extract, CR=Construct (composite) Reliability; $\alpha$ =Cronbach's alpha*

Table 4 presents the results of the convergent reliability measurement using AVE, CR, Validity and Cronbach's Alpha.

Construct Reliability (CR) or composite reliability was applied to get the result of reliability of each item that is used in this research. CR benefits in this study to determine the consistency of construct validity (Said, Badru & Sahid 2011:1099).The formula of construct reliability is as follows: (square of summation of factor loadings)/(square of summation of factor loadings) + (summation of error variances) (Fornell and Larcker 1981 in Chau 1997). Nunnally (1978) suggested a minimum of .80 for evidence of convergent validity.

The average variance extracted (AVE) measures the amount of variance that is captured by the construct of marketing capability of the SMEs in relation to the amount of variance due to measurement error (Fornell and Larcker 1981 in Chau 1997). The formula of AVE is as follows: (summation of squared factor loadings)/(summation of squared factor loadings) + (summation of error variances) (Fornell and Larcker 1981 in Chau 1997). They suggested that it is desirable that the construct exhibit estimates of .50 or larger. However, it is very often variance extracted estimates will be below .50, even when reliabilities are acceptable (Jiang et al 2000). So that, the variance extracted estimates for each dimension of marketing capability of the SMEs are also considered acceptable as shown in Table 4 (Factor-1,2,3 fall between the range of .44 - .50).

Composite reliability is analogous to the Cronbach (1951) coefficient alpha for measuring the reliability of a multiple-item scale (Jiang et al 2000). Composite reliability exposes the internal consistency of the indicators measuring a given factor (Fornel&Larcker 1981).

The composite reliability values for each marketing capability of the SMEs dimension are relatively high (> .80). Furthermore, the traditional Cronbach's alpha values for each of the marketing capability dimensions as shown in Table 4 for comparison, all values exceed the recommended value of .70 (Nunnally, 1978).

After completing the convergent validity test, next stage, is considering the good fit of the data. The model will provide a good approximation to reality, if it provides a good fit to the data. In this study, the CFA was performed by carrying out path analysis using a structural equation modeling. This step is operated to test the first hypotheses investigated in this study: that there is a relationship between the dimensions of marketing capability and their underlying latent constructs.

Given that the structural equation model specifies the causal relationships of the constructs (Factor-1, Factor-2 and Factor-3) to one another as posited by underlying theories (Chau 1997).

A wide range of goodness-of-fit indices is used to assess the model (Tabek 5), namely, Goodness-of-fit Index (GFI), Adjusted Goodness-of-fit Index (AGFI), Root Mean Square of Approximation (RMSEA), Normed Fit Index (NFI), and Comparative Fit Index (CFI).

A value greater than .80 is desirable for AGFI, and values greater than .90 are desirable for CFI, RMR, and NNFI (Anderson & Gerbing, 1988). For both GFI and CFI, values > .95 constitute good fit and values > .90 acceptable fit; For the RMSEA, it has been suggested that values < .05 constitute good fit.

**Table 5. Result of fit indices**

Ratio $\chi^2/df$	GFI	AGFI	RMSEA
1,775	0,93	0,90	0,048
	<i>Good Fit</i>	<i>Good Fit</i>	<i>Close Fit</i>
NFI	CFI	PNFI	PGFI
0,98	0,99	0,77	0,66
<i>Good Fit</i>	<i>Good Fit</i>		
Standardized RMR	P- value	Chi-Kuadrat ( $\chi^2$ )	
0,039	0,00	239,62	
<i>Acceptable Fit</i>			

All the fit indices (Table 5) indicate that the marketing capability of the SMEs' scale is a three-factor construct and the evidence indicates that the full model is valid.

### Validity

Validity refers to the capacity of a set of indicators to really measure the underlying concept. Several different forms of validity can serve as criteria for assessing the psychometric soundness of a scale i.e., marketing capability scale (Grapentine, 1995 in Robledo 2001): face validity, convergent validity, discriminant validity, and predictive or concurrent validity. Face

validity has been executed and discussed previously. In this section, the study presented the results of the other three of validity tests.

Convergent-validity analysis pertains to the extent to which scale items of marketing capability of the SMEs assumed to represent a construct (marketing capability of the SMEs) do in fact "converge" on the same construct (Robledo 2001). Convergent validity is the extent to which each measure correlates with other measures of the same construct and high interitem correlations within each construct indicate convergent validity (Chau 1997).

The convergent validity of the instrument for measuring marketing capability can be determined using Bentler Bonnet coefficient (Voon & Lee 2009 in Voon & Lee 2009). The Bentler-Bonnet coefficient represents the ratio of the chi-square value of the specified measurement model to that of a null model, which has no hypothesized item loading on a construct (Siu-Cheung and Lu, 2004). Scales with this coefficient value of 0.90 or above demonstrate good convergent validity. The results of the Bentler- Bonnet coefficient (delta) for the threefactors of marketing capability of the SMEs are greater than 0.9, si that the scales demonstrate strong convergent validity (Table 6).

Discriminant validity is the extent to which the measure of a construct i.e., marketing capability does not correlate well with measures of other constructs (Chau 1997). Discriminant validity can be achieved if an item correlates more highly with items intended to measure the same construct than with items used to measure a different construct (Chau 1997).

To test the discriminant validity, this study adopted the steps and the justification presented by Voon & Lee (2009). Their test used the justification from Ahire *et al.*, (1996) and Sureshchandar *et al.*, (2001). The discriminant validity of a measure is the degree to which the measure is diverge from the measures that are theoretically not similar (Sureshchandar *et al.*, 2001 in Voon & Lee 2009). If it can be shown that the different components on the constructs actually measure different things, this will be a sound basis to claim that the instrument posses discriminant validity. The chi-square difference test was used to establish the discriminant validity of the instrument.

**Table 6 Fit Indices of Marketing Capability's Dimension**

<b>Dimension-1:</b>	<b>ROSR</b>	<b><math>\chi^2/df</math></b>	<b>RMSEA</b>	<b>GFI</b>
<b>Marketing Intelligence,</b>	0,60 –	2.065	0,059	0,98
<b>Number of items:</b>	<b>AGFI</b>	<b>CFI</b>	<b>TLI</b>	<b>BBC</b>
<b>6</b>	0,95	0,99	0,98	<b>Coef.</b>
				<b><math>\Delta</math></b>
<b>Dimension-2:</b>	<b>ROSR</b>	<b><math>\chi^2/df</math></b>	<b>RMSEA</b>	<b>GFI</b>
<b>Marketing Execution,</b>	0,58 –	2,438	0,067	0,99
<b>Number of items:</b>	<b>AGFI</b>	<b>CFI</b>	<b>TLI</b>	<b>BBC</b>
<b>5</b>	0,95	0,99	0,98	<b>Coef.</b>
				<b><math>\Delta</math></b>
<b>Dimension-3:</b>	<b>ROSR</b>	<b><math>\chi^2/df</math></b>	<b>RMSEA</b>	<b>GFI</b>
<b>Marketing Strategy</b>	0,62 –	1,977	0,055	0,98
<b>Number of</b>	<b>AGFI</b>	<b>CFI</b>	<b>TLI</b>	<b>BBC</b>
				<b>Coef.</b>

items:				$\Delta$
8	0,95	0,99	0,99	0,99

Note: ROSR: Range of Std. Regression; BBC = Bentler-Bonett Coefficient

To further assess the degree of uni-dimensionality of the constructs and the convergent validity of the items representing the constructs, measurement models were specified for each construct. In this stage, the CFA was carried out for the individual constructs of marketing capability to check how closely the designated items represent the construct (Thompson 2004).

According to Ahire *et al.*, (1996 in Voon & Lee 2009; Siu-Cheung and Lu, 2004), ‘a goodness of fit index of 0.90 or higher for the model suggests that there is no evidence of lack of uni-dimensionality’ (Ahire *et al.*, 1996, p.38 in Voon & Lee 2009).

Table 6 shows the results of the CFA on the individual constructs. CFI value of 0.99 and above testifies strong scale unidimensionality,  $\Delta$  value of 0.90 and above testifies strong scale convergent validity (Sureshchander *et al.*, 2001 in Voon & Lee 2009).

To test the discriminant validity, this study adopted the steps and the justification presented by Voon & Lee (2009). Discriminant validity refers to the property of a construct to be measuring only one concept and not overlapping another. Discriminant validity is a type of construct validity that assesses the extent to which an item of one dimension (i.e., marketing intelligence) does not correlate with other dimensions (i.e, marketing execution) of construct (Emari et al 2016). Discriminant validity was evaluated by two tests, firstly, examination of the inter factor correlation (Kline 2011 in Emary et al 2016). Secondly, comparison of the squared correlation with AVE value of each of the three latent constructs (Fornel and Larcker 1981 in Emary et al 2016). If the inter factor correlation is below 0.85 so discriminant validity can be established (Kline 2011 in Emari et al 2016). The chi-square difference test was used to establish the discriminant validity of the instrument.

In this test (Tabel 7), the CFA was performed on selected pairs of constructs, allowing for correlation between the two constructs and then the test was rerun again by constraining the correlation between the pairs by fixing it to 1 (Ahire *et al.*, 1996). Fornell and Larcker (1981 in Emari et al 2016) suggested that a squared correlation between three constructs (i.e., marketing intelligence, marketing strategy and marketing execution) should be lower than the AVE for each construct. Because the root AVE value not greater than the value of the correlation between the latent variables then the latent variable has not good enough value of a discriminant validity. Moreover, AVE is a common method of testing discriminant validity (Gerbing and Andersen 1988). The cutoff of AVE should be above the recommended value of .50 (Fornell and Larker 1981). Very often, variance extracted estimates will be below .50 when reliabilities are acceptable (Jiang et al 2015). Table 4 provides the score of the AVE for the dimensions. Thus, all dimensions were found to have adequate convergent validity based on their high factor loadings (>.50) (Gerbing and Andersen 1988). Furthermore, the AVE (Table 4) for each latent factor exceeded the respective squared correlation between factors, thus providing evidence of discriminant validity (Fornel and Larker 1981).

**Table 7 The Discriminant Validity**

	MI	ME	MS
MI	<b>0,663</b>		
ME	0,86	<b>0,693</b>	
MS	0,84	0,90	<b>0,707</b>

Note: MI: Marketing intelligence; ME: Marketing Execution); MS: Marketing Strategy

Based on the seven model fit measurement indices (Table 5 and Table 6), almost all of them meet the requirements of fit model, thus the model is categorized good fit. Figure 1 shows the model as fit by the CFA. So that, based on model fit index, the null hypothesis is accepted ( $H_0 : \chi^2 = \chi^2(\chi)$ , the SEM model is a fit model) and the alternative hypothesis is rejected ( $H_1 : \chi^2 \neq \chi^2(\chi)$ , the SEM model is not a fit model). So that, the scale of the marketing capability of SMEs (MC-SME) is an accepted instrument.

## Discussion

Marketing capability is considered crucial for SMEs to survive in sustaining its position in the market. Marketing in SMEs is often largely base on the owner capability. Based in the results of the study, the dimension of marketing capability for the SMEs consists of three factors. First factor is labeled marketing intelligence. Marketing intelligence represent a continuous process of understanding, analyzing, and assessing an SME's internal and external environments associates with customers, competitors, and markets (Chern *et al.*, 2015: 399). These continous process usually blended with the acquired information and knowledge to support the SME's marketing related decision.

Similar to the indicators that shape first dimension of the marketing capability of the SMEs, namely marketing intelligence. This factor composes of 6 items that represents the level of existing marketing competencies of the entrepreneurs in grasping the knowledge of consumer preference for similar products offered by their business (MC1); knowledge of competitor products that have similar characteristics with their products offered (MC2); knowledge of product trends preferred by growing consumer (MC3); skills in predicting or forecasting profits accurately (MC4); awareness of the major strengths of business that is currently occupied (MC5); knowledge of competitors' product marketing planning process (MC6). These items are the representation of marketing intelligence of the SMEs in understanding, analyzing, and assessing an SME's internal and external environments of the business. Furthermore, Chern *et al.* (2015) state that marketing intelligence can help the firm in providing road map of current and future trends in customers' preferences and needs, new market and segmentation opportunities, and major shifts in marketing and distribution in order to improve the firm's marketing planning, implementation, and control.

Second factor is labeled marketing execution. Marketing execution or implementation (Sashittal and Jassawalla 2001) emerges as an organizational's adaptive response to day-to-day market events. This factor was defined by 5 items that portraying the level of existing marketing competencies as entrepreneurs in mastering the knowledge to allocate resources to marketing activities (MC7); the ability to integrate marketing activities with the rest of business activity (MC8); the ability to set the location of production facilities / business (MC17); the ability to mix used in the cost-effectiveness of doing business (MC18); ability to evaluate the activity of marketing for future improvements (MC19). These items are the representation of marketing execution of the SMEs. Marketing execution usually play the role as mediator that mediates the relationship between marketing strategy development and firm performance (Morgan 2010).

Final factor is labeled marketing strategy. This factor was strongly the reflection of the items that measures the level of existing marketing competencies as entrepreneurs in conquering skills to segment market served (MC9); the ability to establish the uniqueness of the product / service business offered (MC10); the ability to develop products / services of the new business (MC11); the ability to improve the quality of service of their business (MC12); the ability to set prices according to the market being served (MC13); the ability to design messages for product promotion (MC14); the ability to establish a media campagin that match the capabilities of business (MC15); knowledge of the current image of the product / business based on customers' impression (MC16). This factor was labeled marketing strategy. These

items are the representation of marketing strategy formation of the SMEs. Ferrell and Hartline (2011: 19) state that to develop a marketing strategy, an organization must select the right combination of target market and marketing mix in order to create distinct competitive advantages over its rivals.

### Conclusion

The current study provides evidence of robustness of MC-SME scale in terms of construct validity. This is based on the fact that EFA results yielded three dimensionality of MC-SME. Based on the results, MC-SMEs can be usable in the SMEs' context, particularly measuring marketing capability of the business owners. Most importantly, this study is one of the studies that extensively test the scale of the MC-SME. The three dimensions found in current study were supported by the data collected. As the main objective of this study was fulfilled in developing a measure for measuring marketing capability of the SMEs; this new measure will be used for the final survey to test the relationship between entrepreneurial marketing and marketing capability of the SMEs in marketing their products in larger target market i.e., in some tourism destination.

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**THE EXPLORING OF CAUSALITY RELATIONSHIP BETWEEN ISLAMIC  
WORK ETHICS, ORGANIZATIONAL JUSTICE, AND ACCOUNTANT'S WORK  
STRESS: CASE OF INDONESIA**

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**Abstract**

The objective of this study is to explore the causality relationship between Islamic work ethics and organizational justice, and its impact on work stress. The respondents are the accountants who work in the Islamic financial institutions in Indonesia. The method of data collection is questionnaires. The method of sample selection is purposive sampling. The method to test the hypothesis is Structural Equation Modelling (SEM) with AMOS Software. The results of the study as follows, first, Islamic work ethics positively influence to procedural justice and interactional justice but not to distributive justice. Second, distributive justice negatively influences to work stress but not to procedural justice and interactive justice. Third, Islamic works ethics negatively influence to work stress. This study is important for the employees, especially for accountant profession as guidance in working to support organization performance with the values of Islam as the basis of work.

**Keywords:** *Islamic work ethics, distributive justice, procedural justice, interactional justice, job stress*

**Introduction**

The study of Islamic work ethic associated with organizational justice and job stress is an interesting issue to be researched. This issue has not yet been examined on the accounting profession in the previous research. This study is a combination of Rokhman and Hassan (2012) and Lambert *et al.* (2007) studies. Rokhman and Hassan (2012) investigated the relationship between Islamic work ethic with organizational justice, while Lambert *et al.* (2007) examined the impact of distributive justice and procedural fairness to work stress, work satisfaction, and organizational commitment. Islamic work ethic variable and organizational justice variable on the study of Rokhman and Hasan (2012) and distributive justice variable, procedural justice variable and job stress variable in the study of Lambert (2007) re-examined in this study.

Yousef (2001) stated that one of the factors that influence the individual's attitudes on the workplace environment is Islamic work ethic. An action can be considered ethical or unethical based on fairness in the decision-making process as well as the acquisition of the results. In the organizational context, the meaning of organizational justice is usually related to the resource allocation problem. Implementation of justice in the organization is a significant concern for employers and employees (Folger and Cropanzano, 1998). Currently, employees are looking for organizations which offer a justice and the working environment in which everyone feels welcome, respected and appreciated (Suliman & Al-Khatiri, 2013).

Elovainio *et al.* (2002) found evidence that organizational justice is one of the stress factors as the cause of physical and psychological reactions. The organizations that have not been objective in implementing a justice would impact stress and sleep disturbances on employees. Adeoye (2000) suggested that the stress is usually associated with interpersonal relationships in the workplace, such as conflicts with supervisors, conflicts with co-workers, conflict with subordinates and disputes with management policies. Levy and Dubinsky (1983) argue that the

level of stress increase when employees find obstacles in implementing ethics into their work. Meanwhile, Jaramillo *et al.* (2013) found that the work ethic is a significantly positive impact in reducing stress levels. Other evidence from Sert *et al.* (2014) showed that the development of work ethics and organizational justice could reduce an employee stress levels.

Accountants have a strategic role in assessing and calculating resources, liabilities, and equity of the company, then put them in a financial report. Many parties concerned with the financial statements, so sometimes accountants faced in a depressed condition. By applying of Islamic work ethic within the organization fairly, is expected could reduce the stress level of accountants. The issue of Islamic work ethic about the implementation of organizational justice and job stress is an important issue and interesting to analyze because to obtain the empirical facts about first, the impact of Islamic work ethic on organizational justice. *Second*, the impact of organizational justice implementation to the work stress of accountants, and *the third*, the impact of Islamic work ethic on work stress experienced by the accountants. The results of this study are expected to contribute for the parties, especially for accountant profession as guidance in working to support organization performance with the values of Islam as the basis of work.

## **Literature review and hypotheses**

### **Equity Theory**

Equity theory as a basis theory of this study. According to this theory, an employee is treated fairly or unfairly within the working environment by comparing the outcomes ratio (Adams, 1965). The main components of this theory consist of inputs, outcomes, comparison person (Wexley & Yuki, 1977).

### **Islamic Work Ethics**

The initial concept of Islamic work ethics derived from the Qur'an and the Hadith. Ali and Al-Owaihyan (2008) defined Islamic ethics works this as an orientation to shape the engagement and participation for adherents in the workplace. While Yousef (2001) stated that the Islamic work ethics emphasizes the aspects of cooperation in the work and solve the problems in work through communication to avoid errors in the completion of the work. Furthermore, Rowold (2008) stated that Islamic value applied on the behavior ethics and career orientation in the workplace as a guide of value in human life.

### **Organizational Justice**

In general, the organizational justice concept consists of three dimensions: distributive justice, procedural justice, and interactive justice (Cropanzano *et al.*, 2001). Distributive justice is justice in the context of the amount and awards received from individuals (Robbins and Judge, 2008). Procedural fairness is a concept of justice that focuses on the methods used to determine the amount of remuneration (Noe *et al.*, 2010). Interactional justice is a concept of justice that refers to individual perceptions about how to treat people with dignity, attention, and respect (Robbins and Judge, 2008).

### **Job Stress**

Definition of job stress according to Mangkunagara (2005) is a pressure of feeling experienced by employees in a working environment. A job stress definition according to Greenberg and Baron (2003) is a pattern of an emotional situation and physiological reactions that arise as a response from within and outside the organization.

## **Hypothesis Development**

### Islamic Work Ethics and Organizational Justice

The results of Trevino and Weaver (2001) study indicates that if organizations treat their employees fairly, the unethical actions should be decreased significantly. Employees who feel unfairly treated will seek opportunities to improve their welfare in their way, despite taking an unethical manner. Rokhman and Hassan (2012) obtain empirical evidence that Islamic work ethics positively contribute to the three dimensions of organizational justice (distributive, procedural and interactional). Based on these findings it can be formulated hypotheses as follows:

H<sub>1a</sub>: Islamic work ethics positively influence to distributive justice

H<sub>1b</sub>: Islamic work ethics positively influence to procedural justice

H<sub>1c</sub>: Islamic work ethics positively influence to interactional justice

### Organizational Justice and Work Stress

Khan, *et al.* (2015) study showed that procedural justice is negatively related to low employee work ethics. The study of Sert, *et al.* (2014) found that there is a significantly negative correlation between distributive and procedural justice against work stress. The study of Lambert, *et al.* (2007) found that procedural justice and distributive justice negatively influence to work stress. Work stress of employees increased when their work was not accepted fairly. A hard working employee received the same compensation with lazy employees. Study of Judge and Colquitt (2004) on the employees whose working at 23 universities in the United States shows that procedural fairness has a strong relationship with a work stress. Based on the results of that study generally can be concluded that organizational justice (distributive, procedural, interactional) negatively related to job stress. More unfair treatment on personnel organization, the more stress experienced by employees. In this regard, it can be formulated hypotheses as follows:

H<sub>2a</sub>: Distributive justice negatively influences to work stress

H<sub>2b</sub>: Procedural justice negatively influences to work stress

H<sub>2c</sub>: Interactional justice negatively influences to work stress

### Islamic Work Ethics and Work Stress

Study of Sert *et al.* (2014) in Turkey that examined the influence of Islamic work ethics on work stress showed evidence that there is a significantly negative relationship between Islamic work ethic with work stress. The results of a study conducted by Jaramillo *et al.* (2006) on 138 salespeople showed that Islamic work ethic influence to employee stress. When the level of stress was low, employees more feel happy with their jobs, so they were more committed to the organization and motivated to develop a mutually satisfactory relationship with the customer. Deconinck (2010) support this research which found evidence that the norms of Islamic work ethic can reduce work stress. Some other studies conducted by Myburgh and Poggenpoel (2002) showed evidence that when employees are working in a work environment that values work ethic is low and does not apply the principles of justice, the employee will be vulnerable to job stress. Base on some of previous studies, it can be formulated the hypothesis as follows:

H<sub>3</sub>: Islamic work ethics negatively influence to work stress

### The Framework of Research Model

The framework of research model describes the relationship between the independent variable, the moderating variable and the dependent variable. Figure 1 below describes the research model.

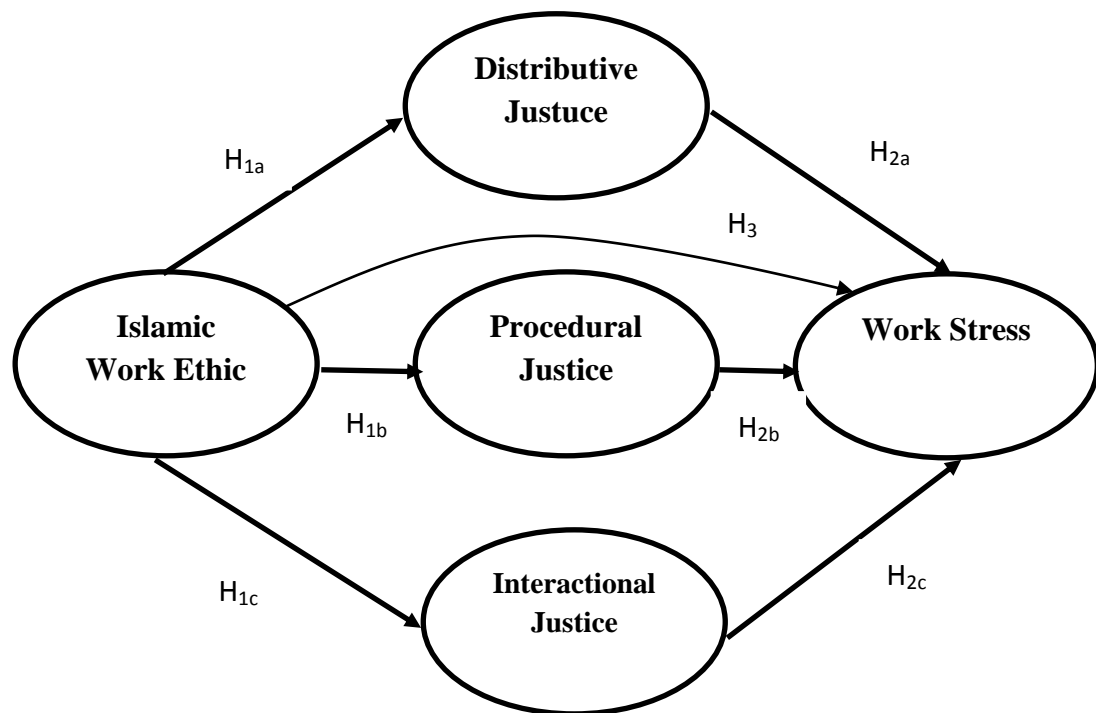


Figure 1. The Framework Research Model

## Research method

### Population, Data for Research, and Sample Selection Methods

The population who participated in this research are the management accountants. The research samples who selected as respondents in this study are accountants who work in the Islamic financial institutions. The questionnaire used to collect the data is from the answer of respondents. The period of the data collection was from April to June 2015. The purposive sampling method used to select the research sample. Sample criteria Participated who could have this research are management accountants who have work experience at least one year in an Islamic financial institution in Indonesia.

### Measurement of Variable

The measurement of variables are as follow: An Islamic Work Ethic variable measured with seventeen statement items developed by Ali (1992). An Organizational Justice variable was drawn up by Niehoff and Moorman (1993) as 19 questions from three dimensions: distributive justice (5 items), procedural justice (5 items), interactive justice (9 items). The Job Stress Variable was measured with 7 statement items developed by House and Rizzo (1972), adopted by Caplan *et al.* (1975) and has been used by Rout and Rout (1993), Wallace *et al.* (2010) and Lu and Kuo (2016). All statement elements in the questionnaire of these variables were measured using ordinal scale (Likert) from one to five. The range of scores: (1) strongly disagrees, (2) disagree, (3) neutral, (4) agree, and (5) strongly agree.

### The Technique of Data Analysis

Data were tested using descriptive statistical test and data quality test. The testing consisted of descriptive statistics: the number of data (sum), the maximum data, the minimum data, the average of data (mean) and the standard deviation of data. Meanwhile, the testing of data quality consists of the validity and the reliability of data. The validity test to calculate the correlation between the scores of each of the questions with the total score. If the correlation between the scores of each of the questions with a total score has a significance level below 0.05, the questions are declared valid, and vice versa (Ghozali, 2013). Data reliability test used Cronbach's Alpha. A statement was reliable if the value of alpha is greater than 0.6 (Ghozali, 2013). The method of hypothesis testing employed Sequential Equation Model with AMOS as software.

## Results and discussion

### Level of Questionnaires Return and Respondents Profile

The number of questionnaires distributed was 239 copies while the number of questionnaires returned was 208 copies (87.03%). The data that can be processed included 202 copies (84.52%). In Table 1 is presented the respondent's profile by type of industry. From these data, the majority of respondents worked in the insurance industry as much as 105 people (52%), other industries 43 (21.3%), and the banking sector as many as 26 people (12.9%).

**Table 1. Respondents Profile by Type of Industry**

	Industry	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Banking	26	12,9	12,9	12,9
	Insurance	105	52,0	52,0	64,9
	Cooperation	28	13,9	13,9	78,7
	Others	43	21,3	21,3	100,0
	Total	202	100,0	100,0	

Source: Primary data processed

### The Results of Descriptive Statistical Test

Table 2 presented the results of descriptive statistical test variables used in this study.

**Table2. The Result of Descriptive Statistical Test**

	N	Minimum	Maximum	Mean	Std. Deviation
Islamic Work Ethics	202	17	51	29,11	6,462
Distributive Justice	202	5	21	12,56	3,276
Procedural Justice	202	5	21	11,50	2,943
Interactional Justice	202	9	33	19,68	4,152
Work Stress	202	16	35	26,66	3,952
Valid N (listwise)	202				

Source: Primary data processed

Table2 informed that the average value of the Islamic Work Ethics Variable is 29,11; Distributive Justice Variable is 12,56; Procedural Justice Variable is 11,50; Interactional Justice Variable is 19,68; and Work Stress Variable is 26,66.

### The Results of Data Quality Test

The following tables present the results of validity and reliability data for all variables. In Table 3, presents the results of testing the validity of data for Islamic Work Ethics variable. The results of testing the validity of this variable presented in Table 3 below.

**Table 3. The Results of Validity Test for Islamic Work Ethics Variable**

The Statements	Pearson Correlation	Sig (2-Tailed)	Description
IWE1	,375**	0,000	Valid
IWE2	,609**	0,000	Valid
IWE3	,627**	0,000	Valid
IWE4	,442**	0,000	Valid
IWE5	,635**	0,000	Valid
IWE6	,544**	0,000	Valid
IWE7	,464**	0,000	Valid
IWE8	,635**	0,000	Valid
IWE9	,453**	0,000	Valid
IWE10	,612**	0,000	Valid
IWE11	,481**	0,000	Valid
IWE12	,631**	0,000	Valid
IWE13	,598**	0,000	Valid
IWE14	,552**	0,000	Valid
IWE15	,631**	0,000	Valid
IWE16	,665**	0,000	Valid
IWE17	,479**	0,000	Valid

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Source: Primary data processed

Table 3 above shows that 17 indicator items on the statements of Islamic work ethics variable declared valid because all of indicators have a significant correlation value at 0.01 level (2-tailed). Furthermore, in Table 4 below are presented the results of the data validity test for organizational justice variable (Distributive Justice, Procedural Justice, Interactional Justice).

**Table 4. The Results of Validity Test for Organizational Justice Variable**

The Statements	Pearson Correlation	Sig (2-Tailed)	Description
DJ1	0,562**	0,000	Valid
DJ2	0,836**	0,000	Valid
DJ3	0,874**	0,000	Valid
DJ4	0,823**	0,000	Valid
DJ5	0,818**	0,000	Valid
PJ1	0,770**	0,000	Valid
PJ2	0,880**	0,000	Valid
PJ3	0,760**	0,000	Valid
PJ4	0,768**	0,000	Valid
PJ5	0,693**	0,000	Valid
IJ1	0,638**	0,000	Valid
IJ2	0,720**	0,000	Valid
IJ3	0,555**	0,000	Valid

IJ4	0,671**	0,000	Valid
IJ5	0,732**	0,000	Valid
IJ6	0,741**	0,000	Valid
IJ7	0,760**	0,000	Valid
IJ8	0,668**	0,000	Valid
IJ9	0,661**	0,000	Valid

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Source: Primary data processed

Table 4 above shows that all statements of Distributive Justice variable (5 indicators), Procedural Justice variable (5 indicators), Interactional Justice variable (9 indicators) declared valid because all of items have a significant correlation value at 0.01 level (2-tailed). Furthermore, in Table 5 below are presented the results of the data validity test for Work Stress variable.

**Table 5. The Results of Validity Test for Work Stress Variable**

The Statements	Pearson Correlation	Sig (2-Tailed)	Description
WS1	0,826**	0,000	Valid
WS2	0,811**	0,000	Valid
WS3	0,731**	0,000	Valid
WS4	0,699**	0,000	Valid
WS5	0,705**	0,000	Valid
WS6	0,278**	0,000	Valid
WS7	0,738**	0,000	Valid

Source: Primary data processed

Table 5 above shows that seven indicator items on the statements of Work Stress variable declared valid because all of indicators have a significant correlation value at 0.01 level (2-tailed). Furthermore, in Table 6 below are presented the results of the data reliability test.

**Table 6. The Results of Data Reliability Test**

Variables	Cronbach's Alpha	Description
Islamic Work Ethics (IWE)	0,856	<i>Reliable</i>
Distributive Justice (DJ)	0,843	<i>Reliable</i>
Procedural Justice (PJ)	0,833	<i>Reliable</i>
Interactional Justice (IJ)	0,859	<i>Reliable</i>
Work Stress (WS)	0,854	<i>Reliable</i>

Source: Primary data processed

Table 6 can be conclude that all the variables were reliablebecauseof the value of Cronbach Alpha greater than 0.6 (Ghozali, 2013). The next step is the hypothesis testing. Table 7 below show the results of feasibility testfor full construct model represification.

**Table 7. The Result of Feasibility Tests for Full Construct Model**

<i>Goodness of fit index</i>	<i>Cut off value</i>	<b>Result</b>	<b>Criteria</b>
Chi-Square	≤ 204,690	957,900	Less Good
Probability	≥ 0.05	0,000	
DF	>0	673	<i>Over Identified</i>



GFI	$\geq 0.90$	0,842	<i>Marginal Fit</i>
AGFI	$\geq 0.90$	0,778	Less Good
CFI	$\geq 0.90$	0,941	<i>Good fit</i>
TLI	$\geq 0.90$	0,921	<i>Good fit</i>
CMIN/DF	$\leq 2.00$	1,423	<i>Good fit</i>
RMSEA	$\leq 0.08$	0,046	<i>Good fit</i>

Source: Primary data processed

From Table 7 above can be concluded that the overall fitness model assessed with chi-square test amounted to 957.900 with a degree of freedom 673. The probability of this model is 0,000. When compared to the cut-off value, this model has a poor outcome. To measure the goodness of fit more can be seen that the value AGFI showed poor results as well, but for the CFI, TLI, CMIN / DF, and RMSEA indicate good fit and value that shows the value of GFI marginal fit. If there are one or more parameters that have been fit then declared fit models (Solimun, 2005). So for the measurement of this model is considered fit.

### The Results of Hypothesis Tests

Tests conducted on the hypothesis by using t-Value with a significance level of 0.05. T-Value in AMOS 18.00 a critical value ratio (C.R.) on Regression Weights: (Group number 1 - Default model) of the fit model or full model. If the value of critical ratio (C.R.) positive or negative  $\geq 1.967$  or the probability value (P)  $\leq 0.05$  then the research hypothesis is accepted. In Table 8 presents a summary overview of the results of hypothesis testing.

Hypothesis testing using t-Value with a significance level of 0.05. t-Value in the output of AMOS program is a critical value ratio (C.R.) on Regression Weights: (Group number 1 - Default model) of the fit model or full model. If the value of critical ratio (C.R.) positive or negative  $\geq 1.967$  or the probability value (P)  $\leq 0.05$  then the research hypothesis is accepted. In Table 8 presents a summary overview of the results of hypothesis testing.

**Table 8. The Results of Hypothesis Tests**

Hypotheses	Exogenous variables	Endogenous variables	Critical Ratio	Probability	Conclusion
H1a	Islamic work ethics	Distributive justice	1,847	,052	not supported
H1b	Islamic work ethics	Procedural justice	2,460	,014	supported
H1c	Islamic work ethics	Interactive justice	2,970	,003	supported
H2a	Distributive justice	Work stress	-3,391	,000	supported
H2b	Procedural justice	Work stress	-,768	,442	not supported
H2c	Interactive justice	Work stress	-,815	,415	not supported
H3	Islamic work ethics	Work stress	-2,160	,031	supported

Source: Primary data processed

### Discussion

From the data in Table 8 it can be seen that the Islamic work ethics not significantly influence to distributive justice, so this finding not supported the hypothesis H1a. This finding was not consistent with the study of Schminke *et al.* (1997) and Rokhman and Hassan (2012) which states that the application of the Islamic work ethics well done will be a positive influence on distributive justice. The further findings showed that Islamic work ethics significantly influence to procedural justice and Interactive justice, so the hypothesis H1b and H1c hypothesis was supported. These results were consistent with Rokhman and Hasan (2012) which showed that the Islamic work ethics influence to the application of procedural justice and interactional justice in the organizations. This finding was relevant to the fact that every employee had hoped to get justice in his work. The Islamic work ethic encourages the implementation of justice, so that established a good relationship each employee and between leaders and subordinates. Each employee will give the best contribution to the company because the rate of work is worship. These findings are also relevant to the opinion of Robbins and Judge (2008) which states that procedural justice is fairness perceived by each employee on rewards distribution.

Next findings showed that the implementation of distributive justice could reduce the level of accountant stress (H2a supported). This finding was consistent with the study of Sert *et al.* (2014) and Lambert *et al.* (2007) which indicated that the implementation of distributive justice could reduce the level of employee stress. In this case, the accounting profession has workloads with high levels of stress. They are responsible for preparing the companies financial statements as a material to make business decisions. If accountants are treated fairly by the firm, they will feel comfortable in work. When accountants feel comfortable in working, their stress level would reduce. The treatment of distributive justice to an accountant, for example, with give a reward to their duties and responsibilities.

The empirical evidence showed that procedural justice and interactional justice were not successful in reducing an accountant stress levels. The results of this study are not consistent with the findings of Sert *et al.* (2014) and Judge and Colquitt (2004) which stated that procedural justice and interactional justice negatively influence to work stress. However, these results still support the research of Lambert *et al.* (2007) which stated that procedural justice did not affect to the work stress. This finding implies that even if the accountant had an opportunity to argue and a right to review the decision (as implementation of procedural justice) and they get an attention and be treated with dignity and respect (as the implementation of interactional fairness), but not necessarily be able to lower the stress level of an accountant.

The difference of this finding may be due to differences in the population of the study. The respondents in a study of Sert *et al.* (2014) dominated by employees who work in non-financial services sector companies. While all respondents in Judge and Colquitt (2004) study of working in the field of education. While all respondents of Judge and Colquitt (2004) study were working in the area of education. The situation of Islamic work environment automatically the aspect of procedural justice and interactional fairness, so that accountants work stress more easily managed through the implementation of distributive justice. The practical situation of respondents on Islamic finance companies are generally more Islamic than other. Working conditions Islami automatically pay attention to aspects of procedural justice and interactional justice, so that accountants work stress more easily managed through the implementation of distributive justice.

The latest findings of this study showed that the Islamic work ethics could reduce accountant work stress. This finding was consistent with the study of Sert *et al.* (2014) and Jaramillo *et al.* (2006) which stated that the implementation of a good work ethic at the company could reduce employee stress levels. Thus, the Islamic work ethic encourages accountants enthusiastically work without stress and avoid corruption. If the accountant works

well, expected to be a positive influence on other employees. This positive effect is projected to improve overall company performance.

### Conclusion

This study examined the influence of the Islamic work ethics on the three dimensions of the organizational justice (distributive justice, procedural justice, and interactional justice) and its impact on work stress of accountant. The results of the study show that, first, the Islamic work ethics did not positively influence to distributive justice, whereas Islamic work ethics positively influence to procedural justice and interactional justice. Second, distributive justice also negatively influence to the work stress, whereas procedural justice and interactional justice has no effect on work stress. Last, Islamic work ethics negatively influence to work stress. This study is important for the employees, especially for accountant profession as guidance in working to support organization performance with the values of Islam as the basis of work. The limitation of this study, first, the sample proportion of industry category was disproportionate. Second, this study have not connected yet with aspects of culture especially in the context of technology alliance in modern era. The recommendations for further research, first, the study have a balanced proportion of all types of industries, to have a stronger generalization for each industry. Second, next study should consider the cultural aspect in modern technology alliances such as the study by Lew *et al.* (2016).

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## GOVERNMENT INTERNAL AUDIT EFFECTIVENESS: EVIDENCES FROM INDONESIA

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### Abstract

This research identifies the determinants of government internal audit effectiveness in Indonesia. Independent variables used are professional expertise of internal auditors, quality of audit work, organization's independence, career and advancement, and the support from the leadership of the internal audit entity, with geographical location, sex, degree in formal education, and auditors' functional position as control variables. This research deploys a structured questionnaire involving 385 functional auditors working for the Badan Pengawasan Keuangan dan Pembangunan (BPKP, literally: "Finance and Development Supervisory Agency"). Results show that professional expertise of internal auditors, quality of audit work, organization's independence, career and advancement, and the support from the leadership of the internal audit entity positively affect government internal audit effectiveness in Indonesia. Nevertheless, all of the variables deployed are still possible to be further developed according to advance analysis testing results. Internal audit entity requires internal auditors who possess professional expertise, independence from any party, and who can demonstrate high quality audit work results. Internal audit entity should also enact proper career policy for auditors and give full support to the execution of the auditing. Research findings are discussed in terms of how they can contribute to the effectiveness of the internal audit and provide added value to the auditees.

**Keywords:** *internal audit effectiveness, professional expertise of internal auditors, organization's independence, the support of the leadership of the internal audit entity*

### Introduction

Government internal audit is a part of government internal body that oversees the practice of governance. It is an essential part in government structural organization (Coram, et al., 2008). If a well-configured internal audit function is implemented, internal auditing can play a crucial role in the governance and accountability of institutions engaged in public sector by improving their evaluations on key organizations control, governance, and risk management processes (Asare, 2009). This is also supported by D'Silva & Ridley (2007) by stating that internal auditing creates occupation for auditors in risk management, controlling, and governance processes, both on strategic and operational level.

According to Sarens & De Beelde (2006a), internal audit has four dimensions, i.e., evaluating, diagnosing, informing, and recommending. Furthermore, an internal auditor is also required to report his personal judgment on existing defects in the observed process and internal control. Later on, the auditor should formulate recommendation(s) that could improve the auditee's performance. This is why, according to Sarens & De Beelde (2006a), many senior managements in many firms in Belgium assert that internal auditing should be widely

implemented so as to support the management in monitoring, risk management, and internal control improvement, as well as in organizational culture oversight.

Internal auditing is also closely related with fraud detection. According to Halbouni (2015), internal auditing plays a role in preventing, detecting, and reporting fraud indication in an organization as an endeavor to build public trust. Salsabila & Prayudiawan (2011) also supports this argument by stating that internal auditing is an attempt to prevent national assets misuse and manipulation. Internal auditors, working for an organization, function as a superintendent, both for operational and administrative affairs. Being a superintendent inside an organization also means that internal auditors generally have a power to oversee all activities performed within the organization, including those in planning, execution, and reporting phases. Frauds committed during planning and execution phase are difficult to be detected by external auditing (auditing based on financial report) as those making the report might be a master in concealing oddity, but are easy to be detected by internal auditing because of the superintendence performed. Organizations with good internal audit function can better detect and indicate fraudulent practice of asset misuse compared to those without (Coram, et al., 2008).

In Indonesia, internal auditing has its own standards, i.e., Standar Audit Inter Pemerintah Indonesia (literally: "Indonesian Government Internal Audit Standards"), that is included in the decree no. KEP-005/AAIPI/DPN/2014 on the enactment of Kode Etik Auditor Intern Pemerintah Indonesia (literally: "Indonesian Government Internal Auditors' Ethical Codes), Standar Audit Inter Pemerintah Indonesia (literally: "Indonesian Government Internal Audit Standards"), and Pedoman Telaah Sejawat Auditor Intern Pemerintah Indonesia (literally: Indonesian Government Internal Auditor's Peer Review Guidelines) by Dewan Pengurus Nasional (DPN, literally: "National Board") and Asosiasi Auditor Intern Pemerintah Indonesia (AAIPI, literally: "Indonesian Government Internal Auditor Association"). It is decreed in the standards that all internal auditing shall be performed only by Aparat Pengawasan Intern Pemerintah (APIP, literally: "Government Internal Supervisory Apparatus"). APIP is a government agency established to perform internal supervision inside the central government and/or local government. APIP consists of Badan Pengawasan Keuangan dan Pembangunan (BPKP, literally: "Finance and Development Supervisory Agency"), Inspectorate General/Inspectorate/Internal Supervisory Unit to Ministries, Main Inspectorate/ Inspectorate of Non-Ministry Governmental Bodies, Inspectorate/Internal Supervisory Unit of Secretariat of both State Institution and of Supreme State Institution, Inspectorate of Municipal Government, and Internal Supervisory Unit to other governmental legal entities according to the law.

Peraturan Pemerintah No. 60 tahun 2008 (translate to "Governmental Act no. 60 in year 2008") on Government Internal Control System article 2 verse 1 clarifies that in order to create an effective, efficient, transparent, and accountable state financial management, the head of a state agency shall take control of the governance, that is the Sistem Pengendalian Internal Pemerintah (SPIP, literally: "Government Internal Control System"). The verse is followed with an assertion that one of many approaches to be done is to establish an effective government internal supervisory apparatus. Thus can be concluded that effective government internal supervisory apparatus' role is important in order to create an efficient, effective, transparent, and accountable state financial management.

As such, data of how Indonesia is fighting corruption from the past five years i.e., 2012-2016 derived from the Komisi Pemberantasan Korupsi (KPK, literally: "Corruption Eradication Commission") available on its website ([kpk.go.id](http://kpk.go.id)) are worthy of observing (KPK, 2016). The data show that based on the number of corruption case handled, ministries/government institutions are placed on top ranks with 119 cases, followed by municipal governments with 57 cases, and provincial governments with 46 cases (KPK, 2016).

The fact has many wondering because these three groups of governmental bodies has its own APIP working from within as decreed in the Governmental Act no. 60 in year 2008. If observed further in the AAIP's internal audit standards, it is inscribed that APIP is to perform anti corruption activities e.g., to give early notice of fraud indication. This indicates a problem of effectiveness within APIP in functioning as a government supervisory apparatus. Therefore, this is worthy of further investigation.

As such, this reserach is aimed to identify the determining factors of the effectiveness of government internal audit in Indonesia. Previous researchers have also studied the determining factors of the effectiveness of government internal audit i.e., auditors' professional expertise—e.g., auditor qualification, development, and training (Al-Twajjry, et al., 2003; Mihret & Yismaw, 2007; Arena & Azzone, 2009)—, independence—studied by Al-Twajjry, et al., (2003), Mihret, et al., (2010), Cohen & Sayag (2010), and D'Onza, et al., (2015)—, career and advancement—which is found having no direct effect to the effectiveness and studied by Goodwin & Yeo (2001) and Cohen & Sayag (2010)—, management support (Mihret & Yismaw, 2007; Cohen & Sayag, 2010), organizational climate—i.e., organizational status, policies, and procedures, studied by Mihret & Yismaw (2007)—, and relationship between internal auditee and internal auditor—studied by Arena & Azzone (2009).

This research works within Indonesian context, a nation struggling to improve its state financial management accountability. This means that the effectiveness of internal superintendence is an important issue for Indonesia to ensure state financial management transparance and accountability. Also, this research uses BPKP's APIP as its subject because although BPKP is a central government's agency, it has a branch office in each of Indonesia's all 33 provinces. This is to represent the actual condition both in central and local scope thus assuring that the result is as representative as possible. Furthermore, BPKP also employs adequate number of certified internal auditors i.e, 3786 auditors (data per Q2 2015 from its website, bpkp.go.id), a 58,89% from its total 6429 employees. This will help validate the result for the subjects are relevant (BPKP, 2016).

As such, this reserach contributes to government internal supervisory policy making in terms of its determining factors so that the state internal supervisory function can be effective and the state financial management accountability could be manifested as mandated by the law. Also, this reserach contributes to to government accounting references, particularly in terms of internal audit effectiveness and its affecting factors.

## Literature Study

### *Internal Audit Effectiveness*

According to Institute of Internal Auditors (IIA) in 1999, the definition of internal auditing is as follows,

“Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organisation's operations. It helps an organisation accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.”

The above definition demonstrates that internal audit is aimed to add value to organizations and to help improve its organizational processes. The three roles mentioned above are the basis for internal audit function in public sector (Asare, 2009). The above definition also corresponds with AAIP's Internal Audit Standards (2014b) which clarifies that internal auditing is an independent and objective activity in form of assurance activities and consulting activities, designed to add value and improve auditee's operations. This activity will help an organization in achieving its goals through systematic and ordered



approaches to evaluate and improve the effectiveness of risk management process, control, governance (public sector).

Government agencies and senior managements in public sector require effective and efficient internal audit services (Asare, 2009). Recommendations and evaluations from internal audit are required by the government for making decisions. Hence, internal auditing has to be effective in order to formulate valid and reliable recommendations, as well as to add values to the auditee (Mihret, et al., 2010).

AAIPI's Internal Audit Standards (2014b) clarify that an effective internal auditing is manifested in (1) proper encouragement towards obedience, prudence, efficiency, and effectiveness in executing duties and functions of government institution (assurance activities); (2) early noticing and risk management effectiveness improvement in executing duties and functions of government institution (anti-corruption activities); (3) giving advices that can maintain and improve the management quality in performing duties and functions of government institution (consulting activities).

According to Mihret & Yismaw (2007), internal audit effectiveness should be seen as an interaction between four different factors i.e., internal audit quality—reflected by auditors' capability in generating audit findings and recommendations that are useful to auditees; management support—e.g., resources and commitment towards implementing internal auditor's recommendations; organizational climate—e.g., organization profile, budget, policies, and SOPs; auditee's behavior—e.g., attitude and auditee's cooperation.

#### *Internal Auditors' Professional Expertise*

To achieve the previously determined goals, an organization should employ reliable personnel that is the personnel who are professional and are expert in their fields. Professional expertise will act as assurance for the organization that the task given to the personnel will be properly done. This is also the case for an internal audit entity. The tasks of an internal auditor are ought to be done with technical competence e.g., formal education, experience, and continuous trainings (Awaluddin, 2013).

According to AAIPI's Internal Audit Standards, AAIPI's effective role can be manifested if supported with auditors' professionalism and competence, i.e., education, knowledge, expertise, experience, and other competence required to perform duties and responsibilities. As time goes by, auditors shall maintain and keep their expertise updated in order to optimally perform duties and responsibilities through Pendidikan dan Pelatihan Profesional Berkelanjutan (translate to "Continuous Professional Education and Training). This will guarantee that the auditors' competence will correspond to AAIPI's requirement and also, to the most state-of-the-art supervisory practice.

Awaluddin (2013) asserts that professional expertise is a technical competence, which is a competence required for auditors working in either auditing, accounting, government administration, or communication sciences. Technical competence possessed by internal auditors especially needs to be continuously improved so that the auditors can provide efficient, effective, and high-quality service to interested parties (Mihret & Yismaw, 2007; Mihret, et al., 2010).

Furthermore, internal auditors shall possess knowledge beyond accounting and auditing. This is one of many components of internal auditors' professional expertise. The knowledge could be in form of advanced understanding of the audited organizations' goals, system, risk, and culture (Asare, 2009). The knowledge of auditing possessed by auditors will determine how they will sort errors and detect risks during audit process so that it will result in good output which could be used as basis for the stakeholders to make decisions (Salsabila & Prayudiawan, 2011).

*Quality of Internal Audit Work*

One of many factors that can be observed during internal auditing is its quality of work. The quality of audit work can be seen from the quality of the audit result which can be evaluated from how many good responses made towards the work (Salsabila & Prayudiawan, 2011). The quality could also be observed from the obedience committed to the valid audit standards as an assurance of the audit work reliability. Work reliability can be translated into how far the work will deviate if done in different times, except in some very rare cases. Low rates of deviation is achieved by working strictly according to the standards so that the standards' interpretation made and procedures done will also be according to the standards. D'Onza, et al., (2015) and Cohen & Sayag (2010) argue that when internal auditing is executed according to valid professional audit standards, the auditing will add values to the auditee.

AAIPI's Internal Audit Standards have clarified that an effective role of internal audit can be manifested if supported with high quality internal audit results (2014b). Hence, the leader of the internal audit shall design and develop a development and quality assurance program which covers all aspects of internal audit activities, from the planning and executing phase, up until the completion and reporting phase. This program could be in form of internal evaluation based on the audit standards and auditors' code of ethics.

The quality assurance program shall also run during assignment, i.e., the proper execution of auditors' supervision by direct supervisor in every phase of internal audit assignment. This is done to ensure goal achievement, quality assurance, and auditors' competence improvement in every assignment.

Also, the AAIPI's Internal Audit Standards have declared that the internal audit leader shall design a strategic audit planning (for 5 years) and detail it into annual internal auditing plan with priority put onto the activities possessing highest risk and highest correspondence to internal auditing goals (2014b).

*Internal Audit Organization's Independence*

Independence in auditing is translated into a circumstance in which the auditors are in an independent state, liberated from any parties' interest, and bow to no intervention from any party whatsoever in performing their duties. Auditors have to be independent enough from the auditee and have to assure that they can perform their duties with no intervention nor obstacles (Cohen & Sayag, 2010). This is not easy, as Mihret, et al., (2010) put it, internal auditors will face difficulties to remain independent for they are basically employed by the organization as employees. This is also put by Salsabila & Prayudiawan (2011) who argue that internal auditors will face problems when reporting findings not beneficial to management or to the auditee with their position as an employee to the audited organization.

According to Christopher, et al., (2009), three kinds of independence threat exist between internal auditors and the management; (1) if the auditors' career is dependent to the auditee; (2) if budget approval is held by the auditee; (3) if management (auditee) is involved in internal auditing development planning. With regards to internal auditors' career in current career advancement system, that internal auditing can be a step to take a position may act as a threat in terms of internal audit independence (Goodwin & Yeo, 2001). This is also expressed by Stewart & Subramaniam (2009) by stating that the positioning system of putting internal auditors into managerial position may result in auditors' reluctance in executing the auditing properly for they know that they may occupy the position they audit in the future.

Independence threat can also be caused by confusion of internal auditors' role between assurance activities and consulting activities (Cooper, et al., 2006), even though experiment by Stewart & Subramaniam (2009) concluded that internal auditing does not become biased during consulting activities. Nevertheless, independence threat may occur when internal auditors

are involved in the audited organization's risk management process (Stewart & Subramaniam, 2009). This contradicts the findings of Arena & Azzone (2009), that by doing monitoring in internal control system and risk management, internal auditing can help managers in accomplishing their goals through advices on the control effectiveness.

Regardless of all, internal auditors' independence shall be continuously defended in every assignment as an assurance that the auditors will face no obstacles, neither fear nor intervention which can influence their judgement. Internal auditors are not justified when taking sides for no matter how flawless their technical expertise might seem, they would not be able to defend the liberty of their judgements without their independence (Singgih & Bawono, 2010). Independence will guarantee that the auditors will be objective so that the audit results would be valid and can be accounted for. In common perceptions, internal auditors cannot effectively perform internal auditing without independence and objectivity because these two are fundamental attributes for internal auditors to maintain their credibility (D'Onza, et al., 2015). AAPI's Internal Audit Standards regulate internal audit independence by clarifying that internal audit leader's coordination with the head of ministry/institution/ local government is to be manifested into a signing of audit charter between internal auditors' party and government/local government party (2014b). This is to serve as a manifestation of commitment that government/ local government will not intervene internal audit work so that responsibility of its execution can be accounted for.

#### *Internal Auditors' Career and Advancement*

Career and advancement mean available career opportunity for internal auditors in the internal audit entity. Currently, in many nations, many auditors are making internal auditing an attempt to take managerial positions (Goodwin & Yeo, 2001). By joining the internal audit entity, an internal auditor has two career opportunities, (1) to continue stepping the internal auditing career ladder or (2) to get promoted into managerial positions. Cohen & Sayag (2010) argue that open career opportunities can drive internal auditors to work harder in demonstrating excellent work performance so that they could get higher chances of getting promoted.

Goodwin & Yeo (2001) further argue that there are two kinds of employees included in the internal audit entity. The first are those who are newly hired and not long after, get promoted into managerial positions. The second are the old employees who will get promoted but first positioned into internal audit entity for learning.

#### *Entity Leader Support*

According to Cohen & Sayag (2010), management support is the support towards internal audit activity programs or such support in assuring that the internal auditing has enough resources required to perform all of its activities. This is in accordance with the argument from Mihret, et al., (2010) on support, i.e., adequate human and material resource allocation and other forms of coordination with auditees so that a good collaboration with internal auditors could be established during internal audit work.

Management support towards internal auditing is the management viewpoint onto internal audit entity (Sarens & De Beelde, 2006a). When audit entity has an excellent work performance—i.e., unbiased, competent, and credible—, the resulted recommendation will also have a good quality, able to solve problems, and create improvement. This will grow trust in the management team so that they will support internal audit entity. Therefore, legitimacy of internal audit activity and mission has to be well understood and supported by the senior management of government bodies in order to improve effectiveness in creating good governance, control, and risk management system (Asare, 2009).

Entity leader support implies a support from the internal audit entity's top management in any form which could be used in assuring the smoothness of internal audit task and responsibility execution. AAIFI's Internal Audit Standards have decreed that the internal audit entity leader shall communicate and ask for approval of annual internal audit activity to the head of ministry/institution/local government (2014b). This is the early step of supporting the internal audit entity. The presence of well designed activity planning combined with support in terms of human resource, funding, or facilities will smooth the internal auditing process. Other kinds of support from government/ local government may take a form of audit charter.

## Hypotheses

### *Auditors' Professional Expertise and Government Internal Audit Effectiveness*

Professional expertise e.g., professional competence and thoroughness, according to AAIFI's Internal Audit Standards, are required to be possessed by internal auditors in order to perform their duties and responsibilities (2014b). Audit competence can be in form of formal education, knowledge, experience, skills in terms of auditing and others. Meanwhile, professional thoroughness can be in form of watchfulness, professional scepticism, and due professional care. These two will collectively form a professional competence or expertise which will enable auditors to effectively perform their duties and responsibilities.

With professional expertise, especially in terms of internal auditing, auditors will be able to perform their duties professionally so that the audit will end up in optimum result. The result will latter be followed up by the auditees and thus, it will give an improving impact to the audited organization or institution. If the expected result can be generated, then the audit internal can be considered as effective. As such, the better the auditors' professional expertise is, the more effective the internal audit would be.

Professional expertise in terms of auditors' qualification, development, and trainings contributes to internal audit effectiveness improvement (Al-Twajry, et al., 2003). This is supported by Zain, et al., (2006) and Mihret & Yismaw (2007) who argue that besides those three mentioned, internal audit staffs' expertise and minimum rotation also positively contribute to the effectiveness. According to Arena & Azzone (2009), auditors' competence will improve internal audit team because the team will get recognition form the audited organization. Based on these analyses, a hypothesis can be drawn as follows,

**H<sub>1</sub>** : *Auditors' professional expertise positively affects government internal audit effectiveness*

### *Quality of Internal Audit Work and Government Internal Audit Effectiveness*

The quality of internal audit work can be observed from audit planning, audit scope, audit authority, and supervision of the audit follow-up implementation based on audit recommendation. This is clarified in the AAIFI's Internal Audit Standards which decree that internal audit entity leader shall manage internal audit activity e.g., designing annual internal audit plan, manage resources, making policies as well as procedures, and ensuring that the internal audit activities add values to the auditees.

Auditors shall pay attention into the quality of internal audit work and other works under their responsibilities. This is crucial because every work done will generate a recommendation which will be followed by the auditees to improve their organization. Maintaining quality also means maintaining the credibility and trust earned from the auditee. This will contribute into effective internal audit as assurance activities, consulting activities, and anti-corruption activities

Cohen & Sayag (2010) also argue that the quality of internal audit work has a correlation or a relationship with internal audit effectiveness. One of many factors affecting internal audit effectiveness is its quality shown by its capability to provide useful findings and recommendation to the auditees (Mihret & Yismaw, 2007). Based on these analyses, a hypothesis can be drawn as follows,

**H<sub>2</sub>** : *Quality of internal audit work positively affects government internal audit effectiveness*

*Audit Entity Organization's Independence and Government Internal Audit Effectiveness*

Independence implies liberty, unboundness, and no side-taking. For auditors, independence means taking no side (Singgih & Bawono, 2010), performing duties without influenced by any party's interest whatsoever, and being liberated from strong economic ties between auditor and auditee which may influence auditors' judgement on issues detected from the auditees (Zhang, et al., 2007). This is consistent with AAPI's Internal Audit Standards which govern that internal auditors and internal audit activities shall be independent and that the execution of internal auditing shall be objective (2014b). As such, independence is not only to be hold by auditors per se, but also by the internal audit entity in performing its responsibilities. It is further clarified in the standards that internal auditors' position is to be set as such that they shall be liberated form any intervention, fully supported by ministries/institutions/local governments, and that the internal audit entity shall be active and fully responsible for the independence held by the entity it supervises (2014b).

Auditors who can manage to defend their independence will have their credibility unquestioned. In normal circumstances, the stakeholders will fully trust the recommendation resulted and will follow it. This implies that the internal audit can give positive impact towards auditees' improvement and thus can be perceived as effective.

Independence affects internal audit effectiveness (Cohen & Sayag, 2010; Mihret, et al., 2010). Furthermore, D'Onza, et al., (2015) also found that internal auditors' independence gives a positive impact into internal audit capability in adding values to the audited organization. Based on these analyses, a hypothesis can be drawn as follows,

**H<sub>3</sub>** : *Audit entity organization's independence positively affects government internal audit effectiveness*

*Auditors' Carrer and Advancement and Government Internal Audit Effectiveness*

Career and advancement are organization's policy to make internal audit entity an attempt in educating or training employees who will later be promoted for managerial positions. The case in the government in which staffs are transfered from internal audit entity to certain positions in ministries/institutions/local government serves as an example of how the policy of career and advancement is implemented in public sector.

This policy has two impacts. First, internal auditors will have a personal motivation to perform their duties excellently so that their work will yield an optimum result. Second, the knowledge and experience earned by internal auditors during their auditing work will contributes to improvements in the government so the government body in which the auditors will be positioned will function more accordingly to the valid regulations and standards.

This policy of career and advancement has been widely practiced inside many firms in Singapore (Goodwin & Yeo, 2001). Being first positioned as internal auditors, newly hired employees will learn what exactly an organization is, its business process, flaws which may occurs within it, and how to fix them. In other words, the employees will learn and understand how an organization is managed and controlled (Cohen & Sayag, 2010). Based on these analyses, a hypothesis can be drawn as follows,

**H<sub>4</sub>** : *Auditors' career and advancement positively affects government internal audit effectiveness*

#### *Internal Audit Entity Leader Support and Government Internal Audit Effectiveness*

One of many factors determining the success of an internal auditing is the support from entity leader. The support can be in form of funding (Cohen & Sayag, 2010), or adequate human resource allocation (Mihret, et al., 2010).

AAPI's Internal Audit Standards clarified that internal audit entity leader support can be in several forms, e.g., internal audit entity leader shall manage required resources—funding, human resources, or equipments—, internal audit entity leader shall make policies and procedures to ensure that all internal audit activities are performed effectively, internal audit entity leader shall design a program to develop and assure internal audit quality—e.g., internal evaluation on auditors' performance based on audit standards and auditors' code of ethics (2014b).

Internal auditing cannot be properly performed without support from entity leader, both in form of adequate funding and in form of proper facilities. Furthermore, support can also be in form of physical and mental security for internal auditors so that the auditors will face no burden outside their scope of assignment. With such support, auditors will perform their duties excellently so that good recommendation will be generated and the recommendation will add values to the auditees.

Top management support significantly affects to internal audit effectiveness (Cohen & Sayag, 2010). This is supported by Mihret, et al., (2010) by arguing that adding management support in form of human resource allocation and adequate material will affect internal audit effectiveness. Based on these analyses, a hypothesis can be drawn as follows,

**H<sub>5</sub>** : *Entity leader support positively affects government internal audit effectiveness*

## **Research Methodology**

### *Research Population and Sample*

The population in this research is all functional officials working for BPKP (3,786 personnel) in 34 BPKP offices (a head office and 33 branch offices) in Indonesia. The sample size is determined according to Sekaran & Bougie (2013) i.e., if the population reaches 4,000, the ideal sample size would be 351. Samples were chosen based on simple random sampling method. 385 samples were successfully collected, thus meets the ideal sample size.

### *Data and Data Sources*

This research uses primary data directly collected from the source using questionnaire distributed through post mail. 700 questionnaires were sent in case some are damaged or unreturned. 405 questionnaires were collected but 20 of which were damaged or not fully filled thus cannot be processed. Hence, 385 questionnaires were processed, a 55% of all questionnaires distributed.

### *Operational Definition and Variable Measurement*

In this research, the operational definition of the variables is based on previous research by Cohen & Sayag (2010) as tabulated in the following table. 1

**Table 1**  
**Variables and Operational Variables**

<b>NO.</b>	<b>VARIABLE</b>	<b>DEFINITION</b>	<b>DIMENSION</b>	<b>VARIABLE</b>
1.	EFKTV*	Government internal audit effectiveness	Audit Quality (20 questions) Auditee's evaluation (11 questions) Additional contribution of internal audit (5 questions)	Dependent
2.	AHLI*	Internal auditors' professional expertise	Auditors' formal education and trainings (2 questions)	Independent
3.	KLTS*	Quality of Internal Audit Work	Internal audit planning and scope (4 questions) Auditors' and auditees' response on audit result (2 questions)	Independent
4.	INDP*	Internal audit organization's independence	Work relationship within internal audit entity (3 questions) Work relationship with the auditees (6 questions)	Independent
5.	KRIR*	Internal auditors' career and advancement	Trainings, promotions, and employee career development (3 questions)	Independent
6.	DKGN*	Internal audit entity leader support	Facility and funding support (4 questions)	Independent
7.	GEO	Auditor's geographical location	1 = Java, 0 = Outside Java	Control
8.	GDR	Auditor's sex	1 = Male, 0 = Female	Control
9.	PDK	Auditor's current degree in formal education	1 = Bachelor, 0 = Non-Bachelor	Control
10.	JFA	Auditor's functional position	1 = Expert auditor, 0 = Skilled auditor	Control

*\*Source: Cohen & Sayag (2010) with adjustments according to regulations and real condition in Indonesia*

As can be seen from Table 1, the dependent variable used in this research is internal audit effectiveness and the independent variables used are professional expertise, quality of audit work, organization's independence, career and advancement, and support from internal audit

entity leader. One variable from the research of Cohen & Sayag (2010) went unused i.e., internal audit sector. This is because in their research, internal audit sector is classified into two—public sector and private sector—whereas this research only investigates public sector. Dependent and independent variables were measured using 4-points likert scale (1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree).

In this research, 4 control variables are added i.e., geographical location, sex, current degree in formal education, and functional position. These variables are categorial and denoted with either 1 or 0 to measure each category.

#### *Data Analysis Method*

This reserach uses multiple linear regression model to analyze data and to see the relationship how independent variables affect the dependent variable. Also, additional tests were performed to observe the interaction between independent variables and the dependent variable.

The multiple linear regression equation in this reserach is expressed as follows,

$$EFKTV = \alpha + \beta_1AHLI + \beta_2KLTS + \beta_3INDP + \beta_4KRIR + \beta_5DKGN + \beta_6GEO + \beta_7GDR + \beta_8PDK + \beta_9JFA$$

Notation:

EFKTV	: Internal audit effectiveness
$\sigma$	: Constant
$\beta_1, \beta_2 \dots \beta_3$	: Regression coefficients
AHLI	: Professional expertise
KLTS	: Quality of internal audit work
INDP	: Organization's independence
KRIR	: Career and advancement
DKGN	: Internal audit leader support
GEO	: Internal auditor's geographical location
GDR	: Internal auditor's sex
PDK	: Internal auditor's current degree in formal education
JFA	: Internal auditor's functional position

#### **Data Analysis Result**

##### *Respondents Details*

Male respondents make up the majority of respondents in this research i.e., 266 respondents or 69.09%. When seen from the office level, most respondents are from BPKP's head office counting up to 46 respondents or 12.21% from the total respondents. However, when seen from geographical category, the majority of respondents are from outside Java i.e., 263 respondents or 68.31%.

Based on degree in formal education, the majority of respondents hold a bachelor degree i.e., 249 respondents or 64.67% and the rest sum up to 136 respondents or 35.33%. Based on functional position, the majority of respondents are classified as expert i.e., 237 respondents or 61.56%.



**Table 2**  
**Respondents Details**

No	Details	Category	Sum	Percentage
1.	Auditor's geographical location	Java	122	31,69%
		Outside Java	263	68,31%
2.	Auditor's sex	Male	266	69,09%
		Female	119	30,91%
3.	Auditor's current degree in formal education	Bachelor	249	64,67%
		Non-Bachelor	136	35,33%
4.	Auditor's functional position	Expert auditor	237	61,56%
		Skilled auditor	148	38,44%

*Validity and Reliability Testing*

Questionnaire validity testing was performed using Pearson Correlation for each questionnaire item from each variable. Results show that there is one invalid questionnaire item which needs to be removed from the hypotheses testing.

The reliability testing results show that the value of Cronbach's alpha from all dependent and independent variables are in a range of 0.616-0.945 which is greater than 0.60. This indicates consistency within respondents' responses and thus the responses is reliable for hypotheses testing (Ghozali, 2006).

*Descriptive Statistics and Data Correlation*

The mean of internal audit effectiveness variable is 3.0075 and its standard deviation is 0.2987, the lowest compared to other variables'. This is because the responses are mostly in between disagree and agree i.e., 259 respondents or 67.30%.

The mean of career and advancement variable is the lowest of all variables' at 2.7735 and its standard deviation is the highest of all variables' at 0.5025. This is because the responses are mostly in between disagree and agree i.e., 333 respondents or 86.5%. Meanwhile, the mean of professional expertise variable is the highest of all variables' at 3.2974 and its standard deviation is 0.4913. This is because the responses are mostly in between agree and strongly agree i.e, 354 respondents or 91.90%.

The descriptive statistics and data correlation are shown in the Table 3 as follows,

**Table 3**  
**Data Description and Correlation**

	EFKT V	AHLI	KLT S	INDP	KRI R	DKG N	GEO	GDR	PDK	JFA
<b>N</b>	385	385	385	385	385	385	385	385	385	385
<b>MIN</b>	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
<b>MAX</b>	4.0	4.0	4.0	4.0	4.0	4.0	1.0	1.0	1.0	1.0
<b>MEA</b>		3.297	2.996		2.773	2.340	0.316	0.690	0.646	0.615
<b>N</b>	3.0075	4	6	2.8883	5	5	9	9	8	6
<b>MED</b>	3.0	3.5	3.0	2.9	3.0	3.0	0.0	1.0	1.0	1.0
<b>STD</b>		0.491	0.368		0.502	0.462	0.465	0.462	0.478	0.487
	0.2987	3	1	0.3321	5	6	9	7	6	1

<b>EFKT</b>	1								
<b>V</b>									
<b>AHLI</b>	<b>0.488<sup>a</sup></b>	1							
	0.000								
<b>KLTS</b>	<b>0.593<sup>a</sup></b>	<b>0.499<sup>a</sup></b>	1						
	0.000	0.000							
<b>INDP</b>			<b>0.610</b>						
	<b>0.564<sup>a</sup></b>	<b>0.427<sup>a</sup></b>	<sup>a</sup>	1					
	0.000	0.000	0.000						
<b>KRIR</b>			<b>0.266</b>						
	<b>0.443<sup>a</sup></b>	<b>0.266<sup>a</sup></b>	<sup>a</sup>	<b>0.408<sup>a</sup></b>	1				
	0.000	0.000	0.000	0.000					
<b>DKG</b>			<b>0.426</b>		<b>0.390</b>				
<b>N</b>	<b>0.560<sup>a</sup></b>	<b>0.434<sup>a</sup></b>	<sup>a</sup>	<b>0.495<sup>a</sup></b>	<sup>a</sup>	1			
	0.000	0.000	0.000	0.000	0.000				
<b>GEO</b>			-		-	-			
			<b>0.094</b>		<b>0.027</b>	<b>0.125</b>			
	<b>-0.128<sup>b</sup></b>	<b>-0.043<sup>c</sup></b>	<sup>c</sup>	<b>-0.077</b>		<sup>b</sup>	1		
	0.012	0.400	0.065	0.132	0.591	0.014			
<b>GDR</b>					-	-			
	<b>0.009</b>	<b>0.062</b>	<b>0.015</b>	<b>-0.020</b>	<b>0.073</b>	<b>0.001</b>	<b>0.009</b>	1	
	0.855	0.227	0.765	0.693	0.151	0.985	0.867		
<b>PDK</b>					<b>0.062</b>		-	-	
						<b>0.108</b>	<b>0.127</b>	<b>0.106</b>	
	<b>0.121<sup>b</sup></b>	<b>0.177<sup>a</sup></b>	<b>0.030</b>	<b>-0.008</b>		<sup>b</sup>	<sup>b</sup>	<sup>b</sup>	1
	0.018	0.000	0.555	0.875	0.227	0.034	0.012	0.037	
<b>JFA</b>					<b>0.032</b>		-		
						<b>0.103</b>	<b>0.104</b>	-	<b>0.935</b>
	<b>0.122<sup>b</sup></b>	<b>0.180<sup>a</sup></b>	<b>0.038</b>	<b>0.006</b>		<sup>b</sup>	<sup>b</sup>	<b>0.089<sup>c</sup></b>	<sup>a</sup>
	0.017	0.000	0.460	0.907	0.535	0.044	0.041	0.079	0.000

AHLI = Professional Expertise, KLTS = Quality of Audit Work, INDP = Organization's Independence, KRIR = Career and Advancements, DKGN = Leader Support, GEO = Geographical Location, GDR = Sex, PDK = Educational Degree, JFA = Auditor's Functional Position;

**Dependent Variable = Government Internal Audit Effectiveness (EFKTV)**

<sup>a</sup> Significant at 0,01, <sup>b</sup> Significant at 0,05, <sup>c</sup> Significant at 0,1

Based on the table above, the quality of audit work variable has a mean and a standard deviation value of 2.9966 and 0.3681 respectively with the majority of response in between disagree and agree i.e, 270 respondents or 70.10%. The organization's independence variable has a mean and a standard deviation value of 2.8883 and 0.3321 respectively. Its standard deviation is the lowest of all variables'. This is because the responses are not really diversified with the majority of responses in between disagree and agree, i.e., 302 respondents or 78.40%.

Meanwhile, audit entity leader support variable has a mean and a relatively high standard deviation value of 2.8405 and 0.4626 with the majority of response in between disagree and agree i.e, 307 respondents or 82.30%. Correlation testing was performed using Pearson Correlation. As shown in Table 3, the relationship between independent and dependent variable is strong and directly proportional because the correlation value is nearing +1. The value of sig. is lower than 0.05. This indicates a significant relationship between independent variable and dependent variable in the research.

*Data Classical Assumptions Testing*

The classical assumptions testing performed in this research is normality testing and multicollinearity testing. The data normality testing was performed using One-Sample Kolmogorov-Smirnov and the multicollinearity testing was performed by observing the tolerance and VIF value. Testing results show that the data are free from all classical assumptions.

*Hypotheses Testing*

Results show that F significance for all regression are below 0.05 indicating that all fit regression equation can be used in the testing. The testing results also show that the mean value for adjusted r-square from regression 1-5 is 29.04 indicating that the independent variables of professional expertise, quality of audit work, organization’s independence, career and advancement, and internal audit entity leader support can adequately explain the variable of government internal audit effectiveness. The results are tabulated in the following table,

**Table 4**  
**Multiple Linear Regression Result**

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>AHLI</b>	<b>10.57</b> 9 <sup>a</sup> 0.292					<b>2.723</b> a 0.072
<b>KLTS</b>		<b>14.20</b> 3 <sup>a</sup> 0.474				<b>6.188</b> a 0.238
<b>INDP</b>			<b>13.35</b> 7 <sup>a</sup> 0.504			<b>2.901</b> a 0.128
<b>KRIR</b>				<b>9.707<sup>a</sup></b> 0.263		<b>4.953</b> a 0.110
<b>DKGN</b>					<b>12.75</b> 5 <sup>a</sup> 0.353	<b>5.236</b> a 0.148
<b>GEO</b>	<b>-2.330</b> -0.067	<b>-1.473</b> -0.039	<b>-1.651</b> -0.045	<b>-2.353</b> -0.069	<b>-1.239</b> -0.034	<b>-</b> - 0.029
<b>GDR</b>	<b>-0.390</b> -0.011	<b>0.264</b> 0.007	<b>0.805</b> 0.022	<b>1.096</b> 0.032	<b>0.366</b> 0.010	<b>0.545</b> 0.013
<b>PDK</b>	<b>-0.063</b> -0.005	<b>0.552</b> 0.040	<b>0.867</b> 0.064	<b>-0.596</b> -0.048	<b>-0.085</b> -0.006	<b>-</b> - 0.003
<b>JFA</b>	<b>2.243</b> 0.019	<b>0.298</b> 0.021	<b>0.153</b> 0.011	<b>1.349</b> 0.106	<b>0.595</b> 0.044	<b>0.604</b> 0.037
<b>F-Value</b>	<b>25.28</b> 6	<b>43.77</b> 8	<b>38.97</b> 8	<b>21.64</b> 4	<b>35.74</b> 3	<b>47.90</b> 7

<b>Sig</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
<b>R<sup>2</sup></b>	0.250	0.366	0.340	0.222	0.320	0.535
<b>Adj R<sup>2</sup></b>	0.240	0.358	0.331	0.212	0.311	0.524
<b>N</b>	385	385	385	385	385	385

*AHLI = Professional Expertise, KLTS = Quality of Audit Work, INDP = Organization's Independence, KRIR = Career and Advancements, DKGN = Leader Support, GEO = Geographical Location, GDR = Sex, PDK = Educational Degree, JFA = Auditor's Functional Position;*

***Dependent Variable = Government Internal Audit Effectiveness (EFKTV)***

<sup>a</sup> Significant at 0,01

Table 4 indicates that the variables of professional expertise, quality of audit work, organization's independence, career and advancement, and internal audit entity leader individually (regression 1-5) and collectively (regression 6) affects internal audit effectiveness positively and consistently. This is because the sig. value for every variable is below 1%, 5%, and 10%. Therefore, all hypotheses tested in this research are accepted.

Professional expertise can improve internal audit effectiveness. If the government internal auditors possess professional expertise that is consistent with their work scope, they can professionally function as government internal supervisors and can ensure that the auditing process professionally executed. This finding supports the findings of Al-Twajjry, et al., (2003), Mihret & Yismaw (2007), and Arena & Azzone (2009).

The quality of audit work can be in form of good planning and good responses toward auditing in terms of follow-up execution supervision and continuous auditing. If the audit results have good quality and are followed up, the internal auditing will add values to the auditees. Therefore, the quality of audit work affects internal audit effectiveness. This finding is consistent with that of Mihret & Yismaw (2007).

Internal audit organization independence assures public credibility and trust towards audit results. Independent auditors execute audits based on real facts so that the audit results would be valid. Hence, organization's independence affects internal audit effectiveness. This finding supports that of Cohen & Sayag (2010), Mihret, et al., (2010), and D'Onza, et al., (2015).

The policy of career and advancement affects government internal audit in Indonesia. Auditors' background combined with experience, knowledge, and understanding of the organization and regulation will give a positive impact towards the institution, in other words, will add values to the auditees.

The execution of internal auditing requires support from entity leader both in terms of funding or other facilities. Adequate support will enable the auditors to perform excellently so that the results will also have good quality. Therefore,—consistent with the finding of Cohen & Sayag (2010) and Mihret, et al., (2010)—support from entity leader affects internal audit effectiveness.

*Hypotheses Testing (advanced analysis)*

The testing results indicates existing effects from the interaction between two independent variables and a dependent variable individually and collectively. Within all regressions (7-26), the significance of F-test is 0.000 (lower than 5%), indicating that all regression equations used are fit. Furthermore, the adjusted r-square values for the regressions are greater than those of the main testing. This indicates that the adding of interacting variable

among variables in the regression model can enhance how variation explanations of the dependent variable. Thus, the equation with interacting variable more fit. The extended analysis testing results below indicates that the two-variable interactions in regression 8, 16, 20, and 26 are significant towards the dependent variable.

**Table 5**  
**Multivariate (2 Variables)**

	7	8	9	10	11	12	13	14
<b>AHLI</b>	<b>5.229<sup>a</sup></b>	<b>4.546<sup>a</sup></b>	<b>6.347</b> a	<b>2.828</b> a	<b>8.852</b> a	<b>3.12</b> 4 <sup>a</sup>	<b>6.630</b> a	<b>1.98</b> 4 <sup>b</sup>
	0.148	0.539	0.174	0.323	0.235	0.24	0.182	0.16
<b>KLTS</b>	<b>10.07</b> 5 <sup>a</sup>	<b>5.920<sup>a</sup></b> 0.841				8		2
<b>INDP</b>	0.376		<b>9.845</b> a	<b>4.121</b> a				
			0.393	0.572				
<b>KRIR</b>					<b>7.868</b> a	<b>2.07</b> 2 <sup>b</sup>	0.21	
					0.202	9		
<b>DKGN</b>							<b>9.360</b> a	<b>2.39</b> 2 <sup>b</sup>
							0.271	6
<b>AHLI*KL TS</b>		- <b>3.389<sup>a</sup></b> -0.136						
<b>AHLI*IND P</b>				- <b>1.346</b> -				
				0.055				
<b>AHLI*KRI R</b>						- <b>0.16</b> 3		
						- 0.00		
<b>AHLI*DK GN</b>						5		<b>0.26</b> 2
								0.00
<b>GEO</b>								8
	<b>-1.667</b>	<b>-1.800</b>	- <b>1.825</b>	- <b>1.872</b>	- <b>2.418</b>	- <b>2.41</b> 8	- <b>1.495</b>	<b>1.46</b> 9
						- 0.06		- 0.03
<b>GDR</b>	-0.043	-0.046	0.047	0.048	0.065	5	0.039	9
	<b>-0.166</b>	<b>0.078</b>	<b>0.200</b>	<b>0.272</b>	<b>0.293</b>	<b>0.30</b>	-	-

						7	0.178	0.210
						0.00	-	0.00
	-0.004	0.002	0.005	0.007	0.008	8	0.005	6
<b>PDK</b>						-	-	-
						0.69	-	0.20
	<b>0.338</b>	<b>0.165</b>	<b>0.571</b>	<b>0.514</b>	<b>0.699</b>	<b>6</b>	<b>0.213</b>	<b>5</b>
						-	-	-
						0.05	-	0.01
<b>JFA</b>	0.024	0.011	0.040	0.036	0.051	1	0.015	5
	<b>0.156</b>	<b>0.307</b>	<b>0.005</b>	<b>0.045</b>	<b>0.930</b>	<b>2</b>	<b>0.357</b>	<b>5</b>
						0.06		0.02
	0.011	0.021	0.000	0.003	0.067	7	0.025	4
	<b>43.57</b>	<b>40.02</b>	<b>42.56</b>	<b>36.81</b>	<b>34.77</b>	<b>29.7</b>	<b>40.48</b>	<b>34.6</b>
<b>F-Value</b>	<b>5</b>	<b>7</b>	<b>1</b>	<b>7</b>	<b>6</b>	<b>35</b>	<b>8</b>	<b>28</b>
						<b>0.00</b>		<b>0.00</b>
<b>Sig</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0</b>	<b>0.000</b>	<b>0</b>
						0.35		0.39
<b>R<sup>2</sup></b>	0.409	0.426	0.403	0.406	0.356	6	0.391	1
						0.34		0.38
<b>Adj R<sup>2</sup></b>	0.399	0.416	0.394	0.395	0.345	4	0.382	0
<b>N</b>	385	385	385	385	385	385	385	385

AHLI = Professional Expertise, KLTS = Quality of Audit Work, INDP = Organization's Independence, KRIR = Career and Advancements, DKG N = Leader Support, GEO = Geographical Location, GDR = Sex, PDK = Educational Degree, JFA = Auditor's Functional Position;

**Dependent Variable = Government Internal Audit Effectiveness (EFKTV)**

<sup>a</sup> Significant at 0,01, <sup>b</sup> Significant at 0,05, <sup>c</sup> Significant at 0,1

**Table 5 (extension 1)  
Multivariate (2 Variables)**

	15	16	17	18	19	20
<b>AHLI</b>						
<b>KLTS</b>	<b>7.867<sup>a</sup></b>	<b>4.317<sup>a</sup></b>	<b>12.618<sup>a</sup></b>	<b>4.394<sup>a</sup></b>	<b>10.447<sup>a</sup></b>	<b>4,828<sup>a</sup></b>
	0.313	0.623	0.407	0.480	0.351	0,584
<b>INDP</b>	<b>6.651<sup>a</sup></b>	<b>4.109<sup>a</sup></b>				
	0.293	0.609				
<b>KRIR</b>			<b>7.732<sup>a</sup></b>	<b>2.159<sup>b</sup></b>		
			0.183	0.268		
<b>DKGN</b>					<b>8.741<sup>a</sup></b>	<b>3,814<sup>a</sup></b>
					0.235	0,484
<b>KLTS*INDP</b>		<b>-2.232<sup>b</sup></b>				
		-0.106				
<b>KLTS*KRI</b>				<b>-0.701</b>		

<b>R</b>						
					-0.028	
<b>KLTS*DKGN</b>						<b>-2,008<sup>b</sup></b>
						-0,083
<b>GEO</b>	<b>-1.349</b>	<b>-1.470</b>	<b>-1.644</b>	<b>-1.640</b>	<b>-0.892</b>	<b>-0,995</b>
	-0.034	-0.037	-0.041	-0.041	-0.022	-0,024
<b>GDR</b>	<b>0.558</b>	<b>0.617</b>	<b>0.847</b>	<b>0.859</b>	<b>0.264</b>	<b>0,487</b>
	0.014	0.015	0.021	0.021	0.006	0,012
<b>PDK</b>	<b>0.864</b>	<b>0.786</b>	<b>-0.134</b>	<b>-0.159</b>	<b>0.271</b>	<b>0,162</b>
	0.059	0.054	-0.009	-0.011	0.018	0,011
<b>JFA</b>	<b>0.117</b>	<b>0.137</b>	<b>0.955</b>	<b>0.977</b>	<b>0.366</b>	<b>0,433</b>
	0.008	0.009	0.063	0.065	0.024	0,028
<b>F-Value</b>	<b>48.014</b>	<b>42.301</b>	<b>52.104</b>	<b>44.671</b>	<b>56.475</b>	<b>49,371</b>
<b>Sig</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0,000</b>
<b>R<sup>2</sup></b>	0.433	0.440	0.453	0.453	0.473	0,478
<b>Adj R<sup>2</sup></b>	0.423	0.430	0.444	0.443	0.464	0,469
<b>N</b>	385	385	385	385	385	385

*AHLI = Professional Expertise, KLTS = Quality of Audit Work, INDP = Organization's Independence, KRIR = Career and Advancements, DKGN = Leader Support, GEO = Geographical Location, GDR = Sex, PDK = Educational Degree, JFA = Auditor's Functional Position;*

***Dependent Variable = Government Internal Audit Effectiveness (EFKTV)***

*<sup>a</sup> Significant at 0,01, <sup>b</sup> Significant at 0,05, <sup>c</sup> Significant at 0,1*

**Table 5 (extension 2)  
Multivariate (2 Variables)**

	21	22	23	24	25	26
<b>AHLI</b>						
<b>KLTS</b>						
<b>INDP</b>	<b>10.299<sup>a</sup></b>	<b>4.430<sup>a</sup></b>	<b>8.609<sup>a</sup></b>	<b>2.928<sup>a</sup></b>		
	0.409	0.500	0.347	0.377		
<b>KRIR</b>	<b>5.741<sup>a</sup></b>	<b>2.047<sup>b</sup></b>			<b>6.156<sup>a</sup></b>	<b>-0.099</b>
	0.151	0.256			0.162	-0.009
<b>DKGN</b>			<b>7.834<sup>a</sup></b>	<b>2.030<sup>b</sup></b>	<b>9.903<sup>a</sup></b>	<b>1.511</b>
			0.229	0.259	0.284	0.128

<b>INDP*KRI</b>	<b>-0.858</b>					
<b>R</b>						
<b>INDP*DKG</b>				<b>-0.243</b>		
<b>N</b>						
<b>KRIR*DK</b>						<b>1.950</b>
<b>GN</b>						<sup>c</sup>
						0.061
<b>GEO</b>	<b>-1.820</b>	<b>-1.811</b>	<b>-1.112</b>	<b>-1.120</b>	<b>-1.477</b>	<b>-</b>
						<b>1.494</b>
<b>GDR</b>	<b>1.191</b>	<b>1.231</b>	<b>0.675</b>	<b>0.694</b>	<b>0.847</b>	<b>0.625</b>
	0.031	0.032	0.017	0.018	0.022	0.017
<b>PDK</b>	<b>0.245</b>	<b>0.191</b>	<b>0.493</b>	<b>0.474</b>	<b>-0.589</b>	<b>-</b>
						<b>0.539</b>
<b>JFA</b>	<b>0.715</b>	<b>0.759</b>	<b>0.274</b>	<b>0.283</b>	<b>1.118</b>	<b>1.078</b>
	0.050	0.053	0.018	0.019	0.079	0.076
<b>F-Value</b>	<b>40.71</b>	<b>34.97</b>	<b>47.88</b>	<b>40.95</b>	<b>39.00</b>	<b>34.22</b>
	<b>3</b>	<b>8</b>	<b>5</b>	<b>1</b>	<b>3</b>	<b>2</b>
<b>Sig</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
<b>R<sup>2</sup></b>	0.393	0.394	0.432	0.432	0.382	0.389
<b>Adj R<sup>2</sup></b>	0.383	0.382	0.423	0.421	0.373	0.377
<b>N</b>	385	385	385	385	385	385

*AHLI = Professional Expertise, KLTS = Quality of Audit Work, INDP = Organization's Independence, KRIR = Career and Advancements, DKGN = Leader Support, GEO = Geographical Location, GDR = Sex, PDK = Educational Degree, JFA = Auditor's Functional Position;*

*Dependent Variable = Government Internal Audit Effectiveness (EFKTV)*

<sup>a</sup> Significant at 0,01, <sup>b</sup> Significant at 0,05, <sup>c</sup> Significant at 0,1

The tables above also show that there are two-variable interactions that are insignificant towards the dependent variable. This indicates that the independent variables used in this testing are sensitive when treated with interactions, meaning that the variables are possible to be further developed in the measurement of dependent variables.

### Discussions

Results show that all independent variables—i.e., professional expertise, quality of audit work, organization's independence, career and advancement, and internal audit entity leader—significantly affects government internal audit effectiveness in Indonesia. The first hypothesis (professional expertise) is accepted while proven to be significantly affecting the government internal audit in Indonesia. The expertise implies the competence individually possessed by the auditors. In the context of auditing, this is commonly evidenced by certain



formal education degree or certain training certifications. The broader the auditors' knowledge, the higher the auditors' formal education degree, and the more trainings the auditors attended, the better perspectives and knowledge on auditing the auditors would possess. Hence, the work done by the internal auditors would also have better quality. This finding is consistent with that of Al-Twajry, et al., (2003), Mihret & Yismaw (2007), and Arena & Azzone (2009).

The quality of audit work refers to how well the auditors' responded on the auditing performed as well as how obedient the auditors are to the established standards. The quality of internal audit work demands the internal auditing to have good planning, significant scope for auditees, and good response towards the auditing process both in terms of follow up supervision and in terms of continuous auditing. Also, the auditors are expected to act as consultants to the auditees. If done well, the internal auditing will be effective. Thus, the second hypothesis is accepted in this research. This finding supports that of Mihret & Yismaw (2007).

The results also show that the third hypothesis is accepted. This indicates that internal audit organization's independence is important and significant to internal audit effectiveness especially in terms of providing assurance services. Unindependent auditors will tend to conceal facts outside auditees' interest or will try to make them insignificant so that other parties will also conceive them as being so. This will make the audit results invalid and will make the auditing ineffective. This finding supports that of Cohen & Sayag (2010), Mihret *et al.* (2010) and D'Onza, et al., (2015) which shows that independence significantly affects internal audit effectiveness even though, with regards to internal audit function outside assurance services—e.g., consulting services—, independence is not really considered important

The fourth hypothesis (career and advancement) is also accepted while proven significantly affecting government internal audit effectiveness in Indonesia. Based on simple logics, public officials from internal audit entity will have a good understanding of the institution in which they are positioned i.e., what is good and bad, what is to be improved, and how to fix it. Therefore, an official's career started from an internal audit entity will have a positive impact towards the organizations. This indicates that the internal auditing has been effective.

In performing internal audit activities, support from entity leader is really needed, both in form of physical and non-physical support. Physical support can be in form of funding or facilities and non-physical support can be in form of psychological security and convenience for the auditors in performing their duties. Absence of such support will auditors' performance and can even lead to fraud. This will make the result cannot be accounted for, will have a negative impact towards the auditees, and will make the internal auditing ineffective. Results show that the fifth hypothesis in this research is accepted for the support from entity leader significantly affects government internal audit in Indonesia. This finding supports that of Cohen & Sayag (2010) and Mihret, et al., (2010).

Results from testing the two-variable interaction between professional expertise variable and quality of audit variable indicates a significant influence to government internal audit effectiveness. Professional expertise in terms of technical competence is required for the auditors to perform the auditing process. This is also the case for quality of audit work which refers to audit planning and responses towards audit result. Auditors possessing excellent expertise and who are able to design a good audit planning will execute the auditing in a most optimum way.

A significant influence is also shown in the interaction between the quality of audit work and organization's independence. Independence will enable auditors to perform their duties according to existing facts, neutrally, and unbiasedly, so that the audit results will be free

from errors resulted by a particular party's interests. Independent auditors combined with good planning will assure the optimality of the auditing.

The interaction of quality of audit work and organization leader support also affects government internal audit effectiveness. Supports in form of funding or other resources can be very beneficial for auditors in performing their duties. An auditing performed with robust planning combined with full support from entity leader will be very effective and its results will become added values to the auditees.

The testing of two-variable interaction shows that the quality of internal audit work is one of many factors affecting internal audit effectiveness. The quality of audit work can be in form of audit planning and response towards audit results. This proves that the auditing performed is affected by how its planning is prepared and by what is to be done afterwards. Good responses towards the audit will guarantee the its recommendation will be executed so that it will become an improvement for the auditees.

### Conclusion, Implication, and Limitation

This research is aimed to identify factors affecting government internal audit effectiveness in Indonesia. Results from hypotheses testing show that professional expertise, quality of audit work, organization's independence, career and advancement, and support form audit entity leader positively affect government internal audit effectiveness in Indonesia. Professional expertise, quality of audit work, organization's independence, career and advancement, and support from the leader are important factors in achieving internal audit effectiveness. This makes it important for the internal audit entity to improve audit professional quality through formal education, continuous trainings, proper planning and audit follow-ups, independence from audited institution assuring, policy making on auditors' career for audited institution, and adequate funding and facility support.

This research also has a limitation i.e., the researchers cannot fully control the questionnaire filling, both in terms of respondents' understanding on every questionnaire item and responses verification. This is because respondents are officials still active in BPKP in every provinces in Indonesia. This creates a geographical barrier and furthermore, there is also a barrier on assignment time and other duties that the officials have to perform. Also, the independent variables used in this reserach can still be further explored both in terms of construct and in terms of questionnaire item because the testing results are still relatively sensitive when treated with interactions among independent variables.

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**FACTORS OF ORGANIZATIONAL DEVELOPMENT TO IMPLEMENT  
SECTORAL INTEGRATED REPORTING SYSTEMS  
(STUDY IN REGIONAL GOVERNMENT SOUTH KALIMANTAN)**

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**Abstract**

This study was conducted in accordance Research of Master Plan (RMP) of Lambung Mangkurat University Year 2011-2014, namely through leading sector of development information technology related to the sectoral of reporting wetland environment. For local governments, this study related to strategic issues related to the role of the Government in the AEC 2015, MDGs 2015, SDGs, where the presence of changes in the environment, including the globalization of the environment require organizational attitude to deal with it, so that, the role as "agents of development" can be maintained. Its objective is to identify the factors in the development of the organization of Regional Government through the strategic aspects, administrative, social, and techniques in the implementation of accrual based financial reporting system since in 2015. The study was conducted on 386 (three hundred and eighty six) population of Government Work Units (GWUs) or SKPD, with 100 (one hundred) GWUs (SKPD) sample. Uses of methods the chi-square tests for testing the differences and test for relationship of variables with C Contingency. Using the nominal measurement scale on aspects: (X1) Accrual reporting: All information for users, (X2) Computer Based Information Systems (CBISs): for sustainability and integrated reporting; (X3) Individual Ethical Intelligence: social intelligence; (X4) Organizational Intelligence: Organizational infrastructure; (X5) characteristic of Change: Personal Change, (X6) Institutional Isomorphism, (Y1) Implementation of integrated sectoral Reporting, with: (Y1.1.): The guiding principle, and (Y1.2) Content Element. The results show the X observation is = 24.512 and X in table = 41.34, showed no difference from the application of theory in the implementation of sectoral integrated reporting system. Implications of the role of theory can be met on a degree of freedom (5-1) (4-1) at the 0.05 alpha X value table = 21.03. Implications of the role of theory met through role aspects X1, X2, and X3, with the value of the relationship C Contingency 0.275. These aspects can distinguish of each Government Work Units as Leading sector of the Provincial / District / City in South Kalimantan, which is associated with their activity in reporting the object of integrated reporting sectoral, namely aspects of the: "capitals", with information : financial, manufactured, intellectual, human, social and relationship, and natural capital.

**Key words:** *Organizational Development, Reporting on an accrual basis, CBISs, Ethical Intelligence, and Characteristics of Change, sectoral integrated reporting.*

## Introduction

Implementation Government Accounting Standard (Government Regulation Number 71 Year 2010) since 2015, marking the adoption of the accrual system into financial reporting of the Indonesian government. This system provides development for for every regional government and central government to consolidate financial reporting as unity in financial reporting of Indonesian government. The implementation of the accounting system was needed in line with the effort to develop the organization to fulfill the System National of Accounts (SNA), as well as in the fulfillment of Government Financial Statistics (GFS). This GFS system puts the conception of the integration for : (i) the Accounting System of Central Government (ASCG ), (ii) the Accounting System of Regional Government (ASRG), (iii) Budgeting system, and (iv) accrual base for reporting system with reference Government Accounting Standard (Government Regulation No. 71 Year of 2010). Implementation of accounting systems and performance of information system is a system requirement in fulfilling a role model to the GFS and SNA systems. This is consistent with an effort to meet the needs the development for integrated accounting systems and the performance of information system between regional and central government.

The accounting system of governmental organization with the implementation of accrual reporting base was the representation of public sector organizations that are in financial accounting environment (Tearney et al., 1997). Parera and Baydoun (2007), describes The Accounting Ecology of Indonesia. The concept of ecology of accounting includes 5 (five) separate aspects but has parts that interact in the environment, namely: social, organizational, professional, individual, and accounting. Social environment refers to the structure of the elements of the economic system, political system, and the legal system, the element of cultural and non-cultural (geographic and demographic) in a society. The organizational or institutional environment refers to the size of the organization, technology, complexity and culture, human and capital resources. Professional environment refers to the various aspects of the profession, such as education, training, registration, discipline and ethics. Environment individually refers to the overall individual determination in respect of which reported of organization, professional and non-professional members of the other community. Environmental of accounting refers to the disclosure and measurement requirements and practices, the type and frequency of reporting accounting, and accounting infrastructure. All aspects of accounting environment underlying the establishment of the organization's policy in meeting the organization's financial accounting reporting practices, laying the basic mechanisms of audit control functions, as well as the identification of the needs of information users.

Based on activity of accounting and information system for financial reporting which has done by governmental organization is as the basis for meeting the information needs related to stakeholders who will use the information. The information which be produced of government consists of : position of economic resources, liabilities, and equity of Government at the end of the period, the information of economy, information adherence to rules, information about financial performance, information on planning and budgeting and narrative information about the financial and environment of organization (GAS, Government Regulation No. 71/2010). Meanwhile, to anticipate and responses global issues such as: AEC, MDGs, and SDGs be needed stages for "sustainability reporting" and towards initiative "integrated reporting" as idea of Global Reporting Initiative (GRI). Fulfillment of Global Reporting Initiative carried out with the support of financial information completeness that communicated which refers to the Government Accounting Standards (GAS) with accrual base of governmental organization.

Relationships of implementing of financial accounting and information system with accrual base was put forward in the context, in which accounting system and information system was designed to produce financial information for performance assessment. Based on “evolution on corporate reporting”, showed milestone of reporting system. Began in 1960 with Financial Statements, to year of 1980 with Financial statements, Management Commentary, Governance and Remuneration, environmental reporting, to year of 2000 with element of reporting, namely: Financial statements, Management Commentary, Governance and Remuneration, and sustainability reporting, and toward year of 2020 with initiative for sustainability reporting and integrated reporting or integrated reporting to be projected, namely financial information, governance and remuneration, sustainability information, and management commentary (IIRC, 2011, in IR, 2014, P: 5)

From financial reporting to sustainability reporting and toward integrated reporting. Until now, we can see, that “sustainability reporting is becoming a mainstream business practice. Sustainability reporting is the critical first step in implementing strategy that can help an organization understand the impact on its stakeholders, and ways in which it might mitigate a negative impact on the economy, society and the environment (GRI, 2013, p: 4). Meanwhile, Integrated reporting is a concept that has been created to better articulate the broader range of measures that contribute to long-term value and the role of organizations in society. Central to this thing is the proposition that its value is increasingly shaped by factors additional to financial performance, such as reliance on the environment, social reputation, human capital skills and others. This value creation concept is the backbone of integrated reporting and, and this is the direction for the future of corporate reporting. In addition to financial capital, integrated reporting also examines five additional capitals that should guide an organization’s decision-making and long-term success — its value creation in the broadest sense”. (IR/IIRC, 2014, p:1).

Efforts to reach the reporting of financial information and the economic aspects as well as aspects of the ESG, is a government organization's efforts to meet accountability and to be the global insightful organizations referring to global issues to fulfill sustainability reporting and towards integrated reporting as Global Reporting Initiative (GRI). Regional Government can take role as global insightful organizations through sustainable reporting toward integrated reporting. Based on support and because of readiness in implementation of financial reporting with accrual base. Reporting on GWUs and regional government (Provincial/District/City) has conformity with content element of the sustainability report, and the report to fulfill or conform with the integrated reporting criteria. All of types of information and the type of report that has been prepared Local Government has a complete type of information or report as classified in sustainability reporting (economic, environmental, social and governance) and also has similarity and completeness with allof information contents of integrated reporting, which consists of information about: financial, Manufacturing, Property Right, Human, Socio and relationship, and natural (Integrated Reporting, IIRC,2014).

The role of theoretical framework is required to fulfill of equality in relationship between “agent” and “principal”, whether the agent has acted appropriate and appropriate, because the agent has managerial opportunism. This concept describes the tendency of the attitude of behavior in specific actions to meet their own interests. This concept is a tool or a trigger that explains how and why the organization will ultimately have a tendency to move from diversity (diversity) to the level of equalization or similarity (similarity). This theory as a complement of the economic theory that has the common meaning (in general), and the special significance (particular) which was expressed as a resource dependency theory (Carpenter and Feroz, 2001: 565). Appropriate description of this

theory, the integration of institutional theory and the theory of resources dependency is to develop a theoretical framework that helps to explain, to control, and to predict an selection process in initiative implementation of GRI of Government with integrated reporting. Because this reporting system can achieve the accountability of economic resource allocation for organization and the impact for social welfare for citizens. Indeed, the whole point of a universal welfare policy is not to discriminate between citizens, not to separate "the needy" and "the poor" from other citizens and to treat them differently. Social policy should seek instead a moral obligation to furnish all citizens social welfare. Government performs the function and role in development by setting the budget framework through the state budget and the state budget, and regulatory frameworks in facilitating the role of private and community in development participation.

Focus on the main task to enhance social welfare and the to fulfill development objectives of global era, has raised the need in the development of organization of Indonesian government. This is done to fulfill the functions and role of development in accordance of Development Plan for long term, Medium Term Development Plan, Strategic Plan, the Regional Government Work Plan. This is related to the strategic aspects of the social dimension, administrative and technical organization. There are priorities and efforts to achieve the goal of social welfare linked to the global context namely AEC, MDGs and SDGs. In the infrastructure development of the organization, this thing referring to a way to be fulfilled that are met through the organization reporting system capacity.

Relevant mechanism of implementation of accounting system and information system of government refers to the state finance law and based on regulation (Government Regulation No. 71 of 2004); and other "ex ante" regulation, namely (Government regulation No 56 Year of 2005 About Regional Financial Information System, Government Regulation Number 8 Year of 2006 About Financial Reporting and Performance of Governmental Institution). For organizational development based on strategic approach with socio aspect, administrative aspect and technical aspect, can refers the theoretical aspects which can support to explain, to control and predict initiative for implementation of sectoral integrated reporting in Indonesia.

This study has conducted in assessment of the initiative for the implementation of sectoral of integrated reporting in government. Based on effort and role of the individual and organizational aspect of environment. Perspective of effort in initiative for integrated reporting is as contingency (Otley, 1980), because the result of this process be determined with many different aspects in every decision-making's environment be taken. There was perspective which describing that no information system that is universally applicable to all circumstances and at all locations of its application. This theory explains there are other situational factors that interact in influencing certain situations. Brownell (1982), and Govindarajan (1986), describe classification aspects of contingency and individual and organizational attributes as a variable that is contingency. The variables are expressed as contingency factors that influence the planning and control systems within the organization for government in Indonesia referring to organizational development to anticipate impact of globalization. Brownell (1982) suggested a variable contingency classification: culture, organizational (stability, environment, technology, uncertainty of tasks, organizational structure), interpersonal (leadership style, task characteristics, group characteristics, the situation, the pressure assignments, group size, and the fit between the individual with the task), personal (locus of control, authoritarian). Govindarajan (1986) argued contextual variables organizations and individuals that include the locus of control, leadership style, motivation, attitude, commitment, group characteristics, pressure duty (attributes of individual psychology), and the organizational structure, organizational culture, production technology,



market factors, environmental organization, compensation systems, strategies, difficulties in the task of contextual of organization.

Writing of this article based on the assessment which has done referring to theoretical aspects. (1) Accrual reporting: All information for users, (2) Computer Based Information Systems (CBISs): for sustainability and integrated reporting; (3) Individual Ethical Intelligence: social intelligence; (4) Organizational Intelligence: Organizational infrastructure; (5) characteristic of Change: Personal Change, (6) Institutional isomorphism, (7) Implementation of integrated sectoral Reporting, with: (7.1.): The guiding principle, and (7.2) Content Element.

Perspective of reporting with Accrual basis is to produces all of information for users. According to Law No. 17 of 2013 that the form and content of the report accountability of APBN / APBD prepared and presented in accordance with Accounting Standards in government (Article 32) The provisions concerning the recognition and measurement of the accrual basis of revenue and expenditure as Referred to in Article 1 point 13, 14, 15 and 16 of this law is implemented at the latest within 5 (five) years. During the recognition and measurement of revenue and expenditure accrual base has not been done, can be used cash basis for recognition and measurement (Article 36 paragraph 1). Preparation of the Government Accounting Standards (Government Regulation No. 24 year of 2005), then through Government Regulation No. 71 of 2010 concerning the Government Accounting Standards with accrual basis. Implementation of the accrual basis can be fully implemented since year of 2015.

Implementation Government Accounting Standard ( Government Regulation No. 71 year of 2010), is a part of financial accounting environment and also as part of accounting ecologi of Indonesia. Based on this standard the government of Indonesia has the guidelines for implementation of the accounting system and performance of information system to produce 7 (seven) elements of financial statements in meeting public accountability, namely: the Balance Sheet, Budget Realization Report, Cash Flow Statement, Statement of Changes More Budget Balance, Statement of Operations, Statement of Changes in Equity, and Notes to Financial Statements (GAS, 2010; Regulation of Ministry of Internal Affair Number 64 Year of 2013). An integration of accounting systems specify achievements the performance of financial reporting. Integration with the fulfillment of the implementation of financial accounting system is to achieve the performance of financial information systems of organization that is characterized by the fulfillment of a characteristic of information that can fulfill the usefulness of information in decision-making ( Jones et al, 1985; Kam 1986; Scott, 2006). Performance of information systems provides the benefits of information which is reached through financial reporting with accrual basis. Performance of information systems is measured by indicators of the benefits of information such as for accountability, stewardship, managerial and external supervision (Zimmerman, 1997; Halim, 2004; Curristine, 2005; Carnegie & West, 2005).

Computer Based Information Systems: for sustainability and integrated reporting. Base on “ A Model Showing How the CBISs subsystems Are Used in Problem Solving”. Computer Base Information Systems (CBISs) as model of MISs consist of : (i) Accounting Information Systems; (ii) Management Information Systems; (iii) Decision Support Systems; (iv) Office Automation Systems; and (v) Expert Systems. (Raymond, 1995: 20). CBIS models with regard to efforts to fulfill the quality characteristics of information management. This is an essential perspective attached to the type of management information, both qualitative information form and the form of quantitative information. Definition of quantitative information is: "Information of data consisting of numeric or numeric data is transformed into graphs. Qualitative information: consisting of descriptive information of data (Scott, 1986: 58). Information generated qualitative terms any SIM design, in addition to the

design of information systems transaction processing. Information generated form of quantitative information systems transaction processing, which includes quantitative information in the size of the financial and quantitative information in the non-financial measure.

The discovery of ethical intelligence widened the possibilities of individuals to manage their own future. Ethical intelligence defines how people generate added value, influence the environment, manage time, build strategies and focus on reality (UPC, 2014). Wayne and Mark (2010, P: 7-8) who refers to (Albrecht, 2006 and Goleman, 2006) has identified ethical intelligence individuals and ethical intelligence organizations. At individual levels, be stated attributes of social intelligence, i.e. the interpersonal skills, knowledge and abilities needed to interpret and understand different social situations and be oneself in social interactions, and to understand social roles and norms and act in accord with them in the establishment and maintenance of effective interpersonal relationships. At the level of the organization, the key attributes include an ethically infused organizational infrastructure- i.e. systems, process and practices that ensure ethical considerations form an inherent and fundamental element in the organization's decision making criteria at all levels and across all functions.

Based on "Anatomy of Personal change" Personal change is both an internal and external experience. It stems from a change in mindset and branches out from there. In truth, it is constantly moving toward some things, and away from others. But in order for noticeable transformation to occur, we must pass through a series of tipping points in succession. This does not mean that a personal change can't take place quickly, because it can. What it does mean is that all meaningful change, regardless of the time required, will follow a certain sequence. The 7 (seven) stages of personal change : (i) Awareness, (2) Discovery (3) Ownership (4) Exposure (5) Intention (6) Action (7) Integration" (<http://advancedlifefskills.com/blog/anatomy-of-personal-change/>). Characteristic of Change with role of Personal Change will enhance the benefit for personal (her/him) self and for organization. As part of institutional change, process of change consist of incremental and abrupt, and will give result of change with continuity and discontinuity impact (Lucie, 2013). Meanwhile, 5 characteristics of a change agent has described, namely: (1) Clear vision (2) Patient yet persistent (3) Asks tough questions (4) Knowledgeable and leads by example, and (5) Strong relationships built on trust (George, 2013)/<http://georgecouros.ca/blog/archieves/3615.>)

**Institutional Isomorphism.** Implementation of the decisions related to public policy, the explanations can be taken through the agency theory (Jensen and Meckling, 1976), and institutional theory (DiMaggio and Powell, 1983). Perspective of agency theory put forward in accordance with the description that: "... conclusion drawn from formal economic models (i.e. agency theory) that ignored the behavioral factor should be interpreted cautiously" (Kren, 1997: 4). DiMaggio and Powell (1983), put forward the concept of isomorphic mechanism which described as competitive isomorphism and institutional isomorphism. The concept of competitive isomorphism with regard to the description of the organization's efficiency and economic survival of the organization, while the institutional isomorphism with regard to the strength of their social environment that gives rise to a certain pressure for organizations to be able to develop certain practices that can be accepted in the organizational environment. Initiative for implementation of the decisions for integrated reporting as a way to reach insightful government need decision in a public policy referring to agency theory (Jensen and Meckling, 1976), and institutional theory (DiMaggio and Powell, 1983). The concept of the institutional isomorphism with regard to the strength of their social environment that gives rise to a certain pressure for organizations to be able to develop certain practices that can be accepted in the organizational environment.

Implementation of integrated sectoral Reporting, consist of: (i) The guiding principle, and (ii) Content Element. Guiding Principles: (i) Strategic focus and future orientation insight into the organization's strategy; (ii) Connectivity of information showing a holistic picture of the combination, interrelatedness and dependencies between the factors that affect the organization's ability to create value over time; (iii) Stakeholder relationships insight into the nature and quality of the organization's relationships with its key stakeholders; (iv) Materiality disclosing information about matters that substantively affect the organization's ability to create value over the short, medium and long term; (v) Conciseness sufficient context to understand the organization's strategy, governance and prospects without being burdened by less relevant information; (vi) Reliability and completeness including all material matters, both positive and negative, in a balanced way and without material error (vii) Consistency and comparability ensuring consistency over time and enabling comparisons with other organizations to the extent material to the organization's own ability to create value. (Integrated Reporting, IIRC,2014). Content elements (IIRC), consists of: (i) Organizational- overview and external environment what does the organization do and what are the circumstances under which it operates? (ii) Governance- How does an organisation's governance structure support its ability to create value in the short, medium and long term? (iii) Business model – What is the organization's business model? (iv) Risks and opportunities – What are the specific risk and opportunities that affect the organization's ability to create value over the short, medium and long term, and how is the organisation dealing with them? (v) Strategy and resource allocation – Where does the organization want to go and how does it intend to get there? (vi) Performance – To what extent has the organization achieved its strategic objectives for the period and what are its outcomes in terms of effects on the capitals? (vii) Outlook – What challenges and uncertainties is the organization likely to encounter in pursuing its strategy, and what are the potential implications for its business model and future performance ?, and (viii) Basis of preparation and presentation - How does the organization determine what matters to include in the integrated report and how are such matters quantified or evaluated ? (Integrated Reporting, IIRC,2014).

The Association of Chartered Certified Accountants, International Integrated Reporting Council, and the International Association for Accounting Education and Research have awarded three research projects to stimulate fresh insight on issues at the heart of integrated reporting... The first of the three projects is : *Meeting users' information needs: The use and usefulness of Integrated Reporting*, (Faye, 2015). A global body is to be created to help public sector organizations develop integrated reporting – reporting that incorporates both financial and other relevant information, including Environmental, Social, and Governance (ESG). The new initiative, which will include inputs from investors, is to be christened the Public Sector Pioneer Programme, and will be formed jointly the International Integrated Reporting Council (IIRC) and the UK-based Chartered Institute of Public Finance and Accountancy (CIPFA). These are: the main aim to implement integrated reporting across the various different types of bodies in the public sector to demonstrate how it can be applied. It mean that public sector bodies can use a way with share their experiences of initiative of integrated reporting with the private sector. Be describes, that although public sector organizations already publish a wide range of data on their social and environmental impacts, few present a 'complete and coherent picture' of how this links into their economic performance. The decision to launch the programme follows a CIPFA scoping study of the issues involved in applying integrated reporting in the public sector. It concluded that integrated reporting principles 'can readily be applied in the public sector, although there are some sector-specific issues to be considered in

more detail to facilitate this. (<http://www.unpri.org/whatsnew/public-sector-to-get-integrated-reporting-body/>)

Previous other Research result showed that:

- Evidence of previous research (Mooghali and Azizi, 2008), among others shows that: strategic outlook is related to knowledge management (hypothesis is rejected), share fate is related to knowledge management (which confirms this hypothesis), and Appetite for change is related to knowledge management (refutes this hypothesis) Performance pressure is related to knowledge management (confirms this hypothesis).
- There was potential avenues for research – analysis of integrated reports, such as: Analysis of integrated reports will contribute to the development of good practice. There is a need for analysis of: Quality of reporting on content elements especially: external environment; opportunities and risks; strategy and resource allocation; business model; future outlook (Carol, 2013).
- The results above gives meaning that readiness in financial reporting with accrual base has supported by management support, communication effectiveness and the role of internal supervision, but not fully supported by the role of regulation. Level of readiness of local government in financial reporting with accrual base provides organizations development opportunities as the global insightful organizations to fulfill the national issues for national integrated reporting uses System national of Account (SNA) and referring to global issues referring to fulfill sustainability reporting to achieve integrated reporting as Global Reporting Initiative (GRI) (Syaiful, 2016:1)
- Determination for initiative of implementation for integrated reporting as decision making process will related to content of decision and environment where decision will taken. This policy referring to decisions which will involves many parties. Jones stated policy definition (1984: 26): "as a standing decision characterized by behavioral consistency on the part of both Reviews those who make it and Reviews those who abide by it". Every establishment of policies will be related to the context of the "who" earned "what" and "how" to get it. There are various aspects determines for the policy implementation.

## Methods

### *Research Design*

This research is a quantitative research with non-parametric statistical tests.

## Research methods

### *Subject and Object Research*

Subjects of research are Government Work units (GWUs) in Banjarmasin City, Banjarbaru City, Banjar District, Tanah Laut District, Tabalong District, and South Kalimantan Province. Characteristics of the subjects be selected for each GWU which have accounting entity and reporting entity. Sampling technique using multi stages sampling with 2 (two) stages to determine : (1) taking sample for local government from 14 (fourteen) entities Regional Government, and (2) taking sample of local Government Regional Work Unit of selected regional government in line with the forms of work unit as: Board, Agency, Office, and Secretariat. The amount of population target of research are 386 (three hundred eighty six) of work units. The amount of selected sample are 100 (one hundred), which for

each Government work unit is represented with 1 (one) respondent. List amount of work unit as population and as sample be stated in table 1 below:

**Table 1.**  
**Proportion of Classification Sample Research**

No	Classification of GWUs	Population	Ratios (%)	Sample
1	Board/Agency/Body	98	25	33
2	Service /Affair	208	54	54
3	Office/Sub District	48	12	4
4	Secretariat/Part of Secretariat	32	9	9
	Total	386	100	100

(Sources: Primary data): Where: GWUs: Government Work Units

The object of study are; Accrual reporting: All information for users, Computer Based Information Systems (CBISs): for Sustainability and Integrated Reporting; Individual Ethical Intelligence: social intelligence; Organizational Intelligence: Organizational infrastructure; Characteristic of Change: Personal Change, and Institutional isomorphism. Implementation of integrated sectoral Reporting, consist of: (i) The guiding principle, and (ii) Content Element.

#### Data analysis

Data were analyzed through analysis of informational and statistic analysis using non-parametric Chi-square and C Contingency. Phase of data analysis is done by collecting a score for each variable with each indicator. Indicators that fulfilled rated 1 and for indicators that are not met be valued 0. The maximum number of each indicator of each variable is 5 and the lowest value is 0. Use of Contingency table, where this table contains the distribution of observed frequencies (Fo) generated from tabulation of scores from each indicator of one variable. Based on data from Fo can be calculated distribution that expected as frequency (Fe) generated by using the formula:

$\sum ij = ni \times nj / N$ , where:

$\sum ij$  = frequency distribution of expected in the row and column i to j

$ni$  = number of frequencies on the line to i

$nj$  = number of frequencies in the column to j

$N$  = the total number of frequencies

$i = 1, 2, 3, \dots$

$j = 1, 2, 3, \dots$

$\chi^2$  calculations generated from the data with the formula :

$$\chi^2 = \sum_{i=1}^r \sum_{j=1}^k (O_{ij} - \sum ij)^2 / \sum ij, \text{ where:}$$

$r$  = Couolumn

$k$  = row

$O_{ij}$  = observed frequency distribution row i and column j

$\sum ij$  = expected frequency distribution row i and column j

$X_o^2$  value compared to the value  $X^2$  table, namely to test  $H_0$  on different test, where if  $X_o^2 > X^2$  table then  $H_0$  can be rejected, and, if  $X_o^2 < X^2$  table then  $H_0$  can not be rejected.  $X^2$  table is determined according to the table Chi-Square, namely the (row - 1) x (column - 1). The coefficient of Contingency (Contingency C) obtained by the formula:  $C = \sqrt{X_o^2 / N + X_o^2}$  where: C = coefficient value is limited ie associations between  $0 < 1$ , where: 0 = no correlation and 1 = a perfect relationship

$X_o^2$  = Chi squared observations

N = number of responses in observation

Interpretation of the value of C based Guilford's Empirical Rule.

Table 2

Guilford's Empirical Rule

Nilai	Interpretasi
0,0 - < 0,2	Slight correlation : almost negligible relationship
> 0,2 - < 0,4	Small correlation ; low relationship
>0,4 - < 0,7	Moderate correlation : substantial relationship
>0,7 - < 0,9	High correlation: dependable relationship
>0,9 - 1	Very high correlation: very dependable relationship

Source: <http://psycnet.apa.org/index.cfm?fa=buy.optionToBuy&id=1974-01085-001>

## RESULT AND DISCUSSION

### Description Data

Below will be stated the descriptive statistics for "score keeping" based on uses questionnaire. Based on table 3 until table 18, which be varied of score for each variables from a score of 1 until score 5, showed relatively large score 5 which show the high effectiveness for role of theoretical aspects.

Table 3

Number Frequency of responses (Fo): Accrual Reporting: all information for users

Frequency of Scores	1	2	3	4	5	Total
Responses of GWUs	0	2	2	13	83	100

Scores 5 has achieved with a relatively large up to 83,00 percent. It showing a High effectiveness and a positive response in the ranks of GWUs to accept aspects accrual for reporting: all information for users.

Table 4

Responses for Accrual Reporting : All Information for Users

No	Indicators to be considered	Fulfilled	Not Fulfilled
1	Information of position of economic resources, liabilities, and equity of Government at the end of the period,	98	2
2	Information of economy	86	14

3	Information of adherence to rules	95	5
4	Information of financial performance	99	1
5	information on planning and budgeting and narative information about the financial and environment of organization	100	0

Except for information of economy being lack about 14%, all of information for users which be produced through accounting system and information system has effectiveness with fulfilment almost 100. This thing in line with Vicky (1997: p: 56) who refers Libby (1981), which described that information presentation appears to be a key element in financial decision making; yet, for many years, the method of displaying the information "...received surprisingly little attention from financial accountans, managerial accountants, information system designers, and auditors.

**Table 5.**

**Number Frequency of responses (Fo): Computer Based Information Systems : for Sustainability and integrated reporting.**

Frequency of Scores	1	2	3	4	5	Total
Responses of GWUs	1	1	6	7	85	

Score 5 has achieved with a relatively large up to 85 percent. It showing a high effectiveness and a positive response in the ranks GWUs to accept CBISs as part of implementation the accounting system and the information system referring to Management Information Systems.

**Table 6**

**Responses for Computer Based Information Systems: for Sustainability and integrated reporting.**

No	<i>Indicators to be considered</i>	Fulfilled	Not Fulfilled
1	Applications Financial Accounting System as per the terms Accounting Standards	100	0
2	Application Information Reporting Systems for Organizational Decision Management	95	5
3	Decision Support Systems (DSSs) of organizations use management model	88	12
4	Decision support system of organization using the application program	99	1
5	Fulfillment for Office Automation with intranet and internet	92	8

Based on assessment for indicators, except for DSSs with management model with 12 % as being lack from high effectiveness, all of indicators has a high effectiveness in clarity role for initiative GRI with integrated reporting in government. Role MISs with CBISs will enhance government in empowerment of accounting system, information system with general and special purpose of information. Role of CBISs to support the aim in integrated reporting in line with a way Establishing a decision stage and information required based on

information technology.

Government establish CBISs. This is priority to make sure that all of development policy meet the requirement for reporting system development of organization. This assessment result in line with (Joe and John, 2016: p: 11) which describes: "...However, we believe that there is still a significant 'knowing-doing-gap'; the knowledge of what should and can be done is well established, but the evidence is that it is unfortunately not followed in practice often enough... Managing IS/IT successfully Is perhaps even more difficult in today's environment of uncertainty, complexity and faster business change...".

**Table 7**

Number Frequency of responses (Fo): Individual Ethical Intelligence: Social Intelligence

Frequency of scorers	1	2	3	4	5	Total
Responses of GWUs	0	1	1	9	89	

Score 5 has achieved with a relatively large up to 89%. It showing an effectiveness and a positive response in the ranks GWUs to accept and recognize role of aspects of social intelligence as individual ethical intelligence.

**Table 8**

**Responses for Individual Ethical Intelligence: Social Intelligence**

No	<i>Indicators to be considered</i>	Fulfilled	Not Fulfilled
1	Integrated reporting as the economic situation (capital) requires a social role of GWUs / Sector	99	1
2	Norms and actions related to integrated reporting requires interpersonal skills	93	7
3	Clarity of roles on the relationship between the parties (Government / State, private, socio) in integrated reporting	99	1
4	Common goals in the fulfillment of integrated reporting strategically	100	0
5	Fill each principles integrated reporting require the ability of strategy for implementation	96	4

The high achievement of individual role in supporting of cross-function in reporting system. These are good response of GWUs to justify that the organization has capability to combine content of information in capital context which consists information for : economic, socio, and environment of organization. In Fact, the government until now, has well done with their reporting system, where they have reported of financial, economic, and environment aspect in many of forms reporting as officially. Government has produced the information which can be used to fulfill the accountability, managerial, stewardship, and for supervision internally and externally.

Based on identification of several key attributes (Wayne & Mark, 2010), stated individual level for social intelligence consists of interpersonal skills, knowledge and ability to support the organization in initiative for implementation of integrated reporting. Meanwhile, Albrecht (2006) stated that assets that what employers are really seeking is something more nuanced and multi –dimensional : “ social intelligence”. In Albrecht's



version of social intelligence, these innate abilities can be measured using five dimensions of assessment, in yet another acronym-SPACE: Situational Awareness; Presence; Authenticity; Clarity; and Emphaty” (Powerpress:http://gsbm-med-pepperdine.edu/gbr/audio/summer2010/Book Corner/).

**Table 9**  
**Number Frequency of responses (Fo): Organizational Intelligence: Organizational infrastructure**

Frequency of Scorers	1	2	3	4	5	Total
Responses of GWUs	0	0	3	7	90	100

Scores 5 has achieved with a relatively large up to 90 percent. It showing a effectiveness and a positive response in the ranks GWUs to accept aspects of Organizational Intelligence: Organizational infrastructure.

**Table 10**  
**Responses for Organizational Intelligence: Organizational infrastructure**

No	Indicators to be considered	Fulfilled	Not Fulfilled
1	The ethical aspects as the criteria which inherent in any decision-making of organization	98	2
2	The decision of organization considers the involvement of all levels and functions of the organization	98	2
3	Decision of organizations consider the involvement of all functions of the organization	97	3
4	Ethical aspects become fundamental criteria in the main focus of the organization's services	95	5
5	The process's approach in meeting the organization's output	99	1

Fulfillment for an ethical infused infrastructure (Wayne & Mark, 2010) as part of organizational development. Management creates strategic Program / Administrative / Socio / Technical to support all functions of each level of management will enhance capability initiative for integrated reporting of government. The agreement can be included two important components, namely: the priority integration sectors, and to all sector which needed to be reported through financial reporting to sustainability and integrated reporting.

**Table 11**  
**Number Frequency of responses (Fo): Characteristic of Change: Personal Change**

Frequency of Scorers	1	2	3	4	5	Total
Responses of GWUs	0	2	4	3	91	100

Score 5 has achieved with a relatively large up to 91 percent. It shows a high effectiveness and a positive response in the ranks GWUs to accept aspects of personal change as a way to support organization toward initiative of integrated reporting.

**Table 12**  
**Responses for Characteristic of Change: Personal Change**

No	<i>Indicators to be considered</i>	Fulfilled	Not Fulfilled
1	The need for self-development in the face of initiative integrated reporting	94	6
2	Clarity of purpose and process for the initiative implementation of integrated reporting	92	8
3	The complexity of the work requires the development of working methods related initiatives integrated reporting	90	10
4	The quality of the integrated reporting activities require the availability of written reference available for the organization.	96	4
5	Accountability implementation always requires accountability reporting system	98	2

Response from personal of each GWUs shows that they have both an internal and external experience referring to activity in financial reporting and experience of other reporting of management, such as performance reporting, prognosis reporting, also availability for reference as ex ante regulation. This thinggive meaning that a personal change can support for requirement of organization development in initiative of integrated reporting.

**Table 13**  
**Number Frequency of responses (Fo): Institutional isomorphism**

Frequency of Scorers	1	2	3	4	5	Total
Responses of GWUs	1	1	7	7	84	100

Score 5 has achieved with a relatively large up to 84 percent. It shows a high effectiveness and a positive response in the ranks GWUs to accept aspects Institutional isomorphism referring to institutional change and globalization.

**Table 14**  
**Responses for Institutional isomorphism**

No	<i>Indicators to be considered</i>	Fulfilled	Not Fulfilled
1	Needs on efficiency and economics' survival for organization related to initiative of integrated reporting.	96	4
2	Adaptation to the strength of the social environment for organizations to develop activities related to the initiative of integrated reporting	95	5
3	The organization's policy in professional training programs, based on professional education, and professional codes of conduct related to initiatives of integrated reporting	94	6
4	The organization's needs to imitate other organizations that have realized more legitimacy or success meet good governance.	92	8
5	Needs on organizational external reference for the needs of the practicing of the organization with the regulatory framework in an integrated reporting initiatives	95	5

Referring to institutions as are the foundation of social life. These attributes of Institutional isomorphism will accommodate : formal and informal rules, monitoring and enforcement mechanisms, and systems of meaning that define the context within which individuals, corporations, labor unions, nation –states, and other organizations operate and interact with each other (John, 2004). It mean that when government do regulatory impact assessment for initiative of implementation of integrated reporting, this policy will enhance role of government to become organization with insightful globalization referring to AEC, MDGs and SDGs which has declared linked with Indonesia.

**Table 15**

**Number Frequency of responses (Fo): Implementation of sectoral integrated Reporting, with: The guiding principle**

Frequency of Scorers	1	2	3	4	5	Total
Responses of GWUs	0	1	5	6	88	100

Score 5 has achieved with a relatively large up to 88 percent. It showing a high effectiveness and a positive response in the ranks GWUs to accept the initiative for implementation the guiding principles for integrated reporting.

**Table 16**

**Responses for Implementation of sectoral integrated Reporting, with: The guiding principle**

No	<i>Indicators to be considered</i>	Fulfilled	Not Fulfilled
1	Strategic: organizations with a strategic focus and future orientation	100	0
2	Strategic: to compare the information with other organizations to create own value for the organization	95	5
3	Social: the nature and quality of the organization's relationship with the organization's key stakeholders	94	6
4	Administrative: Connectivity information as an overall view of the combination, linkages and dependence factors to create value for the organization from time to time	92	8
5	Technique: The content of the information concise and packed in accordance with context of the strategis of organization, governance and prospects without being burdened by the lack of relevant information	93	7

Response to aspects of the guiding principles of integrated reporting related to the principle of how the financial reporting complied with at government organizations. This is explained through the implementation of Accounting Standard as rule that it contains a conceptual framework and Principles of public sector accounting.

Implementation of Government Accounting Standard with Accrual basis (Government Regulation No. 71 year of 2010) has an omnibus regulation through "Regulation of Ministry of Internal Affairs, No. 64 year of 2013", which covers technical references, namely: (1) Policy of Accounting of local government ( 2) System of regional Government Accounting , and (3) Chart of Accounts Standard . Accounting policies comprises:

- Preparation of financial reporting accounting policy, which consists of:

(1) Statement of Government Accounting Standard 01, Presentation of Financial Statements;

- (2) Statement of Government Accounting Standard 02 on Realized Budget Report;
- (3) Government Accounting Standard 03, Cash Flow Statements;
- (4) Government Accounting Standard 04 Notes to financial statements;
- (5) Government Accounting Standard 11 of the Consolidated Financial Statements;
- (6) A statement of the Government Accounting Standards 12 Report on Operations;
- (7) Interpretation of Accounting Standards Technical Bulletin Government and the Government Accounting Standards related to financial reporting;

- Preparation of accounting policies account, consisting of:

- (1) PSAP 05 on Accounting for inventory; (2) PSAP 06, Accounting for Investments
- (3) PSAP 07 on Accounting for Fixed Assets; (4) PSAP 08, Accounting for Construction in progress; (5) PSAP 09 on Accounting for Obligations; (6) PSAP 10 of the Correction of Errors, Changes in Accounting Policies, Changes in Accounting Estimates and discontinued operations and; (7) Technical Bulletin IPSAP and SAP-related accounts.

**Table 17**

**Number Frequency of responses (Fo): Implementation of sectoral integrated Reporting with: Content Element**

Frequency of Scorers	1	2	3	4	5	Total
Responses of GWUs	0	2	6	7	85	

Score 5 has achieved with a relatively large up to 85 percent. It shows a high effectiveness and a positive response in the ranks GWUs to accept aspects of Content for implementation of sectoral integrated reporting.

**Table 18**

**Responses for Implementation of Sectoral integrated Reporting with: Content Element**

No	<i>Indicators to be considered</i>	Fulfilled	Not Fulfilled
1	Strategic: information about the risks and opportunities for the organization to create value in the short term, medium term and long term	98	2
2	Strategic: complete information related to the allocation of organizational resources and how to achieve it	94	6
3	Social: presentation of information governance structure of the organization that supports the ability to create value for the organization	89	11
4	Administrative: information challenges and uncertainties that may be encountered in achieving the strategy, as well as the potential for the business model / service of organizations and the level of organizational performance	97	3
5	Technique: Information that included in the integrated report and how these are measured and evaluated	96	4

Conformity of content element with all of information which has produced through reporting system of government. Government interest related to information system which produces information initiated a national level. First, to fulfill the national issues for national integrated reporting uses System national of Account (SNA) and, secondly, to be the global insightful organizations referring to global issues to fulfill sustainability reporting and towards integrated reporting as Global Reporting Initiative (GRI). Government can take role as

global insightful organizations through sustainable reporting toward integrated reporting, be supported and because of readiness by: (i) Reporting on GWUs and regional government (Provincial/District/City) organizations which has compatibility with the completeness of the information content, content of the sustainability report, and the report to fulfill the contents integrated reporting criteria. Transparency is regarding the completeness of the information content filled in various forms organizational reports referring to Local Government; (ii) The type of information and the type of report that has been prepared Local Government has a complete type of information as classified in sustainability reporting (economic, environmental, social and governance performance and has similarity and completeness with all of information contents of integrated reporting, which consists of information about : financial, Manufacturing, Property Right, Human, Socio and relationship, and natural. Reports that compiled at GWUs Local Government.

### Hypothesis Test

Frequency as result of measurement data with each five (5) indicators on the 8 (eight) study variables presented through the following table below:

**Table 19**  
**CONTINGENCY & CHI SQUARED TABLE- OBSERVATION**

Variabel	X1	X2	X3	X4	X5	X5	Y1	Y2	Total
Sectoral of Integrated Reporting									
Very Implementable									
Skor 5 (Fo)	83	85	89	90	91	84	88	85	695
Fe	86.875	86.875	86.875	86.875	86.875	86.875	86.875	86.875	
Implementable									
Skor 4 (Fo)	13	7	9	7	3	7	6	7	59
Fe	7.375	7.375	7.375	7.375	7.375	7.375	7.375	7.375	
Sufficient Implementable									
Skor 3 (Fo)	2	6	1	3	4	7	5	6	34
Fe	4.25	4.25	4.25	4.25	4.25	4.25	4.25	4.25	
Less Implementable									
Skor 2 (Fo)	2	1	1	0	2	1	1	2	10
Fe	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	
Not Implementable									
Score 1 (Fo)	0	1	0	0	0	1	0	0	2
Fe	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	
(N) Total of	100	100	100	100	100	100	100	100	800

Responses									
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(Sources: primary Data, 2016)

Where: (X1) Accrual reporting: All information for users, (X2) Computer Based Information Systems (CBISs); for sustainability and integrated reporting; (X3) Individual Ethical Intelligence: social intelligence; (X4) Organizational Intelligence: Organizational infrastructure; (X5) characteristic of Change: Personal Change, (X6) Institutional isomorphism, (Y1) Implementation of integrated sectoral Reporting, with: (Y1.1): The guiding principle, and (Y1.2) Content Element.

Based on data in Chi Squared Table (observation) above will use to determine  $\chi^2 = \text{Chi squared observations with } N \text{ as number of responses in observation.}$

**Table 20**  
**CHI SQUARED OBSERVATION**

Variable	X1	X2	X3	X4	X5	X6	Y1	Y2	Total
	-3.875	-1.875	2.125	3.125	4.125	-2.875	1.125	-1.875	
	15.015625	3.515625	4.515625	9.765625	17.015625	8.265625	1.265625	3.515625	
XObservation	0.17284173	0.040468	0.0519784	0.1124	0.195863	0.095144	0.01457	0.040468	0.72374101
	5.625	-0.375	1.625	-0.375	-4.375	-0.375	-	-0.375	
	31.640625	0.140625	2.640625	0.1406	19.14063	0.140625	1.89063	0.140625	
XObservation	4.29025424	0.019068	0.3580508	0.0191	2.595339	0.019068	0.25636	0.019068	7.57627119
	-2.25	1.75	-3.25	-	-0.25	2.75	0.75	1.75	
	5.0625	3.0625	10.5625	1.5625	0.0625	7.5625	0.5625	3.0625	
XObservation	1.19117647	0.720588	2.4852941	0.3676	0.014706	1.779412	0.13235	0.720588	7.41176471
	0.75	-0.25	-0.25	-	0.75	-0.25	-0.25	0.75	
	0.5625	0.0625	0.0625	1.5625	0.5625	0.0625	0.0625	0.5625	
XObservation	0.45	0.05	0.05	1.25	0.45	0.05	0.05	0.45	2.8
	-0.25	0.75	-0.25	-	-0.25	0.75	-0.25	-0.25	
	0.0625	0.5625	0.0625	0.0625	0.0625	0.5625	0.0625	0.0625	
XObservation	0.25	2.25	0.25	0.25	0.25	2.25	0.25	0.25	6
N (total)							XObservation		24.5117769

								on	
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(Sources; Primary Data, 2016)

Where:

$$X_o^2 = \sum_{I=1}^r \sum_{j=1}^k (O_{ij} - \sum_{ij})^2 / \sum_{ij}, \text{ where:}$$

r = Coulumn; k = row

O<sub>ij</sub> = observed frequency distribution row i and column j

$\sum_{ij}$  = expected frequency distribution row i and column j

X<sup>2</sup> table is determined according to the table Chi-Square, namely the (row - 1) x (column 1).

X table = degree of Freedom (5-1) (8-1) = 28 referring to 0.05 be found 41.34

For (in case all of aspects used in measurement), shows the result  $X_o^2 < X^2$  table, namely 24.511 < 41.34. It mean that H01 can not be rejected. Result of hypothesis test is that there was no differences with role of theoretical aspects in implementation to sectoral of integrated reporting in government.

For role clarity of theoretical aspects (in case not for all of theoretical aspects used in measurement), where only 3 (three) theoretical aspects (X1, xx2, X3 with Y), so that = (5-1) (4-1) =12 referring to 0.05 be found 21.03. It mean that  $X_o^2 > X^2$  table, then H01 can be rejected. Result of hypothesis test is that there was differences with role of theoretical aspects, namely Accrual reporting: All information for users, Computer Based Information Systems (CBISs); for sustainability and integrated reporting; and Individual Ethical Intelligence: social intelligence; in implementation to sectoral of integrated reporting in government.

Relationship of these theoretical aspects with implementation to sectoral of integrated reporting in government is counted by the coefficient of Contingency (Contingency C) obtained by the formula:

$$C = \sqrt{X_o^2 / N + X_o^2}, \text{ so that:}$$

$$C = \sqrt{24.511 / (800-300) + 24.511} = 0, 2162, \text{ where: } X_o^2 = \text{Chi squared observations is } 24.511 \text{ and } N = \text{number of responses in observation is } (800-300)^* \text{ (from table 18 where 3 (three dependent variable not included in measurement)}$$

Interpretation of the value of Contingency coefficient referring to Guilford's Empirical Rule, shows that C = coefficient value is limited i.e. associations between 0 < 1, where: 0 = no associations/relationship and 1 = a perfect associations/relationship. Based on the Guilford Empirical Rule indicates the degree of association between variables, which for coefficient C Contingence is amounted to 0.2162 can be stated as " Small correlation ; low relationship "

## CONCLUSION

Based on role of theoretical aspects, namely: Accrual reporting: All information for users, Computer Based Information Systems (CBISs): for Sustainability and Integrated Reporting; and Individual Ethical Intelligence: social intelligence with initiative of implementation of integrated reporting, the government need to strengthen with regulation

framework. Be needed regulation impact assessment to justified next organizational development strategically through socio, administrative and technically approach.

Accrual reporting: All information for users. In the public sector (Hanah, 2010:p:6), that reporting by national government is often driven by domestic political pressure, international agreements, so should consider to provide performance of information system that produced the information not only in financial term but also consider sustainability in all its social aspects, environmental and economic elements. Reporting is one of key aspects of sustainability in business. "Reporting demands measurement of the different elements that are critical to effective sustainable business operations. Strategy helps to build on sustainability reporting as a tool to understand the internal and external impact on the business, using the data to help address the challenges of 21 st –century business, and create a competitive edge in a world increasingly shaped by the effects of resources scarcity and climate change. Sustainability reporting is the critical first step in implementing a strategy that can help an organization understand the impact on its stakeholders, and ways in which it might mitigate a negative impact on the economy, society and the environment. Even, in new form of integrated reporting with new indicator referring to the capitals aspect as value to stakeholders, namely: financial, manufacture, human, intellectual, social and relationship, and natural capital.

Computer Based Information Systems (CBISs); for Sustainability and Integrated Reporting. All GWUs of Regional Governments have conducted financial reporting (the role of system performance information) through the implementation of an accounting system with the characteristics of technology, namely: (i) use the application program namely Regional Finance Management Information Systems (RFMISs) and Regional Management Information Systems ( RMISs). (ii) Availability of reference of national regulations and regulatory for the region, and (iii) Supported the regulation of governor / Regents / Mayors of RG in the accounting system implementation and performance of information systems

Individual Ethical Intelligence: social intelligence. Because of phenomenon that "The emerging emphasis on environmental factors recognizes that not only does the organization surrounding decisions impact individuals judgments, but individuals also tend to make decision as part of a team or group.(Vicky, 1997:p 76).

Based on absence of role of theoretical aspects, namely: Organizational Intelligence: Organizational infrastructure; Characteristic of Change: Personal Change, and Institutional isomorphism, where, because the organization needs to explain, to control, and to predict the initiative of implementation of integrated reporting, then the government need for internalize and socialization this theoretical aspects with regulation framework, also be needed regulation impact assessment to perform next organizational development with strategically through socio aspect, administrative approach and technical approach with these intended theoretical aspects.

For Implementation of integrated sectoral reporting, with the guiding principle, and fulfillment of Content Element, the government need to create the content of policy and environment of policy, namely through:

Unite the guiding principles of integrated reporting into guide through regulation of reporting of government.

Incorporate content element integrated reporting as the suitability and completeness of the report type and content of the reporting system of organization, including financial



reporting, sustainability reporting, and content aspect of financial reporting and sustainability reporting into format of integrated reporting

Environmental policy implementation which requires time dimension towards 2020 and the support of members of the organization in the role and implementation.

Implementation for sectoral integrated Reporting for governmental organizations is needed to realize the role of government in duty to develop social welfare referring to global situation. Fulfillment of information completely will enhance the organization take advantage of management for future with reach level insightful organization globally.

Government needs stages, namely: Financial Reporting with accrual basis to sustainability reporting and toward initiative of implementation of integrated reporting, through:

Implementation of accrual reporting requirement on SKPD that supports presentation of 7 (seven) elements of financial reporting by local government (has been done since 2015)

Green Reporting readiness for presentation of related organizations (presentation of financial and non financial information and reporting environmental aspects) (includes in Notes to Financial Statements)

-Readiness of Sustainability Reporting for presentation of related organizations (unified reporting of financial aspects, social, and environmental aspects sectoral) (Includes in Notes to Financial Statements)

-Readiness for presentation of Integrated Reporting (merger reports related aspects of finance, governance, and sustainability reporting related to the value of the organization) (need formal policy making)

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## LEADER'S WILLINGNESS TO SACRIFICE IN THE STATE OF BUSINESS FAILURE: A PERSPECTIVE OF JAVANESE LOCAL WISDOM

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### Abstract

This research aimed to examine the leader willingness to self sacrifice when the business falling down into deep crisis. The purpose of this study was to explore the spirit of leader's willingness to self sacrifice and develop leader's willingness to sacrifice himself to keep the business running in the context of the Javanese local wisdom.

A qualitative research was conducted with a phenomenological approach to analyze the spirit of a leader willingness to sacrifice on business traditional batiks entrepreneur in Surakarta. The traditional batik industry was elected in the research object with the justification that batik product has become the most popular icon of Indonesian national heritage product which has a cultural uniqueness due to the national competitive advantage.

The result shows that the leader's willingness to self-sacrifice comes from the calling and their obligation to maintain local wisdom. The business failure is caused by internal financial factors such as: mismanagement and complicated tasks, insufficient working capital including a weak cash position. Other factors are external (non financial) such as: high competition, market trend, inability to maintain business network, and high volatility of currency.

### Introduction

#### 1. Background

Indonesia has charmed the world by presenting its hospitality, archipelago's natural beauty, culture, and batik that has been recognized by UNESCO as intangible cultural heritage. As a part of Indonesian culture, batik has high historical value. It is not only as a mode of fashion, but also as a form of visual non-verbal communication on philosophy and cultural values (Rarick & Sunaryo, 2013). However, the competition in batik industry is getting tighter in the economic globalization where cheap Chinese batik threatens Indonesian batik existence and ASEAN Economic Community (AEC) emerges. Batik industry in Indonesia has to make the best effort to improve its sustainable competitive quality in order to be able to compete with other countries' batik industry. One of the ways is by prioritizing the basic and most important resources (the human resources) and applying human resources management adding benefits and uniqueness to the organization (Barney, 2001). One of the unique traits to explore is local value based leadership.

Western management system sees bureaucracy vertically and horizontally. This notion believes in superordinate and subordinate (vertically), and positions at the same level to the right and to the left (horizontally). Leadership wisdom is in line with the belief i.e. how somebody influences other people in the framework of vertical and horizontal bureaucracy.

In Indonesia, however, there is a leadership concept with a different dimension namely a concept recognizing 3 positions (front, middle, back). This concept is proposed by Ki Hajar Dewantara, the father of education in Indonesia. He's also the founder of Taman Siswa School in 1922. The school embraced a famous Javanese motto of the founder saying: *ing ngarso sung tulodho, ing madya mangun karsa, tut wuri handayani* or front leaders lead by examples, those in the middle raise the spirit, and those in the back position drive and

motivate.

The leadership concept does not break down people by their levels but by their roles. Roles are different in nature. A leader plays her/his role in the front position sometimes. She/he can also play the role in the middle position. When required, she/he plays the role in the back position. A leader is a role model. People will look up to this role model. Therefore, a leader has such big moral obligation. Her/his attitude, behavior, way of thinking, and habit are all looked up by people around. A leader being in the middle of subordinates has to initiate, motivate, and empower the human resources. The true leader is required in the back row. From the back row, the leader drives her/his people to move forward. The leader in the back position has to be smart in managing and keeping up with the people in the front row in order to maintain the consistent movement and goal. This is called *goal congruency* where the individual goal in an organization is in line with organizational goal. The *goal congruency* is particularly important otherwise the organizational movement will be in a heavier state due to a different or contradictory movement. The true leader has to be able to take care of the people. It means that she/he is to serve, to teach). ([www.pembelajar.com](http://www.pembelajar.com)).

This research focuses on a transformational leadership concept where a leader motivates the people to implement and internalize the bigger values and common goals rather than transactional leadership (Bass, 1985; Burns 1978). The leadership research focuses charismatic leadership paying attention directly to the essence of leadership aspect called “leader’s willingness to sacrifice” (Conger & Kanungo, 1998). Leader’s willingness to sacrifice gives huge contribution to leadership effectiveness (Choi & Mai-Dalton, 1998).

Leadership mostly determines the success or failure of an organization. Saying expresses that it is the leader who is responsible for the failure of a certain work. Choi and Mai-Dalton (1998) state charismatic leadership shows that leader’s willingness to sacrifice gives huge contribution to leadership effectiveness and organization. Leaders willing to sacrifice are considered to be more charismatic and able to mobilize the people to contribute and serve the organization (Yorgers et al 1999). A research by De Cremer (2002) and De Cremer & van Knippenberg (2002) propose a comparison between leaders with willingness to sacrifice and those without. It shows that leaders with willingness to sacrifice perform and achieve higher in their organization.

Leadership is the key factor to the sustainability of an organization, be it high scaled, middle scaled or low scaled public organization or business; state owned or private owned organization or business; and solely led or collectively led organization or business. Burns in Purwadi (2007) emphasizes on people’s motivation to willingly participate to realize the organization’s goal based on leader’s personal goal. Organization has to develop manager’s transformational leadership in order to improve the performance of organization (Waldman et al. 2001). Studies show that leader’s willingness to sacrifice influences her/his sub-ordinates by enhancing mutual reciprocal norms (Choi & Mai Dalton, 1999), and by positioning a leader as an example (Shamir et al. 1993).

A business entity with credible going concern has no plan or thought of liquidating its business in the future. In the state of economic crisis, however, there are entrepreneurs doing work termination due to company’s insolvency (Setyaningsih, 1999). In this case, an entrepreneur and leader of a company has to sacrifice to save the business and workers from insolvency and layoffs. The main cause of business failure is high intensity of competition or entrepreneur or manager who applies transactional leadership. An efficient business management will be wise in dealing with the competitors. Some businesses might fail due to poor human resources managing the business. Management inability happens when a manager or leader is unable to manage her/himself in the time of hard work that results in inability to dedicate or focus on various and big responsibility (Grant, 1975).

## **2. Problem Formulation**

The problem formulation is stated as follows:

1. What is the meaning of leader's willingness to sacrifice in batik enterprises in Surakarta?
2. What is the background of leader's willingness to sacrifice in batik enterprises in Surakarta?
3. Do batik entrepreneurs in Surakarta still have willingness to sacrifice when the company is in the state of failure?

## **3. Research Objective**

The research aims to develop a model of leader's willingness to sacrifice which is in line with local Javanese value and wisdom particularly when the company is in the state of failure. Besides, the research also aims to explore the meaning of leader's willingness to sacrifice. The phenomenological approach is applied to explore the attitude of leader's willingness to sacrifice of batik entrepreneurs in Surakarta. The research will yield proposition or descriptive theory and proposition or prescriptive theory on the leader's willingness to sacrifice.

## **State of the Art & Previous Results**

### **1. Leader's Willingness to Sacrifice**

The grouping of transactional and transformational leadership has been known widely. The transactional leadership in dealing and communicating with people in order to do the exchange is important. However, the transformational leadership drives people to higher moral values (Burns, 1978). A leader shows the increase of commitment perception to her/his sub-ordinates on company's vision by being willing to sacrifice. Leader's willingness to sacrifice is proven by leader's perspective on being a leader by serving others (Greenleaf & Spear, 2002). Leader's willingness to sacrifice is also manifested by leader's willingness to take personal risk in order to achieve the bigger goal of the organization. The willingness to sacrifice improves the perception of sub-ordinates towards their superordinate. A leader is perceived to be a charismatic and interesting figure, acting and leading people by examples (Conger & Kanungo, 1987).

A leader is also somebody who "dispels totally/partially and/or defers permanently personal interest, privilege or well-being, reward distribution, and right of power" (Choi & Mai Dalton, 1998). On the other hand, De Cremer & van Knippenberg (2004) observe the advantages granted to other parties if a leader is willing to sacrifice. They claim that leader's willingness to sacrifice means "spending personal expenses to achieve company's goal". Leaders are those who are willing to sacrifice for public good (Bass & Steidlmeier, 1999). Leader's willingness to sacrifice will create trust, earn public acceptance as an example, shape transformational leadership, (Bass, 1985). Conger et al. (2000) and strengthen the opinion that leader's willingness to sacrifice is positively related to sub-ordinates' sense of respect.

Further, leader's willingness to sacrifice will result in giving habit and being unselfish in an organization (Choi & Mai-Dalton, 1999).

### **2. The Development of Leader's Willingness to Sacrifice Concept**

The development of leader's willingness to sacrifice concept is presented in table 2.1 below

**Table 2.1**  
**The Development of Leader's Willingness to Sacrifice Concept**

No	Researcher	Dimension	Indicator
1	Conger & Kanungo (1987)	Raising a dimension of leader's willingness to sacrifice	Containing two questions
2	Choi & Mai Dalton (1999)	Researching a model of leader's willingness to sacrifice consisting of one dimension	Containing 13 questions
3	Singh & Khrishnan (2008)	Yielding two dimensions, however, one dimension consists of low reliable items to remove. Hence, only one dimension to be used	Developing 6 questions

**Source:** Various sources, prepared 2014

a. Conger & Kanungo (1987)

Conger & Kanungo (1987) propose a concept of leader's willingness to sacrifice consisting of one dimension and two questions. The two questions are: (1) Leaders take personal high risk for the sake of the organization, (2) In achieving the goal of organization, leaders make big sacrifice.

b. Choi & Mai Dalton (1999)

Choi & Mai-Dalton (1999) develop a concept of leader's willingness to sacrifice consisting of one dimension and 13 questions.

c. Singh & Khrishnan (2008)

Singh & Khrishnan (2008) develop a concept of leader's willingness to sacrifice by conducting *explanatory factor analysis* based on Choi & Mai Dalton's (1999). The test results in two dimensions. However, one dimension consists of low reliable items to remove. Hence, only one dimension to be used consisting of 6 questions. Some questions are presented as follows: (1) voluntarily defers or refrains from using the authority, power position, or privilege for personal benefit, (2) Frees her/himself from privileges granted by other business leaders, (3) bears and/or be responsible for failure, misfortune, incident, mistake, and so forth where she/he is not the only bearer.

The research on concept of leader's willingness to sacrifice has so far yielded inconsistent results. Therefore, this concept is considered as unsettled. This is likely to be caused by research context differences.

## 2.1. Research Topic Novelty

Research topic novelty is:

1. Inconsistent research results on leader's willingness to sacrifice are likely to be caused by research context differences especially local context. On the other hand, there is a limited number of researchers doing empirical research on such a notion in relation with local wisdom and value. Furthermore, the Western and Eastern perspective on leader's willingness to sacrifice is different. The Western leadership concept emphasizes on competition, while the Eastern one suggests cooperation. The Western leadership concept features reason and rationality, while the Eastern concept proposes wisdom. Thus, it is important to develop a model of leader's willingness to sacrifice to be adjusted to local context and to be in line with local wisdom and values.

2. This research is a qualitative research in nature employing a phenomenological approach. It is not only a study trying to describe some actions (shown by the subjects' action/attitude, utterance, and/or conversation among research subjects) thoroughly, holistically, and contextually, but also an effort uncovering the meaning of any actions that become a phenomenon, i.e. *noumena* being in line with local wisdom and value.

## Research Method

### 1. Research Design

The research is a qualitative research in nature employing Schutz's phenomenological approach. The assumption of phenomenological approach is that in making interaction with others, a person has various ways in assigning meaning to her/his experience. The meaning of the experience shapes acting reality shown/manifested by each person (Waters, 1994; Dimiyati, 2000; Collin, 1997). The phenomenological approach goes deeper into the world of meaning to be concerted innately in a self to be expressed in the form of phenomenon and tries to answer the questions on how structure and nature of experience influences a symptom of a person (Ritzer, 1992).

Phenomenological approach in a qualitative research claims that individual behavior must be related to some motives: "because" (*because motives*) and "in order to" or "purpose" (*in order to motives*) (Schutz, 1972).

#### a. Steps of Qualitative Research with Phenomenological Approach

According to Fatchan (2012), steps of qualitative research with phenomenological approach are:

##### i. General Observation

General observation is conducted by observing unique and specific businesses having local wisdom and value. The observation results show that batik business is in uncertain phase due to high competitive atmosphere. Questions to be posted are:

- 1) What is the meaning of leader's willingness to sacrifice in batik enterprise in Surakarta?
- 2) What is the background of leader's willingness to sacrifice in batik enterprise in Surakarta?
- 3) Do batik entrepreneurs in Surakarta still have willingness to sacrifice when the company is in the state of failure?

##### ii. Focus and Subject/Informant

Subject/informant in this research are entrepreneurs willing to sacrifice. The method is purposive sampling. Should there be too many subjects or the number is indefinite, then the researcher selects the subjects using the snow ball method.

##### iii. Participant Observation

Qualitative research employing phenomenological approach is a field research emphasizing on participant observation (Haberman & Miles, 1994). Observation plays an important role in observing batik entrepreneur's daily activities such as leading a meeting, doing the monitoring, and so forth. This step is expected to find out the *noumena* description or the "nature" behind the leader's willingness to sacrifice in Surakarta.

##### iv. Observation on Subjects' Conversation

Observation on the topics being discussed by the subjects is conducted when the subjects are in interaction such as in a meeting (formal or informal). This step is conducted to find out the *noumena* description or the "nature" behind the leader's willingness to sacrifice based on



the conversation's content among batik entrepreneurs in Surakarta.

**v. Description Analysis and Data Validation**

Description analysis and data validity are *primary interpretation* or *first order understanding* i.e. understanding on information data gained from the research subjects presented in the form of narration/result original information. This is conducted simultaneously one by one during the research by reading the participant observation and observation on conversation done by the subjects. Data validation is conducted at the same time as description analysis. According to Fatchan (2012), there are standards or criteria to ensure qualitative data validity as follows: (a) Credibility, (b) Transferability, (c) Dependability, and (d) Conformability. Description analysis and data validation are expected to find out interpretation's description or the meaning of "something" on each leader's willingness to sacrifice.

**vi. In-depth Interview (in the form of dialog with the research subjects)**

In-depth interview is a structured interview. This interview is guided by a number of questions based on data/information gained in participation observation and observation on conversation done by the subjects. This step is a sort of dialog to explore and confirm the deep meaning on each leader's willingness to sacrifice.

**vii. Substantial Analysis and Data Validation**

Substantial analysis is an effort to unite and relate inter-theme, inter-substance, or inter-category that has already been confirmed to the subjects. Substantial analysis and data validation are expected to find out cause-effect relation of inter-theme, inter-substance, and inter-category in order to reach a new proposition or substantive theory on each leader's willingness to sacrifice.

**viii. Subject's Understanding/Perspective**

This step is meant to find out thorough description of in-depth interview result and substantial analysis. The data will be in the form of statement of each subject. The statement is analyzed and directed to a new proposition or theory. It will result in statements of cause-effect relation of inter-substance or inter-theme hypothetically, interpretatively, and argumentatively. Then, it will be narrated in minor and major propositions in accordance with the focus of the research and in the light of Schutz's theory.

**ix. Understanding the Subject's Perspective**

Understanding the subject's perspective is *secondary interpretation* or *second order understanding*. It is the researcher's understanding on subjects' understanding/perspective. This is conducted by discussing the research results with experts or testing it using the relevant theory. The new proposition is competed and compared with the existing theory and/or the previous research results by the previous researchers. This step aims to criticize, debate, reconstruct, and even "claim" that the research result is "a new finding". In other words, this step is meant to explain the theoretical implication of the new results, i.e. how they are different from the theory and previous results, how some of them are similar or supporting the theory or previous results.

**Finding and Discussion**

Business failure is caused by various reasons of different side and nature (macro, micro, external, and internal factors). External factors are beyond company's control such as inflation rate, change of political situation, economy, society, and culture.

Internal factors are, on the contrary, under company's control such as financial ratio,

company's strategy, and management and accounting system. Foster (1986) classifies a company into four types based on the insolvency categories as seen in Table 4.1

**Table 4.1 Insolvency Category**

Without Financial Problem	With Financial Problem	
Not insolvent	I	II
Insolvent	III	IV

Source: Foster (1986: 535)

It can be seen in the table that category I is a healthy company. It means it has no financial problem that it has sustainable and credible going concern. A company might fall into category II (having financial problem but it is not insolvent). There are non-financial factors making the company survive. Non-financial factors and other factors cause a company insolvent and fall into category III. Category IV shows that financial factors become the only factors for company's insolvency.

In this research, in-depth interviews are conducted to 3 (three) subjects where all are batik entrepreneurs in Surakarta. The meaning of leader's willingness to sacrifice is gained from the interview with A as follows:

*Monetary crisis in 1998 was pretty hard. At that time, Laweyan's batik industry was all in zero stage. Then, an owner of a batik store went to Malaysia with other entrepreneurs. In Malaysia, the owner earned valuable experience. It The statement above shows how a leader is willing to lose the position and turn to be a worker to earn money and rebuild the business. The leader also teaches the new generation to understand and observe the meaning of sacrifice to nurture and conserve batik. The fact that the leader teaches young was a dramatic change, however, for her/him as from an owner of a batik store into a worker. She/he also learned about screen printing. After two years working in Malaysia, she/he went back home with money and experience and started the batik business again. It has been growing so well. It survives because it is a family business. Laweyan itself is the center of batik. The region had existed long before Solo was born. "This batik business is my great grandfather's business. I survive and so does this business. I don't want to leave this. This is part of my life becoming my flesh and blood. Batik is family heritage and cultural signature. I observe the values passed by the elderly. I know and realize how tough they were in the past that my family went to another country to make a living due to business insolvency and earn some money to rebuild the business. Therefore, I don't want to leave it and I'm proud of being able to nurture it".*

Generation is in line with Yorges et al. (1999). They state that leader's willingness to sacrifice shows sincerity to lose something to maintain the strong belief and value. A's business insolvency was purely caused by financial problem. This is proven by the following statement: "...To be precise, the business was in a low stage because of financial and capital problem. It's impossible to buy raw materials since the price was determined by dollar's currency. The dollar's currency during the monetary crisis was really high."

The statement of A shows her/his business had low current asset (inability to buy raw materials). Company's management failed to manage the working capital. Hence, goods and credit could not be converted into cash to pay the debt. Capital was dramatically and continuously reduced. A's statement is also in line with C's statement as follows:

*“Our batik business is our grandmother’s. Our business partners trusted our grandmother more. During batik’s golden era, people in the structure or prominent figures of this country ordered batik from the store and it was directly delivered to Jakarta. Well, our grandmother passed away. We, the younger generation, nurture and conserve the heritage. We have to survive. We realize that the purchase volume is not as big as it was. There are many young competitors as well. We have to find a way to attract the buyers such as by making an abstract motif. Blue abstract motif relates to sea life. We also combine it with **parang** that such combination makes our batik interesting and unique”*

Both A and B’s statements emphasize that leader’s willingness to sacrifice to nurture and conserve the heritage comes from the inner calling. This is in accordance with Yorges et al. (1999). They mention that willingness to sacrifice is defined as “giving an important thing to someone”. B’s business failure which is stated as “the volume of purchase is not as big as it was” is caused by financial factors, i.e. young competitors and failure to maintain the network built by the predecessor. Something different is stated by B:

*“Our company has decreasing turnover because of changes in consumer’s taste and interest. Once the customers were given an example of cloth and they would buy it directly. However, they now ask for design breakthrough with more modern and colorful design. We target young consumers. As a consequence, we cannot maintain batik motif with darker color as the elderly wore. We are all supported by our parents. Our father has good network. Even if there is a change in management where now I become the CEO but customers are still loyal to our store. This is how our business survives. Well, I have more passion in beauty salon. However, I try to merge the two as both are closely related. At first, I was insisting on beauty salon and cosmetic business. But when I was told about the history and value of batik and my father asked me to nurture and conserve Javanese culture, then I agreed. That was the start.”*

B is a young successor in batik industry (28 years old). She felt that she was forced to manage the business. She was more interested in beauty salon. However, she agreed with the offer. She then manages the business that her father established. She experiences how her customers change in batik color taste. Now they tend to get into more colorful and catchy batik motifs. This business survives because it is able to adjust to the market’s tendency. B’s willingness to sacrifice is caused by her parents’ order and not purely by the inner calling. This is in accordance with Grant’s theory (1975). B as a leader is given more work to manage the two companies that both are able to mutually subsidize. The business fails in conventional market that now it turns to online market as stated by B as follows:

*“... I build the market by going through online store and market. Problem emerges when I am out town and my customers urge me to serve them. They don’t want to deal with my employees. So far, it survives. It is subsidized by other businesses that I have.”*

B’s business survives because of internet advancement that she builds an online store. The advancement of IT also helps business survive by reaching customers through *Whatsapp* (WA) and *Blackberry Messenger* (BBM) as done by C below:

*“Business atmosphere supports batik promotion, especially in Solo. I do promotion on WA or BBM. I post batik motifs that customers are interested in. Well, the fashion trend is sometimes not as perfect as our idealism. However, they are the kings to serve, right?”*

Another factor of business failure suggested by A is government regulation. A says something in contrary:

*“... these days batik has been so popular as supported by Solo municipal government. It officiates Laweyan as the batik center in line with the UN declaring batik as Indonesian intangible heritage. We get what we want and all our effort pays off. However, there is*

*something wrong. The government never changes the regulation regarding the raw materials. All raw materials are imported. This is not right. It is very difficult for batik sellers and producers to access the raw materials because of the unchanged regulation. Why?"*

A has difficulty in assessing the imported raw materials. A wants the government to revise the regulation and protect the batik producers regarding the bureaucracy. A also hopes for the protection from fluctuating dollar currency. C, however, expresses her/his fear of losing the business:

*"I need more capital, to be honest. It is hard to have customers with down payment. Now it still survives, but I cannot guarantee what it will be like in the future. It is also difficult to ask my children to manage the business in the future. They tend to be professionals than batik sellers."*

C's statement indicates inability to survive in the future. The current networks are not as strong as they were. Networking is only a means to survive as C suggests:

*"I have no other skill than manufacturing batik. Being the firstborn in my family, I become the bread winner for my family."*

In other words, she/he has no successor for she/he lets the children to choose their own professional career.

## **Conclusion and Suggestion**

### **1. Conclusion**

From the discussion it can be concluded that:

- a) A and B's willingness to sacrifice comes from the inner calling to rebuild the business and conserve the heritage. This supports Yorges et.al. (1999). They claim that leader's willingness to sacrifice shows the sincerity to lose something to maintain the faith and personal value.
- b) B's statement supports Grant's theory (1975) stating that business failure is caused by management inability. Management inability happens when a manager or leader is unable to manage her/himself in the time of hard work that results in inability to dedicate or focus on various and big responsibility.
- c) Business failure is caused by financial problem such as insufficient working capital including a weak cash position.
- d) Business failure is also caused by other external factors such as high competition, changes in market trend and taste, inability to build network, changes in currency, changes in technology, and changes in government policy and regulation.

### **2. Suggestion**

Business insolvency can be avoided by doing and having the following:

- a) There is rate protection when batik sellers buy the raw materials so that they are protected from rate changes.
- b) There is credit facility provided by banks to ease and defer company's debt payment when company's working capital is in the weak position.
- c) Company makes a tactical effort by not only changing the working atmosphere inside it to be a profitable business area but also taking into account other factors and phenomena outside it which are sometimes beyond its reach. Company shall protect the business by insuring all activities to easily recover in time of crisis. Government shall make another breakthrough in protection such as providing batik insurance.

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## THE IMPACT OF COMPETENCY CERTIFICATION AND LEADERSHIP STYLE ON EMPLOYEE PERFORMANCE IN MINING COMPANY EAST OF INDONESIA

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### Abstract

The study aims to determine and analyze the impact of recognition of the relationship between competence and leadership style with the performance of employees which is focused on operation department in Mining Company in east of Indonesia. Optimal performance of employees who will support the achievement of corporate objectives that the management should be carried out as well as possible. This study is causal, ie the type of research where researchers want to find the cause of one or more issues.

This research was conducted at PT Vale Indonesia Tbk, PT Freeport Indonesia and PT Newmont Indonesia as representative of mining companies which apply competency certification in the east of Indonesia. The population in this study is employees numbering 105 persons. Side technique used is purposive sampling. Statistical analysis of the data using the tools of statistical program SPSS (Statistical Program / Package for Social Science) version 23.0.

These results indicate that the recognition does not affect the relationship between competence and transformational leadership style on employee's performance. Employees are more motivated to work optimally to achieve good performance instead of supported by their superior as a motivator for the improvement of work performance, therefore it is recommended that the superior always gives recognition in the form of praise or other simple expression through body language to encourage his subordinates to work optimally, if the frequency is increased superiors and subordinates will have a better relationship.

**Keywords:** *competency certification, leadership style, performance*

## INTRODUCTION

### Background of study

The role of human resources is deemed essential to develop human resource management as one of the main keys to get the pre-eminent performance. The broadly meaning of performance in his book entitled 'Key Performance Indicators' elucidates that a performance is a record of the results obtained from job functions or activities for a certain period. He also mentions that a performance is regarded as a person's success in executing a job (Moeheriono-2012).

A performance can be influenced by competence as stated by Gilley et al (1999), "Competency are useful in employee recruiting and selection of a given job classification. They can also be used to determine the training and development activities in which employees must participate to acquire adequate levels of performance mastery." It signifies that a performance is affected by the competence of each individual which is determined by the training and development of human resources to achieve the desired level of performance. Previous researches have confirmed that competence significantly affects the employees' performance as a result of research by Fitran (2012) for employees at the level of managerial

positions in ABC Islamic Bank. The other study is conducted by Xu and Ye (2014). In their research they mention that there is positive and significant correlation between the competence of teachers (lecturers) and performance, the sample in the study is representative of eight Universities in Beijing.

Nowadays only company with competitive advantage can compete in the global market. A research conducted by Tjiptohadi&Agustine (2003) states that "in order to survive, companies are rapidly changing from a business based on labor (labor-based business) towards a knowledge based business (knowledge-based business), with science as the main characteristic". Thus, it is evident that human resources play a very important role in realizing the company's goal primarily associated with free trade competition.

According to Stajkovic (2014), recognition is the official statement, approval, and genuine appreciation (and not false praise). In his study he mentions that the recognition given by the employer in the form of a sincere compliment will trigger employees to re-enact positive behavior in the future. One reason to grant recognition to employees during a study shows that employees who get appreciated will get positive feedback about his/herself and the ability to contribute (Daniels, Darling et al., Nelson, Gostick and Elton in Tessema et al., 2013).

Based on a survey of 200,000 employees, it is concluded that if recognition is carried out correctly then it can increase profits and the level of service to customers and also strengthen the correlation between employees and job satisfaction. In addition, in a study about the granting of recognition only 50 percent of managers state that they only grant recognition to high-performing employees (Tessema et al., 2013).

Leadership is also one of the critical factors for a successful organization. The role of leader is necessary not only to play an active role in encouraging employees in channeling creative ideas, but also to act positively for the betterment of the company. According to Kurniawan (2011), leadership is one of the elements that have an impact strong enough for the running of the organization and its survival. Indeed the role of the leader is crucial for the achievement of organization's direction and goals.

Kurniawan (2012) reveals that a performance is an organization's ability to be able to achieve its goals by using resources effectively and efficiently. Effective transformational leadership is vastly essential to be known, understood, managed, and even created with the aims to improve performance, achieve goals and be able to create organization's competitive advantage.

This study is conducted in PT Vale Indonesia Tbk, PT Freeport Indonesia and PT Newmont Indonesia. Both companies are representatives of mining companies to employees and have implemented BNSP competence certification. This study aims to determine and analyze the effect of certification of competence and leadership style with employee performance as a moderating variable.

## **Theoretical Basis**

### *Resource Based View (RBV)*

Grand Theory of this study is the Resource Based View (RBV) (Wernerfelt, 1984). RBV is a theoretical concept that can be trusted because it was born out of research in economics which observes the factors that affect the company's competitive advantage (Hasbi and Surya, 2015). RBV perceives that employees' knowledge and company's intellectual capital will be the key to the future performance of a company (Lanvin et al, 2013: 20).

RBV considers that company's resources are deemed as a major factor driving performance. In order to produce the performance, resources should be managed with the capability, the ability to process performance (Barney, 1991). Resources and capabilities are combined to produce the company's competency. HR competency is one of the resources that need to be



managed by the capability to produce the company's competency to compete and generate performance.

### *Performance*

The word performance is derived from the words job performance and also called actual performance or achievement that has been achieved by an employee as stated by Moeheriono (2012: 69). According to Emmyah (2009: 32), etymologically, the word *kinerja* comes from the word performance. Performance comes from word to perform that has multiple entries, namely (1) to conduct, (2) to meet or to run, (3) to execute a responsibility, (4) to do something that is expected by someone. From these inputs, it can be interpreted that a performance is executing an activity that enhances the work in accordance with its responsibilities to achieve the expected results.

According to Mangkunagara (2001: 67), the performance term is derived from job performance or actual performance (job performance or actual achievements attained by someone). Performance (job performance) means: the result of the quality and quantity of work that can be achieved by an employee who performs his/her duties in accordance with the given responsibilities. In connection with the concept of performance, Simanjuntak (2005: 10) states that a performance is the level of achievement of results on the application of certain tasks. Individual performance or the employee's performance reflects how she/he fulfills the job requirements accordingly. Whitmore (1997: 104) defines that a performance is the implementation of the functions demanded by someone, a performance is an act, an accomplishment, a common cast skills. Employee's performance within a certain time period shall be evaluated or assessed for the assessment is a part of the staffing process, which starts from the process of recruitment, selection, orientation, placement, training and performance appraisal process as explained by Alwi (2001: 177).

From these definitions above, it can be concluded that a performance is the work of individuals and groups according to the powers and responsibilities provided to achieve organization's goals. Quantity and quality of performance can be measured and is influenced by several factors: environmental, organizational, external environment factors and employees' internal factors. Internal factors include skills, competence and experiences shown in the job performance.

### *Competence*

Boyatzisconceptor of competence and implementation quoted Spencer and Spencer (1993: 9) suggests the fundamental characteristics of an individual are causally related to the tremendous effectiveness or performance. According to Palan (2007: 5), there are two terms that appear in work, two of them are competency and competence. These terms arise from two different schools of thought about the concept and suitability in work. Syaiful F. Prihadi (2004: 83) describes the two terms are interchangeable. He refers to the terms contained in the Indonesian dictionary, namely 'an ability to do something or for a task'. Regarding this statement, he also explains that a single person has the competence to manage his/her work. More specifically that person is competent to plan a series of activities to achieve certain targets. In this case the competence generally refers to the ability to run a job.

According to Kessler (2011: 7), competence is the main characteristic shared by most successful people in an organization or profession that helps them to become successful. Similar to Kessler, Mathis & Jackson (2011: 219) defines competence as basic characteristics that can be attributed to improved performance of an individual or a team. Furthermore, in order that competence can function effectively within an organization, it shall be turned into relevant competence for each department or profession within the organization or company. Competence refers to the underlying characteristics that describe behavior patterns, personal

characteristics (typical), self-concept, values, knowledge or expertise of a person who is considered as a superior performer in the workplace. The concept of competence comes from David McClelland article entitled Testing for Competence Rather than Intelligence. He draws a conclusion that based on the study results of traditional academic proficiency test and content knowledge test, as well as scores and diplomas from school is as follows:

- 1) We cannot predict success in works/life.
- 2) It is usual for low socio-economic communities.

The next question is, if it is not intelligence, what can predict success in work and life. This is why a research method is necessary to predict employees' performance and not influenced by economic, social or racial. The method is called criterion Sample, comparing between successful and less successful people. The goal is to identify the characteristics associated with success. Characteristics or competencies that appear consistently can lead to successful outcomes.

Berger Lance & Berger Dorothy (2007: 82) describes a competence is a characteristic (a combination of several characteristics) that can be measured reliably and it relatively lasts a long time (stable) owned by a person, a team, or an organization. Likewise Laksmono (2004: 1) defines that generally competence is the underlying characteristics of a person to possess high performance on the job. Those characteristics appear in the form of knowledge, skills and other ability or personality. Meanwhile, according to Ulrich (1997: 68) competence reflects the knowledge, skills and abilities among an employee and a group of employees. The common definition accepted by the public is the definition of competence as a basic characteristic of someone who has a causal correlation with the reference criteria of effectiveness and/or excellence in a job or a particular situation. Description of five types of characteristics can be seen in the Iceberg Model below.

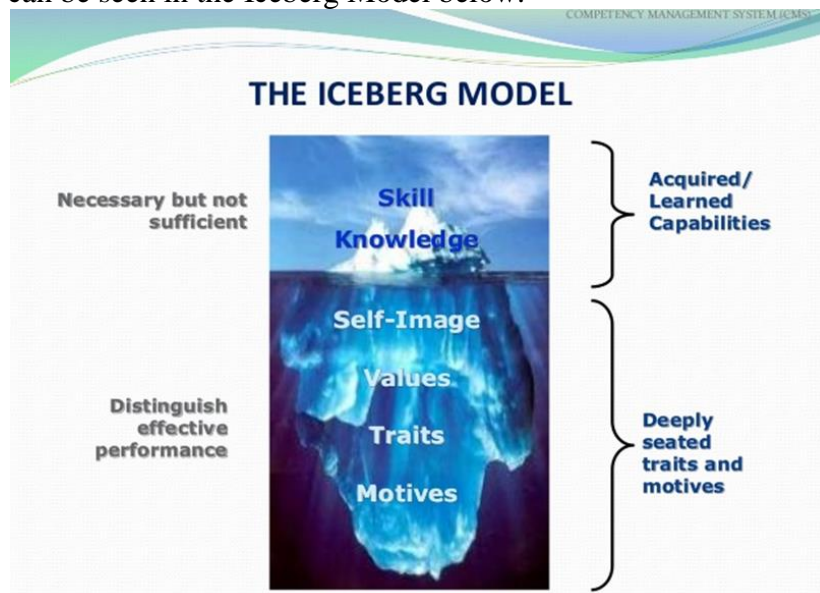


Figure 1. The Iceberg Model  
Source: Spencer & Spencer (1993)

Spencer and Spencer (1993: 34) classify dimensions and individual competence into three components, namely: (a). intellectual competence, (b). emotional competence, and (c). social competence. It seems Spencer and Spencer has perceived competence components from human dimension aspects and inter-personal relationships, but they do not produce spiritual competence components.

According to the National Professional Certification Board (2014), an assessment is a process of assessment to a person on the fulfillment of the requirements set forth in the certification scheme. Then, a competency test is performed. It is a procedure as a part of the assessment to measure the certification participants' competence using one or several means such as written, oral, practice and observation, as specified in the certification scheme. Yodhia (2007) suggests that this assessment phase is a critical stage where it must be done after an organization or company has competency directory along with the competency requirements per position. At this stage the level of employees' competence and a gap between the level of required competence and employees' current level can be identified. Another competency test method is applying certification of competence issued by an independent and credible entity. In Indonesia there are institutions recognized nationally and internationally, such as, LSP (Profession Certification Institute) PERHAPI (Association of Indonesian Mining Expert), LSP IATKI (Association of Electrical Indonesia), Indonesia Tourism LSP and others.

### *Competence Recognition*

Basically, a competence is a person's ability to do anything right. For it is ability, the competence is developed through the process of learning. Dreyfus and Dreyfus (1980: 19) introduce the theory of the stages of human competence development that categorizes into five groups: beginner, competent, proficient, expert, and master.

Meanwhile, recognition is an appreciation of an achievement or claim to recognize the existence or validity of something (Microsoft Encarta, 2009). Recognition can be expressed publicly using a symbol, both formal (awards, certificates) or non-formal (speech, respect). Recognition also can be done socially by the community and professionally by the organization.

### *Leadership and leadership styles*

One of the fundamental qualities sought in organization's employees is the ability to lead others. Attitude and leadership attitude of a leader to influence his/her subordinates is exceptionally decisive in the achievement of organization's goals. When leaders feel motivated, enthusiastic, and active, they are more likely to give energy to their subordinates and convey a sense of effectiveness, competence, optimism and excitement as stated by Robbins & Judge (2008: 342).

Leadership style is selected and utilized behavior or method of a leader to influence thoughts, feelings, attitudes, and behavior of the members of the organization/subordinates (Siregar 2006: 8). Different styles are essential in different situations and each leader shall know when to make an appropriate approach. According to Stoner et al., in Kurniawan (2011: 28) leadership styles are patterns of behavior preferred by leaders in the process to direct and influence their employees. Kurniawan (2013: 29) elucidates that the better the employees' perception of leadership style adopted by their leader, it will trigger an impact on the employees' loyalty because of their high respect for the leader.

### Previous Research

No	Researchers' Name & Research Year	Title	Objective	Variables	Analysis Method	Result and Conclusion
1.	SaumandaTazilioI erhasy, Prihatin LR, Parapat G (2014)	The Effects of Communication and Competence on Employees' Performance Using Supervision as Moderating Variable in PT. Perusahaan Gas Negara (Persero) Tbk. SBU Distribution Area III North Sumatra	To determine the effect of communication and competence on employees' performance by using supervision as moderating variable in PT. Perusahaan Gas Negara (Persero) Tbk SBU III Medan.	<b>Independent Variable</b> Communication Supervision Competence <b>Dependent Variable</b> Performance <b>Moderating Variable</b> Supervision	Quantitative descriptive	Simultaneously communication and work competency has positive and significant effect on the employees' performance in PT. Perusahaan Gas Negara (Persero) Tbk SBU III Medan.
2.	Subhi, Emil Ryan (2014)	The Effects of Transformational Leadership on Employees' Performance Using Award as Moderating Variable	To describe and analyze further on the influence of transformational leadership style on employees' performance by using reward as moderating variable.	<b>Independent Variable</b> Leadership Transformational <b>Dependent Variable</b> Performance <b>Moderating Variable</b> Reward	Causal research with quantitative method	Transformational leadership style has significant, positive effect on the employees' performance with the reward system as moderating variable and transformational leadership directly affects positively and significantly on employees' performance.
3.	Coffey, Lisa (2013)	The Correlation between Reward Management and Recognition in the Workplace	To identify the effects of rewards and recognition on Job Satisfaction and Motivation	<b>Independent Variable</b> Rewards Recognition <b>Dependent Variable</b>	Descriptive Analysis	There is a direct influence between rewards and recognition on the job satisfaction and motivation

				Job Satisfaction Motivation		
4.	Bradler, Christiane et al (2014)	Employee Recognition and Performance: A Field Experiment	To analyze the impact of public recognition on the performance	<b>Independent Variable</b> Recognition <b>Dependent Variable</b> Performance	Field Experiment (Survey Method)	Recognition is proven improving performance especially when it is given exclusively to employees with the best performance.
5.	Margaretha, Ines dan Diana Kartika (2015)	The Effects of Internal Communication, Intrinsic Rewards and Recognition on Employee Engagement in Surabaya Suite Hotel	To analyze the effect of internal communication, intrinsic rewards and recognition on employee engagement	<b>Independent Variable</b> Internal Communication <i>Intrinsic Rewards and Recognition</i> <b>Dependent Variable</b> <i>Employee Engagement</i>	Causal Quantitative with multiple linear regression	Internal communications, intrinsic rewards and recognition have simultaneous and significant influence on employees' engagement in Surabaya Suite Hotel
6.	Schouten, Theresa Lynn (2006)	The Impact of Recognition has on Employees in the Human Resources Department at Bemis Company, Inc	The purpose of this study is to collect data regarding Corporate Human Resource employees at Bemis Company, Inc.'s view on the impact of recognition	<b>Independent Variable</b> Recognition <b>Dependent Variable</b> KinerjaKaryawan	Survey	Recognition and praise consistently correlate with higher retention, higher customer satisfaction, higher productivity, and higher profits
7.	Tessema, Mussie T, et al (2013)	The Effects of Employee	Analyzes the effect of employees	<b>Independent Variable</b>	Regression Analysis	Both financial and non financial rewards have a role in influencing job

		Recognition, Pay , and Benefits on Job Satisfaction: Cross Country Evidence	recognition, pay and benefits on Job Satisfaction	Recognition, Pay, Benefits <b>Dependent Variable</b> Job Satisfaction		satisfaction
8.	Ngatia, Zachary M. (2014)	The Influence of Non –Monetary Rewards on Employee Performance in Muranga Water and Sanitation Company Murang’a County	This study was done objectively by assessing the influence of recognition, career development, employee independence and flexible schedules on employee performance in Muranga water and sanitation company, Murang’a County	<b>Independent Variable</b> Non-Monetary Reward (Recognition, Career Development, Independence, Flexible Schedule) <b>Dependent Variable</b> Employee Performance	Quantitative and Qualitative research methods	Recognition has a significant impact on employee’s satisfaction and productivity, a high level of level of organizational effectiveness is achieved when organizations adopt career development as a way of boosting employee performance to a great extent, and that flexible working schedules render employees great flexibility in how their jobs are done, creating good morale can help in keeping stress at low levels, and so employees are not only happier but healthier, lead to improved productivity
9.	Ibrar, Muhammad (2015)	The Impact of Reward on Employee Performance (A Case Study of Malakand Private School)	To analyze the impact of reward on employee performance.	<b>Independent Variable</b> Reward <b>Dependent Variable</b> Employees’ Performance	Qualitative research using questionnaires	Reward positively affects employees’ performance.
10.	Lina, Dewi (2014)	The Effects of Leadership and Organizational Culture on Employees’	To identify and analyze the effect of leadership and organizational culture on	<b>Independent Variable</b> Leadership Organizational Culture	Causal research with multiple linear	Leadership partially has significant effect on the employees’ performance in Univ. Muhammadiyah Sumatra, whereas organizational culture has no significant effect on employee

		Performance Using Reward as Moderating Variable.	employee performance and reward system effect on the correlation between leadership and organizational culture with employees' performance.	<b>Dependent Variable</b> Employees' Performance <b>Moderating</b> <i>Reward</i>	regression analysis techniques.	performance. Simultaneously leadership and organizational culture influence employee performance.
11.	Kurniawan, Hendra (2011)	The Effects of Transformational Leadership Style on Employees' Performance in PT. BerauKarya Indah in Surabaya Using Work Motivation.	To determine how significant the effects of transformational leadership has on employees' performance in the operational section of PT. BerauKarya Indah in Surabaya	<b>Independent Variable</b> Leadership Transformational <b>Dependent Variable</b> Employee Performance <b>Moderating</b> Work Motivation	Questionnaire with Path Analysis technique	There is a significant effect of Transformational Leadership Style on the Employees' Performance through Work Motivation
12.	Tandoh, Veronica Celattia (2011)	Effect of Leadership Behaviours on Employee Performance in Guinness Ghana Breweries Limited.	To identify the effects of Leadership Behavior on Employees' Performance in Guinness Ghana Breweries Company.	<b>Independent Variable</b> BehaviorLeadership <b>Dependent Variable</b> Employee Performance	Descriptive analysis using SPSS version 17.0	There is a strong correlation between job-centered leadership behavior and the employees' performance, thus providing positive and significant effect to the performance, including productivity.
13.	Hari, Bagus Laksana (2015)	Effect of Competence,	To evaluate the correlation	<b>Independent Variable</b>	Causal research	H1 reward as moderating variable has a significant positive effect on the

		Independence, Work Experience, Task Complexity on Audit Inspectorate Officers' Quality in Regional Financial Supervision Using Reward as Moderating variable.	between competence, independence, work experience and task complexity with audit quality by means of the establishment of reward as moderating variables that might affect the strong or weak correlation among these variables.	Competence Work experience Task complexity <b>Dependent Variable</b> Audit quality <b>Moderating</b> <i>Reward</i>	with multiple linear regression approach.	competence of the audit quality.
14.	Royani (2010)	The Correlation of Reward and Nurse's Performance in Executing Nursing Care in RumahSakit Umum Daerah CilegonBanten	To determine the correlation between the reward system and nurses' performance in performing nursing care in InstalasiRawatInap RSUD CilegonBanten	<b>Independent Variable</b> Reward <b>Dependent Variable</b> Performance	Descriptive study of correlation and cross-sectional	There is no significant correlation between the reward system and 65 nurses' performance
15.	Muthoni M. Muchai, 2014	Effect of Employee Rewards and Recognition on Job Performance	to establish the effect of employee engagement on job performance in Kenya's public	<b>Independent Variable</b> Rewards,Recognition <b>Dependent Variable</b> Job performance	Descriptive	The study concluded that organizational support and growth opportunities foster learning which enhances employee competence. It was further concluded that engaged



		in Kenya's Public Sector, A Case Study of Nakuru Water and Sanitation Services Company Ltd	sector, taking a case study of Nakuru Water and Sanitation Company Limited			employees are more involved in organization's issues and perform better. The findings also led to the conclusion that employees would work harder if they are recognized more.
16.	Nazili, Iqbal (2012)	Effect of Leadership Style and Organizational Climate on Employees' Performance: Work motivation as Intervening Variable	To investigate the effect of leadership style on work motivation, the effect of organizational climate on work motivation, the effect of work motivation on employee performance, the effect of leadership style on employee performance and the effect of organizational climate on employee performance	<b>Independent Variable</b> Leadership style Organizational Climate <b>Dependent Variable</b> Employees' performance <b>Intervening</b> Work Motivation	Multiple regression and SPSS 16	Leadership style and organizational climate with job motivation as mediating variables (intervening) have positive and significant effect on employees' performance
17.	Emmyah (2009)	Effect of Competence on Employees' Performance in Polytechnic State of Ujung Pandang	The effect of competence on employee performance in Polytechnic State of Ujung Pandang.	<b>Independent Variable</b> Knowledge, skills, self-concept and values, personal characteristics	Survey research using quantitative approach with	Simultaneously competence has significant effect on employees' performance in Polytechnic State of Ujung Pandang. Indicators of self-concept and values provide the most dominant effect while indicators of

				<b>Dependent Variable</b> Work Quality, Productivity, Cooperation, Initiative, Responsibility	explanatory purposes.	personal characteristics have the smallest effect.
18.	M. Ali Fitran (2012)	Study on the Effects of Competence on Employees' Performance in Level of Managerial Position (Case Study in PT. Bank Syariah ABC)	To determine the effect of competence on the performance of employees at the managerial level in PT. Bank Syariah ABC.	<b>Independent Variable</b> Competence <b>Dependent Variable</b> Performance	Quantitative explanation using the enclosed questionnaire with Likert scale.	Competence variable has significant effect on the employee's competency.
19.	AnguoXu& Long Ye (2014)	Impacts of Teacher's Competency on Job Performance in Research Universities with Industry Characteristics: Taking Academic Atmosphere as Moderator	To identify the effect of teachers' competence on performance in university research with industry characteristics.	<b>Independent Variable</b> Competence <b>Dependent Variable</b> Performance	empirical research	There is a significant positive correlation between the level of teachers' competence and performance.
20.	Arcynthia M, Lian (2012)	Analysis of the Effect of Competence on Employees'	To analyze the effect of knowledge, skills, behavior and work	<b>Independent Variable</b> Competence <b>Dependent Variable</b>	Descriptive analysis and multiple linear	Competence dimensions have significant effect on performance improvement.

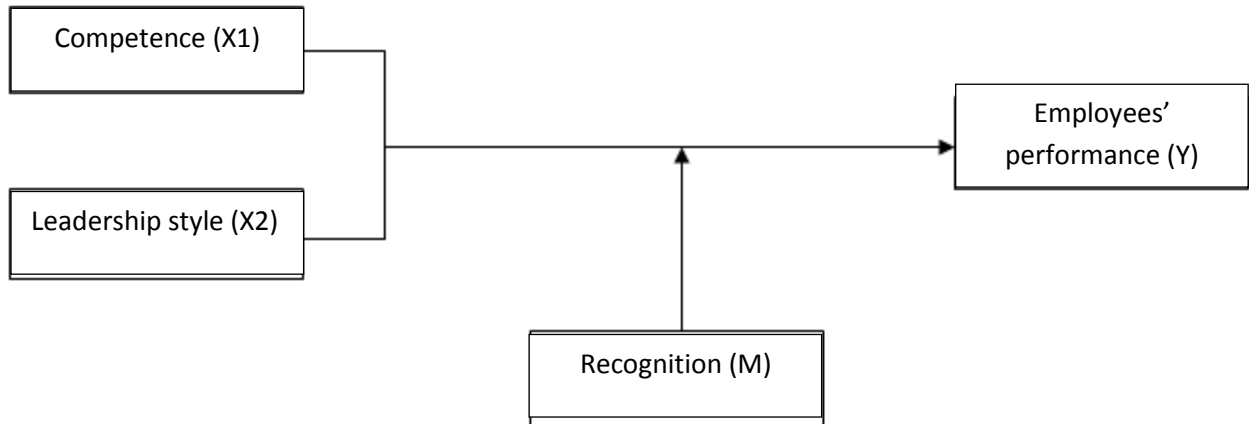
		Performance in PT. Bank BUKOPIN, Tbk. Makassar branch	experience to employees performance in PT. Bank BukopinTbk Makassar branch.	Performance	regression analysis	
21.	Kartikan, Lucia Nurbani (2014)	Effect of Competence on Administrative Employees' Performance	To determine the competence level, competence-related factors and the impact of the competence level on the employees' performance.	<b>Independent Variable</b> Level/education level, experience, competence <b>Dependent Variable</b> Performance	Complete Enumeration (Sensus)	Administration employees' competence has significant effect on their performance.
22.	I Kadek Edy Sanjaya (2013)	Effect of Competence, Compensation and Work Environment on Employees' Performance in PT. PandeSegara Agung Dewata	To determine the effect of competence, compensation, and work environment on employee performance.	<b>Independent Variable</b> Level/education level, experience, competence <b>Dependent Variable</b> Performance	Census Method with Multiple Linear Regression Analysis	Simultaneously and partially, competence, compensation and work environment has significant and positive effect on performance.
23.	Galang et al (2015)	Effect of Leadership, Work Environment, and Reward on Employees' Performance in Pawnshop Branch Besuki	To determine the effect of leadership, work environment, and reward on employees' performance in Pawnshop Besuki branch	<b>Independent Variable</b> Leadership, Work environment, and <i>Reward</i> <b>Dependent Variable</b> Employees' Performance	Multiple Linear Regression Analysis	The results show that leadership, work environment, and reward have positive and significant effect on employees' performance in Pawnshop Besuki Branch

24.	Widodo (2010)	The Effects of Smart Work Moderation on the Effects of Competence, Reward, Motivation on Performance	To analyze the effect of HR Competency on the motivation and managers' performance, to analyze the effect of motivation and reward on the managers' performance, and to examine the role of smart work as moderating variable.	<b>Independent Variable</b> Competence <i>Reward</i> Motivation <b>Dependent Variable</b> Performance <b>Moderating</b> Smart Work	Questionnaires with SEM and AMOS program	HR competence has positive and significant effect on managers' performance. Reward has positive and significant effect on the motivation and performance of managers. Motivation has positive and significant effect on the managers' performance. Smart work is moderating variable.
25.	Aryan, Richa (2015)	Impact of Motivation and Recognition on Employee's Performance: A Study on Public and Private Sector Banks in Punjab and Haryana.	To examine the impact of motivation and recognition on employee's performance in Public and Private Sector Banks in Punjab and Haryana.	<b>Independent Variable</b> Motivation Recognition <b>Dependent Variable</b> Performance	Regression analysis	Performances of employees are significantly affected by the salary and other monetary benefits provided by the organization. Recognition is the most important non monetary reward which improves performance of the employees of banks

## Conceptual framework and hypotheses

### Conceptual framework

The conceptual framework of this study is as shown below:



**Figure 4. Conceptual Framework**

### Hypotheses

Based on the research paradigm, the author compiles the following hypotheses:

H1: H1: It is suspected that competence and transformational leadership style have significant influence on employees' performance

Competence can influence employees' performance. The higher the employees' competency is and in accordance with the demands of the job role, those will enhance the employee's performance. Competent employees usually have certain character of attitudes and behavior or a willingness and ability to work which is relatively stable especially when they face a situation in the workplace that is formed from the synergy between character, self-concept, internal motivation, and contextual knowledge capacity so that they can quickly overcome the problems, execute works quietly and with confidence, perceive work as an obligation that must be done sincerely, and openly improve themselves through a learning process. This will encourage employees to finish their jobs efficiently and effectively as well as psychologically it will provide meaningful work experience and a sense of personal responsibility on the results. In the end, all these things will enhance both employee performance related to occupational factors and personal characteristics. It is supported by a theoretical statement of Spencer & Spencer (1993: 78) that intellectual, emotional, and social competences as parts of people's personality can predict or influence the effectiveness of individual performance. In addition an empirical statement expressed by Kusumastuti in Winanti (2007: 258) supports that individual competences have significant, positive effect on the performance with influence contribution amounting to 0.278.

Transformational leadership style influences employees' performance as an indicator of leadership styles such as charisma, inspirational, individual attention, and intellectual stimulus elicits them to feel more comfortable and motivated without feeling pressured so that they can achieve the expected performance. From the frequency distribution of respondents this study proves that the average of employee agrees with transformational leadership style. It shows that employees feel comfortable with transformational leadership style that has been applied.

H2: It is suspected there is moderating effect of the recognition on competence and transformational leadership style on employee performance.

Subhi (2014: 8) describes a performance is influenced by three variables, namely individual, psychology and organizational variables. Individual variables consist of willingness and

skills, family background, social and demographic levels. Psychological variables consist of perception, attitude, personality and motivation. Furthermore, organizational variables consist of resources, leadership, structures and appropriate reward systems.

A leader should be able to unite the various competencies and appropriate recognition systems. Proper implementation of leadership style and granting recognition will contribute to employees' satisfaction who will ultimately improve their performance. Research conducted by Allen and Helms in Tessema et al (2013: 3) confirms the importance of recognition done by managers and leaders, which is to encourage employee behavior to achieve strategic goals

## Research method

### *Approach and types of research*

This study is causal research, the type of research where researchers aims to determine the causes of one or more issues. In causal study, it is necessary to determine the causal relationship by employing correlational analysis or specific regression.

### *Research location*

This research is conducted in PT Vale Indonesia Tbk, PT Freeport Indonesia and PT Newmont Indonesia as representatives of mining companies to employees who have been certified competence by BNSP (National Professional Certification Board).

### *Population and sample techniques*

Population in this study consists of 105 employees who have been certified and they are from PT Vale Indonesia Tbk, PT Freeport Indonesia and PT Newmont Indonesia. Sampling technique used in this study is purposive sampling.

### *Data source*

This study employs two data sources, namely primary data and secondary data. Primary data is data obtained directly from the list of questions provided in the form of questionnaires to employees who have been assessed by Professional Certification Institute (LSP) PT. Vale, LSP Perhapi (Association of Indonesian Mining Expert) at PT Freeport and Newmont.

Secondary data is taken from the documents related to PT. Vale, LSP Perhapi in PT Freeport and PT Newmont in accordance with this research.

Based on primary data collected through questionnaires, the obtained data by age of respondents can be seen in the following table:

**Table 5.1**  
**Distribution of Respondents by Age**

Age (Year)	Total Respondents	Percentage (%)
< 25	1	0.95
25 - 30	14	13.33
31 - 40	69	65.71
> 40	21	20.00
Total	105	100

*Source: Primary data, processed 2016*

### *Data collection technique*

Data collection instruments used in this study is a list of questions and statements in the form of questionnaires. This technique is conducted by delivering or distributing questionnaires to a sample of respondents who provides answers to the questions or statements. The scale used in this questionnaire is Likert scale.

### *Data analysis technique*

In this study the existing data are analyzed quantitatively. Quantitative approach emphasizes quantitative analysis on the numerical (numbers) data processed using statistical methods. Multiple linear regression analysis is selected for the dependent variable is affected by more than one independent variable or explanatory variables. For analysis and hypothesis testing, data is processed statistically using a statistical program called SPSS (Statistical Program / Package for Social Science) version 23.0

### *Chapter v discussion*

From table 1 above SPSS output results present the correlation matrix between variables. The correlation between competences and performance variables is equal to 0,816. The correlation between Leadership style and performance variables is 0.678, and the correlation between recognition and performance variables is 0.659. Furthermore, table 2 compares F count to F table. To identify F table in hypothesis testing in regression model, the degree of freedom (df) or known as df2 while in F table symbolized as N2 are determined by using the following formula:

$$df1 = k - 1$$

$$df2 = n - k$$

Where n = number of observations in the period of data.

Where k = number of variables (independent and dependent).

This test is performed by using a confidence level of 5% or 0.05 hence we can test using the formula. In  $df1 = 3-1 = 2$  and  $df2 = 105 - 3 = 102$ , then the value of F table is 3.09.

Based on SPSS output results in Table 2, F count is greater than F table ( $79.040 > 4.74$ ) with a significant level below 0.05 is 0.000. Based on the decision making of simultaneous test in the regression analysis, it can be concluded that competence, leadership style and recognition variables when tested together or simultaneously result in significant effect on employee performance improvement.

From Table 3 the competence regression coefficient is 0.593, has positive value hence competence has positive influence on employee performance. The positive effect can be interpreted that the increasing competence will also increase employee performance. Furthermore, to determine whether the effect is significant or not, the regression coefficient for competence variable is examined by comparing t count and t table. If t count > t table, competence has significant effect on employee performance.

To identify t table, the value of df is determined using N-2 (N = number of respondents) and the result = 1,984. Based on the results of the regression calculated using SPSS and Table t, it is found that t count is 7.471 and t Table = 1.983, which means t count > t Table, it can be interpreted that the competence has significant effect on employee performance.

From Table 3 the leadership style regression coefficient is 0.124 and positive hence this variable has positive effect on employee performance. The positive effects can be interpreted that the better leadership style will also increase the performance of employees. Furthermore, to determine whether the effect is significant or not, the regression coefficient

value of this leadership style is examined by comparing  $t$  count and  $t$  table. If  $t$  count  $>$   $t$  table, the leadership style has a significant effect on employee performance.

To identify  $t$  table, the value of  $df$  is determined using  $N-2$  ( $N$  = number of respondents) and the result = 1,984. Based on the results of the regression calculated using SPSS and Table  $t$ , it is found that  $t$  count is 1.984 and  $t$  Table = 1.983, which means  $t$  count  $>$   $t$  Table, it can be interpreted that leadership style has significant effect on employee performance.

Table 3 also shows that recognition regression coefficient is 0.106 and has a positive value hence this variable has positive effect on employee performance. The positive effects can be interpreted that the better recognition will also increase the performance of employees. Furthermore, to determine whether the effect is significant or not, the regression coefficient value of recognition is examined by comparing  $t$  count and  $t$  table. If  $t$  count  $>$   $t$  table, recognition variable has a significant effect on employee performance.

To identify  $t$  table, the value of  $df$  is determined using  $N-2$  ( $N$  = number of respondents) and the result = 1,984. Based on the results of the regression calculated using SPSS and Table  $t$ , it is found that  $t$  count is 1.845 and  $t$  Table = 1.983, which means  $t$  count  $>$   $t$  Table, it can be interpreted that recognition variable has significant effect on employee performance.

## **Closing**

This study indicates that there is effect between competence and employee performance. The results of the calculations have obtained value prob.  $T$  count in the table of coefficients (SPSS output shown in column sig.) is 0.000 less than the error rate ( $\alpha$ ) 0.05 (predetermined). Thus, it can be concluded that the independent variables (from  $t$  count) have significant effect on the dependent variable. Value of prob.  $t$  count of the competence variable is 0.000 smaller than 0.05 hence the competence as independent variable significantly influences the dependent variable which is employees' performance at  $\alpha$  5%, or in other words, competence influences employee performances on a confidence level of 95%.

The regression coefficient of competence is positive which means when competence increases, the amount of the employee's performance will also increase and vice versa. This implies higher employee competency will result in the increasing performance. On the other hand if the employee is less competent, his/her performance will not be optimal that could eventually lead to lower productivity.

The results of this study indicate that competence has significant effect on employees' performance. This is because the required competence through Competence Standards that exist in the company. These results are consistent with research by Emmyah (2009), Arcynthia (2012), Fitran (2012), Xu and Ye (2014), Ierhasy et al (2014) and Kartika (2014), which conclude that the competence variables can significantly affect employees' performance.

Better leadership style can be a charismatic leader, motivational inspirational subordinates and has good individual consideration, provides intellectual stimulation for his/her subordinates, and becomes a good role model that will improve employees' performance.

Transformational leadership style will result in the employee's performance that is getting better. On the contrary poor leadership style will discourage employees' morale and it will affect their performance. These results are consistent with research conducted by Kurniawan (2011), Subhi (2014) and Lina (2014), who conclude transformational leadership style has a significant effect on employees' performance.

Partially recognition does not significantly influence employee performance because its effect is only 0.096 or 9.6%. However, granting recognition to the dimensions of the



relationship will cause emotional feelings and confidence for employees so that their morale increases. Moreover, recognition and appreciation will boost employees' morale to work better. The increase in morale will improve employees' performance. These results are consistent with research by Bradler et al (2014), and Muchay (2014), who states that recognition, has a positive effect on employees' performance. Further, it is concluded that recognition in the form of consistent compliment is closely related to the increase in employee retention, increased customer satisfaction resulting in increased profits. Recognition is a non-monetary reward that is deemed most essential to improve the employees' performance (Aryan, 2015).

Therefore recognition is not moderating variable but it is an independent variable just like competence and leadership style variables which significantly influence employees' performance. The results of this study have never been examined before and a preliminary study to see the effect. Most studies utilize non-monetary reward variable as another name of the recognition variable. As stated by Mulyadi in Dalmy (2010), the performance-based reward system is a control tool used by employees to motivate their personnel to achieve company's objectives by displaying appropriate behavior of the company's expectations.

### **Conclusion and suggestion**

Based on the results and the discussion it can be concluded that recognition does not affect the correlation between competence and transformational leadership style on employee performance hence in this study recognition is not moderating variable. Based on respondents' statements about recognition, the results show that employees are encouraged to work optimally to achieve good performance, instead of leader's support as a motivator for the improvement of work performance. Therefore, it is recommended that a leader shall frequently grant rewards in the form of praise or other simple expression through body language to encourage his/her subordinates to work optimally, if the frequency is amplified, it can result in the better relationship between superiors and subordinates.

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**Table 1. Correlation Matrix between Variables**

		Competence	Leadership Style	Recognition	Performance
Competence	Pearson Correlation	1	.690**	.667**	.816**
	Sig. (2-tailed)		.000	.000	.000
	N	105	105	105	105
Leadership Style	Pearson Correlation	.690**	1	.668**	.678**
	Sig. (2-tailed)	.000		.000	.000
	N	105	105	105	105
Recognition	Pearson Correlation	.667**	.668**	1	.659**
	Sig. (2-tailed)	.000	.000		.000
	N	105	105	105	105
Performance	Pearson Correlation	.816**	.678**	.659**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	105	105	105	105

*Source: Primary data, processed using SPSS 23 for Windows*

**Table 2. Simultaneous Testing (F test)**

Model		F	Sig.
1	Regression	79.040	.000 <sup>b</sup>
	Residual		
	Total		

*Primary data, processed (2016)*

**Table 3. Partial Testing (t test)**

Model		T	Sig.
1	(Constant)	4.654	.000
	Competence	7.471	.000
	Leadership style	1.984	.050
	Recognition	1.845	.068

*Primary Data, processed (2016)*

**A MODEL OF MANAGING BUSINESS ORGANIZATION CHANGE PROCESS:  
A CASE STUDY OF INDONESIA LOCAL GOVERNMENT BUSINESS FIRM**

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**Abstract**

In 2020-2030, Indonesia face facts a great era of population, what we call it as a “*bonus demografi*”. This situation, off course, have some consequences. One of the consequence is government need more budget to optimize this situation. In local level, the situation is hardly, because most of local government of Indonesia also face facts a hard budget constraint. One of the opportunity is to increase the local government revenue by increasing the performance of their BUMD (Badan Usaha Milik Daerah) or local government firm/enterprise. Meanwhile, most of BUMD have a bad performance, and today, all of the local government of Indonesia have to implement the new regulation about local business organization. On this new regulation, Government of Indonesia had been declare the change management policy on their local business organization. In other side, many theorist claims that business organization change process is not easy, and many of them tend to failed. The goal of this research is to try to develop a model of managing local government business organization change in Indonesia. The research used qualitative methods with a single case study approach.

**Keywords:** *change management, local business organization, business organization change process, model of managing local government business change.*

**Introduction**

Indonesia is one of the country which will enjoyed by the situation of – what we call it as “a window opportunity” – that is a large amount of population. In years of 2020 and 2030, Indonesia is predicted have a 268 million and 293 million people (Romdiaty, 2013). The large amount of population will challenging the government to optimize this situation.

To optimize the situation, one of the consequence is that government need more budget. In local government level, the situation is hardly, because most of local government of Indonesia are face facts a hard budget constraint. One of the opportunity is to increase local government revenue by increasing the performance of their BUMD (Badan Usaha Milik Daerah) or local government firm/enterprise.

The new regulation of Indonesian government – Indonesia Act No. 23/2014 of *Pemerintahan Daerah* (Local Governmental System) – declaring un-act of Indonesia Act No. 5/1962 of *Perusahaan Daerah* as Local Government Company, and dictating local government company to the new type to “*Perumda*” and “*Perseroda*”. The differences of the three type are:

- *Perusahaan Daerah (PD)* or Local Government Company is a company which all capital or a half of capital are funding by local government.
- *Perusahaan Umum Daerah (Perumda)* or General Local Government Company is a company which all capital are funding by local government.
- *Perusahaan Persero Daerah (Perseroda)* or Local Government Limited Company is company which all capital is divide by shares, and local government owned all capital or at least more than 51% of the share.

The implication of the new regulation is very huge and very complex. Why? Because of the change – in our prediction – is so widely and deeply. After 7 decade, the old-closely management system is change by the new-openness management system, or what we call it as good corporate governance system. The flow of change can be shown in figure as a below:

Figure 1  
The Steps of Local Government Business Change Process



Considering the huge of change and the complexity of the problem, the change process is predicted has a big threat. To make the change process are successfully, we need a raw model to direct the change process, and the goal of this research is to develop the model. The outcome of this research is more understanding about local government business organization change in Indonesia.

### Methods

The research used qualitative methods with constructivism paradigm. A single case study approach (Yin, 2009; Dul&Hak, 2008) is applying to PD. X in province of Y. Right now, PD. X is still in the progress of their change process. Data and information will be collected by depth-interview and documentation study.

To analyze the change process, we will use not only some theoretical perspectives, but also practical perspectives of business change process. From both perspectives, then, we will applying to generic process of change management by John Hayes (2010). Some experience of organization change in Indonesian State Owned Enterprises (SOEs) is also considered. By this approach, we can get some variables which can be used to collect data, to analyze, and to develop the models.

### Theoretical Background

Generally, organizational change is the process by which organizations move from their present state to some desired future state to increase their effectiveness (Jones, 2010: 292). To get the future state, some effort need to be taken. Beckhard (2006: 3) comment that:

*Organization development is an effort (1) planned, (2) organization-wide, and (3) managed from the top, to (4) increase organization effectiveness and health through (5) planned interventions in the organization's 'processes', using behavioural-science knowledge.*

On his comment, Beckhard want to be explain that (2006: 3-7): (1) “*planned*” by mean that organization development involves a systematic diagnosis of the organization, the development of strategic plan for improvement, and the mobilization of resources to carry out the effort; (2) “*organization-wide*” mean that organization development refers to a system which is relatively free to determine its own plans and future within very general constraints from the environment; (3) “*managed from the top*” mean that the top management must have both knowledge and commitment to the goals of the program and must actively support the methods used to achieve the goals; (4) “*increase organization effectiveness the organization and health*”. The effectiveness mean that organization have a “self-renewing”, and can “adapt and cope with the changes in its environment”. Health organization mean that organization concerned with task accomplishment, internal integration, and involving mutual adaptation of the organization and its environment; (5) “*planned interventions*” mean that the intervention used draw on the knowledge and technology of behavioral sciences about such process as

individual motivation, power, communications, perception, cultural norms, problem-solving, goal-setting, interpersonal relationship, intergroup relationships, and conflict management. In practical perspective, Beckhard argument about the urgency of “planned intervention” effort was proven. Some experience of project management practitioners argues:

*It isn't easy to manage projects and programs that call for a high degree of behavioural change. Of all the different type of projects, they are ones most likely to encounter delay (especially if they are particularly large and complex). Yet in today's business environment, with business models in a state of flux just as products and service are, it is virtually impossible for organizations to implement their chosen strategies without undertaking the kinds of strategic initiatives that inevitably require substantial behavioural and cultural change. It is not surprising that a recent report from the Economist Intelligence Unit identifies 'the organization lacks change management skills' as the most frequently cited reason for the failure for strategic initiatives. (Terry Cooke-Davis. 2014. Perspective: The Strategic Benefits of Change. PMI's Pulse of the Profession In-Depth Report: Enabling Organizational Change Through Strategic Initiatives. p.3).*

*A good practice at the launch of a strategic initiative is to develop a deliberate and structured change management plan to address both the hearts and minds of employees up and down the organizational hierarchy. The 'minds' component includes, among other things, addressing the contextual elements that reinforce the desired behaviours (e.g., metrics, incentive compensation, organizational structure and responsibilities, management forums). The 'hearts' component includes aligning leaders to speak with one voice, helping stakeholders to understand what the change means for them, and maintaining morale over time in the face of inevitable challenges in actual execution. (Jeanne Kwong Bickford. 2014. PMI's Pulse of the Profession In-Depth Report: Enabling Organizational Change Through Strategic Initiatives. p.3).*

*Projects and programs by their very nature create change. To successfully implement organizational strategy, companies need project and program manager with the skills to drive and navigate change, while ensuring that those changes are strategically aligned to business goals. The success or failure of a change initiative is not just about initiating, planning, monitoring, executing and evaluating the project that will drive the change. It also involves preparing your organization for transformation, ensuring stakeholders buy-in, and engaging executive sponsors to champion and support the change before, during and after its implementation. (Tricia S. Cabrey and Amy Haughey. 2014. PMI's Pulse of the Profession In-Depth Report: Enabling Organizational Change Through Strategic Initiatives. p.2)*

From theoretical and practical perspectives, we can conclude that an essential condition for change program successfully are highly respond to people issues, and to respond it, its important to use a behavioral science.

Regarding the importance of people issues in managing organizational change effort, according to Hayes (2010: 140-142), there are six variables to be considered. The six variables are:

1. Stakeholder management. A conceptual framework for identifying which stakeholders are likely to be most important at various stage of a change project and for selecting appropriate ways of managing relationship with them;

2. The role of leadership. The leader's role in terms of creating a vision, aligning relationships around the vision and inspiring others to achieve the vision;
3. Communicating change. A communication that focus to the issues associated with change managers perceiving, interpreting and using information communicated to them by others;
4. Motivating others to change. A general level of commitment in an organization can affect the level of support for change and identifies some of the most common sources of resistance to change;
5. Managing personal transitions. People going through change experience with a variety of emotional and cognitive stages. The seven transition stages are shock, denial, depression, letting go ( acceptance of reality), testing, consolidation, and internalization/reflection/ learning (Adam, J, et.al. in Hayes, 2010: 215-216). Then, managing personal transitions is how change managers can create a plan and implement organizational change in ways that will maximize benefit and minimize cost for the organization and those affected by the change;
6. Modes of intervening. The modes to intervene in a way that helps others to help themselves. Usually this involves adopting a collaborative approach like supporting, theorizing, challenging, and information gathering, but also a prescriptive approach like advising.

## Result and Discussion

1. **Stakeholder Management.** The result shown that the management of PD. X didn't developed a conceptual framework for stakeholder management. They are only making studies about change initiatives with two organizations. First, with state government organization budgeting review, and second, with the university. The result of studies are some recommendation to take some program and project in terms of due diligence process, but not in terms of appropriate ways for managing stakeholders. The management of PD. X are also make a consultation to Kementerian Dalam Negeri and Kementerian Hukum dan HAM - which is are not as a key stakeholders organization.
2. **The role of leadership.** The top management of PD. X had been create a vision – in context of change - in their Business Plan 2012-2016. But, their vision is not enough elaborating to program and project which have strong relation to change initiatives. In other words, the programs and projects of PD. X is not enough to top leader's of PD. X to aligning relationships around the vision and to inspire others to achieve the vision.
3. **Communicating change.** The management of PD. X have been developed an effort to communicate to the stakeholders. But, this communication effort is only implemented in the first stage of change process, and the goal of communication is only to explain the objectives of change initiatives. According to Clampitt et.al. (2000: 41-57), this communicating can be categorize to "tell and sell" strategy which is not effective enough to make change happened. Clampitt states that "underscore and explore" strategy is the best strategy for change, because can give others (stakeholders) feel free to explore their opinion about the implication of change initiatives. Those strategy also can give the change leader's and manager's to listening attentively for potential misunderstandings and unrecognized obstacles.
4. **Motivating others to change.** The management of PD. X was passively motivate their employee to support the change initiatives because - in their opinion - at



least two main reason: *Firstly*, their employee is not capable enough to implemented the change initiatives; *Secondly*, and the change initiatives will results in a settlement of employment. According to Kotter and Schlesinger (2008: 1-14), misunderstanding and lack of trust is one of the main reason why people resist of change.

5. ***Managing personal transitions.*** Managing personal transition was correlated to communicating the change. As we know, the management of PD. X have an effort to communicate to the stakeholders. But, this communication effort is only explain the objectives of change initiatives. Meanwhile, people going through change experience with a variety of emotional and cognitive stages, and that is needed a time. Normatively, the management of PD. X do not implement in managing transitions.

6. ***Modes of intervening.***

Basically, the management of PD. X is not create the modes of intervening. The management of PD. X tend to intervene the process of change by lean to political support. This action can not supporting others (stakeholders) to help themselves.

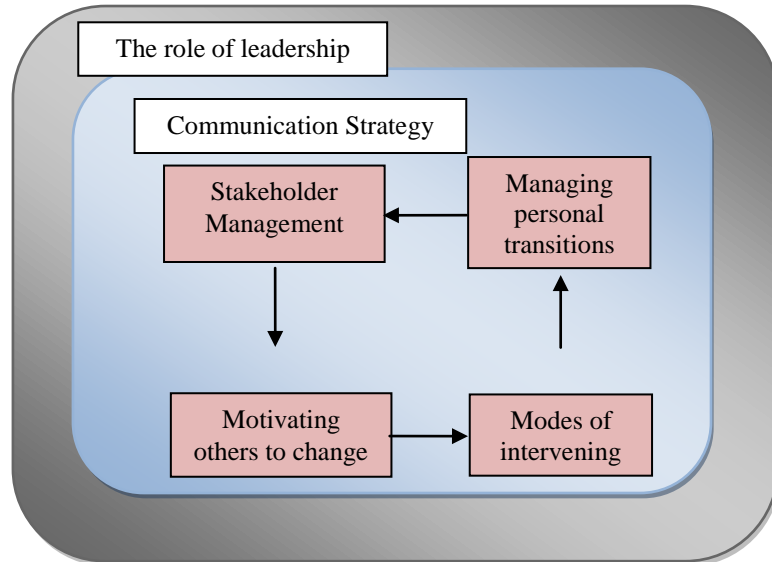
### **Conclusion**

The management of PD. X is lacking attention to respond the people issues on the change process. This lacking attention has been result in delayed the whole process of change, and so it is tend to deadlock. The research also shown that the six variables have a strong relationship each other, and have focus on the role of leadership and his/her communication strategy. The others variables was start on managing stakeholders, follows other variables: motivation to change, modes of intervening, and managing personal transitions. Based on the relationship of six variables, we can develop a model of managing business organization change process, especially in the level of government in Indonesia (a model can be shown in figure 2 as a below).

The result of the research also can recommend a concept for local government business organization change as below:

*The successful of managing a local government business organization change - especially (a) in the form from “Perusahaan Daerah” to “Perseroan Daerah/Terbata”, and (b) in terms of the local government are giving full authority to the top leader’s as change leader - will have strongest relation to the role of leadership of the change leader’s and their communication skill; and will have strong relation to stakeholder management, motivating others to change, modes of intervening, and managing personal transitions.*

Figure 2  
A Model of Managing People Issues in Local Government Business Organization Change



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**TRANSFORMATIONAL LEADERSHIP MODEL IN IMPROVING UNIVERSITY  
PERFORMANCE  
(STUDY IN UNIVERSITY OF LAMPUNG)**

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**Abstract**

Leaders played an important role in determined the survival and development of a university. Leaders can defined policies to be taken and decisions that determined the success of a university. Therefore, research on the model of leadership, especially transformational leadership is very important to be conducted by the University of Lampung. The purpose of this study was to test the effect of transformational leadership on performance, test the effect of transformational leadership on organizational support, as well as test the mediation support for innovation in organizations on performance. The research was conducted by survey method. The research samples were 300 person, taken using nonprobability sampling techniques with convenience sampling analysis done using Structural Equation Model. Validity test results indicated that there are two items which invalid on variable support for the organization, as well as one item statement on performance variables. The test results by using SEM analysis is known that transformational leadership does not directly influence the performance of lecturer and staff, but indirectly affect by mediated with the support for innovation in organization variable. Transformational leadership effect on support for innovation in organization, as well as support for innovation in organization variable fully mediated the effect of transformational leadership on the performance of lecturer and staff at the University of Lampung.

**Keyword:** *transformational leadership, support for innovation in organization, performance*

**Introduction**

University is an institution that create the human resources that are reliable and able to answer the challenges of the world of work and to anticipate the changes that occur in society. In an effort to create skilled human resources (have academic capability, have good character, faith, and discipline) then the university should have a leader who is able to direct the achievement of these objectives.

Leaders play an important role that determines the survival and development of the university. Leaders can define policies to be taken and decisions that will determine the success of university. Leaders must be able to motivate lecturers and staff to contribute more for their strong commitment to university education without being forced.

The role of a leader who is able to transform ideas, desires, goals, Lampung University in order to be well understood and implemented by lecturers and staff at the University of Lampung is very important that teachers and lecturers willing to contribute maximum with initiatives arise from them without any coercion from the leader, high motivation of lecturers as well as their strong commitment to the organization, which is University of Lampung. Therefore, research on the model of leadership, especially transformational leadership is very important to be conducted by the University of Lampung.

Studies conducted in several countries, namely Israel, Nigeria, Singapore and Tanzania, showed that transformational leadership committed by leaders of schools and university will affect job satisfaction, behavior of organizational members and commitment to the organization (Koh, et al, 1995; Bogler 2001; Nguni et al, 2006; Othman et al, 2013).

The problem often faced by university relating to leadership, among others, different styles of leadership among the leaders will lead to difficulties in achieving the set goals, the lack of coordination between the leader of lecturers and staff can cause communication gaps that can lead to conflict, lack of motivation given by the leaders would make lecturers and staff feel that they did not get the attention and support of the leader, the lack of commitment from lecturers and staff to contribute the maximum to the organization, and the behavior of lecturers and staff were seen from the still productivity, resource utilization and lacking coordination among the leaders and lecturers as well as lecturers.

## Literature Review

### Transformational Leadership

Leaders plays an important role in executing a company operational activities and in understanding an organization. (Posner and Kouzes, 1993). Bass (1985) and Yukl (1999) on Pieterse et al (2010) defined transformational leadership as “*a style of leadership that transforms followers to rise above their self-interest by altering their morale, ideals, interests, and values, motivating them to perform better than initially expected.*”

The transformational leader has been described as a person who articulates a vision of the future that can be shared with colleagues and subordinates, stimulates subordinates intellectuality, attention to individual differences between people, prefer to use private resources including time, knowledge and experience, and serves as a coach, teacher and mentor (Yammarino and Bass, 1990; Yukl, 1989 in Shivers-Blackwell (2004).

Transformational leadership contains four components: (Bass, 1985, 1998; Bass & Avolio, 1993 in Bass and Steidlmeier, 1999): (1) charisma or ideal influence (associated with behaviors). (2) Inspirational Motivation. (3) Intellectual stimulation . (4) Consideration of individual.

Posner and Kouzes (1988) in Posner and Kouzes (1993) designed a way to assess the capabilities needed by a leader, who is referred to as The Leadership Practices Inventory (LPI). LPI was developed based on the analysis of case studies on more than 1,100 managers based on their best experience as a leader. The behavior and activities of the managers are grouped into five categories: challenging the process, inspiring the shared vision, enabling others to act, modeling the way, and encouraging the heart.

### Support for innovation in organization

Support for innovation in organization refers to employee perceptions of respect and concern for the organization (Eisenberger et al, 1986). Support felt in organizations can increase employee expectations that the organization will provide greater reward to the achievement of organizational goals (Eisenberger, et al, 1986). Research by Zhou and George (2001) in Joiner (2007) were carried out on organizational support for creativity, which refers to the degree to which an employee feel that the organization encourage, respect, appreciate and recognize the employees who demonstrate creativity.

Innovative organization defined as one the matter which fosters creative functions of its members (Siegel and Kaemmerer, 1978). Some dimensions of the creative organization: (1) leadership, leadership type that characterizes

An innovative organization that they support the initiation and development of new ideas in the whole system and ensure the diffusion of power throughout the system. (2) ownership, related to group members who develop ideas, processes and procedures at their work place. (3) Norms for Diversity, members of the system has positive attitude towards diversity and the system itself positively responds to creativity, and several different behaviors. (4) Continuous Development, and (5) Consistency.

Eisenberger et al (1986) measured the employee commitment to provide support to organizations with Perceived Organizational Support consists of 36 statements that measured by 7-point Likert scale to express their consent to the item in question. The study was conducted at a private high school teacher. The results showed that the effect of perceived organizational support will be greater on the teachers who have a strong ideology to change than the teachers who have a low ideology for change.

### **Performance**

Performance is a multidimensional concept. Performance at the basic level can be regarded as aspects of the process, and aspects of performance results. Performance includes certain behavior. Based on these conceptualization only action that can be improved which can be regarded as the performance (Campbell et al., 1993 in Sonentag et al, 2008). In fact, this performance concept explicitly describe only goal-oriented behavior, which is behavior to encourage employees to improve organizational performance (Campbell et al., 1993 in Sonentag et al, 2008).

Research conducted by Li and Hung (2009) focuses on two types of performance which are task performance and organizational citizenship behaviors (OCB). Task performance defined as behavior that is recognized by the formal reward system and is part of the requirements described in the job descriptions, while citizenship behavior is the discretionary individual behavior, which indirectly or explicitly recognized by the formal reward system, and which, in the aggregate, promote the efficient and effective function from organization (Organ, Podsakoff, & MacKenzie, 2005 in Li and Hung, 2009). William and Anderson (1991) stated that there are two categories of Organizational Citizenship Behavior or OCB: (1) OCBO which is profitable behavior that the organization in general such as informing a person does not come to work, adhere to the informal rules designed to keep order. (2) OCBI which is a behavior that directly benefit certain individuals and indirectly contributes to the organization. William and Anderson measured OCB performance using 21 item statements related to OCBO and OCBI.

### **RESEARCH METHOD**

The method utilized is exploratory research with survey to lecturers and staff in the University of Lampung with the aim to gather information related to the leadership that has been implemented at the University of Lampung. Roscoe (1975) in Sekaran (2006) states that a decent sample size in the study were between 30 to 500. Based on the matter, the number of samples in this study was 300 people. Samples were taken by using non probability convenience sampling technique. Data analysis was done using Structural Equation Modeling (SEM).

The variables in this study consisted of transformational leadership (X), performance (Y) that is mediated by the support for innovation in organizations variable (Y), measured using five Likert scale which are: strongly agree (SS), agree (S), quite agree (CS ), disagree (TS) and strongly disagree (STS).

Transformational leadership using the Leadership Practices Inventory (LPI) developed by Fields and Herold (1997), which consists of 24 item statements, but in this study leadership was measured using 20 items statements, which are follows the developments that have an impact on the organization, explains the future to be achieved. Performance using questionnaire developed by William and Anderson (1991), which consists of 21 item statements, but in this study only used 18 item statements, and support for innovation in organization variable using indicators developed by Siegel & Kaemmerer (1978).

### **RESULT AND DISCUSSION**

The study was conducted using a survey by distributing questionnaires for lecturers and staff in the Faculty as well as in the Technical Services Unit and the bureau at the University of Lampung. The questionnaire contains 65 items about transformational leadership, the support for innovation in organization and performance. Questionnaires were distributed as many as 280 copies of questionnaires, the returning and possible to processed was 259 copies. Thus the response rate in this study was 92.5%.

Respondents in this study came from seven faculties and two UPT and one bureau at the University of Lampung. Most of the respondents are male (as many as 131 person or 50.58%) aged 36-40 years (51 person or 19.69), with the number of lecturers 109 person (42.08%) and staff 150 person (57.92%) and the working period of 2- 15 years (36.67%).

### **1. Validity and Reliability Testing Results**

Validity test results on transformational leadership variable showed that all item statements were valid with factor loading greater than 0.5. In the variable support to the organization, there are two invalid statement items, and one item of performance variables is not valid because it has factor loading less than 0.5.

The results of reliability testing on transformational leadership variable were consistent with the results of tests performed by Fields (1997) and Kouzes and Posner (1993), in which the reliability value ( $\alpha$ ) is between 0.82 to 0.92. In the variable support for innovation in organization, there are four unreliable item statements, and on performance variables, there are three unreliable item statements.

### **2. Qualitative Analysis Result**

Based on the responses of respondents about transformational leadership it is known that the leaders of the University of Lampung rated by lecturers and staff were excited about the future that will be achieved by the University of Lampung. Lampung University leaders are optimistic and enthusiastic in achieving the vision of the University of Lampung is Becoming Ten Best Universities in Indonesia. In order to achieve this, the leader of the University of Lampung seeks to motivate lecturers and staff to provide support to the University of Lampung in achieving that vision.

Lampung University leaders also rated by lecturers as eager to achieve better future, it is seen from the efforts to do re-accreditation of the institution as a first step to achieve the vision that has been set by the University of Lampung. However, respondents stated that the leadership of the University of Lampung were taking less time to celebrate the achievements that have been reached with lecturers and staff. It is important for them as it celebrates the achievements on the achieved accomplishment as a form of appreciation and rewards for the efforts and the attempts that have been made by lecturers and staff in living and improve the reputation of the University of Lampung. Respondents also expect the leaders of the University of Lampung to ensure that they are recognized for their contribution for the success of a project. Based on this, it can be stated the importance of the recognition given by the leader of the University of Lampung on contributions of lecturers and staff for success or performance that still need to be increased to motivates employees to contributes more and achieve more in achieving vision set by University of Lampung

Respondent responds about the support to the organization showed that most respondents (81.41%) stated that they are committed to achieving the objectives of the University of Lampung. This commitment is very important, because without the commitment of lecturers and academic staff at the University of Lampung, the desired objectives will not be achieved. The role of the Executive Board of Lampung which provide support to lecturers and staff also rated quite well by the respondents. The support given by the Executive Board in Lampung can increase motivation to work for lecturers in the University of Lampung environment.

However, respondents also stated that the methods used by the organization is still unsuitable with the goals to be achieved by the University of Lampung. The method applied by the University of Lampung perceived by some lecturers and staff are still not undergo much changes from years earlier, so that it can slow the target achievements set by the University of Lampung. The majority of respondents (43.41%) stated that at the University of Lampung, how to do the job is still not perceived as important as the work performed. This suggests that the process of carrying out the work have less attention, but leaders are more likely to focus more on the judging of the final results achieved. This can lead to delays in achieving the goals set, given the process undertaken will determine the final result set. If the process is done well, for example in providing good service to the stakeholders will have an impact in the form of an impression (image) is good for the University of Lampung because the services provided have been able to satisfy stakeholders and to improve the effectiveness of goal attainment.

In the performance variables, most of the respondents (86.87%) stated that they would tell their superior or co-workers if they can not go to work. Attendance is one of indicators in assessing the performance of lecturers and staff, and it is also related to compensation to be accepted which are remuneration and incentives of meal allowance calculated on the basis of their presence. Respondents also reported that they comply with the informal rules applied by the University of Lampung in order to maintain orderliness (81.08%). Furthermore, the commitment of lecturers and staff (77.22%) to maintain the property or goods of the organization is high. It is important remembering the sense of ownership for the property or the property of the organization will make lecturers and staff maintain and preserve the property. Respondents also stated that they did not take time off more than conditions set (55.04%). Increasing awareness of lecturers and staff for activities in accordance with the specified schedule can happen because of several faculties at the University of Lampung have implemented ISO 9001: 2008, such as the Faculty of Economics and Business, Faculty of Law, Faculty of Social and Political Sciences and other faculties processing towards the ISO so they have strict rules relating to hours of service to stakeholders.

### **3. SEM Analysis Results**

#### **A. Normality Testing**

Data distribution will be said to be normal if the value of the critical ratio (C.R) resulting from skewness and kurtosis were greater than  $\pm 1.96$ .

Based on the results of normality testing, point declaration in univariate normal distribution is Y11, Y10, Y9, Y8, X1.11, X1.13, X1.14, X1.17, X2.19, X2.13, X2.7, X2 .6, X2.4, while overall multivariate were greater than  $\pm 1.96$  which is 30.766. So that overall existing data are not normally distributed. However, this data will still be used as data is the real answer of the respondents.

#### **1. Outliers Testing**

Outliers detection using  $D^2$  Mahalanobis measurement,  $D^2$  were divided by number of variables used on the research ( $D^2/df$ ). For small sample if  $D^2/df$  value were greater than 2,5 meanwhile for big sample category, if it is greater than 4 thus it is assumed that outliers is exist(Hair, et al., 2010). Based on outliers measurement, there are no statements which indicates the existence of outliers, where each of  $D^2/df$  were no greater than 4.

#### **2. Goodness-of-Fit Model testing**

Goodness of-Fit model shows how well a particular model reproduces the observed covariance matrix between the items which are in common covariance matrix indicators



observed and expected (Hair et al, 2010). Value Goodness of Fit (GFI) after the modification are as follows:

**Table 1. Structural Model GOF Criteria Evaluation**

Measurement Index Criteria	Reference Values	Result	Description
CMIN/DF	≤ 3	2,675	Good
GFI	≥ 0,90	0,653	Marginal
AGFI	≥ 0,90	0,616	Marginal
RMSEA	0,03 – 0,08	0,08	Good
TLI	≥ 0,90	0,710	Marginal
CFI	≥ 0,90	0,727	Marginal

The model used in this research is adequate, it can be seen from some of the values that have met the criteria of fit of the model.

### 3. Mediation Test Result

Mediation test was conducted to see the intervention of a third variable. The mediation test results are as follows:

**Table 2 Mediation Test Result**

Variable	Beta estimates	S.E.	C.R.	P-value	Result
<b>Before Mediation</b>					
Performance<--- <i>Transformational Leadership</i>	<b>-0,349</b>	0,241	-1,446	0,148	<b>Not Significant</b>
<b>After Mediation</b>					
Performance<--- <i>Transformational Leadership</i>	<b>-1,047</b>	0,369	-2,838	,005	<b>Significant</b>
Organization Support <--- <i>Transformational Leadership</i>	0,972	0,198	4,912	***	Significant
Performance<--- Support for innovation in organization	0,742	0,243	3,051	,002	Significant

Source: Appendix 9

Based on the mediation test results above, the direct effect of transformational leadership on performance was not significant ( $\beta = -0.349$ , p value = 0.148), and when the transformational leadership is mediated by the support for innovation in organization, the influence of transformational leadership on the performance become significant ( $\beta = -1.047$ , p value = 0.005). Therefore, **full mediation is supported**.

Based on the research that has been done it can be stated that the performance of lecturers and staff will increase with the existence of transformational leadership and support for innovation in organization. The leader of the University of Lampung should be taking the time to celebrate the success that has been achieved together with lecturers and staff at the University of Lampung, appreciation or reward for the success of the work done by lecturers and staff at

the University of Lampung. Lampung University leaders should not only oriented to the achievement of the results of jobs but also pay attention to the process in doing the job. In doing their jobs, lecturers and staff should be given the freedom to work on a job in a manner that is different from the usual, thus encouraging them to be more innovative in doing the task assigned to them.

### Conclusion

The results showed that transformational leadership is not directly improve the performance of lecturers and staff. This means that the performance of employees will not directly increase due to good leadership adopted by the leader of the University of Lampung, but there are other factors which is support to the organization. Support for innovation in organization mediates the influence of transformational leadership in improving the performance of lecturers and staff at the University of Lampung. Support for innovation in organization plays a role in improving performance where employees will feel appreciated for the efforts that has been made and given the freedom to to try a new method to solve a given task, so this will have an impact on their performance.

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## A CAUSAL ANALYSIS OF THE RELATIONSHIP BETWEEN COLLABORATIVE LEADERSHIP, CREATIVITY, INNOVATION, JOB SATISFACTION, AND ORGANIZATIONAL LEARNING

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### Abstract

The overall purpose of the current research is to examine the relationship between collaborative leadership, creativity, open innovation, job satisfaction, and organizational learning. Gained knowledge can be applied in improving the effectiveness of organizations and mainly their leadership, ensuring positive work environment, higher productivity, and excellence in business operations and strategies. A theoretical study was generated about the topic, followed by a questionnaire with participants from diverse Small and Medium Enterprises. The questionnaire is divided into seven parts measuring: leadership, organizational innovation, organizational creativity, organizational learning, delegation and job satisfaction, performance in addition to the demographic characteristics. To test the hypothesis and answer the research problem, the researcher in the current study collected primary data from a very large sample and used structural equation modeling for analysis. Important results of this research are the set of recommendations for further studies and the implications for policy and decision making.

**Keywords:** *Transformational leadership, empowerment, followers' creativity, Organizational innovation, organizational learning*

### Introduction

Collaborative leadership, job satisfaction, innovation, creativity, and organizational learning are important elements of today's business world. They are needed to achieve organizational success, competitive advantage, survival, and growth as challenges and threats are highly increasing.

In the current paper, we will study the relationship between these constituents to be able to derive results that will benefit the company, when its employees will be empowered to work together in order to achieve goals as one group sharing knowledge and skills, helping each other, presenting, and adopting new ideas and ways of doing business. This research will have significant impact on both theories and practices, and it can be adopted by leaders and organizations seeking for world-class practices and development in leadership which will promote leadership effectiveness and excellence.

First of all the study discusses an existing gap in the previous researches that link collaborative leadership, creativity, open innovation, job satisfaction, and organizational learning. Secondly, the increasing challenges due to globalization and reduction of barriers globally will require from all organizations and groups to make critical changes in their structure, and behaviors. These activities are mainly achieved through investing in improving the ways of thinking of senior management and CEO to focus on new ideas, and on continuous organizational learning while motivating the employees to search for the latest innovations, and this study contributes to the knowledge in this field. The current research problem is to find the relationship between collaborative leadership, job satisfaction, creativity, innovation, and organizational learning.

Our hypotheses are:

- Collaborative leadership is an effective tool to promote job satisfaction, creativity, innovation, and organizational learning.

- Collaborative leaders are effective leaders.

## **Literature Review**

### **1. Collaborative Leadership Style**

Initiating a conversation about given topic in the entire organization will make people more aligned around the mission, establishing therefore an open and inspiring culture. It became a trend to have teams working globally due to social media, and the connectedness making collaboration easier to be performed. Leaders adopting “Command and Control” style will find it hard to change as it is not easy to move into the correct leadership style (Hansen, 2011, p. 3). According to (Silverthorne, 2011, p. 1), CEOs adopting usually command-and-control leadership style have minimal chances to succeed in a current world where the collaborative leadership style is required.

Collaborative leaders possess strong skills in the following areas: Connecting people together, appealing diverse capacities and talented individuals, showing collaboration, and all needed efforts to prevent the team from being stuck in debates (Hansen, 2011, p. 4).

Leaders are continually interested in forming diverse groups to be more productive. Most successful collaborations are performed by joining in teams experienced people as well as new employees at the beginning of their career. To keep high levels of performance in the business, collaborative leaders make sure to continually hire new blood (Hansen, 2011, p. 6).

In today’s global world, managers know the need to lead differently but they struggle to know how. Leaders need a new playbook, and it is important to understand the collaborative leadership style, needed skills, and how to learn them in order to obtain higher levels of performance in the company. Successful leaders are proven to be pioneers in collaborative leadership. Nowadays we have the technological development, globalization, trends in social media, and virtual teams that require additional transition to adopt collaborative leadership style. People who won’t be able to deal with connectivity and collaboration will be lost (INSEAD, 2011).

Leaders are key drivers in the collaboration inside a business. Collaborative Leadership style is based on engagement and openness between all the employees (INSEAD, 2011).

The presence of CEO in social media is not a superficial activity, as there are many methods to be used like “Check In” to improve collaboration by motivating employees to raise work related matters, and ideas through virtual or direct contact after this announcement of her/his presence in the company. This practice will ease communication. This is not a case of distraction but CEO will be leading by example though inspiring employees to focus more on external environment, connecting them inside the business (Hansen, 2011, p. 4).

Effective leadership will empower the team to achieve excellent results, and due to diversity in current teams, it will be wasteful trying to standardize everyone in this group because narrowness in differences between the members of a group will limit or even kill creativity and innovation. Talented people may be different, and we must be familiar, accept, and adopt such differences (Hansen, 2011, p. 5).

Leaders’ behavior must influence the team in order to effectively collaborate in alignment with the company’s values. This style doesn’t focus solely on short-term performance of the company, but it is based on socialization of senior management as well as compensation of highly collaborative managers, instead of focusing on agendas (Hansen, 2011, p. 5).

Collaboration consists of keeping a firm hand to prevent any abuse through unifying commands for diverse teams, and to prevent meetings from becoming useless or any occurrence of never-ending conflicts. When it comes to assigning authority, the person in charge of the final decision should be known and in case of no agreement, she/he should interfere to make decisions (Hansen, 2011, p. 6).

Collaborative leaders promote an environment, in which ideas, people, and resources are well connected in the company as well outside it, and this is related to knowledge and capacity of knowing when to exercise influence, when to decide, and when to call all the team to discuss job-related issues (Hansen, 2011, p. 6).

Researches show that if a leader doesn't collect information and ideas from outside organizational borders, searching for new causes of encouragement; she / he will risk being beaten by competitors. To stay at the head of the game, leaders should consider talking and discussing with important components of the external environment including and not limited to: individuals, groupings, and diverse stakeholders (Karabell, 2011, p. 1).

To survive and excel in today's business world, organizations should rely on Collaborative leadership, making benefits more than ever from cleverness and ingenuity of the team. This will emerge the power of mutual intelligence that can save Billions of Dollars, and it will boost the development and introduction of new revolutionary product, service, or systems that may change the status quo. In the end, organizations will be able to survive when others are dropping out of business. Low collaboration in the workplace doesn't have negative financial impact, but workforce will miss motivation, creativity, joy, and increasing productivity, all of which are present in a collaborative environment (Goman, 2014, p. 1).

The following tips will help in adopting collaborative leadership style within an organization: sharing information between departments is essential to increase efficiency, productivity, and prevent any power scuffle. Collaboration is mainly a change in employees' behavior, and investments should focus on promoting successful collaboration to benefit the whole organization. Any organizational change can't be achieved without the commitment, collaboration, intelligence, and involvement of the employees from the beginning, and this is the correct way to transform any company. Common purpose and vision between management and employees will originate into business success (Goman, 2014, p. 2).

Diverse teams resolve problems effectively due to the ability of thinking differently, and therefore they are not limited by a given number of ideas as they have different viewpoints and options. Strong interpersonal relationships in the workplace help the team to be more productive, and it is achieved through different methods like assembling a team together to present a new project. This is the first step in strengthening relationships, and obtaining common understanding of tasks in hand. Trust and sharing knowledge between the leader and her / his employees are mandatory to obtain a strong open collaboration based on complete information and continuous communication. Body language is essential in collaborative leadership, eye contact, and focusing on speakers without distraction will demonstrate attention, engagement, and willingness to listen (Goman, 2014, p. 3).

According to (Wiese, 2012, p. 1), "From the marketplace to the battlefield, no one's going it alone", technological development, and electronic advancements in a globalized world are changing the way business is conducted while disruption is happening in many industries. Collaborative leadership benefit from technological development but many efforts of collaboration are facing failures.

Leaders must lead by example, which will encourage employees to collaborate, break silos of the organization, and obtain a competitive advantage (Wiese, 2012, p. 2). Successful collaborative leaders share the following qualities: trustworthy, avoid being passively aggressive, transparent, deal with resources as instruments and not assets, and they develop and maintain proper and formal documentation of decision rights, accountability, and rewards, in addition to the relationship between them (Wiese, 2012, p. 3).

#### **A. Job Satisfaction**

For the last forty years, Job satisfaction was considered as one of the most important topics for researchers. The main driver behind launching these studies was the need to find solutions

for absence, turnover, low output, and the development of condition and wellbeing of the workforce (Taylor, 2016, p. 1). In modern management researches, job satisfaction remains also a very important topic to handle (Jonathan Westover, 2010, p. 372).

The literature of business contains various definitions for Job Satisfaction, and according to (Locke, 1976, p. 1297), it is an emotional situation that occurs when an individual value her / his job. The researcher in (Snyder, 1975, p. 318) defines job satisfaction as an assessment of the circumstances in a job, and results obtained from it. In the study (Charles L. Hulin, 2003, p. 255), the writer considers that job satisfaction is composed of multidimensional inner answers to the job by an individual, which is composed of cognitive, affective, as well as behavioral constituents.

Measuring job satisfaction is a rough task, and many variables may interfere in this measurement, covering the following factors: individual, culture, and environment (Gupta Kavita, 2012, p. 90). Not all employees are satisfied in the same way, as the degree of satisfaction will differ between them (Gupta Kavita, 2012, p. 91). According to (Sempane M. E., 2002, p. 30), there is a relationship between organizational culture and job satisfaction.

To motivate employees, many companies make decisions based on three elements: money, wages, and conditions of service. Money has the highest influence in motivating employees, and encouraging them to be more productive. Inducements on salaries are adopted to increase employee satisfaction, and the successful achievements of tasks and duties to achieve employee's satisfaction of the tasks done. The conditions of service play important role in satisfying and engaging employees, as they search for better treatments, possibility of improvements, and advancements, rich communication, safety and security, and sharing of knowledge (Gupta Kavita, 2012, p. 92).

According to (Sinoway, 2012, p. 1), employment crisis and limited opportunities make the employees at all levels trapped, and unsatisfied. The sole solution to change this situation can be obtained through economic revival leading to a creation of jobs for people in need, and also improving the opportunities for those who currently work.

First of all, an employee can meanwhile initiate a road for their satisfaction under the current conditions, following these stages: development of individual vision for long-term professional and personal goals, questioning whether this is the right path, and if she / he will remain in the same position after a reassessment of current goals in the job, household, material capital, and society. Secondly, employee may reconsider what is "insecure", knowing that sometimes doing nothing may be risky. This occurs when no decision is made to face given risk, and employees will stay in the same situation despite that she / he will be heading directly off a cliff. Thirdly, employee may start their "individual board of directors" (IBOD), which is composed of individuals who can act proactively to advance her / his career, by continually providing needed feedback, support, and advises to have skills that meet opportunities available in the market, and to compensate professional weaknesses. Finally employee must focus on the main zones in which she / he is mostly skillful, and have more competencies and capabilities than competitors who seek the same opportunities (Sinoway, 2012, p. 2).

## **B. Creativity**

Creativity is usually defined as the development and the presentation of new ideas like Pablo Picasso when developing new ways of painting (Amabile, 1998, p. 2).

In business, new ideas should be clear, easy, appropriate, and able to be transferred into actions. Creativity may be involved in all departments without exception, as it can provide benefits for the whole organization. It is related to the way people think about these problems, or how they imagine it. This is the creative-thinking skill, and its components: expertise and motivation (Amabile, 1998, p. 2).

According to (Sternberg, 2005, p. 3), creativity can be defined as the combination of skills and characters to develop new ideas, and products of high quality with new characteristics that are required in the market, and can satisfy the customers' needs. Creative leaders will develop ideas influencing the followers that will adopt them and follow them. Creativity is a must for all the leaders who may share the creative ideas with employees through many stories according to the situation and the business, in addition to the position of the leader.

Developing a culture of creativity in the workplace will promote growth, increase market share of the organization, along with a higher leading position of the company in the market (David Burkus, 2015, p. 1).

Creative companies perform better than other rivals, as they will have higher revenues, and bigger market share, which is a main driver towards continually seeking innovations, and inspirations. Those are the sources of the highest levels of creativity obtained by empowering individuals to think and behave outside their comfort zone (Levirne, 2015, p. 1).

Sources of creativity are sometimes misunderstood, and therefore leaders may harm the moral of their team members in times when they need it the most. Leaders may consider some limitations in which their behaviors will determine the extent of influence they have on empowering or damaging the creativity of their team members, and entire organization. When negatively influencing the development of innovative products and services for example, a reflection of these negative issues will shape all the departments in the entire company, and will influence operational as well strategic activities and decisions, which can change the future of the business in a current global world (David Burkus, 2015, p. 1).

Researches on creativity started more than one century and a half ago, and it is still difficult to find the sources of different ideas standing behind it. Researches considered the creativity as a trait for individuals and groups, without considering other assumptions like the need of people to be different from others, and development of something that no one else has previously presented (Walton, 2016, p. 1).

Creativity can be initiated by moving people out of their comfort zone, increasing challenges, and promoting risks and original thoughts. While initiating creativity, we may distinguish between discomfort and fear to prevent fear from replacing discomfort in the organization which will be harmful for the whole business. This fear will make people seek self-protection instead of achieving organizational goals, reducing firm's capacity to innovate, creating an environment of trust, and cooperation among team members, and management (David Burkus, 2015, p. 2).

Fear will be prevented when discomfort is constrained accordingly, because fear will push employees to search for self-protection, losing concentration of their tasks and duties. Discomfort will also push individuals to move, act, innovate, and drive results, but fear is harmful and dangerous (Levirne, 2015, p. 1).

Creativity is unique for the organization, and it is challenging to find the balance between artificial results and the business outputs. Organization aims to stay profitable, which constraint the leaders in their daily as well as strategic decisions and activities, preventing any investment in finding creative solutions, and enabling the business to focus only on the elements that provide direct return, and increase directly the profits of the business. The manager responsible of the creativity may apply the following three steps: protect the team responsible of creativity, protect creativity process, and finally communicating directly to obtain new ideas and results. Managers of such creative organization usually intervene to resolve any problems, and to balance art with commerce. These interventions require efforts and skills to convince other individuals (Bangle, 2001, p. 8).

Creative ideas come from those who focus on boosting their knowledge of artistic quality, and they welcome all information related to excellence in design. Critics may be presented to respect the emotional relation between these individuals and their designs. The protection of



creative individuals is essential from all company's responsible and managers who are directly responsible of them, because these individuals are at the highest levels of sensitivity which can constraint the global efforts of development of new and different products, services, and processes. Individuals responsible of creativity will be also competing between themselves carving into new environment of higher levels of creativity (Bangle, 2001, p. 9).

Managers also work to protect the whole process of creativity, and they teach other employees about the importance of working in this creative department. Learning is performed through the involvement of top management in the creative process, seeking and obtaining highest levels of excellent results, and putting themselves in the customers' shoes to make any needed changes from this perspective (Bangle, 2001, p. 7).

Managing well the relationship between art and business will be accomplished through a rich communication process focusing on sharing the most important things in the company to be more efficient. Non-verbal communication and gestures may be utilized to share better the message in question, in a way that describe reality of the situation instead of speaking about it. This is an innovation in the communication process to be able to obtain needed understanding, and to resolve gaps (Bangle, 2001, p. 8).

#### **D. Innovation**

Innovation is a set of steps for elaborating, developing, and applying new ideas, decisions, new products and services, new methods of doing business and dealing with diverse stakeholders, etc. The study of innovation is concerned with ideas behind this newly created element of the business life, which is a primary reason behind the effectiveness of any organization or group of people (Xiaomeng Zhang, 2005, p. 2).

Innovation may be related to manager's response to change, with all needed steps after its occurrence, and it is related to the relationships leader – followers. This will boost creativity and innovation when trust is shared between them (Xiaomeng Zhang, 2005, p. 2).

Innovation can't always be considered as a solution for all problems in the organizations as sometimes, it may worsen them (William McKinley, 2014, p. 1).

"Innovate or Die" is a sentence that created continuous debates (Ignatius, 2014, p. 1) after that Peter Drucker mentioned it. Innovation requires an investment in R&D, which has sometimes big costs in terms of time and money, and can't be afforded by all companies. Despite that all of them acknowledge the importance of innovation, and of developing unique products and services or the "Next Big Thing". This is continually happening for example in the case of P&G, one of the most innovative global businesses (Ignatius, 2014, p. 1).

Companies seek inventions and consider them as a major source of experimentation and development. Failure in these experiments is of high cost: reducing the performance, and influencing negatively the business in all its functions. These failures may endlessly occur, without being noticed, because when a product, a process, or a firm fail, therefore they will go directly out of the scope of literature, and rarely books debate the causes of failure (William McKinley, 2014, p. 2).

Flexibility in Innovation may be used to prevent companies from having a rigid situation of innovation. In this case, the built-in flexibility will regulate the bad influences on companies. This flexibility is about two main characteristics: First of all the multiple configurations that this product and/or process can have whenever it is introduced, and how quickly it takes to move from one configuration to another (William McKinley, 2014, p. 1).

The cases of organizational declines may occur globally, and the majority of organizations are not able to turn things around. Many factors are the reasons behind this decline including and not limited to uncertainty, managers' mistakes, wrong decisions, and bad operations. Organizations have to ask themselves: "What Then?" and to know what opportunities are

available to survive setbacks, and what time is required for adaptation after implementing this innovation (William McKinley, 2014, p. 3).

**E. Organizational Learning**

The technological development, and increase in competition are continually forcing companies to be transformed into learning organizations at all managerial levels. Companies will continually learn new methods to perform their tasks, and different functions, because the whole organization will seek learning, and not only CEO or the board of directors. The assessment of its current situation, strengths, weaknesses, advantages and disadvantages of its strategies and tactics, will help in determining what is needed to be done, and what decisions should be made in order to make the business better and to increase its competitive advantages (David A. Garvin, *Is Yours a Learning Organization?*, 2008, p. 3).

For a successful organizational learning, three primary factors are required, and they are: existence of an environment that promotes and supports learning within organizations, strength and quality of the content, and reinforcement through leaders' behaviors. Those are the three basis of a successful organizational learning, and it is critical to seek for long term learning experience, and to continually adopt the latest efforts and researches in this concern for better business results, and achievements (David A. Garvin, *Is Yours a Learning Organization?*, 2008, p. 1).

First, the environment is affected by the following four factors: Psychological Safety, respect and awareness of the differences, seeking new ideas, and time factor. Psychological safety is obtained when employees are able to express their ideas and concerns easily with complete trust, and when they are motivated to show all personal information accordingly. The respect and awareness of the differences is needed in a challenging world where the threats are in continuous development, and they are becoming more harmful whenever not considered correctly. New ideas are required during learning experience to benefit from it. This is not only limited to Trial-And-Error, but it goes to the point of finding new ways to do business, and to creatively work in elaborating new elements which can change the status-quo in the industries. A fair time is needed in learning organization for people to behave correctly under diverse situations, and to motivate investment of time in development the organizational processes and procedures (David A. Garvin, *Is Yours a Learning Organization?*, 2008, p. 3).

Secondly, strength and quality of the content is a factor of primary importance, as learning process is the development, grouping, implementation, and consumption of given information aiming to beat the competition, and to provide additional information in all the value chain. It will also monitor the flow of information, and their methods of use. Internal sharing of information in a learning organization in addition to the entire gained knowledge is of primary importance. This can be done with individuals, groups, as well as the whole organization through the following directions: inward, downward, or lateral. This step will confirm that information is well received by people who are in need for it. This will make the learning experience effective and efficient. An example of this approach is the AAR "U.S. Army after Action Review", which is adopted in the business world by many organizations. This approach consists of answering the following questions: What were our targets? What happened in reality? Why this result happened? How we will perform next time?

Answers and results will be published in documents which will be a very important learning experience for the company (David A. Garvin, *Is Yours a Learning Organization?*, 2008, p. 4).

Thirdly, leaders' behaviors have the biggest influence on learning organization, and how it deals with different situations where employees are required to seek learning, and innovative solutions for the problems after proving a will to find alternatives, and to be a part in the learning process. The leader will start to behave accordingly to motivate employees to pursue

steps to obtain a good learning experience. Employees will think about the situation using many criteria after a complete knowledge about the directions towards resolving the problem, and the possible results to obtain (David A. Garvin, *Is Yours a Learning Organization?*, 2008, p. 5).

## 2. Procedures and Materials

The decision regarding what method to adopt is critical, and it follows the study's topic, purposes, problems, variables, and questions. The researcher was supposed to perform a clear overview of philosophies and paradigms of leadership in addition to different views in performing the research studies. Here we don't aim to contrast different elements of the research but to precisely determine where the current research study is positioned. The chosen sample is representative of the population needed. The study aims to obtain results by using sampling statistics which add value to the work.

The analysis is structural equation model which is a strong multivariate analysis composed of many different methods. This model requires a familiarity with the concepts of variance, covariance, and correlation (Dell, 2015, p. 2).

According to (Christof Nachtigall, 2003, p. 2), SEM is the future of data analysis in academia, and it is hard and even impossible to understand it completely. And despite its importance, we cannot present a complete definition of SEM.

In (Kaplan, 2009), Structural equation model was defined as set of methodologies seeking to represent the information about resources in doing the analysis.

Structural Equation Model is sometimes called LISREL models, which is the abbreviation of Linear Structural Relations, and these structural relations are performed between variables using usually linear regression equations, presented by a graph in which related variables are linked using arrows (Christof Nachtigall, 2003, p. 3).

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**BEHAVIORAL CONTAGION, TRANSMISSION OF INFORMATION SIGNALLING  
AND ACTION BASED OF HERDING:  
AN ANALYSIS ON THE EVENT OF FINANCIAL DISCLOSURE  
ANNOUNCEMENT**

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**Abstract**

This study aims to examine the existence of contagion effect of bank herding on security market. Unlike the common use of contagion measurement, that is stock price, this study focus on the use of behavioral measurement of contagion and action based of herding. The underlying argument for the use of such measurements are the theory of social influence and behavioral contagion, which is stated that contagion is exercised whenever the need for reducing uncertainty is persisted and the positive reference individual is existed. Using such argument, this study argues that the contagion effect of bank herding on security market is purely behavioral. The transmission channel for the behavioral contagion is information signaling, which is carried by the depositors, as they are being perceived as the positive reference individual by the investors in security market. The action based of herding behavior in each market will also be explored to provide in depth understanding about the dissimilar (or similar) motives of herding amongst depositors and investors due to their decision making of investment maximization.

**Keywords:** *behavioral contagion effect, information signaling, herding*

**Introduction**

The classical economic theory, by the use of expected utility theory has assumed that individual decision making process is rationally completed. The rational decision making process is characterized by completeness and transitivity. Completeness assumes that one is able to comprehensively weighing and measuring all of available alternatives or choices, while transitivity assumes that one is capable of making priority amongst available choices. Transitivity and completeness are exercised since there is an existence of individual expected positive outcome (or expected utility) from the decision making process. In such case, expected utility is assumed can be calculated using rationally quantitative tools. Based on those assumptions, the chosen alternatives under classical theory will be consistent across times and situations.

However, rationality on decision making process has recently been questioned, especially by behavioralists, who believe that the process is actually irrational, that is, mainly based on one's behavior. In that case, emotion plays an important factor which significantly affect the decision. Beside emotion, is the existence of bounded rationality which also plays an important role on the irrational decision making. Bounded rationality argues that one's rationality is actually, contained by his or her irrationality, such irrationality are one's sentiment and perception. The argument of bounded rationality is especially based on the fact that the available information is imperfectly shared for only some of individuals, meaning that some will received only small portion of information. Such individuals, then will make a decision based on emotions, mainly their perception and sentiment. The effect of such behavior, especially on financial market is the existence of market anomalies, such as black Monday and dotcom bubble.

In the field of finance and investment management, the believe that trading activities always preceded by in depth fundamental and technical analysis (the rational process) has been argued by some empirical evidences. Some of those evidences notice the significant of behavioral factors behind investor decision on investment. Tversky and Kahneman (1974) on the theory of “anchoring and adjustment”, found that the decision making process on investment was mainly determined by the presence of reference individual. Such individual is believed as an expert that poses a significant knowledge in an investment area. Reference individual then, becomes an anchor for investor on making the investment decision especially on determining asset value, disregarding the heavy reliance on rational tools. Furthermore, Tversky and Kahneman found that investor’s value prediction only have a small deviation from its anchor’s value. Based on the finding, it is confirmed that rational decision making process is not relevant. Moreover, Thaler (1988) found that imperfect market information has caused difficulty for investor to determine the true value of an asset. In this case, investor have a high tendency to predict the value either higher or lower than the true value of asset. Such condition is called “the winner’s curse”. DeBondt (1998) argues that value prediction usually determines based on historical data of asset price and the reputation of asset issuer (firms). While behavioral factor may cause market anomalies and price dis-equilibrium, Black (1986) predicts, that the role of behavior which is represented by the presence of noise trader or irrational investors, will create more dynamic financial market in the future.

On the perspective of psychological domain, the main reason for the occurrence of irrational behavior on investment is the cognitive bias. Such bias emerge since investors do not involve structural and logical thinking while making decision. Cognitive bias is mainly affected by behavioral variables. One example of cognitive bias is heuristic bias that is bias due to the tendency of investor on simplifying problems. In this situation, investor simply rely on available information (availability bias) or rule of thumb without further need to find more comprehensive information.

This study emphasize the analysis on behavioral contagion which is part of irrational behavior. Behavioral contagion argue that investor’s decision making is determined by an observation of other’s behavior. Wheeler (1966) defines behavioral contagion as a sudden change of investor behavior in order to imitate the behavior of initiator. In this situation initiator doesn’t have either specific relationship or communication with the imitator. Further, the decision making process by the imitator is explained by the concept of approach-avoidance conflict. Using this approach, Wheeler (1966) argues that the necessary condition that must be met in the process is imitator’s internal conflict on facing a critical circumstances: whether make some actions (approach) or avoiding actions (avoidance). Since the information is limited, imitator will observe behavior of others in order to make a decision.

Studies of contagion in finance and investment management, usually associate contagion with herding behavior. To be specific, contagion is the effect of herding behavior. Contagion will trigger financial market instability and financial crisis. In that case, the law of one price become the major explanation for contagion. This law argue that the same asset in the same market will have similar price. In that case, the spreading of contagion will take place exclusively in one and similar market (purely contagion) and asset’s price will determine the level of severity, contagion had caused. Contrasting with the law of one price, studies on contagion using purely behavioral arguments and measurements are still rare. In this light, behavioral arguments and measurements need to be explore since the root of contagion is purely affected by one’s behavior, not the price. Furthermore, herding which precedes contagion, is the behavior that emerge from the existence of heuristic bias. Scharfstein and Stein (1990) define herding as the behavior that follows the crowd. Such behavior emerge since the information possessed by other (or crowd) is perceived to be more accurate compare

to those of one's private information. Consider in the extreme trading situation that investors have to decide, whether to buy or sell an asset: 50 investor with the substantial private information that has already decide to sell an asset, will suddenly change their decision due to 1 investor in that group that has a different decision (buy an asset). Banerjee (1992) argues that herding behavior in the financial market follows a sequential mechanism. It means that one will engage in herding behavior after observing the first individual in the group exercising some action. In that case, crowd's behavior provide a powerful signal of the real market condition.

Several studies empirically find the contagion effect that emerge after herding behavior. Mostly, such contagion depart from bank herding (run) event, that is a massive sudden withdrawal by depositors due to the perceived of poor liquidity management. Aharony and Swary (1996) find that herding on the failure bank will be subsequently followed by another bank, which mainly have smaller size than the first (failure) bank. The study confirm the presence of pure contagion effect.

Furthermore, Cornett, McNutt and Tehranian (2009) find that the competitor of failure bank will

have better performance in the long run if the failure is caused by bank characteristic not fundamental factors. In that case there is no pure contagion effect. Conversely, fundamental factors will become the source of failure of both the failure bank and its competitors.

As mention earlier, most studies of contagion effect use stock price as a proxy to measure the degree of contagion. For example, Aharony and Swary (1983) find that bank run is usually followed by the sharp fall of stock price in the financial institution sector. Consistent with Aharony and Swary (1983), Swary (1986) find that the failure of Continental Illinois is also followed by the sharp decline of its stock price. Similarly, Goldsmith-Pinkam and Yorulmazer (2010) find that the fall of a specific bank in UK due to herding or run has significantly followed by the fall of its stock price. The use of stock price to measure contagion, cannot appropriately portray the pure contagion effect in banking sector. The significant fall of stock price due to bank run, is actually showed the pure contagion on the other side of market that is security market. However, this study is not aiming on finding the best measurement for contagion effect of bank run. The security market instability due to bank run is seen as the possibility that banking sector and security market may have interdependent relationship that provide a transmission for contagion. To be more specific, this study is aimed to examine the interdependent relationship between the two sectors by using the argument of behavioral contagion and measurement. In order to have an in-depth analysis of behavioral aspect of contagion, the action based of herding within each sector will also be analyzed.

Since the occurrence of interdependent relationship between the two sectors might be realistic, the question that must be raised is that, what kind of transmission channel that might create behavioral contagion between them? It is arguably, that theories that can be used to explain such behavioral transmission channel is still rarely explored. However, before answering the question, it is important to identify that the contagion effect is constantly depart from bank run to security market, not from the opposite direction. Knowing the process of contagion will help and enhance our understanding on how the behavior being shaped in each market, then how it become very contagious.

The argument of systemic risk begin with the existence of interbank short term loan, which caused high interdependence amongst banks in the financial market. The liquidity failure in bank A will affect another bank's liquidity, since such failure mean that bank A is unable to meet its loan commitment for both; the depositors and another bank (non-failure bank). For non-failure bank the event will cause illiquidity problem, since they will suffer from cash due to the default.

On the other hand, depositor's trust on bank A decreases and substantially withdraw their investment, which is followed by sudden withdrawal on non-failure bank due to the fear that the saving can't be reimbursed. This circumstance drive the total failure of bank especially on functioning the intermediary role. Since bank's intermediary role is also assuring trading liquidity of stocks, the failure will affect the price of stocks due to delays on trading activities. Stock price usually fall and cause the sudden behavioral shift of investor, namely flight to quality. This behavioral shift take place due to the changing perspective of investors on risk. Saving which is being perceived as the safest investment, become risky due to bank run event. Hence stock which is more risky than saving now become riskier. This changing perspective of risk then trigger a substantial selling decision on stock, drive the stock price to severely decrease. Based on this perspective of flight to quality, it can be seen that the contagion is actually based on the changing perception which is part of the cognitive bias. It is purely behavioral and irrational. In the light of implicitly behavioral factors of contagion, Pritsker (2001) confirms that contagion from banking sector to stock market is purely behavioral and irrational. However, Pritsker (2001) sees that the source of irrational behavior is trust, not the changing perspective of risk. Since bank also play as an asset intermediary for the real sectors, the failure may discontinue the operation of some industry in the real sector, then slowing down the economic growth. In such situation, investor trust on bank and firms (as part of real sector industries) will decrease as portrayed on the sudden selling action of real sector stocks. Using the argument that contagion is depart from bank run and contain behavioral characteristics, this study argue, the transmission channel for the contagion might be occurred is information signaling. Information signaling is information send by depositors to investors via herding behavior that carry fundamental circumstance of bank. The underlying argument for the signaling information is the theory of "Social Influence" The theory argue that social influence may occur whenever one's emotion, belief, and behavior, are affected by the behavior of others.

Hirshleifer and Teoh (2008) argue, since the trading activities in security market are mainly based on behavior observation which subsequently reflected on cognition (reasoning) and emotion, it is important for social influence to be the main explanation for the contagion. Under social influence theory, one's emotion, belief and behavior are assumed transfer one's idea, business strategy, or forecasting regarding specific financial asset. Behavior imitation then, according to the behavioral contagion theory may occur since there is an approach-avoidance conflict especially on facing and reducing the risk of uncertainty.

Based on these argument, this study argue that contagion effect from banking sector to stock market is purely behavioral with information signaling play as the transmission channel. To have an in-depth understanding on the behavioral factor of contagion, the action based of herding as the main source of bank run and then market crash will also be explored. In addition this study argue that the event of financial disclosure announcement will add more insight on the occurrence of behavioral contagion. Gu (2011) states that financial disclosure become the main source of information for depositors to decide whether to withdraw or not. The importance of financial disclosure then add more knowledge on the degree of severity of bank run through herding behavior. The intense severity of bank run will expectantly bring the understanding on how the event will convey information leading to investor imitation behavior.

## **Literature Review**

### **1. Behavioral Contagion, and Bank Run**

In the light of the law of one price, herding followed by bank run, has resulted on pure contagion effect to the entire system of banking sector. Aharony dan Swary (1996) find that small size bank appear to have higher possibility of run compare to those of bank with bigger



size. In addition, Aharony and Swary (1996), Chakravarty, Fonseca dan Kaplan (2012) find that pure contagion actually comes from depositor observation of non-failure bank, to the behavior of depositor of failure bank. Trautmann dan Brown et.al (2014) argue that the contagion effect occur since depositors know the interbank economic linkage.

Studies which examine that bank run may trigger behavior contagion into different market that is security market are still rare. In addition, since the contagion is assumed not behaviorally occur, the measurement of contagion generally use stock price. For example, Goldsmith-Pinkam and Yorulmazer (2010) finds that the contagion effect of herding and bank run in UK reveals in the decreasing stock price of affected bank. This study argue that the use of stock price in fact show the pure contagion on security market, not the financial institution market (bank). However, the significant fall of stock price following bank run, may indicate that bank and security market are actually integrated. Using the proposition of market integration, it is important to comprehend that such integration may occur since each market are systematically connected. Using the argument of systemic risk, it is clearly show that the contagion will always depart from bank run to stock market. The contagion itself demonstrate the possibility of integration.

By means of systemic risk argument, the occurrence of behavioral contagion between the two markets can be described in two perspective: traditional and market perspective. Traditional perspective sees bank as an intermediary for those the need and the have of capital. The main source of bank failure from traditional view is the liquidity shock due to asset mismanagement. Generally, bank balance sheet is characterized by the presence of substantial proportion of longterm loans (for the need) which are financed by mostly short term liabilities (from the have) including interbank loan. The failure occur once longterm loans are default due to downturn of economic situation, resulting on bank failure to pay its short term liabilities (Hendricks et.al, 2006). Since interbank short-term loan are also allowed, the liquidity shock may generate shock to another bank. Such circumstances create the flight to quality phenomenon for both, banking sector and the stock market. Depositors and investors suddenly change their asset for an exchange of the saver one, characterized by sudden withdrawal of saving and massive stock selling.

The second perspective of systemic risk is market perspective. This perspective accommodate the recent shifting of bank role from traditional to market intermediary. One of such role is to ensure the liquidity trading of securities including stocks. The failure of bank due to liquidity shock or macro economic downturn cause the delays of trading resulting the stock price decreasing.

## **2. The Transmission of Information Signalling**

The argument of systemic risk implicitly stated that bank and stock market are integrated. Such integration require a channel of transmission, a channel that convey an information from one market to the other different market. Hirshleifer and Teoh (2008) argue that reasoning and emotion become relevant in the analysis of investment decision, since many empirical findings confirm such behavioral factor through market anomalies. In this case, contagion which can also be seen as decision making contagion, might occur in the behavioral manner. Furthermore, Hirshleifer and Teoh (2008) argue that the theory of social influence become important on explaining behavioral contagion, especially on how the behavior from one market is transmitted to another market.

Social influence theory stated that reasoning will resulted on the imitating behavior. The imitating process occur since one perceive that the behavior of others convey (signal) some information (Hirshleifer dan Teoh, 2003). The behavior of other is also believed carry some strategies or analysis of specific financial asset. This circumstance arise due to the information blockage that is a lack of factual information on the side of the imitator. From the

investor perspective, the case of bank run, the herding behavior that massively withdraw saving is believed bring some important information about affected bank. Since bank financial disclosure become the main source of information for depositors, investor then, believed that depositors have better analysis on bank fundamental situation. Depositor's herding then, become important and trusted signal for investor which subsequently followed by investor herding. Based on these explanation, it is clearly seen that imitating behavior that is contagion occur due to the presence of trusted and important information brought by one's behavior. Furthermore, Ogunlade (1979) argue that the occurrence of imitating behavior that is behavioral contagion is spontaneous in order to lessen the fear of uncertainty. Ogunlade also stated that the necessary condition for the spontaneous occurrence is that the imitator and the initiator must be in the same critical situation. Further, initiator must also have a significant expertise for the imitator to be interested. In this case initiator become the positive reference individual for the imitator.

### **3. Depositor Herding and Financial Disclosure**

To have an in-depth understanding that contagion is occurred from behavior to behavior manner, this study explore the action based of herding for each market. Gu (2011) argue that depositor herding arise in the more dynamic and rational mode. Thus, the occurrence of depositor herding is more fundamental than panic action. This argument arise since there is a believe that depositor's trait namely patient and impatient play an important role on herding decision.

Depositor with high impatient tend to herd compare to those of with low impatient. In that case depositor with low impatient (patient) will not herd on the first period (timing) of herding. Furthermore it is confirmed that depositor with high patient usually investor that have considerable amount of saving (big account). Since depositors with big account are well informed, the behavior of big account depositors will usually followed by the small account-uninformed depositors. In this situation, eventhough critical situation force depositor to withdraw, the occurrence of such withdraw is small since the big account-well informed depositors remain unwithdraw.

Furthermore, Gu (2011) argue that fundamental herding doesn't always resulted on market stability or new equilibrium. On the extreme case, when big account depositors withdraw due to the motive for consumption not fundamental motive, it may cause sudden liquidity shock for healthy bank. The consumption motive will be followed by herding of small depositor resulted on bank cash drain eventhough bank is fundamentally healthy.

The correlation of herding and financial disclosure are given by Garriga dan Gu (2012). On their study it is found that the more detail the financial disclosure, the high possibility for bank to get affected by run. On the contrary incomplete financial disclosure resulted on the small possibility of being run (Parlatorre, 2015). The argument is that, on the low transparency of financial disclosure, both big and small depositors can not appropriately read the signal brought by the disclosure. Thus it may lead to inefficient and misleading herding.

### **4. Investor Herding and Financial Disclosure**

Contrary to those of depositor, investor herding behavior is more emotional due to their bounded rationality on coping noisy information (DeBondt, 1998). Barber et.al (2009b) find that the emotional level will be high for individual investor than those of institutional investors. This is due to the characteristic of individual investor who prefer taking risky investment than the safer one. Based on the emotional level, action based of investor herding is divided into two categories, intentional herding or panic herding and unintentional herding or fundamental herding.

Intentional herding is type of herding that is executed by abandoning private information. Such herding rely heavily on non-fundamental factors such as: reputation and size of the issuer (firm). On the other hand, unintentional herding is done by considering fundamental analysis and information such as: earning announcement, interest rate fluctuation and other changes of fundamental macro economic variables. In conjunction with financial disclosure Han et.al (2013) find that detailed financial disclosure will draw noise trader attention. Noise trader that usually has poor capability on analyzing the information (financial report) and short-term oriented will use the event of financial disclosure announcement as a means to acquire higher return.

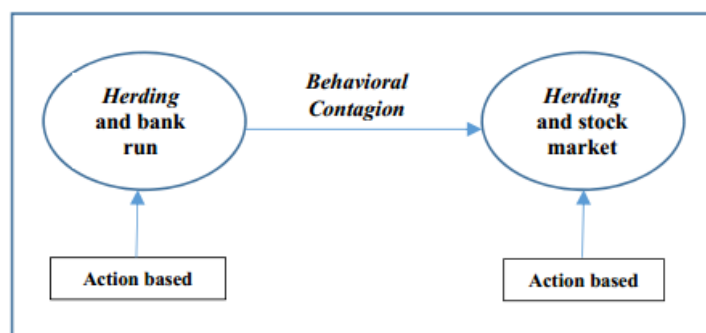
## 5. Propositions Development

Based on the argument this study develop two propositions, which are:

Proposition 1: There is a behavioral contagion effect from bank run to security market on the event of financial disclosure announcement.

Proposition 2: There is a difference action based of herding for each market

The model for the analysis is presented below:



**Figure 1. The model of behavioral contagion**

Based on the figure 1, it is shown that the behavioral contagion is flow from herding on bank run event to stock market herding which may leading to market crash. The behavioral contagion is based on the argument of social influence in which investor will imitate the behavior of depositor as a positive reference individual. As a reference individual depositor behavior became the channel of signaling which convey information regarding bank fundamental situation. For each market there is ascertain type of action based herding. Especially on the side of bank run, the type of action based herding will determined the severity of run then subsequently imitated by investor in the stock market. The nature of action based herding of investor will consequently determine the degree of imitation.

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**SUKUK AND CONVENTIONAL BONDS PERFORMANCE IN INDONESIA  
 (COMPARATIVE ANALYSIS OF RETURN AND RISK)**

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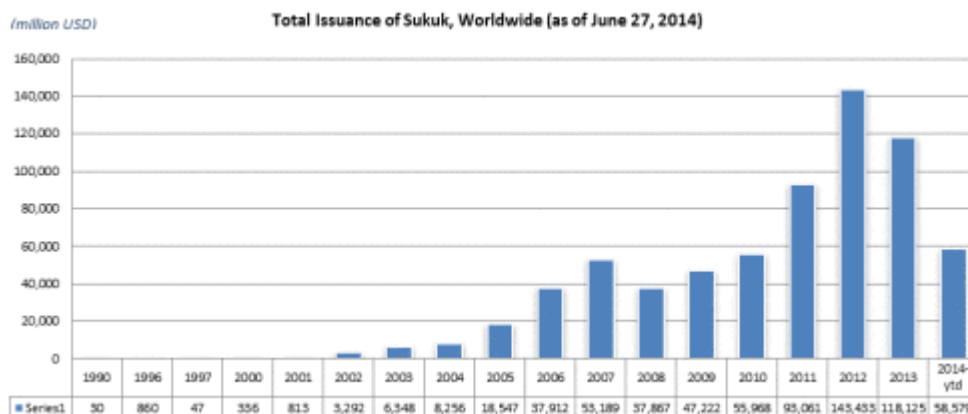
**Abstract**

Sukuk and bonds are two kinds of financial instruments that share in the Indonesian capital market. Sukuk is bonds that the implementation based on the principles of Islamic law. Sukuk is not like other interest-based securities, but in conventional bond yields received one of them in the form of interest. The conventional bonds are based on debt instrument while the Sukuk financing is based on the equity method. The aim of this research is the comparative analysis of return and risk between sukuk and conventional bond in Indonesia by using model calculations Yield to Maturity (YTM) and Value at Risk (VaR) framework for the period 2010-2014. This study used various methods on analyze the data. The result indicates that there is a significant performance difference between Bonds and sukuk based on Yield to Maturity. YTM of sukuk is greater than conventional bonds. When compared risk with conventional bonds the sukuk stands better in these sensitivity measures and sukuk have a lower level of risk than conventional bonds.

**Keywords:** *sukuk, bonds, return, risk, islamic finance*

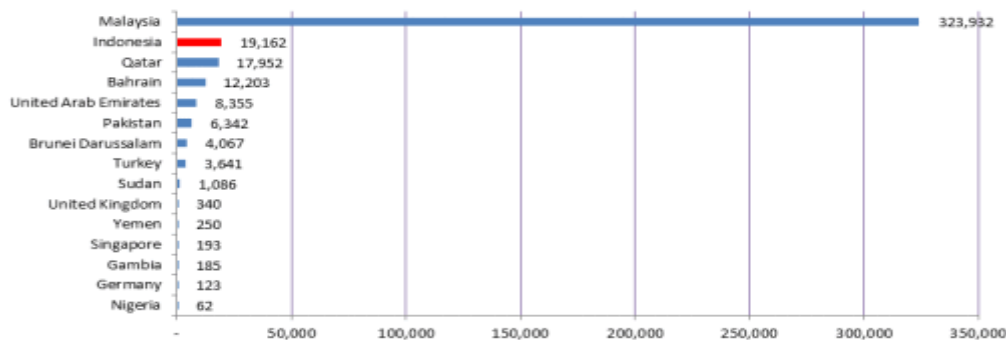
**Introduction**

Sukuk and bonds are investment instruments of some other investment instruments that exist in the financial sector. Both of these have similar investment instruments as securities issued by the issuer of sukuk or bonds in this case the companies or institutions that need capital to investors. Since almost two decades , the issuance of sukuk as an alternative source of financing both the corporation and the state continues to experience rapid growth. Based on data from the Islamic Financial Information Service ( IFIS ), total sukuk issuance recorded worldwide has reached approximately USD 683.8 billion or equivalent to Rp 8277 trillion ( 1USD = Rp12.103 ) in 2014. Much improved when compared to the number of publications in 2004 , which reached approximately USD 8.2 billion.



**Figure 1. Total Issuance of Sukuk, Worldwide (as of June, 2014)**

Issuance of sovereign sukuk worldwide have been carried out by 15 countries . Indonesia as the country's Muslim majority world turned out to be the country 's sovereign sukuk second largest publisher in the world , with total issuance reached USD 19.16 billion. The development of sukuk in Indonesia can be seen from the number of companies issuing financial securities with a total value of sukuk bonds owned by the community or institution. The Sukuk high growth rate is an indicator that the sukuk investment is very promising for investors. The higher the total value of sukuk emissions in Indonesia from year to year, the higher investor interest in investing in sukuk.



**Figure 2. Sovereign Sukuk Issuance Worldwide (million USD)**

As for the total issuance of international sukuk denominated in US Dollar , Indonesia ranks third in the world with a total issuance reached USD 4.15 billion. Surpass Malaysia in the fourth position with a total issuance of \$ 4 billion . As the largest international sukuk issuance of sovereign states is dominated by the UAE ( USD 7.4 billion ).

Issuers that issued sukuk must conduct its business in a business that is not included in the business carried on gharar group, maysir , or usury, but the business is run with the lawful business systems and good manufacturing and other service companies . This is done in order to avoid violating the provisions of Islamic law whereby the three types of businesses in the group gharar, maysir, or usury is not justified in Islam as preventive measures to avoid the uncertainties and risks that would arise from business practices that are not in Islamic law.

Other financial instruments that have characteristics such as sukuk is bonds. Referring *Sukuk* as “Islamic bonds” is due to some similarities between *Sukuk* and bonds, especially in terms of financial process. In fact, some studies say that *Sukuk* are innovated to mimic the financial features of bonds in addition to being compliant with Islamic finance principles, we cite for example the work of

Lahsasna and Lin (2012).

In fact, several similarities exist between Sukuk and bonds; however, these two financial instruments are different and are not duplicate tools of financing. Like conventional bonds, Sukuk has fixed term maturity, coupon and are tradable at normal yield price (Zakaria, Isa, & Abidin, 2012). Unlike bonds, Sukuk is issued in accordance with Sharia principles. Indeed , Sukuk differs from conventional bonds since bonds are defined as long-term debt instruments that are issued by corporations and government (Tahmoures, 2013) while Sukuk is defined by AAOIFI (2008) as certificates of equal value that represent proportion ownership of an existing asset or a pool of diversified assets.

The convergence between Islamic and conventional finance, particularly in the case of *Sukuk*, is gaining momentum as foreseen by several scholars (Mirakhor 2007). This said, there are certain differences between conventional bonds and *Sukuk*. A bond represents the issuer’s pure debt, while *Sukuk* represent ownership stake in an underlying asset. Furthermore, since

the issuance of some types of *ṣukūk* securities, especially in large funding cases, may affect the balance sheet of the issuer the risk structure of the issuer is affected. In other words, by issuing *ṣukūk* particularly with a transfer of assets to a special purpose company owned by the fund providers as asset-backed *ṣukūk* such as is the case in *ijārah*, ownership of some parts of the assets of the issuing entity is transferred to the intermediating entity (i.e., Special Purpose Vehicle, or SPV) whose ownership is vested with the fund providers as *ṣukūk*-holders. This is not the case in conventional collateralized bonds and introduces greater risk, unlike in conventional bonds. Moreover, the profit stream of a *ṣukūk*-issuing firm is not entirely dedicated to the equity holders because parts of the profit streams belong to SPV. Some portion of this profit of the SPV is distributed to the *ṣukūk*-holders as profit shares (or as rent for lease funding in *ijārah*) instead of interest payments, which is strictly prohibited in the structuring of *ṣukūk* funding (Safari, 2013).

The risk analysis and the level of profit are very important for an investor to invest in conditions of uncertainty (probabilistic). Sukuk with *mudharabah* and *musyarakah* returns to investors by the use of expected return due to its floating depends on the income used as the basis for the results (Purnamawati, 2013). This causes the floating nature of the risks that may occur as a result of the performance of the sukuk assets as collateral. According to Samson (2006: 218), the risks inherent in bonds with fixed coupon rate will occur if general interest rates rise or fall beyond specified limits. Risks that may occur as a result of a rise or fall in interest rates is the reference of return obtained by conventional bondholders. Therefore sukuk *mudharabah* and conventional bonds comparable risk because both have similar characteristics. So sukuk *mudharabah* be an alternative in comparing risk with conventional bonds.

Sukuk *Mudharabah* and conventional bonds are investment instruments in the capital markets basically, have similar characteristics. However, sukuk *mudharabah* require underlying assets for the sukuk issuer to avoid transactions prohibited by sharia . Underlying assets used as the basis for setting a number of bonds that may be issued to the public so that the total value of sukuk emissions equal to the value of the underlying assets.

According to Wahid (2010: 284 ), contracts *Musharakah* and *mudharabah* adopts a profit loss sharing, the risk of this form will be a shared responsibility between *shahibul maal* and *mudharib*, where *shahibul maal* will lose capital and profits, while *mudharib* will suffer losses and management advantages. Sukuk *Mudharabah* has risks due to volatile market conditions as a whole, causing losses to tangible assets in sukuk transaction. It can also be seen on conventional bonds that use a floating interest rate in determining return . Performance bonds are influenced by market conditions, where the increase in interest rates will cause bond values decline so it can be detrimental to the issuer.

The objective of this paper is to investigate risk and return structure of sukuk and conventional bonds in Indonesia by using model calculations Yield to Maturity (YTM) and Value at Risk (VaR) framework. The chosen VaR methodology for evaluating risk is widely applied in the area of finance. The VaR approach measures the downside risk of a portfolio position as the maximum loss that can materialize at a future prescribed date with a given probability due to adverse changes in relevant asset and liability prices. Application of this methodology to bonds requires a decomposition of the securities and an estimation of variances and covariance of returns on these securities. Variances and correlations of returns of each debt instrument are estimated from historical data.

## **Method**

This research is a comparative research which is a research that uses T-test analysis tool, has a minimal intervention level, does not set the research condition, has sukuk *mudharabah* and conventional bond as its analysis units, and its time horizon is longitudinal (period of 2010-

2014). This study uses quantitative secondary data derived from the financial statements, the annual ratio (financial highlights), and cash flow statement and income statement. In this study, the data used quantitative secondary data obtained from the Stock Exchange, Kustodian Sentral Efek Indonesia (KSEI), Indonesia Bonds Pricing Agency (IBPA), financial services authority ( FSA ) and the Bond agency.

The sampling model in this study is nonprobability sampling that the chosen design is judgment sampling. Judgment sampling is based on certain considerations, including selecting a subject which is in the most favorable place or in the best position to provide necessary information (Sekaran, 2006: 137). The number of observations is 25 observations from the 11 companies, 9 of sukuk mudharabah, and 16 of conventional bond . Sugiyono (2009: 263) stated that, if the object of research it has a number of samples (n) which are different (homogeneous variance), then the number of samples can vary by using the pooled variance formula.

This study analyzes one calculation of yield and one VAR (Value at Risk). The yield calculation is Yield to Maturity ratio and the VAR uses the historical method (Back Simulation). The Value-at-Risk method is used to test whether the introduction of Sukuk to bond portfolios creates any diversification benefits. Formally, VaR measures the worst expected loss of a portfolio over a certain holding period at a given confidence level, under normal market conditions (Jorion 2006).

In other words, VaR is an expression of the portfolio's market risk, representing the maximum amount which may be lost, during a holding period, in all but (say) one percent of cases. For example, the VaR method can state with either one percent probability or a 99 percent confidence level that a certain amount of dollars will be lost in a given day, month, or year. Various methods, including simulation techniques, are applied to estimate the distribution of future portfolio values and to calculate the possible losses by using historical data. VaR is based on the variance of the return on the portfolio:

$$VarT = V \cdot 1,65 \cdot \sigma T$$

Where:

V = the market value of the asset at time T

$\sigma T$  = standard deviation of the portfolio

T = period of time during the standard deviation of returns counted

Yield-To-Maturity (YTM) is the internal rate of return earned by a bondholder who buys a bond certificate today, at market price, and holds it until the maturity, entitling the ondholder to all coupon payments as well as maturity payment. YTM is the discount rate that equates the total present value of a given bond's future cash flows to the spot market price. In other words, it is the internal rate of return or Yield to Maturity. This YTM is inversely related to the value of the bond. If YTM increases the bond's value declines. This fall in value is the VaR which is needed for hedging decisions. Yield-To-Maturity calculated as follows,

$$YTM \text{ approximation} = \frac{C_i + \frac{P_p - P}{n}}{\frac{P_p + P}{2}} \times 100\%$$

T-test is used to determine whether two unrelated objects have different average values. It is performed by comparing the difference between the average value with a standard error of the two research objects (Ghozali, 2009: 6).

## Results and Discussion

Summary descriptive statistics for various *sukuk* securities and onventional bonds are presented in Table 1



**Table 1. Descriptive statistics YTM of Sukuks and Bonds**

	N	Minimum	Maximum	Mean	Std. Deviation
YTM_Sukuk	9	8,12	13,51	10,3706	1,53416
YTM_Bonds	16	7,92	12,50	10,2400	1,49197

The minimum value of the variable Yield to Maturity conventional bonds known the maximum value of 7.92 and 12.50. The average value of 10.24 with a standard deviation of 1.49197, can be interpreted variations contained in the Yield to Maturity of bonds. the value of 10.24 shows a high number because the standard deviation on the Yield to Maturity of bonds is lower than 10.2400 that is 1,49197. This indicates that the Yield to Maturity of conventional bonds on average by 10.24 %.

**Table 2. Descriptive statistics risk of Sukuks and Bonds**

	N	Average Market value (million USD)	Average VaR 1 day (million USD)	% Of total market value
VaR_Sukuk	9	256094	541,667	0,21151
VaR_Bonds	16	525876	1499,375	0,28512

The average market value of the index sukuk mudharabah amounting to 256.094 , while the average market value of a conventional bond index amounted to 525 876. While the average per 1 day VaR amounted to 541.667 sukuk mudharabah and conventional bonds amounted to 1499.375. The percentage of the total market value of conventional bonds amounted to 0.28512 larger than sukuk mudharabah amounting to 0.21151. The conventional bonds and sukuk mudharabah that have coupons and tenors are not the same, the VaR of sukuk mudharabah has a smaller value than VaR of the conventional bonds.

The value of VaR is highly dependent on the magnitude and duration tenor coupon for each bond and sukuk. Basically, there are several things that affect the amount of a bond VaR according to the VaR model in this study. One of the main factors is the tenor of bonds. Tenor that meant of here is the tenor of the day VaR measurements until the final maturity of the bonds.

**Table 3. Sukuks and Bonds mean differences and t values of YTM**

<b>Independent Samples Test</b>							
Levene's Test for Equality of Variances				t-test for Equality of Means			
F	Sig.	T	Df	Sig. (2- tailed )	Mean Differen ce	Std. Error Differenc e	95% Confidence Interval of the Difference <hr/> Lower Upper

Y	Equal variances assumed	,037	,849	-	32	,803	-,13059	,51903	-1,18781	,92664
T	Equal variances not assumed			-	31,975	,803	-,13059	,51903	-1,18785	,92667

Table 3 provides results of sample t-tests on pairs of YTM sukuk mudharabah and conventional bond. The F Value for YTM of sukuk and conventional bonds is 0,037 and probability for 0,849, greater than 0.05. it can be concluded that both variants of bonds and sukuk are same. It implies that is insignificant. it can be concluded that the YTM on conventional bonds and sukuk mudharabah are not significantly different.

**Table 4. Sukuks and Bonds mean differences and t values of Risk**

		<b>Independent Samples Test</b>								
		Levene's Test for Equality of Variances				t-test for Equality of Means				
		F	Sig.	T	Df	Sig. (2- taile d)	Mean Differe nce	Std. Error Differenc e	95% Confidence Interval of the Difference	
									Lower	Upper
Risk (Va R)	Equal variances assumed	,375	,519	2,2	25	,020	1685,72	48 660,80770	302,638	3068,81
	Equal variances not assumed			2,6	16,85	,017	685,7248	634,89612	345,309	3026,14

Table 4 provides results of sample t-tests on pairs of risk sukuk mudharabah and conventional bond. The F Value of VaR of sukuk and conventional bonds is 0,375 and probability for 0,519, lower than 0.05. it can be concluded that both variants of bonds and sukuk are same. It implies that is significant. it can be concluded that the risk on conventional bonds and sukuk Mudharabh are significantly different.

Based on the results showed the market risk data is known that there are significant differences between sukuk mudharabah and conventional bonds because the level of significance of less than 0.05. The level of market risk is seen from VaR turned out for the time horizon (tenor) 1 day in quantitative portfolio of sukuk has a risk with VaR value lower than the VaR value of conventional bonds. Sukuk lower risk than conventional bonds. There are several reasons for this, the first in the sukuk is no moral restraint of the perpetrator so that the counterparty risk can be minimized. Second, although the sukuk inflation risks but did not have enough influence is high, so is the interest rate which is not a benchmark in sukuk. Third, sukuk do not allow the transaction containing gharar, usury and speculation. Product / transaction financed by sukuk is a real business / real and project / transaction is lawful. Bonds also did not allow for speculation, such as margin trading, forward and option. This is different from conventional bonds, which allow all forms of transactions or projects funded.

**Conclusion**

This research has compared the performance of sukuk and bonds portfolios using YTM and Value at Risk in the Indonesian Sukuk and bonds market. Indeed, we use the indices of the series Sukuk INDEX reflecting the performance of sukuk and bonds market in Indonesia for the period from 2010 to 2014. We first addressed that the development of sukuk issuance in Indonesia is not in line with the development of sukuk trading. There are several factors that caused it, they are: the limited issuance of sukuk corporate in Indonesia, the investor has a lack of understanding about the corporate sukuk trading in the secondary market.

Secondly, There are not differences YTM of sukuk mudharabah and conventional bonds schemes. The results of correlation also indicate a significant and positive correlation between risk of sukuk and bonds portfolios. All these results imply that the sukuk are more apt investment for risk averters, whether they follow Islam or any other religion. Investors who choose bond market for investment will be normally risk averse else they will go to stock market which is more risky and with better YTM. In spite of its shortages and risks, sukuk market has a great potential for further growth. While significantly smaller than conventional bond market, sukuk market is developing rapidly and expanding to new areas of international capital market.

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**THE “DIWANIYYAH” AND KUWAITI’S DECISION TO INVEST IN KUWAITI  
STOCK EXCHANGE:  
A PROPOSED RESEARCH FRAMEWORK**

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**Abstract**

Investment refers to the sacrifice of current financial assets for future income. The stock market is one of the avenues that are available for investors to sacrifice their current finances for a future income. The decision of an investor to invest in a given stock market is driven by a number of factors such as the expected returns, the risk appetite as well as their individual needs. Their perception of the stock markets is influenced by microeconomic and macroeconomic variables. The paper is proposing a behavioral approach to understand Kuwaiti investors’ decision to invest in Kuwait Stock Exchange.

**Introduction**

Reforms in Kuwait have seen increased participation of investors in its stock market. This has seen the KSE emerge as one of the best performing markets in the Gulf region. However, the country’s economy is still highly dependent on oil revenues (Balcilar, Demirer and Hammoudeh 2013). The frequent fluctuation of oil prices in the international market usually has a direct impact on the economic performance of the country (Abdmoulah 2010). Such events coupled with other international and local events also impact the performance of Kuwait’s stock exchange. Currently, the Kuwait Stock market is exposed to a number of negative events including political and religious conflict in the Gulf region as well as the falling oil prices. It is thus important for the attitudes of investors in the Kuwait stock market to be analyzed in the face of these events, which are likely to impact the future performance of the KSE.

To the authors’ knowledge there is obvious lack of studies on factors explaining investors’ behavior in the Kuwait’s securities market. The current study seeks to fill this gap. The next section traces the establishment and development of Kuwaiti Stock Exchange. This followed by a discussion on an important cultural aspect of Kuwait society, diwaniyyah, and is followed a proposed research framework.

**The Growth of Kuwait Stock Exchange**

It is reported that share trading in Kuwait began as early as 1952 with the establishment of the Kuwait National Bank, which was the first shareholding company in the country (Kuwaitse 2015). During these periods, merchant markets, real estate brokerage offices as well as public cafes were the only means through which shares could be traded. The issuing of the Amiri decree in 1983 led to the establishment of the Kuwait Stock Exchange market (Heritage 2015). The Amiri decree saw the stock exchange being established as an independent financial institution. The exchange was placed under the management of the executive administration and exchange committee.

The establishment of the KSE during this period marked the beginning of the securities market in this region. The stock market as by 2007 had a total of 49 companies with a grand total of \$10.11 billion registered (Ibpa USA 2007, p. 236). The securities market in Kuwait is

in the developing stages given the country's status as an emerging country (Indexmundi 2015). The securities market has over 200 shares listed on the Kuwait's Stock Exchange (KSE) (Indexmundi 2015). The 2000 decree allows foreign investors to own shares in companies that are currently established in Kuwait and those that may be formed in the future (Indexmundi 2015). As a result of this legislative framework, it is widely expected that more foreign investment into the stock market will be realized in the near future (Kuwaitse 2015). The growth of the KSE has been impacted by various macroeconomic variables, including GDP, interest rates, inflation, money supply and this in turn has had an impact on the individual investor perception of the securities market. The stock market has often been turbulent, with the frequently changing oil prices having an adverse impact on individual investment.

### **The Kuwaiti Society and Culture**

The country is predominantly Muslim, with about 95% of the population being Muslims. Most of the country's population is urban, having changed from a nomadic population over the past years. In Kuwait's society, a total of five levels of social stratification can be noted. These classes are mainly based on ownership and control of wealth. The ruling family sits on top of the social hierarchy. They are followed by old merchant families whose history of trade dates back many years ago. Bedouins come in next after the old merchant families. This group consists of desert nomads who settled in the country at the onset of the oil industry. At the fourth level are people of Arab descent from neighboring countries. The last level of the strata is occupied by foreign nationals. Kinship bonds within these social classes play a vital role in maintaining the social structure. The state, cultural factors and social rights perpetuate the social stratification in the country (Heritage, 2015)

The shift from the nomad population to the Islamic population has largely been due to the Islam religion, which resulted to most Kuwaitis settling around Mosques and other religious places. Another important aspect of the Kuwaitis culture is hospitality. The Kuwaitis believe that it is important to be generous to guests, both strangers and non-strangers. They express their affection for each other through their unique daily greetings which consists of a handshake and a kiss on the cheek.

The Diwaniyyah is an important traditional culture observed by all families. It refers to the gathering together of men in a tent or a small room away from the main house where societal issues such as sports, religion, politics and entertainment are discussed. Both the event and the place where the event takes place may be referred by the term Diwaniyyah. The meetings often occur in the evenings, and the members include the male members of a family together with their friends and relatives.

It is estimated that a Kuwaiti man attends an average of 2 Diwaniyyahs in a week. This institution is unique to Kuwaitis and reflects the country's democracy where the people can discuss the issues that affect them most. Women are also allowed to hold their Diwaniyyahs. However, the traditional gatherings are only reserved for women. Modern Diwaniyyahs allow foreign dignitaries and important business partners to attend regardless of their gender.

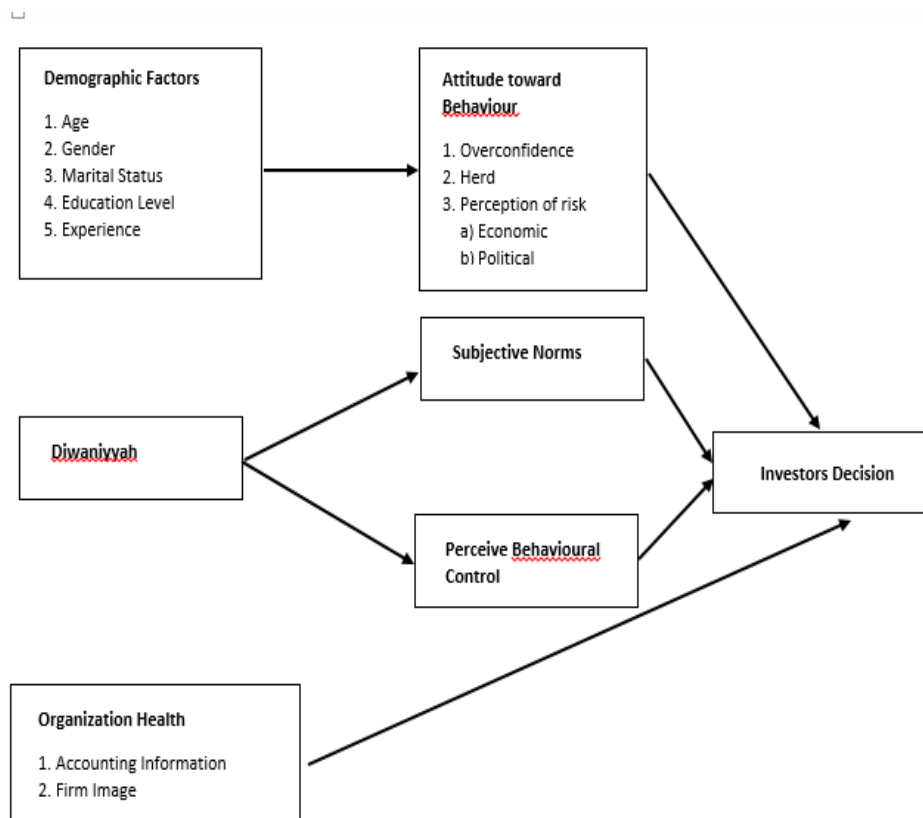
In the past, political discussions, smoking Shisha, playing traditional card games as well as drinking coffee and tea used to be the main activities during the Diwaniyyah. With developments in technology and increased pace of globalization, modern Diwaniyyahs involve playing of video games, billiard games and watching television. During these meetings, the host will often provide the visitors with refreshments such as tea or coffee and engage them in conversations touching on a variety of topics. One of the major topics that are often discuss is related to the selection of stocks for investment decisions.

So it is timely that a study is conducted to determine social-cultural factors, in particular the Diwaniyah’s influence the individual investors’ intention to trade in the Kuwaiti Stock Market vis-à-vis other regional stock markets.

**Proposed Research Framework**

The study employs the theory of planned behavior (Ajzen, 1991) to investigate the various variables that affect investor decisions in Kuwait’s stock exchange. Refer Figure 1. The main objective of the study is to investigate the factors that influence the individual attitudes that investors have towards the Kuwait stock exchange market. The specific objectives of the study include;

1. To investigate the impact of demographic factors towards attitude of individual investors.
2. To determine the influence of attitude on decision to invest in Kuwait Stock Exchange.
3. To evaluate the impact of Diwaniyyah culture on subjective norms and perceived behavioral control of the individual investors
4. To determine the influence of subjective norms and perceived behavioral control on investors' decision to invest in Kuwait Stock Exchange.
5. To determine the perceived value of financial information and firm’s image on the investors’ decision to invest in Kuwait Stock Exchange.



**Figure 1: Proposed Research Framework**

**Summary**

Kuwait has over 200 shares listed on its Stock Exchange (KSE). The country heavily relies on the production and exportation of oil and oil products, a fact that has brought the stock

exchange under great pressure to diversify. The stock exchange market still attracts both domestic and foreign investors since it provides ways through which other businesses and new investments can be established thereby diversifying the oil-dependent economy. After undergoing privatization and liberalization during the 1990's, the country has seen its stock exchange market grow to the level of allowing foreign investors to take part in the securities exchange. Being an emerging economy with rich reserves of oil, Kuwait is increasing attracting investors in its stock exchange market. However, some investors are still hesitant about investing in the KSE. The attitudes and perceptions of these investors are shaped by different factors, some of which have been mentioned above. This research will help in analyzing the individual investment trends in the Kuwait stock exchange with the main focus being on their perception towards the securities market.

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## ANALYZING THE VILLAGE FUND EFFECTIVENESS: DOES THE GOVERNMENT PLAN WORK?

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### Abstract

This study aims to analyze the effectiveness of the Village Fund to accelerate local economic development and necessary rural infrastructures. It examined the village fund administered by village government in the context of planning, executing, and controlling the fund. The research used four districts in North Sumatera province (i.e. Langkat, Deli Serdang, Asahan, and Mandailing Natal districts), which were the most active regions in absorbing the fund. To measure the effectiveness level of the village fund policy, it employed regulatory gap analysis. It compared the governance performance to rural people's expectation on the village fund effectiveness. The results revealed that it was ineffective in utilizing the capital, specifically in financing the infrastructures construction, which it did not match with the rural needs. The villager perceived that village administrators were not capable enough to review the village's needs and yet equipped with the necessary skills to manage the village funds.

**Keywords:** *Village fund, economic development, rural infrastructures*

### Background

The Dana Desa (village fund) program, which is the part of the government's large-scale decentralization initiative to diminish economic inequality and poverty, becomes interesting discourse topics nowadays. This program, which covers over 74,000 villages and provides Rp 20.7 trillion (US\$ 1.4 billion) grants, will be the accelerated fund to spur the local welfare and develop the necessary infrastructure, including agricultural needs. Nevertheless, despite the potential of future wealth for villages, some experts concern the village administrator's limited capabilities and experiences to manage the fund that can lead to multiple problems, such as a mismatch between the real needs and the resource allocation, corruption, and power abuse (Lewis, 2015; Martinez-Bravo, 2014; Prabowo, 2015; Vel & Bedner, 2015).

The study of Corruption Eradication Commission (KPK) on village financial management practices revealed four weakness aspects to be immediately attended: regulatory and institution, governance, monitoring, and village human resources (KPK, 2015). On the first issue, the study found the three most significant problems. Those issues were the uncompleted regulatory and technical guidance to implement the village financial management, the nontransparent village funds allocation, and inefficient reporting procedures due to overlapping regulations. On the governance aspect, there were five critical issues, such as the fixed budget-disbursement period covered by the report, the unavailability village budget's transparency and accountability plan, and the misuse village-fund allocation since not all community executives have sufficient management skills, specifically in public financial management and priority governance. For example, Village A, whose limited infrastructures and low-level income people, prioritizes the fund to renovate village office rather than to fix up an important bridge connecting the village with the nearest market. On the third aspect, the study highlighted the potential monitoring problems: the low-effectiveness of the regional inspectorate in supervising the village financial management, the ineffective public complaint management, and the unclear supervision and control by the higher administrator (i.e. *camat* – sub-district head). Finally, on the human resource aspect,

the possible problem stems from the experts' power abuse. Those officials are the experts expected to provide technical assistance and project management supervision to community and village administrators, which in many prior cases, they were involved in the village fund's corruption and fraud. Referring to the findings, KPK argues that the village fund good governance should advance and empower rural communities.

The other studies show similar results, such as the enormous increase in funding for village budgets may well strain the capacity of current public financial management (PFM) systems (DFAT & World Bank, 2014; SMERU, 2008; Venning, 2009 ). The global village PFM processes have settled over the course of many years in the context of quite limited service responsibilities and moderately small amounts of funding (DFAT & World Bank, 2014). In this regard, village procurement is a particular concern. The report of DFAT and World Bank (2014) apparently claims that village procurement procedures are not clearly set out in regulation and the practices tend to be ad-hoc and nontransparent. Also, the minimal levels of open bidding in tendering processes are less assured (Ashcroft & Cavanough, 2008; DFAT and World Bank, 2014).

As the regulator and the chief controller of the program, the government enacted the Regulation of Minister of Villages, Disadvantaged Regions and Transmigration Number 21 of 2015 concerning the Stipulation of Priorities for Village Fund. The rule determined the fund 2016 should be used to finance programs and local-scale activities concerning village development and people empowerment (Kemenkeu, 2016). The regulation is one of the efforts to deal with uncertain service obligations, fast increasing and relatively massive budgets (Lewis, 2015), poor public financial management procedures, and doubtful control and accountability mechanisms cause specific worry about the potential for corruption at the village level (Shahrir *et al.*, 2014). Corruption has been a substantive matter among Indonesian local governments since decentralization began in 2001 (Henderson & Kuncoro, 2004; Henderson & Kuncoro, 2011).

Even though the study of village fund effectiveness is one of the most intensive discourses in the field of local decentralization, there are still facets, aspects, and consequences to be explored and discussed scientifically (Anggraini, 2016; Asni *et al.*, 2013; Saito, 2003; Saputro, 2015). The study focuses on two research questions: (1) Does the village fund improve the local economic about an increased local revenues and a reduction of rural poverty? (2) Does village fund management meet the local people's expectation on village's good governance? Therefore, the study of village fund effectiveness will contribute, at least, at two important aspects. First, it will provide an objective evaluation of village fund effectiveness to develop infrastructures, such as rural roads, agriculture irrigations, simple bridges, and river wall, enabling more economic activities. Second, it will compare the village fund management performance to the villagers' expectation and analyze whether the village administrators apply good governance or not in the context of proper planning, implementation, monitoring, and transparency aspects.

The paper is organized as follows. First, some background material on village fund and village governance structure in Indonesia is provided. Second, the literature review of village governance and decentralization are described. Third, regulatory gap analysis is used to determine village fund effectiveness. Fourth, it discusses the findings and its implications. The final section of the article summarizes the main results and draws conclusions.

## **Literature Review**

Prior studies on village fund programs revealed that the main challenges were the fund allocation effectiveness and the conformity between the necessary needs and the

implemented programs (Boonperm *et al.*, 2007; Davis *et al.*, 1994; Jarvis, 2002; Kaboski & Townsend, 2006).

### **1. Village Fund Effectiveness**

The studies of village fund effectiveness in some countries provide inconclusive findings. Menkhof and Rungruxsirivorn (2011) reported that village fund was successful in reaching and improving the welfare level of lower income households in Thailand rural areas. The work of Boonperm *et al.* (2013) supported the finding, which village fund has a stronger effect on local people income than on expenditure. Meanwhile, other studies in different countries (Bardhan & Udry, 1999; Chandoevwit & Ashakul, 2008; Coleman, 2006; McKenzie & Woodruff, 2008) reported the adverse results. In Indonesia, the majority findings showed that the fund effectiveness was the main concern (Botes & Rensburg, 2000; Harrison & Sayogo, 2014; Hermansyah, 2015; Husin, 2016; Siagian *et al.*, 2016). The scholars identified three main problems, namely, (1) the insufficient knowledge of village executives about what they should do with the village funds, (2) the inappropriate-lead-to-imbalance formulation of allocating the funds, and (3) the common finding of many village funds are simply deposited into rural development banks (Asni, 2013; Cimpoeru & Cimpoeru, 2015; Renzio & Masud, 2011). Several key factors, such as population size, poverty levels, and unfavorable and uphill geographic conditions become the sources of imbalanced village fund allocation. There is only 10 percent of village fund allocated by considering those factors. Meanwhile, the remaining funds are allocated pro rata per village. Therefore, it is not surprising, which most of the funds are not effective to run the wheels of the local economy.

To optimize the utilization of village fund in improving the local people's welfare, Barrios (2007) argues that the development intervention is critical, specifically to finance infrastructures and community empowerment. The study also claims that the strategic management of natural resources in which rural community actively participates is indispensable for ecological integrity and to support sustainable rural development (Barrios, 2007). The study of Cook (2011) reported that a strong relationship between infrastructures, economic growth and economic development, which led to the rural prosperity. Cook (2011) illustrates the findings by showing the nexus of electrification and local community's entrepreneurial activities. Even the study of Estache and Fay (2007) affirmed that the failure to invest sufficiently in infrastructure is the most reasonable explanation of the differences in growth between the successful East Asian economies and other parts of the developing world. Also, the research of Fan and Zhang (2004) in China revealed some significant findings on the effects of infrastructures and education on rural economic sectors' productivity (i.e., agricultural and non-agricultural sectors). It means that any aid funds or grants for rural economic development are subject to infrastructures and education development. However, Fan and Zhang (2004) also emphasized the critical participation of rural people to be involved actively in the aid funds or grant management process (i.e., planning, implementing, controlling, and monitoring activities). Wong *et al.* (2013) affirmed this argument by testing the cost efficiency of rural infrastructures development in China. They found 101 projects of rural roads were more efficient when local community managed and participated actively in overseeing it. Those prior findings demonstrated the importance of villagers' involvement in running the village fund to accelerate the regional economic development and assure its effectiveness through rural infrastructures improvement.

### **2. Village Fund Management – Meeting the Expectation**

Village fund scheme is a decentralization platform to make more equitable economic development and professional public service for local regions. Prior findings showed that

decentralized-development at the local level could elevate public service quality, community participation, local wisdom-based policy, and local institutions' representativeness (Antwi-Boasiako, 2010; Jones *et al.*, 2007; Ribot, 2002). However, those findings are still inconclusive due to some reported adverse effects, such as conflicts between the regional government and local people, corruption and power domination by local 'elite' officers (Pattenden, 2011; Nijenhuis, 2003; Bierschenk & Olivier de Sardan, 2003). Moreover, it coupled with low public management capacity, leading to poor public services' performance (Fisman & Gatti, 2002).

The main challenges of Law 6/2014 effective implementation are inadequate village administrators' governance capacity, lack of assistant support from provincial and district governments, and low quality of rural development planning (Hermansyah, 2015). This fact is similar to the findings of Dragoş & Neamţu (2007) in Romania, which points out the process of decentralization is closely interwoven with the development of the administrative capacity of the local units. Meanwhile, referring to the Karanikolas and Hatzipanteli's (2010) finding on the decentralization programs in Greece, the village fund management effectiveness depends on the role of community participation due to the local people's knowledge or understanding of the environment. This community engagement is essential in identifying the development projects, helping to minimize the inefficient resource allocation, and allowing resources to be allocated efficiently for the most needed projects. In other words, to be effective village fund management, it needs a proper delegation of competencies and resources to the actors involved at all local administrative levels, coupled with a renewed awareness of integrated community participation policies.

### Research Methods

This research examined five variables of village fund effectiveness in 4 (four) districts (i.e., *Langkat, Deli Serdang, Asahan, and Mandailing Natal districts*). Those communities were located in remote areas, populated with low-income people, and bordered to other provinces. The study employed a survey of 465 respondents, which represented three related groups in village fund management (i.e. headmen, village council members, common villagers).

This study analyzed the comparison to the condition before and after implementation of the village fund on the economic development and the availability of infrastructure to support the society's welfare in rural areas. Furthermore, to evaluate the management of the village fund, then this paper conducted a regulatory gap analysis. The Regulatory Gap Analysis is an analysis tool that used to assess the performance of the government regarding policy/public service by comparing input plan and actual implementation. By this analysis, it will obtain the perceptual comparison between the village government and the society. If the value of the average gap is more than zero, so the policy implementation has been succeeded according to plan and could resolve the society problem. While if the value of the average gap is less than zero, then the policy implementation is still not according to the plan and has not succeeded or failed in addressing the problems in society. To test whether there is a significant gap between the government perceptions' society or not, this study used independent t-test sampling.

### Results and Discussion

Village funds are expected to increase prosperity and reduce poverty in the village. It is based on the benefits of village funds were used to build some rural infrastructure such as rural roads, irrigation, roads, sanitation, and others believes that it will have an impact on the economic recovery of the village. In fact, the government considers the impact effect on the acceleration of national economic recovery. This is certainly the hope of all elements of the villagers though still, some have argued that the village fund is not enough to improve the

economy and prosperity to the fullest. Here are the response and the perception of respondents that the Village Fund will provide improvements to the welfare of society.

Based on study results, the village fund has an impact on the improvement of welfare for 57.5 percent of society, while 42.5 percent of other communities has declared that there are no changes for income society. These achievements still cannot be said to be successful in improving the community welfare. The Infrastructure development and community empowerment are not optimal. Therefore, it still cannot increase the local economy. Community income inequality is a result that is not optimal. The study result found that only 25.0 percent of people see an improvement in income inequality between communities.

In the gap analysis when the average value of the difference is greater or equal to zero, then the policy implementation has been succeeded according to plan and was able to resolve the problems that exist in society. While if the average value of the gap is less than zero, then policy implementations are not by the plan and failed to resolve the problems in society. The expected value is the weighted average value of perception given by the village government that is Headman and The Village Consultative Body. Whereas the value of the performance is the weighted mean value of an objective assessment of the public that quantifies each indicator measured.

To test the gap analysis for the village fund policy, there are 5 (five) indicators measured that are planning, execution (the implementation of the village funds utilization), oversight, transparency, and impact on the village fund use. Overall, this study tested the perception gap between village government and society. This test carried out using independent sample t-test, and the t-count results obtained by 4.871. These results indicate a significant difference in differences of perception given by the village government to the society on the effectiveness of village funds for economic development and infrastructure in rural areas. The biggest perception gap is the impact indicator of village funds to the improvement of people's welfare, society involvement in the village development plan and control of the village funds budget. These results indicate that the planning of the village fund is still not on target as the government expected. Although the budget issued by the government is substantial, the government still needs to make an improvement.

Other potential problems, which become barriers to the implementation of the village fund are governance. In the category of governance, there are five issues, namely: (1) The time within village budget management cycle difficult to be obeyed by the village; (2) Unit prices of raw goods / services are used as a reference for the village in compiling Budget Village or what we called 'APBDes' is not yet available; (3) Transparency-use plans and accountability of Budget Village is still low; (4) The accountability report that made by the village has not followed the standards and prone to manipulation and (5) Budget Village drafted, did not show the necessary requirements of the village.

**Table 1: The Gap Analysis of the Village Fund Policy For Economic Development and Infrastructure in North Sumatra Province**

Variable	Indicator	Expectation	Performance	Deviation
Plan	Preparation of planning documents	4,10	4,10	0,00
	Potential analysis and rural development needs	4,53	4,20	-0,33
	Local community involvement in planning	4,70	3,73	-0,97
Implementatio	Village administration capacity	4,40	3,55	-0,85

n	Empowerment of rural communities	4,20	3,70	-0,50
	Use of local resources	3,80	3,23	-0,58
	Mentoring village governance	4,00	3,08	-0,93
Supervision	Budget accountability report	4,20	3,58	-0,63
	Usage efficiency of village funds	4,40	3,55	-0,85
	Supervision of the use of budget	4,20	3,28	-0,93
Transparency	Disclosure of information	3,80	3,08	-0,73
Impact	The use of village funds to improve the society welfare	4,60	3,50	-1,10
	Equitable rural incomes	3,20	2,95	-0,25
	Extra facilities and rural infrastructure	3,80	3,35	-0,45
Average		4,17	3,49	-0,68
t-independent sample test		t-stat 4,871 Sig (0,001)		

Based on the existing regulations, the mechanism of making the APBDes participatory prosecuted for improving the society welfare. However, not always the quality of APBDes formulation produced by the priority needs and the condition of the village. For example, the status of Village A has a minimal infrastructure condition and a large proportion of poor people, precisely prioritize the use of APBDes for the renovation of village office, which is in the right conditions. As another example, Village B which prioritizes the establishment of Village-owned Enterprises (BUMDes) clove trading at stake, whereas the region has a minimum infrastructure. In the second rule, the village was no violation. Expenditure incurred by the rules that have been made, but the substance of the problems in the village cannot be resolved.

There are so many villages that are desirous of establishing village-owned enterprises (BUMDes) to increase the Revenue Villages (PADes) but the main issue is still many villages, which do not have knowledge about BUMDes. The capacity of village officials in developing and optimize the utilization of villages has not been evenly distributed. The local government has a low commitment to the village. The facility function and development of district/city over the village, is still not running at all district level.

Lattermost, on the aspect of human resources, there is a possibility problem, that is assistants potentially fraud using the weakness of village officials. It is likely the previous program, PNPM Rural; whereabouts the representatives are supposed to work to help the community and village officials, instead of corruption and fraud.

### Conclusion and Policy Implication

The village fund system has played a significant role in the increasing of the income of the citizens. However, this accumulative did not cause the improvement of public facilities for the area but resulting from other factors. The study also found the imbalance distribution in full populations' income still stood at the same level and did not show ant decreasing movement even with the help of central government funding to local authorities. The village monetary policy has the important role in the development of public facilities in its area. Nonetheless, still, this study discovered numerous issues regarding infrastructure improvement agenda. Also, the study found the lack of contribution from the residents in the program. In contrast to National Citizens Prosperity Program, that its design and process involved the citizens directly.

Considering the village fund program is one of the programs of the government, it is highly necessary that everyone should enjoy this policy. It is clear that the participation of citizens in government activities needs to be increased. The Village Consultative Institution as has been tasked as the watchmen for the local activities that designed by the village headman, need to act more enthusiastic in receiving people aspirations. The Ministry of Village and Rural Areas development has issued the policy that related to the guidelines on how to spend the village fund productively and to avoid any bribery activities in exercising the programs. It also consists of the guidance for local government to utilize local natural resource effectively to help the development.

The distribution of the village fund was aimed to tackle the poverty issue in rural areas. Nevertheless, through the result of the agenda, it is relevant to say that the government required finding more ways. The program seems to be designed inadequately and without precise monitoring activities in its operations. The vast amount that has been distributed through physical development (infrastructure) or program, the result shows no significant continuing impact on the residents. The structural issue that appeared is the uncontrollable subordinate connection style between urban city residents and village residents. Village residents have received pressure and under control of big distributors as the village lack of capital, have less knowledge and creativity, small opportunity, and challenging access to market. The modern city controls the commodities price, particularly in agriculture sectors resulted in imbalance profit distribution. What is needed to be done is the village residents should have equal opportunity, knowledge, and creativity to be adequate in managing their agriculture products to increase their income and to add more value.

The government should create a stronger economic, social, and education body. Furthermore, build more public facilities that will increase the independence of economic for rural area residents. Through education and knowledge on how to operate agriculture technology, the government will be required to boost the role of the local financial institution more effectively, which might create the high bargaining power possibility for the residents and to avoid any involvement from greedy business people that might create unequal profit distribution in general.

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## THE TODA-YAMAMOTO CAUSALITY TEST FOR GOVERNMENT EXPENDITURE AND ECONOMIC GROWTH: CASE STUDY IN INDONESIA

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### Abstract

This research aims to find out the causality between economic growth and government expenditure. Using Toda-Yamamoto Causality Test, we found unidirectional causality between economic growth and government expenditure in which government expenditure affects economic growth which is in accordance with Wagner's Law. In terms of expenditure by function, we found the relationship that supports Keynesian approach between economic growth and government expenditure by economic function. However, there is no causality between the other functions of government expenditure and economic growth.

**Keywords:** *Economic Growth, Government Expenditure, Toda-Yamamoto Causality Test*

### Background

The success of a country in improving the prosperity of its citizens is measured by the rate of economic growth achieved. The high and low rate of economic growth in a country shows the level of change in the economic prosperity of the citizens. High and stable economic growth from year to year indicates the improving economic prosperity, while economic decline or economic growth which has a negative value shows the decline in economic prosperity. On the other hand, the level of economic growth is also used to evaluate the accuracy of the policies that have been taken with respect to the role of government in the economy.

Failure of the existing economic system requires the government interference in the economy. Market failures due to public goods, externalities, and imperfect competition encourage the government to further enter the market and to intervene. It is the responsibility of government to create economic efficiency and ensure fairness in the attempt. The role of government can be classified into three major categories, namely: (1) the allocation role – ensuring that the allocation of economic resources is efficiently implemented; (2) the role of income distribution and subsidies in an effort to improve people's welfare, and (3) the stabilizing role in the effort of improving economic growth (Musgrave and Musgrave, 1993).

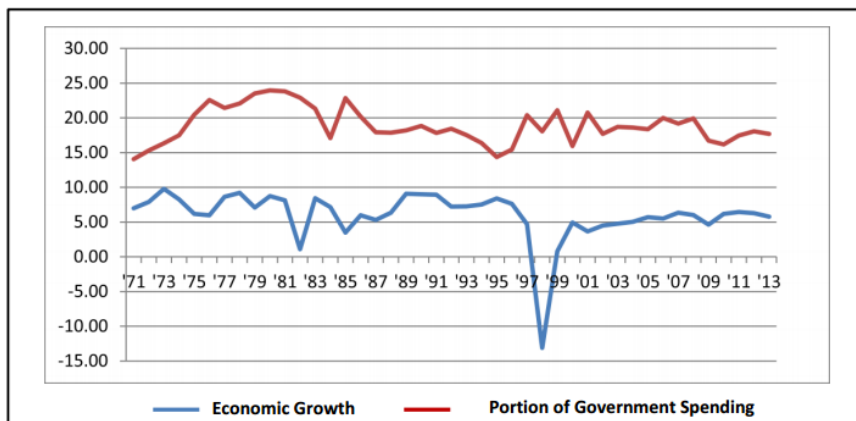
The role of government as the economic stabilizer is very important because economic situation is not always as favored by the government and society. Government efforts to boost economic growth become increasingly significant when the market fails. Shocks in the economy lead to the decline in the level of economic prosperity as a result of the decline in output and employment (Mankiw, 2007).

The form of government invention in economy concerning the allocation role is by fulfilling the needs of the community through the provision of public goods. It occurs since market mechanism is not interested in providing public goods as the purpose of market perpetrator activities is gaining profit whereas the provision of public goods is a kind of non-rival and non-exclusive activity. The consequence of the role of government in allocation is the availability of budget allocation, which is manifested in government expenditure.

According to Keynes (1936) in his book entitled '*The General Theory of Employment, Interest, and Money*', government involves in the economy through the policies that are taken and implemented. Keynes argued that fiscal and monetary policies implemented by the government can influence the output of the nation which in the end will ultimately reduce the number of unemployment and shorten downward trend in economic condition (Samuelson dan Nordhaus, 2004). Indonesian government fiscal policies are depicted through the amount

of the state budget that is implemented. The problem is that the details of the existing policies in the state budget often do not reflect the direction of the policies and are not used as the guidelines so that it provides opportunities for private sector or stimulation for economic activity. Budget allocations have not yet provided the direction of change for the creation of economic growth, instead it shows the government's lack of seriousness in allocating budgets for vital sectors such as education sector and the improvement of the quality of life of all Indonesian citizens as indicated by a large portion of unproductive expenditure for example debt interest payments as well government loans.

Government strives to optimize the function of policies in dampening economic fluctuations or is countercyclical. It means that, in a sluggish economic condition, government expenditure is autonomous, particularly expenditure on goods and services and capital expenditure which provide stimulation to the economy to grow, and vice versa. In the middle of the economic conditions that is heating up due to too high aggregate demand, contractive fiscal policy is used to grease the wheels of economic activity by balancing the demand and supply condition of economic resources. As seen in Figure 1, both economic growth and portion of government expenditure have a fluctuating pattern, but economic growth has a larger deviation than the portion of government expenditure. At one period, economic growth and portion of government expenditure have the same movement direction, but in the next period the movement is in the opposite direction.



Source: Ministry of Finance, various years (processed), 2015

**Figure 1: Comparison between the Portion of Government Expenditure and Economic Growth in Indonesia in 1971-2013**

The relationship between government expenditure and economic growth has become a concern of many previous researchers and generated two opinions on the relationship between the two variables. Keynes and his supporters argued that government expenditure affects economic growth in accordance with the equation identity of open economy. While Wagner's Law states that the improvement in the economy that occurs affects government expenditure. The debate continues as further studies were conducted to determine the actual conditions which occur in the field. Various studies on the relationship between government expenditure and economic growth result in a variety of conclusions which creates supporters for each theory. The diversity of the results obtained is due to the difference in research site, data types, methods of research, as well as the operational definition of each variable used (Peacock and Scott, 2000). The objective of the study is to analyse the relationship between government expenditure and economic growth in Indonesia.

**Methods and Materials**

This study aims to determine the causality between government expenditure and economic growth. In general, there are two frequently used causality test namely Granger causality test and Toda Yamamoto causality test. Granger causality test obtains reliable results if it is used in time-series data which are integrated at the same degree, but it will get an invalid conclusion when applied to data in which the degree of integration varies. Therefore, Toda Yamamoto causality test method was used in this research. The selection of Toda-Yamamoto causality test was based on the nature of time series data which have possibilities to be integrated on the same degree or on the different degree or even not integrated at all. Toda and Yamamoto (1995) developed a causality test which can be applied to data with different degree of integration but still obtain reliable results called Toda-Yamamoto causality test.

Toda Yamamoto causality test method was applied to the function adopted from the research conducted by Samudram *et al.*, (2009) as follows:

$$Y_t = f(X_t) + \varepsilon_t$$

Where in Wagner's Law,  $Y_t$  = government expenditure and  $X_t$  = economic growth. In Keynesian point of view,  $Y_t$  = economic growth and  $X_t$  = government expenditure. Furthermore, according to Pahlavani *et al.*, (2011), the function explained above can be described in the form of equation to be tested with Toda Yamamoto causality method as follows:

$$GROWTH_t = \sum_{i=1}^{k+dmax} \alpha_{1i} GROWTH_{t-i} + \sum_{i=1}^{k+dmax} \alpha_{2i} GOVEXP_{t-i} + \varepsilon_t$$

$$GOVEXP_t = \sum_{i=1}^{k+dmax} \alpha_{1i} GOVEXP_{t-i} + \sum_{i=1}^{k+dmax} \alpha_{2i} GROWTH_{t-i} + \varepsilon_t$$

where  $k$  is the optimum lag,  $dmax$  is the highest degree of integration,  $GROWTH_t$  is economic growth in period  $t$ , and  $GOVEXP_t$  is government expenditure in period  $t$ . To test causality of government expenditure by functions covering public service, defense and security, economy and education, government expenditure variable will be substituted by government expenditure based on the selected functions as presented below:

$$GROWTH_t = \sum_{i=1}^{k+dmax} \alpha_{1i} GROWTH_{t-i} + \sum_{i=1}^{k+dmax} \alpha_{2i} GENEXP_{t-i} + \varepsilon_t$$

$$GENEXP_t = \sum_{i=1}^{k+dmax} \alpha_{1i} GENEXP_{t-i} + \sum_{i=1}^{k+dmax} \alpha_{2i} GROWTH_{t-i} + \varepsilon_t$$

$$GROWTH_t = \sum_{i=1}^{k+dmax} \alpha_{1i} GROWTH_{t-i} + \sum_{i=1}^{k+dmax} \alpha_{2i} DEFEXP_{t-i} + \varepsilon_t$$

$$DEFEXP_t = \sum_{i=1}^{k+dmax} \alpha_{1i} DEFEXP_{t-i} + \sum_{i=1}^{k+dmax} \alpha_{2i} GROWTH_{t-i} + \varepsilon_t$$

$$GROWTH_t = \sum_{i=1}^{k+dmax} \alpha_{1i} GROWTH_{t-i} + \sum_{i=1}^{k+dmax} \alpha_{2i} ECOEXP_{t-i} + \varepsilon_t$$

$$ECOEXP_t = \sum_{i=1}^{k+dmax} \alpha_{1i} ECOEXP_{t-i} + \sum_{i=1}^{k+dmax} \alpha_{2i} GROWTH_{t-i} + \varepsilon_t$$

$$GROWTH_t = \sum_{i=1}^{k+dmax} \alpha_{1i} GROWTH_{t-i} + \sum_{i=1}^{k+dmax} \alpha_{2i} EDUEXP_{t-i} + \varepsilon_t$$

$$EDUEXP_t = \sum_{i=1}^{k+dmax} \alpha_{1i} EDUEXP_{t-i} + \sum_{i=1}^{k+dmax} \alpha_{2i} GROWTH_{t-i} + \varepsilon_t$$

where *GROWTH* is economic growth, *GENEXP* is government expenditure by public service function, *DEFEXP* is government expenditure function by security defense and order, *ECOEXP* is government expenditure by economic function, and *EDUEXP* is government expenditure by education function.

Causality test is used to determine whether an exogenous variable can be treated as an endogenous variable. Causality theory states that the X variable affects Y if past values of the X and Y can predict Y better than if just using the past values of Y, and because the future cannot affect the past, the change in X should precede changes in Y (Gujarati and Porter, 2012). Causality between one variable with other variables can be identified by comparing the probability (p-value) with a standard error of 5%. If the probability value is less than 5%, then H0 (no causality) can be rejected. According to Gujarati and Porter (2012), causality can show four possibilities, namely:

1. Unidirectional causality, where economic growth influences government expenditure;
2. Unidirectional causality which is the opposite of point 1, where government expenditure affects economic growth;
3. Bilateral causality (feedback), where economic growth and government expenditure affect each other;
4. Independence / no association between economic growth and government expenditure.

### Statistical Findings

In order to analyze the causality between government expenditure and economic growth, there four (4) steps (i) stationary test, (ii) optimal lag length, (iii) cointegration, and (iv) Toda-Yamamoto Causality test. First, the stationary test was conducted to identify whether there is a unit root in the variables studied. Stationary test was carried out using the method of ADF test. Each variable was tested in sequence, ranging from grade I(0) or degree level. When the value of the ADF t-statistic is greater than the critical value, the variable does not have a unit root which means that the data has been stationary.

The results of the ADF test revealed that some variables were stationary at degree level and the others were stationary at the degree of their first difference. *GROWTH*, *GOVEXP*, and *GENEXP* variables can reject H0 (the data is not stationary) at confidence level of 5%, with a value of t-statistic which was greater than the critical value. On the other hand, *DEFEXP*, *ECOEXP* and *EDUEXP* variables can reject H0 at the degree of the first difference with a confidence level of 1%.

**Table 1. Stationary Test Results**

Variable	Level	Critical Value (Level)	First Difference	Critical Value (1st Diff)
GROWTH	-4.627609***	-4.192337	-	-4.198503 (1%)
GOVEXP	-3.917752**	-3.520787 (5%)	-	-3.523623 (5%)
GENEXP	-4.459207***	-3.191277(10%)	-	-3.192902(10%)
DEFEXP	-2.341819		-7.041718***	
ECOEXP	-2.400130		-6.335673***	
EDUEXP	-3.200078*		-6.915255***	

Source: Data processed, 2016

(\*\*\*), (\*\*), (\*) significant at confidence level of 1, 5 dan 10 percents

Second, lag length selection aims to determine the time required by a variable in order to respond to changes of other variables. Lag length selection is very crucial because appropriate lag selection will generate residuals which are free from autocorrelation and

heteroscedasticity. Based on table 2, the suggested optimal lag length for equations with growth and government expenditure variables by using the four criteria comprising LR, FPE, AIC and HQ is lag three. The same lag is also recommended for equations which employ variables of economic growth and government expenditure by defense, security and order functions and also for equations with variables of economic growth and government expenditure by economic function, as well as equations with variables of economic growth and of government expenditure by educational function.

**Table 2: Optimal Lag Length Selection Results**

<i>Endogenous Variable</i>	<b>Lag</b>	<b>LR</b>	<b>FPE</b>	<b>AIC</b>	<b>SC</b>	<b>HQ</b>
Growth	1	13.59265	72.95076	9.964695	10.23133	10.05674
Govexp	2	12.70366	60.2193	9.769811	10.21420*	9.923213
	3	11.19486*	51.09786*	9.598566*	10.22071	9.813329*
Growth	1	16.55231*	14.50183*	8.349186*	8.615817*	8.441227*
Genexp	2	0.739483	17.83725	8.553108	8.997493	8.706509
	3	4.04444	19.53897	8.637235	9.259374	8.851997
Growth	1	37.43216*	0.531768*	5.043364*	5.309995*	5.135405*
Defexp	2	4.818147	0.57093	5.11133	5.555715	5.264732
	3	6.851167	0.565748	5.095217	5.717356	5.309979
Growth	1	65.94808*	7.710226*	7.717458*	7.984089*	7.809499*
Ecoexp	2	5.734581	8.028988	7.754877	8.199262	7.908279
	3	0.180166	10.09651	7.977014	8.599153	8.191776
Growth	1	18.87859*	0.614349*	5.187719*	5.454350*	5.279760*
Eduexp	2	4.554298	0.665419	5.26448	5.708865	5.417882
	3	1.40228	0.801033	5.44297	6.06511	5.657733

Source: Data processed, 2016

Third, cointegration test was conducted to identify whether or not a long-term relationship between the variables of the study exists. If the variable/ series in the study are proven to be cointegrated then there is a stable relationship in the long term. Conversely, if there is no cointegration, it can be said that there is no relationship between the variables in the long term. Cointegration test carried out by using Johansen method in this study generated the following results:

**Table 3: Cointegration Test Results**

<b>Equation</b>	<b>Trace Statistic</b>	<b>Critical Value 5%</b>
Growth-Govexp	15.64978	15.49471
Growth-Genexp	20.42933	15.49471
Growth-Defexp	21.04305	15.49471
Growth-Ecoexp	19.07369	15.49471
Growth-Eduexp	27.0988	15.49471

Source: Data processed, 2016

Based on the output results of Johansen cointegration test, trace statistic of each variable indicates value greater than the critical value. It means that each pair of variables including economic growth and government expenditure, economic growth and government expenditure by public service function, economic growth and government expenditure by defense and security function, economic growth and government expenditure by economic function as well as economic growth and government expenditure by educational function have a relationship or long-term equilibrium.

Finally, Toda-Yamamoto causality test was used to identify the direction or relationship of the variables studied. Toda-Yamamoto causality test which was conducted comprised selection of the degree of integration using the ADF root test, optimum lag determination based on LR, FPE, AIC, SC and HQ criteria as well as the Wald test to determine the causality between each variable. The null hypothesis which states that there is no relationship between variables can be rejected if the probability value is less than 5%.

Based on table 4, there is a unidirectional relationship from economic growth to government expenditure and from economic function of government expenditure to economic growth with a degree of confidence under 5%. In contrast, for economic growth and government expenditure by public service function, economic growth and government expenditure by defense function, economic growth and of government expenditure by security and order functions, as well as economic growth and government expenditure by educational function, the causality between the variables was not found.

**Table 4: Results of Wald Test**

<b>Dependent Variable</b>	<b>excluded</b>	<b>Chi-square</b>	<b>Probability</b>
GROWTH	GOVEXP	7.131302	0.0678
GOVEXP	GROWTH	18.11423	0.0004
GROWTH	GENEXP	0.674668	0.4114
GENEXP	GROWTH	0.511768	0.4744
GROWTH	DEFEXP	0.010606	0.9180
DEFEXP	GROWTH	0.444296	0.5051
GROWTH	ECOEXP	4.152246	0.0416
ECOEXP	GROWTH	0.386400	0.5342
GROWTH	EDUEXP	0.060380	0.8059
EDUEXP	GROWTH	0.091092	0.7628

Source: Data processed, 2016

### **Discussion of Findings**

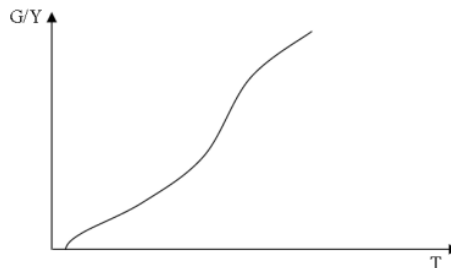
Based on the results of stationarity and cointegration tests, the relationship between economic growth and government expenditure, both in the aggregate or by function, is stationary and has a longterm relationship or balance, so that the causality analysis which was conducted obtained valid and reliable results, not a nonsense regression (Gujarati and Porter, 2012). In contrast, the results of TodaYamamoto causality test revealed unidirectional causality relationship in which economic growth affects government expenditure by economic function and government expenditure by economic function affects economic growth.

In government expenditure by public service, defense and security function and educational functions, each of which has no causality with economic growth at confidence level of 5%. Although using the same object, the results of this study differ from the results of the previous studies, such as Loizides and Vamvoukas (2005), Jiranyakul and Barahmasrene (2007), and Manik and Hidayat (2010) who found unidirectional relationship between government expenditure and economic growth in which government expenditure affects economic growth. According to Peacock and Scott (2000), the different research findings can be caused by proxy differences to variables and data types used.

The different research findings also obtained by Samudram *et al.*, (2009) who found a two-way causality between GNP and government expenditure in administration and health, and

research conducted by Olaiya *et al.*, (2012) found the presence of two-way causality between GDP and economic growth. In addition, Bagdigen and Cetintas (2004) also obtained different result; there is no long-term and causality relationship between government expenditure and economic growth and research by Sinha (1998) in Malaysia which found independency or no relationship between government expenditure and economic growth.

Studies showing similar results to this study include Pahlavani *et al.*, (2011) in Iran, Sukartini and Saleh (2012) in Indonesia and Attari and Javed (2013) in Pakistan that found unidirectional causality between government expenditure and economic growth in which economic growth affects government expenditure. Applicability of unidirectional relationship between government expenditure and economic growth indicates that economic growth affects government expenditure in accordance with Wagner's Law which states that government expenditure will always increase along with economic growth, as shown in the figure 2 below:

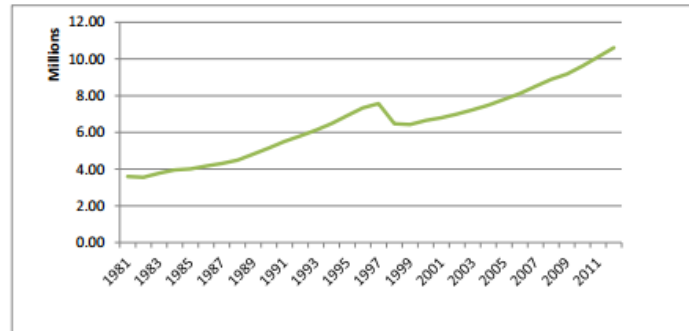


Source: Suparmoko in Manik and Hidayat (2010)

**Figure 2: Ratio of Government Expenditure to National Income based on Wagner's Law**

Manik and Hidayat (2010) pointed out that the role of government in economic activity is largely as a consequence of the increasing complexity and interdependency of modern society. Increased government expenditure is caused by the demand of increasing need for security protection and defense, raising income level of the society, urbanization and economic growth and inefficiency of government bureaucracy that accompanies development. This justification is in line with Dimitrios & Richter (*no date*) in Sukartini and Saleh (2012) who suggested three reasons (justifications) for the enactment of Wagner's law. First, the development of government activity related to administrative functions and functions of the protection of citizens. This condition is also indicated by the changes caused by the increase of population, and the increased flow of urbanization. Such changes would require more provision of public facilities (housing, sanitation, educational facilities, health, etc.) and new regulations that must be provided by the government. Second, along with the increasing individual welfare, as indicated by the increase in demand for better quality of goods, the government provision of education facilities and infrastructures, health and other public services should also be responsive to an increase in the quantity and quality of the society demands. Thirdly, more regulations are needed to prevent monopolistic company as a result of technological improvements and changes in investment patterns.





Source: World Bank, 2013 (data processed)

**Figure 3: Development of per Capita Income in Indonesia in 1981-2012**

In figure 3, it is proven that the public per capita income tends to rise from one period to the next. It leads to an increase in the quality and quantity of public needs required by the community and that must be provided by the government. Unidirectional relationship between economic functions of government expenditure and economic growth in which government expenditure affects economic growth shows the enactment of Keynes's theory. It means that the policies taken and implemented by the government concerning the economic function of expenditure have reached the goal as a part of efforts to accelerate economic growth by strengthening economic resilience. These results support the research conducted by Samudram *et al* (2009) which revealed that government expenditure is one of the components of fiscal policy and can be used as an instrument to influence economic growth.

Realization of economic function of government expenditure is the realization of the expenditure used to fund infrastructure programs covering transportation, agriculture, irrigation, and energy, which are expected to support the government efforts to accelerate economic growth. It is based on the fact that in developing countries, as in Indonesia, expenditure (investment) in infrastructure will bring many economic benefits for the country (Muthui, *et al*: 2013).

The government continues its efforts to accelerate economic growth. In period 2005-2013, expenditure by economic function increased from IDR 25.9 trillion (1.0 percent of GDP) in 2005, to IDR 118.5 trillion (1.3 percent of GDP) in 2013. The increase in the expenditure by economic function is mainly related to the government's efforts to support the acceleration of quality economic growth.

Meanwhile, in the time period 2006-2011, the actual expenditure on economic function increased on average by 22.0 percent, from IDR 38.3 trillion (1.1 percent of GDP) in 2006 to IDR 103.3 trillion (1.4 percent of GDP) in the APBN-P (state budget changes) of 2011. The increase in the budget realization in the economic function is mainly related to the efforts taken by the government in order to support the acceleration of quality economic growth.

The absence of independency relationship between economic growth and government expenditure by public service function, economic growth and government expenditure by security defense and order function, as well as economic growth and government expenditure by educational function indicates that the functions of government expenditure on public service, security defense and order, and education do not affect the economic growth in Indonesia and vice versa. This can occur because the GDP as a proxy of economic growth is compiled more by private economic activity, such as household consumption, gross fixed capital formation and export activities of goods and services, rather than government expenditure. As shown in table 5, in period 2011-2013, the average value of GDP constituent components of household consumption expenditure reached 55.03 percent, gross fixed capital

formation was 32.09 percent, export of goods and services for 24.79 percent, while government consumption expenditure components had the smallest amount of 9.02 percent.

**Table 5: GDP Components by Expenditure Year 2011-2013 (%)**

<b>Component</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
1. Household Consumption	54.63	54.64	55.82
2. Government Consumption	9.02	8.91	9.12
3. Gross Fixed Capital Formation	31.95	32.67	31.66
4. a. Inventory Changes	0.95	2.07	1.98
b. Statistical discrepancy	2.04	3.27	3.42
5. Exports of Goods and Services	26.36	24.29	23.74
6. Minus: Imports of Goods and Services	24.95	25.86	25.74
<b>Gross Domestic Product</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

Source: Central Bureau of Statistics, 2016

Theoretically, government public services to the community directly or indirectly affect the economic activities of the community, but it is not proven in this study. The absence of the relationship between government expenditure by public service function and economic growth may occur due to problems of efficiency and effectiveness in the administration and bureaucracy. Although government expenditure by public service function continues to increase (as described in the previous section), but apparently it has not been able to achieve a clean and transparent governance. Reform of the bureaucracy has been running in some institutions, but overall bureaucracy in Indonesia cannot be declared clean and transparent as proven by many cases of corruption and public dissatisfaction over the services provided. Furthermore, the absence of the relationship between expenditure by public service function and economic growth may occur due to the expenditure on public service function is also used to repay a loan that must be borne by the government and non-targeted subsidies. This study obtained the results that government expenditure by defense, security and order functions does not affect economic growth and vice versa. This may occur because government expenditure by defense, security and order functions has varying effects on the economy. Purchasing the main tools of defense systems and facilities of state defense and security is unproductive expenditure which burdens the budget so that it negatively impacts the economy. On the other hand, the government's efforts to maintain security and public order will give a sense of security to the community. Sense of security in the attempt would encourage economic activity and investments.

The results showed that government expenditure by educational function has no causality with economic growth. It can be occurred because government expenditure in which the constitution mandates the educational function to allocate 20 percent of government budget for the education budget is mainly allocated for formal education such as elementary education, secondary education and higher education (e.g.: in the period 2006-2011 reached 87.5 percent of the allocation function of education) so that the high labor force is not balanced with the skills possessed to enter the working world.

The further impact emerged is the problem of unemployment which hampers economic growth. As shown in the figure below, youth unemployment (15-24 years old) has a higher percentage (average 26 percent) of the labor force in those age range, compared to the total unemployment rate in Indonesia which is also high (average 8.9 percent). It shows that in

Indonesia, many young workforces who have graduated from educational levels but are not able to get a job and become a burden for the national economy.

### **Conclusion**

The results showed that economic growth and government expenditure have unidirectional causality in which economic growth affects government expenditure. This relationship is in accordance with Wagner's law which states that the development of government expenditure is in line with economic growth. This can occur because government expenditure is used as a tool or a policy balancing (countercyclical) to respond to the development or economic cycles which occur. Economic growth and public service function of government expenditure, economic growth and government expenditure by defense, security and order functions, as well as economic growth and government expenditure by educational function have no causality. The results showed that government expenditure by public service function, education function and defense, security and order functions generated outputs that are not directly related to economic growth comprising the creation of a clean bureaucracy, qualified human resources and sense of security in society.

Economic growth and government expenditure by economic function have unidirectional causality in which government expenditure affects economic growth, in accordance with the theory of Keynes. It indicates that the allocation of government expenditure by economic function has been aimed for activities which directly support economic activities such as infrastructure and transportation.

Furthermore, based on the above conclusions, the suggestions which can be given are as follows: First, to support economic growth, the government's attention should be focused on the government administration to establish: (i) more powerful central government for managing the policy process and resolve conflict policy, (ii) a leaner bureaucracy for the realization of improved accountability (iii) improved strategic management of human resources in public administration, (iv) better procedures for planning and budgeting in order to improve the realization of government expenditure.

Secondly, the government is expected to improve the quality of all levels of education and the functions of training centers to close the gap of skilled workers, provide more information for students and graduates on the opportunities in the labor market, make vocational education more responsive to the needs of the market and improve the allocation of education expenditure in formal and non-formal sectors.

Thirdly, for the next research, it is suggested to use a longer period of data and consider the fluctuations in economic conditions, take into account the size of government, and include other variables such as inflation and human development index to identify the relationship between economic growth and government expenditure more comprehensively.

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## DAU ALLOCATION IN INDONESIA IS IT FOR GOOD LOCAL GOVERNMENT OR LUCKY ONE?

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### Abstract

This study investigates the association of Badan Pemeriksa Keuangan (BPK) audit opinion on the value of government transfer in the forms of equalization fund (*dana perimbangan*) among districts/cities government in Indonesia. Applying panel data regression to illustrate the role of BPK's audit opinion, value and lag values of: general or block grant (*dana alokasi umum/DAU*), specific grant (*dana alokasi khusus/DAK*), revenue sharing (*dana bagi hasil/DBH*); and Human Development Index (HDI) on the value of equalization fund received by the local government.

Among 249 sample within 4 years (2005-2009), empirical investigation indicates that in several districts or cities government, which receive BPK's audit opinion of value 3 (adverse opinion) or value 4 (disclaimer), but still receive high transfer in the subsequent year. This implies that BPK's audit opinion do not matter for determining the allocation of equalization fund. On the other hand, neither positive nor significant impact of HDI on the DAU allocation, but it is for DAK and DBH. This result implies that HDI formula does not empirically influence the DAU allocations.

Policy implication of this study is central government should provide equalization fund higher in terms of DAK. This is because this grant even though not directly improves the community welfare, but it will influence human capital investment through it leading sector goal; i.e. education and health. In the future, because DAU is recently set up as the biggest share among equalization fund, but it must be redefined for the shakes of efficient and effectiveness issues.

**Keywords:** *Fiscal decentralization, government expenditure, HDI, Indonesia*

### Introduction

Fiscal decentralization and political reform has been implemented in Indonesia since 1990s. These reforms were formally arranged through: 1. Law No. 22/1999 concerns on Regional Government, 2. Law No. 25/1999 concerning for regulation for fiscal balance between central and local government. Recently, these Law is updated into the Law No. 32/2004 and Law No. 33/2004. The introduction of these two Laws mean fiscal decentralization in Indonesia has been implemented de facto and de jure (Bird & Vaillancourt, 1998; Musonda, 2005).

Theoretically, under central government regulation, public goods and public services are provided uniformly with the assumption of homogeneous preference among individual (Musgrave & Musgrave, 1973; Oates, 1999). Globalization and democratization process has put pressure for nations to redefine their development strategy. Democratization process requires that central and local governments are elected through democratic process, which is indicated by transparency and accountable. On the other hand, globalization offers variety of goods and services traded between regions, either internationally or within the nation. This is consistent with Wagner's Law; which indicates that higher government activity for delivering public goods for compensating larger economic activities.

Improving services delivery for the community is the reason for implementing fiscal decentralization (Ahmad, Devarajan, Khemani, & Shah, 2005; Bird & Vaillancourt, 1998). In the case of Indonesia, the implementation of fiscal decentralization means more and larger

autonomy of power. These power applicable both economically and politically, and the power are concentrated on the districts and cities government. To be able provides better public goods and public services, sufficient and sustainable source of fund for districts and cities government. Majority of decentralized countries, especially in developing countries, parts of subnational governments' revenues are from central government transfer. According to Bergvall et al.(2006) disregards of the issues in particular country, the design of the transfer from central to subnational levels are mainly to reduce fiscal imbalances among the local government. In general, priority of subnational spending is determined by the law, and it must be implemented according to national priorities.

In case of fiscal decentralization in Indonesia, subnational governments i.e. district (*kabupaten*) and city (*kota*) annually receipt transfer from central government in the forms of equalization fund (*dana perimbangan*). There are three types of equalization fund, namely: general allocation fund or *dana alokasi umum* (DAU), specific allocation fund or *dana alokasi khusus* (DAK), and revenue sharing fund or *dana bagi hasil* (DBH). *Dana alokasi umum* or DAU is distributed to all districts and cities government according to specific formula, therefore DAU also well known as block grant mechanism. Both DAK and DBH are distributed to targeted districts or cities. DAK is distributed to districts or cities which are: 1. a special autonomy districts or city, such as Yogyakarta and Aceh; 2. Vulnerable to natural disasters such as mount eruption or flooding or broken landscape; 3. Districts with large share of poverty, etc. However, since 2005 all districts and cities receipt DAK and DBH according to rule or determined by the ministry of finance (Yani, 2002).

To improve efficient allocation of DAU, DAK and DBH, deterministic criteria's must be met. Partly, DAU allocation is determined to improve Human Development Index (HDI) and to fulfill horizontal imbalances of sharing revenues, either from taxes or natural resources. On the other hand, DAK allocation is recently determined for improving access to basic infrastructure, health and educational performance (MoF-Indonesia, 2016). Regarding the determinant of DAU, DAK and DBH allocation; it can be inferred that the distribution indirectly will improve Human Development Index (HDI). HDI is calculated as the fiscal gap weighted, while DAK and DBH are weighted for fiscal capacity. Both fiscal gap and fiscal capacity are part of DAU allocation formula. Regarding this formula, it is expected that higher DAU allocation will increase HDI index.

On the other hand, improving accountability and transparency of local government managing their revenues and expenditure, Badan Pemeriksa Keuangan (BPK) conduct financial audit regularly. According to Saparani (2009) BPK's audit reports for period 2005-2009 indicate a growing number of undesirable score regarding local government financial report. In Indonesia, BPK's audit for financial reports of local government are scaled as: 1. Unqualified Opinion (*Wajar Tanpa Pengecualian/WTP*). 2. Qualified Opinion (*Wajar Dengan Pengecualian/WDP*). 3. Adverse Opinion (*Tidak Wajar/TW*). 4. Disclaimer (*Tidak Memberikan Pendapat/TMP*). 5. Unqualified Opinion with Explanatory (*Wajar Tanpa Pengecualian Dengan Paragraf Penjelasan/WTPDPP*). 6. It is not mandatory to prepare and report sub-national budget, it is a new proliferated districts. 7. Audit Report is in progress, and 8. Audit process is being delayed due to force major.

According to Saparani (2009), BPK's audit reports for the period of 2005-2008 indicate a decreasing in quality. Number of districts and cities with government financial report scaled of 3 (adverse opinion) and 4 (disclaimer) has increased significantly. This figure indicates that indicator of good quality and accountability of local government has not achieved. In terms transfer to local government, among transfer expenditure, equalization fund is the largest one. DAU allocation is account approximately 85 per cent of equalization fund. Based on this condition, rationally there should be correlation between BPK audit opinion and DAU

allocation, if good governance in terms of accountability and transparency indicators are applied.

This paper will investigate do larger DAU allocation related to fiscal need, fiscal gap, or BPK's audit opinion, among districts and cities government in Indonesia, for period 2005-2009. If the distribution is met with either fiscal need with low HDI as the main indicator, or low fiscal capacity such as own revenues (pandapatan asli daerah/PAD) then the local government is lucky receiving the transfer. However, when neither fiscal need, fiscal capacity and BPK's audit opinion is met; then the local governments do not satisfy criteria good government. The research question to be answered is what the determinants of DAU allocation are; is DAU distributed for good governance or lucky one? The organizations of this paper as follows. After introduction in the first part, it will be followed subsequently by literature review, data and model empiric, and lastly discussion and conclusion.

## Literatur Review

### 1. Theoretical background

Following the argument of World Bank (2004, 2008) and Yilmaz, Beris, & Serrano-Berthet (2008); decentralization or precisely fiscal decentralization is a policy which reshape power relationship between citizen, residents which act as consumer and government (central government and local government) which act as producer of public goods and public services. Under centralistic mechanism, central government as the decision makers determine from the stage of planning until implementation of all program for delivering public goods and public services. Assuming the central planner has benevolent characteristics; the distribution of public good and public services should be delivered universally. World Bank (2008) report indicates that there is lack of evidence that either public good or public services distributed universally in all nation. In region of Asia, especially rural areas of South East Asia, Latin America, and Africa, access to public good and public services are relatively very scarce. Poor people can not afford not only privat good but also public good.

Why centralistic government system fail to provide universal public goods and public services? Difference arguments are arises. From supply sides, difficulty in matching the real preference between the planner (producer) and citizen (consumer). For example central planner delivers health facilities but the community need more educational facilities. Geographical barriers may also drive down the efficient distribution of the services. Different geographical condition will generate difference cost for produce the services. On the other hand, the government has to set one price for the services. This condition will tend to reduce the quantity of the service in the region where geographically undesirable.

To overcome this situation, decentralization in terms of fiscal, politics and power are proposed. In terms of fiscal decentralization, to fulfill the financial requirement in delivering services, central government has to provide source of revenues for the sub national or local government. In the case of Indonesia, the largest financial transfer from central government to the local; i.e. provinces, districts and cities government in the forms of equalization or balancing fund (*dana perimbangan*). There are three types of equalization fund, namely: general allocation fund (dana alokasi umum/DAU), specific allocation fund (dana alokasi khusus/DAK), and revenue sharing allocation (dana bagi hasil/DBH). DBH furthermore, is classified as DBH taxes (dana bagi hasil pajak) and DBH natural resources (DBH sumber daya alam). Component and formula of equalization fund; DAU, DAK and DBH as follows

#### A. General allocation fund (DAU).

According to the Law No. 33/2004; source of DAU is from net domestic revenues, collected by the central government. Part of this revenues, at least 26 percent must be distributed to the

sub national: province, district and cities (MoF\_Indonesia, 2004). Government Regulation; PP No. 55/2005 determine the formula of DAU allocation. Basic formula DAU is:

$$\text{DAU} = \text{Fiscal Gap} (\text{Fiscal Need} - \text{Fiscal Capacity}) + \text{Basic Allocation} \dots(1)$$

Fiscal need is calculated index of total regular spending of local government; and it is multiplied by weighted index of: population size, length of areas, construction cost, HDI and GDP regional per capita. Fiscal capacity is calculated from local government revenues, which includes: own-sources revenues (*pendapatan asli daerah*/PAD), revenues sharing tax; including tobacco taxes, and revenues sharing from natural resources. Basic allocation is calculated based on the number of civil or state employment, which determined the spending on wages salary. In general, basic allocations cover all wages and salary spending. Article No. 45 of PP No. 55/2005 and based on formula (1), it can be inferred the allocation of DAU annually as: 1. Region (province, districts and cities) which has fiscal gap positive, will receive DAU for amount of fiscal gap plus basic allocation. 2. Region which has zero fiscal gap, will receive DAU of amount basic allocation. 3. Region which has negative, but the value lower than basic allocation will receive DAU of amount basic allocation minus fiscal gap. 4. Regions will receive zero DAU if their fiscal gap is positive and it is larger than the basic allocation. Among 34 districts in Indonesia, only Jakarta has fiscal gap negative and larger than the basic need. Therefore, since 2009 Jakarta receives zero DAU.

#### **B. Specific allocation fund (DAK).**

DAK was initially distributed for selected regions based on three criteria's: general, specific and technique. Based on Law No. 33/2004; DAK is distributed from at least 10 percent of national income. DAK distributed to economic sector by Ministry of Finance, conditional on matching grant from related Ministry which promoting national development priority. Three criteria as screening process of DAK allocation are: 1. General criteria. Region is eligible for receiving DAK if has fiscal capacity positive or has fiscal capacity lower than national average. 2. Specific criteria. Region which eligible for receiving DAK if determined as special autonomous regions (Papua, West Papua, DI Yogya and DI Aceh); or being disadvantages geographically. Disadvantage region means: being located in coastal/ isolated island/border with other countries; vulnerable to natural disasters; or targeted as food producer and tourist destination. 3. Technical criteria is determined by Ministry of Finance, which sectors will become national priorities.

For the purposes of improving public services, DAK allocation is determined according to basic and non-basic infrastructure and services. Belong to basic infrastructure and service sectors are: education, health, irrigation, safe drinking water and sanitation, transportation and rural energy. On the other hand, non- basic infrastructure and services are: maritime and fisheries, agriculture, local government infrastructure, environment, forestry, family planning, trading infrastructure, and housing.

#### **C. Revenue sharing fund (DBH).**

According to article No. 28 PP No. 55/2005, it is mandated the composition of revenues sharing between central and sub national government. DBH taxes are collected from properties tax, land and building and personal income tax. DBH natural resources are collected from oil, gas, forestry, fisheries, geothermal and mining. The sharing of DBH is as follows.



**Table 1: Sharing Composition of DBH**

No.	Types of Revenue sharing	Central government	Sub national government	
			Province	District
A.	DBH taxes			
	1. Property tax	10%	16.2%	64.8%
	2. Land and building	20%	16%	64%
B.	DBH natural resources			
	1. Oil	84.5%	3.1%	12.4%
	2. Gas revenues	69.5%	6.1%	24.4%
	3. Mining, geothermal, and forestry	20%	16%	64%

Source: Law No. 33/2004

From theoretical point of view, transfer of equalization fund from central government to subnational level should bring positive impact on the development process. DAU allocation for fiscal need directly weighted HDI and regional gross domestic product (RGDP). This formula implies there should be direct mechanism between DAU allocation and regional economic performance, either monetary (RGDP) and non-monetary (HDI). On the other hand, DAK allocation specifically targeted to sector that could boost human capital investment (health, education, safe drinking water and sanitation), labor productivity (irrigation, transportation and rural energy). These allocation priorities imply direct association with regional development indicator, especially long run productivity of human capital.

The implementation of fiscal decentralization should indicate good government and transparency. In Indonesia, equalization fund count as the largest share of government transfer. Among three equalization funds, DAU and DAK subsequently count for 90 per cent of the total transfer (MoF\_Indonesia, 2015). Technically, all equalization funds are distributed based on formula. Good and transparent sub national government should spend the equalization fund as directed by the law.

### **Empirical Finding**

Since the implementation of fiscal decentralization policy since 1990s, some studies reporting various results. Even though the formula of DAU, DAK and DBH allocation are specifically for supporting regional development through human capital investment (DAU), labor productivity (DAK) and rule of government size (DBH), empirical finding do not support the expected outcome. The larger equalization fund is receives by province, the higher is inequality of per capita income among 30 province between 2003-2009 (Savitri, 2013). Similar finding is reported by Wibowo (2011) event utilizing micro data at household level. Wibowo combines Indonesia Family Life Survey (IFLS) wave 1997, 2000, 2007; and Household Socio Economic (Susenas) data 2002, 2004. He find that the larger share of villages receive DAK infrastructure results in higher income inequality at household level.

Applying data at district level, Wibowo, Dendi, and Zulhanif (2010); Wibowo, Muljarjadi, and Rinaldi (2011) find no evidence of DAK allocation could improving development outcome. The authors find there is causality either one way or bidirectional; between DAK on health and educational sector on HDI. DAK on health also does not Granger cause on HDI, but the other way round does exist. The study of Badrudin (2015) also report similar result. District which receive large DAK share has no impact on community longevity, infant mortality rate (IMR) and school attainment.

### **Data and Empirical Strategy**

This study utilize data at district and cities level, which is the documented by World Bank in The Indonesia Database for Policy and Economic Research (INDODAPOER). We employ panel data analysis for the period of 2005-2009 among 430 districts and cities in Indonesia. Our empirical strategy will: analyze the determinant of DAU allocation, does it follows the rule? Does DAU allocation based on criteria good government and transparent? We consider the role of audit opinion from Badan Pemeriksa Keuangan (BPK) as indicator of good government. Our empirical model is defined as:

$$\text{LogDAU}_{it} = \alpha_0 + X_{it}'\beta + Y_{it}'\delta + \gamma\text{DA}_{it} + a_i + u_{it} \dots(2)$$

Log DAU is the logarithm value of DAU fund received by districts/ cities government (i) at year (t). *X* is set of variable indicate fiscal need. Vector *X* includes: population size, region size, HDI, and regional gross domestic product which calculated with or without oil and gas component. Vector *Y* indicates set of fiscal capacity variable, which include: own-sources sharing (PAD), DBH taxes and natural resources sharing. Notation DA is dummy variable for BPK audit opinion. BPK's opinions are scale from 1 to 8. Scale 1 means unqualified opinion, 2 means qualified opinion, 3 means adverse opinion, 4 means disclaimer, 5 means unqualified opinion with explanatory paragraph, 6 means that new proliferated districts or cities, and it is not required for preparing report, 7 means audits is in progress and 8 means audit is delayed due to force major. Data for BPK audits is only available for the periods 2005-2009. Because audit BPK is our concerns, we prioritize sample period in 2005-2009.

### **Result and Discussion**

Results of empirical model are presented in the following tables. Table 2 in appendixes summarizes value of DAU and DAK by provinces in 2015. The data in 2015 indicate that DAU allocation varies greatly from Rp 2,778.9 million (Riau island ) to Rp 35,905.5 million (East Java). DAK on the other hand, varies from Rp 128.5 million (East Kalimantan) to Rp 3,820.9 million (Papua). Without do not put weighting on population on DAU and DAK allocation, so we can- not compare riel differences, unless the magnitude of the DAU and DAK by provinces.

Empirical model summarizes in Table 3 indicate that the determinant of DAU allocation is more related with the value of previous allocation (logarithm value of DAU), socio demographic characteristic (population and area) and fiscal capacity. In general, DAU allocation always increases in the subsequent year. In terms of socio demographic, the larger population and region size, the larger DAU is received. This finding indicates, in general DAU works purely as block grant, every district receive it for granted. Due to weak control or poor data quality, many districts do not report indicator population and size properly, it tends to over estimates in order to get larger DAU allocation (Dirjen-Perimbangan-Kuangan, 2015). It is reported that every year the size of the districts tend to increase, as an effort for getting larger DAU. On the other hand, regarding fiscal capacity, empirical estimation find that districts with the larger contribution of PAD and RGDP with oil and gas tend to get higher DAU. In this case, larger DAU acts as reward for district government who success for generate higher economic revenues (PAD) and productive activity (RGDP).

Estimation for audit BPK is presented in Table 4 and estimated impact of DAU and DAK on HDI is presented in Table 5. We find no evidence that audit BPK has significant impact of DAU allocation. This finding implies that DAU allocation is not distributed based on good and transparent government. District government who success implement good and proper financial report does not differ significantly with those government who do not provide proper report. This finding brings common sense that DAU allocation is purely block grant.

This conclusion is supported by the empirical result in Table 5. There is no evidence that higher DAU and DAK allocation could improve HDI performance. Scatter plot attached in appendixes also supported this argument. Larger DAU allocation does not match with HDI performance. The figure is presented by island.

### Conclusion and Policy Recommendation

We investigate DAU allocation based on formula and BPK's audit opinion. Applying data set from Indonesia Database for Policy and Economic Research (INDODAPOER) for period 2005-2009 we find that DAU allocation is not imaging the formula based, but rather than block grant. DAU allocations tend to increase every year. The larger population and region size, the higher DAU is allocated. This implies no DAU is allocated as block grant. Audit BPK is not also matter for controlling DAU allocation. Good and not good governance still receive DAU allocation. For those good governments and those lucky one receive DAU for financing their annual expenditure.

Scatter Plot in appendix indicate has lower HDI performance compare to national average, but always receive higher DAU allocation. Districts or cities scattered in the south east block means that these iatrict receive higher DAU compare to national average during fiscal period 2005-2005, but the HDI performance still below national average.

Policy recommendation for central government and Ministry of Finance is to update and improve quality and transparent based in allocating DAU. HDI performance can be an indicator. Those sub national government who success to improve HDI performance within 5 years could receive higher DAU in the subsequent year.

**Table 2: DAU and DAK allocation by Province, 2015 (million Rupiah).**

No	Province	Equalization Fund 2015	
		DAU	DAK
1	Aceh	13,233.9	1,643.2
2	North Sumatera	20,667.0	2,148.0
3	West Sumatera	12,060.2	1,354.4
4	Riau	6,441.7	513.5
5	Riau Island	<b>2,778.9</b>	425.9
6	Jambi	6,755.0	518.7
7	South Sumatera	10,366.6	869.9
8	Bengkulu	5,846.6	452.5
9	Bangka & Belitung	5,846.9	753.2
10	Lampung	3,935.0	1,127.2
11	DKI Jakarta		
12	Banten	7,556.5	1,770.5
13	West Java	31,862.9	517.4
14	Central Java	32,723.8	2,140.1
15	DI Yogyakarta	5,000.0	241.8
16	East Java	<b>35,905.5</b>	2,193.1
17	West Kalimantan	10,828.1	1,294.9
18	Central Kalimantan	9,382.6	790.1
19	South Kalimantan	6,892.6	636.6
20	East Kalimnatan	3,066.0	<b>128.5</b>
21	North Kalimantan	2,263.3	214.4

22	North Sulawesi	7,620.1	1,022.2
23	Gorontalo	3,576.8	482.8
24	Central Sulawesi	8,494.8	1,081.1
25	West Sulawesi	3,800.3	1,763.6
26	South Sulawesi	15,824.4	546.3
27	South East Sulawesi	8,227.3	1,216.9
28	Bali	6,081.2	426.0
29	West Nusa Tenggara	7,674.2	883.3
30	East Nusa Tenggara	12,034.5	1,866.4
31	North Maluku	5,620.9	1,008.5
32	Maluku	6,768.5	843.9
33	Papua	21,008.5	<b>3,820.9</b>
34	West Papua	7,421.6	1,104.6
<b>Total</b>		<b>352,887.8</b>	<b>35,820.7</b>

Source: Ministry of Finance, Indonesia

**Table 3: Determinant of DAU allocation**

List of Independent Variable	Dependent Variable: Logaritme value of DAU				
	1. OLS	2a. FEM	2b. REM	3a. FEM	3b. FEM
Constant	7.279*** (13.53)	9.35*** (3.11)	5.93*** (10.55)	19.97*** (14.23)	8.275*** (2.64)
Log DAU <sub>t-1</sub>	0.741*** (21.53)	0.46*** (11.08)	0.74*** (21.56)		0.403*** (8.96)
Log DAU <sub>t-2</sub>	-0.026 (-0.44)	-0.06 (-1.50)	0.01 (0.43)		-0.029 (-0.73)
<b>Fiscal Needs</b>					
Log Population	0.049*** (2.78)	0.41*** (3.19)	0.07*** (3.54)		0.387*** (3.03)
Log Size	0.024*** (3.29)	0.08 (1.27)	0.0005 (0.96)		0.075 (1.15)
HDI	0.043* (1.66)	-0.000 (-0.02)	-0.005 (-0.21)		-0.0008 (-0.027)
HDI <sub>t-1</sub>	-0.005 (-0.14)	0.009 (0.309)	0.001 (0.04)		-0.007 (-0.22)
HDI <sub>t-2</sub>	-0.039** (-1.99)	-0.01 (-0.83)	0.001 (0.11)		-0.001 (-0.006)
Log GDP with oil & gas	0.411*** (4.40)	0.35*** (2.97)	0.38*** (4.48)		0.312*** (2.65)
Log GDP without oil & gas	-0.378*** (-4.01)	- 0.26*** (2.22)	-0.38*** (-4.47)		- 0.301*** (-2.56)
<b>Fiscal Capacity</b>					
Log PAD	0.138*** (7.72)			0.22*** (8.91)	0.171*** (6.97)
Log PAD <sub>t-1</sub>	-0.132*** (-5.75)			0.05*** (2.45)	-0.031 (-1.32)

Log PAD <sub>t-2</sub>	-0.004 (-2.91)	-0.007 (-0.33)	-0.014 (-0.68)
Log DBH tax	-0.019 (-0.17)	0.03 (1.23)	0.013 (0.52)
Log DBH tax <sub>t-1</sub>	-0.009 (-0.57)	0.02 (0.83)	0.012 (0.48)
Log DBH tax <sub>t-2</sub>	-0.016 (-0.84)	-0.003 (-0.16)	-0.001 (-0.03)
Log DBH NR	0.138 (-0.01)	-0.005 (-0.43)	-0.011 (-0.87)
Log DBH NR <sub>t-1</sub>	0.04 (0.36)	0.01 (1.047)	0.015 (1.15)
Log DBH NR <sub>t-2</sub>	-0.004*** (-3.48)	-0.017 (-1.35)	-0.017 (-1.35)
N	(5x430)	(5x430)	
	2148	2150	2150
Adj.R <sup>2</sup>	0.59	0.64	0.60
Redundant Test (Chi Sq)		647.23	50.76
			1823.92

Note: Figure in parenthesis are T-Statistics. Notations: \*\*\*, \*\* and \* imply significant at 1%, 5% and 10% respectively

**Table 4: Audit BPK and DAU allocation**

List of independent variable	Dependent Variable is: log value of DAU			
	Model 1	Model 2	Model 3	Model 4
Constant	21.61*** (5.57)	23.18** (2.37)	16.523*** (3.519)	21.14** (2.11)
Log DAU <sub>t-1</sub>	0.224 (1.61)	0.211 (1.52)	0.214 (1.52)	0.197 (1.41)
Log DAU <sub>t-2</sub>	-0.04 (-0.67)	-0.05 (-0.81)	-0.025 (-0.39)	-0.033 (-0.51)
<b>Fiscal Need</b>				
Log Population		0.218 (0.829)		0.197 (0.742)
Log Size		0.096 (0.899)		0.085 (0.79)
HDI		-0.124 (-1.446)		-0.118 (-1.38)
HDI <sub>t-1</sub>		0.031 (0.47)		0.024 (0.365)
HDI <sub>t-2</sub>		-0.000 (-0.001)		-0.004 (-0.095)
Log GDP with oil & gas		0.725*** (3.55)		0.702*** (3.41)
Log GDP without oil & gas		-0.58** (1.96)		-0.848** (-2.18)
<b>Fiscal Capacity</b>				
Log PAD			0.079* (1.707)	0.067 (1.46)
Log PAD <sub>t-1</sub>			0.042	0.042

			(0.906)	(0.89)
Log PAD <sub>t-2</sub>			0.004	0.011
			(0.108)	(0.26)
Log DBH tax			0.022	-0.004
			(0.561)	(-0.109)
Log DBH tax <sub>t-1</sub>			0.046	0.032
			(1.204)	(0.850)
Log DBH NR			-0.017	-0.017
			(-0.814)	(-0.857)
Log DBH NR <sub>t-1</sub>			0.029	0.033
			(1.298)	(1.46)
Audit <sub>t-1</sub>	-0.011	-0.014	-0.012	-0.010
	(-0.257)	(-0.306)	(-0.277)	(-0.23)
Audit <sub>t-2</sub>	0.072	0.062	0.071	0.065
	(1.61)	(1.29)	(1.534)	(1.43)
N	3x430=1290	3x430=1290	3x430=1290	3x430=1290
Adj. R2	0.49	0.51	0.49	0.51
Chi Square test	559	571	561	569

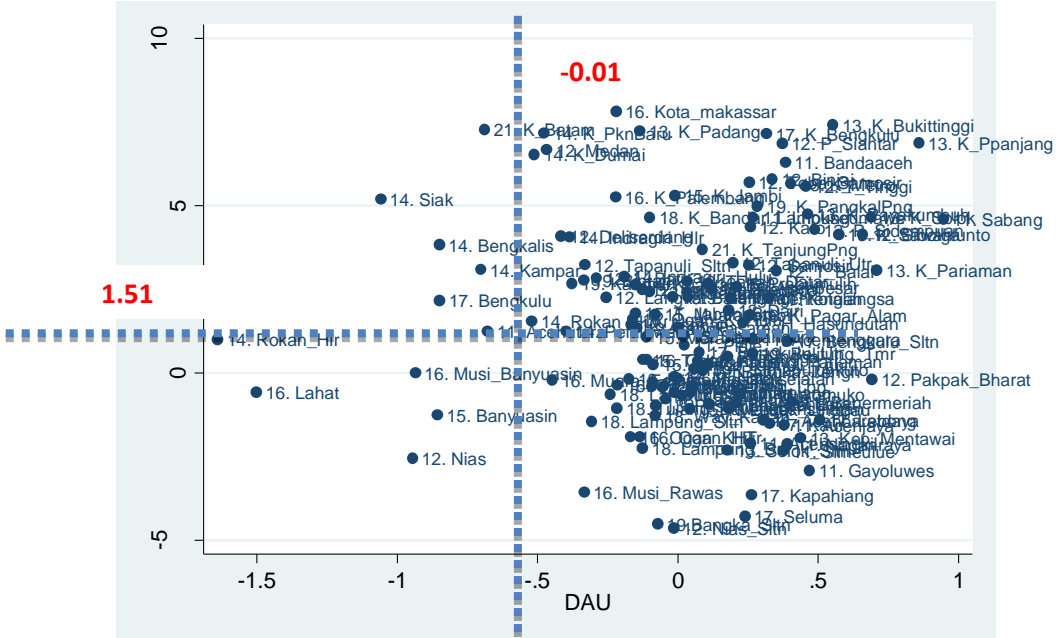
Note: Figure in parenthesis are T-Statistics. Notations: \*\*\*, \*\* and \* imply significant at 1%, 5% and 10% respectively

**Table 5: HDI and equalization fund**

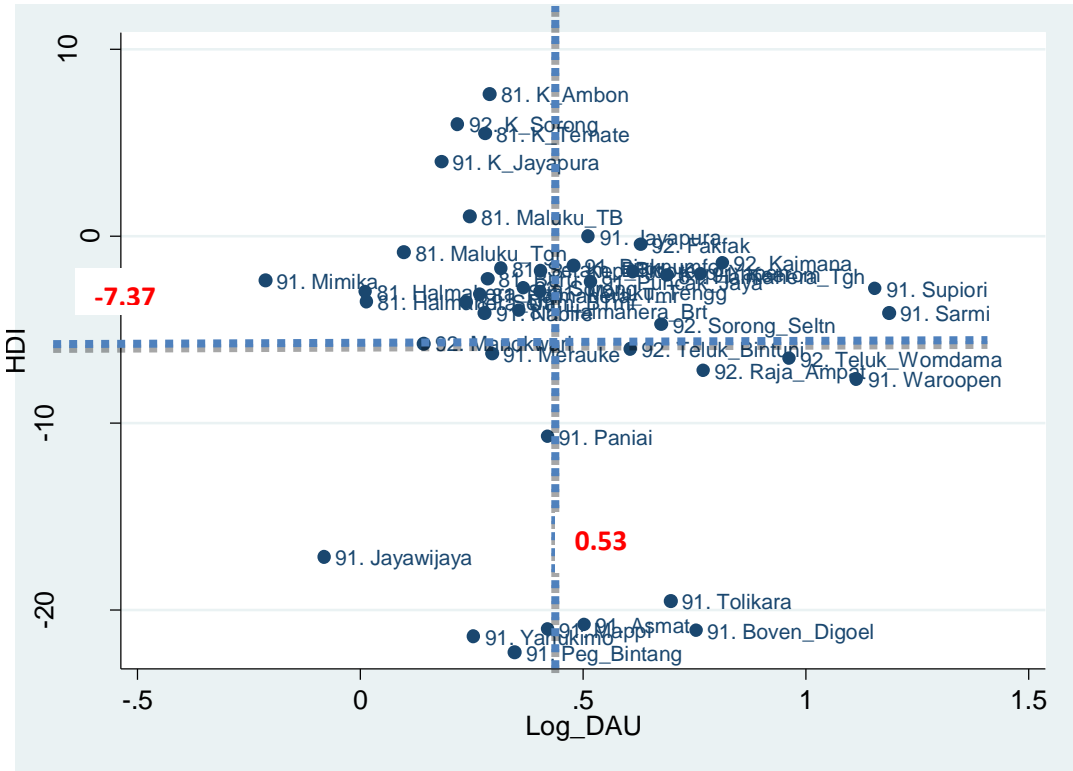
List of independent variabel	Dependent Variable is HDI			
	Model 1	Model 2	Model 3	Model 4
Constant	69.65*** (59.43)	68.83*** (124.51)	69.319*** (78.82)	68.99*** (48.54)
<b>DAU-HDI formula</b>				
Log DAU	0.006 (0.26)			0.002 (0.120)
Log DAU t-1	0.053 (1.26)			0.047 (1.124)
Log DAU t-2	-0.0599 (-1.54)			
<b>DAK-Infrastructure mechanism</b>				
Log DAK		0.018 (1.071)		0.02 (1.17)
Log DAKt-1		0.01 (0.77)		0.007 (0.44)
Log DAK t-2		0.002 (0.18)		0.006 (0.48)
<b>Revenue sharing mechanism</b>				
Log DBHtax			-0.031 (-1.37)	-0.032 (-1.40)
Log DBH taxt-1			0.018 (0.75)	0.01 (0.78)
Log DBH NR			0.009 (0.74)	0.01 (0.859)
Log DBH NR t-1			0.02* (1.66)	0.02 (1.57)
N	(5x430=2150)	(5x430=2150)	(5x430=2150)	(5x430=2150)

Adj.R2	0.99	0.99	0.99	0.99
Redundant Test (Chi Square)	746	665	713	641

Note: Figure in parenthesis are T-Statistics. Notations: \*\*\*, \*\* and \* imply significant at 1%, 5% and 10% respectively



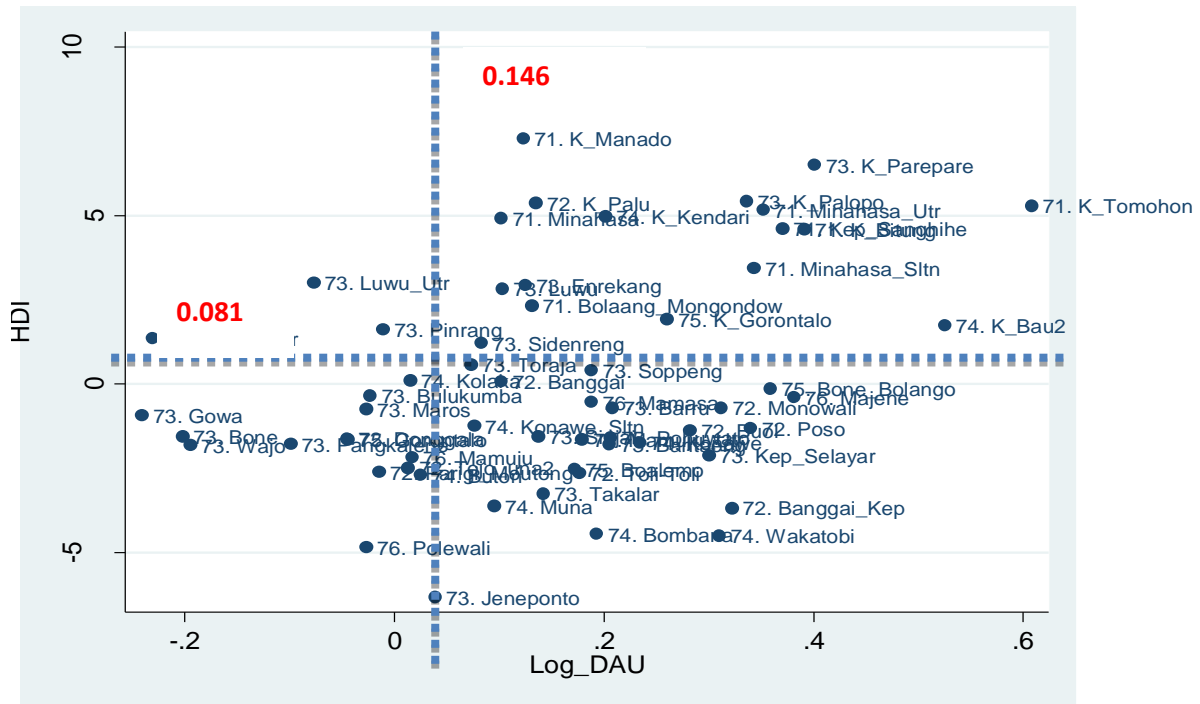
Scatter Plot 1: Differential intercept of DAU and HDI by districts in Sumatera  
Source: Panel Regression Estimation



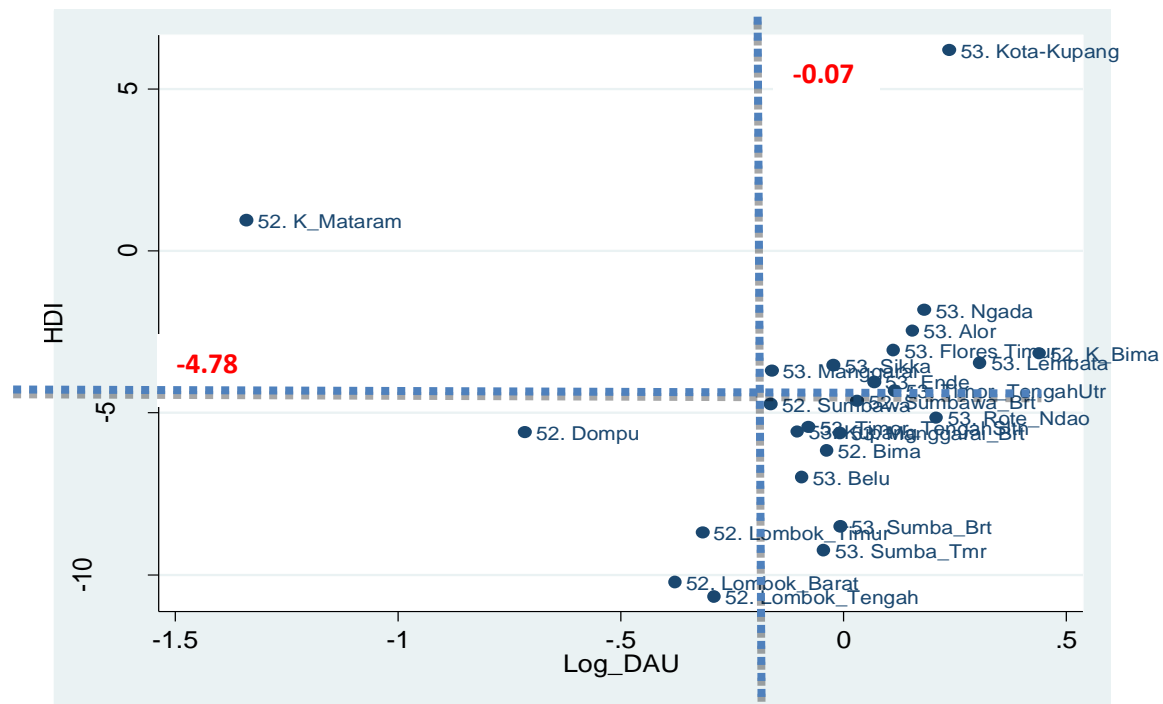
Scatter Plot 1: Differential intercept of LogDAU and HDI by districts in Maluku and Papua  
Source: Panel Regression Estimation







Scatter Plot 4: Differential intercept of Log DAU and HDI by districts in Maluku and Papua  
 Source: Panel Regression Estimation



Scatter Plot 1: Differential intercept of Log DAU and HDI by districts in Nusa Tenggara  
 Source: Source: Panel Regression Estimation

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## INSTABILITY RUPIAH, IS IT?

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### Abstract

The stability rupiah exchange rate is needed for economic growth fast in Indonesia. Because Indonesia is small and open economic country, foreign exchange reserves affects more the stability of rupiah exchange rate, than the interest rate policy targeted, and money supply. The main purpose of this study is to analyze and describe, is rupiah exchange rate stable since uncertainty period such as 2009, 2010, 2015 and why? Hodrick Prescott filter is used to analyzes the stability on rupiah exchange rate, s qualitative analysis and multiple regression with Error Correction Model (ECM) method. The result of this study are, rupiah exchange rate during 2007:Q1-2015:Q4 is unstable in half period (13 period) because the impact of decreasing in international trade, tax revenue tend to decrease significantly, burden of government debt increase. It causes foreign exchange reserves as an external factor has negative and significantly effect on the stability of rupiah exchange rate, while BI Rate has not significant effect but money supply has positive and significantly effect on rupiah exchange rate.

**Keywords:** *unstable, rupiah exchange rate, foreign exchange reserves HP Filter,*

### Introduction

Indonesia is a small and open economic country, it will make Indonesia's economy increasingly integrated with the world economy. Exchange rate has a very important role the more open the economy, Stable, instable, strong or weak of exchange rate of the currency system will effect economic growth. Bank Indonesia as the monetary authority is the competent institutions in maintaining the stability of rupiah. According to Mayer (1982) the stability of exchange rate is basically very expected by all economic actors, including the general public. Excessive exchange rate volatility didn't accordance with the target of long term interest because instability the exchange rate could distort the level of economic competitiveness, reducing the efficiency of resource allocation and increasing uncertainly for economic actors. The problem faced by Indonesia's economy over the last few quarters is quite complex involving unfavorable economic situation outside the country such as activity in export and import. This trade will effect the foreign exchange reserves.

The movement of rupiah against the US dollar since 2007:Q1 until 2015:Q4 is fluctuated especially in the last few quarters increased (depreciates). The phenomenon of the weakening of rupiah against the US dollar figures which touched Rp. 14.657 (the middle rate 30<sup>th</sup> September 2015) made Indonesian economy increasingly depressed. The weakening of the rupiah against the US dollar is influenced by two factors, which is derived from the external and internal. The external factors is derived from the foreign exchange reserves which is effected directly on the export import activities. Since 2012, the current account balance of payments in Indonesia continued deficit. Balance of payments of deficit is financed by foreign exchange reserves. Therefore, when current account deficit is not immediately repaired, Indonesia's foreign exchange reserves will decrease, so rupiah exchange rate will continue to pressure. In addition, a weak exchange rate of the domestic side also caused by increased demand for foreign currency for debt repayment and dividend seasonally, as well as concerns about slowing domestic economy (Bank Indonesia, 2015). There are several internal factors

that can stabilize rupiah exchange rate, including BI Rate set by Bank Indonesia, reserves of Indonesia, and money supply. These factors can be controlled by Bank Indonesia either directly or indirectly. In order to keep the exchange rate remained stable rupiah necessary appropriate policies and effective so that the conditions and the activities of the Indonesian economy can also progressing well. The question are, is rupiah exchange rate stable or not in some focus period ? and how the effects of foreign exchange reserves ,BI rate, and money supply to rupiah exchange rate/US dollar? *First* hypothesis , allegedly rupiah exchange rate/US dollar unstabilized in period 2007:Q1-2015:Q4, *second*, foreign exchange reserves, BI rate and money supply have significant effect sto rupiah exchange rate/US dollar.

### Literature Review

Exchange rate is the price of one currency into another currency (Miskhin, 2008). According to Mankiw (2006) exchange rate can be differentiated into two, those are the nominal exchange rate and the real exchange rate. Nominal exchange rate is the value that a person uses when exchanging currency of a country by another country's currency. While the real exchange rate is the value that is used when a person bartered goods and services from one country with goods and services from other countries (the price level). A stable exchange rate is described by the exchange rate relatively stable either increase or decrease, and if changing eating less volatile so as not to cause shock to the economy of a country. A stable exchange rate can have a positive impact on the economy, in the sense of providing certainty for all economic actors; boost economic growth; as well an impact on other macro policies so that the stability of rupiah exchange rate is essential to support sustainable economic development and improve people's welfare. The money supply in each country assumed to be determined independently by the monetary authorities of the country concerned. The basic theory is the exchange rate comparisons using the price level in each country..

BI Rate is the interest rate policy which reflects the attitude or monetary policy set by Bank Indonesia and announced to the public. Since July 2005, Bank Indonesia officially implemented Inflation Targeting Framework (ITF) fully. To support implementation of that ITF, Bank Indonesia changed the operational target of monetary policy of money supply (base money/ $M_0$ ) the target of interest, namely BI Rate Interest rate parity condition states that domestic interest rate equal to the interest rate abroad reduced estimates of the appreciation of the domestic currency or can be expressed by domestic interest rate together with the international interest rate plus the forecast appreciation of foreign currencies. If domestic interest rate higher than interest rates abroad this means there is forecast positive appreciation of foreign currencies which will compensate for the decline in foreign interest rates lower.

Foreign exchange reserves in the concept of International Reserves and Foreign Currency Liquidity (IRFCL) or official reserves assetsis defined as the entire abroad assets that controlled by monetary authorities and also it can be used every time, to finance international transactions such as imbalances in the balance of payments, or in the framework of monetary stability by doing intervention in the foreign exchange market and for other purposes. The more often rupiah exchange rate under pressure due to negative sentiment, the more foreign exchange reserves that must be released. It will lead shortage of foreign exchange a country which in turn can cause economic hardship for the country concerned. Not only the country will be difficult to import goods it needs from abroad, but also it will degrades the credibility of the country's currency. Currency exchange rate at the foreign exchange market will be depressed.

Money supply is the obligation of the monetary system (Central Bank, Commercial Bank, Rural Banks/BPR) the domestic private sector (excluding central government and non-residents). Liabilities that are components of money supply consist of currency held by the public (outside of Central Bank and BPR), demand deposits, quasi money owned by the

domestic private sector, and securities other than shares that published by the monetary system owned domestic private sector with a remaining term of up to one year. Money supply can be defined in a narrow sense ( $M_1$ ) and in the broad sense ( $M_2$ ).  $M_1$  includes currency in on hold community and demand deposits (predominates rupiah demand deposit), while  $M_2$  includes  $M_1$ , quasi money (cover savings, time deposits in rupiah and foreign currency, and demand deposits in foreign currency) and securities other than shares that published by the monetary system owned domestic private sector with a remaining term of up to one year.

The quantity theory explained the role of money to the economy in general which was first described by Irving Fisher. This theory holds that there is a direct relationship between growth in the money supply with the rise in general prices (inflation). The quantity theory of money illustrates a clear framework the direct relationship that systematic between growth in money supply and inflation. If it refers to the quantity theory of money the main cause of the sole which allows inflation appear is the excess money from the additional money supply in the community. Inflation is purely a monetary phenomenon. Means, changes in the general price index is only caused by changes in the money supply. If the central bank holds the money supply remained stable, the price level will stable. If the central bank increase the money supply rapidly so the price level will rise rapidly (Mankiw, 2006).

Many studies that have been done to determine the effect of BI Rate, foreign exchange reserves and the money supply to rupiah exchange rate. Yanah (2004), in a study entitled The Effect of Interest Rate and Foreign Exchange Reserves to Exchange Rate and Impact on The Price Stability explained that interest rate and foreign exchange reserves as a whole significantly affect the rupiah exchange rate against US dollar. In partially foreign exchange reserves has influence on the exchange rate while the interest rate does not affect the exchange rate.

Yuliyanti (2014), in a study entitled The Effect of Money Supply ( $M_2$ ), SBI Interest Rate, Import and Foreign Exchange Rate Reserves to Rupiah/US dollar (2001–2013) explained that in the short term money supply and import hasn't significant effect to rupiah/US dollar. But, in the long term money supply and import has positive and significant effect to rupiah/US dollar. In the short term and long term, SBI interest rate and foreign exchange reserves has significant effect to rupiah/US dollar.

## Method

This type of study is quantitative descriptive study. The data used in this study is time series which is a secondary data during period 2007:Q1-2015:Q4. Data obtained from Bank Indonesia publications in monthly and quarterly publication.

Hodrick-Prescott Filter (HP filter) is used to analysis the stability of the rupiah by looking the movement of the rupiah exchange rate. Rupiah is called stable if it is fluctuated in restriction level which is declared by Bank Indonesia (BI). BI sets a level stability of macroeconomic indicators which are in  $\pm 1$ .stdev (standard deviation).. The cycle component is calculated from the difference between the actual value with the trend component of the indicator. An indicator that a measure of stability more stable if the smaller original series variability with long-term trends, while increasingly instable means greater original series variability with long-term trends. The second analysis is to determine the effect of variable BI Rate, foreign exchange reserves, and money supply to rupiah exchange rate. This study uses an Error Corection Model (ECM).. Engel and Granger (1991) has developed an error correction model for correcting the regression equation between variables individually not stationary in order to return to the equilibrium value in the long term, with the terms of the relationship cointegration between variables in an equation. General model of ECM is as follow:

$$\Delta Y_t = \alpha_0 + \alpha_1 \Delta X_t + \alpha_2 EC_t + \varepsilon_t \dots \dots \dots (1)$$

So the ECM model that assumed in this study is:

$$\Delta NT_t = \alpha_0 + \alpha_1 \Delta BIR_t + \alpha_2 \Delta CD_t + \alpha_3 \Delta JUB_t + \alpha_4 EC_t + \varepsilon_t \dots\dots\dots(2)$$

Where:  $\alpha_0$  = Short-term Regression Constants  
 $\alpha_1, \alpha_2, \alpha_3, \alpha_4$  = Short-term Regression Coefficients  
 $BIR_t$  = BI Rate (%)  
 $CD_t$  = Foreign Exchange Reserves (Million USD)  
 $JUB_t$  = Money Supply (Billion Rupiah)  
 $EC_t$  = Error Correction Term

**Result**

The result of the unit root test on the level indicates that all variable are not stationary. To obtain the stationary data, data is chaged to first difference level. In the Table 2. shows the result of the unit root test on the first difference level.

**Table 2. The Result of Unit Root Test with Approaching of Augmented Dickey-Fuller (ADF) on First Difference Level**

Variable	Intercept	Trend and Intercept	None
Exchange Rate	-5.045655***	-5.101381***	-4.889212***
BI Rate	-3.713012***	-3.724352**	-3.771711***
Foreign Exchange Reserves	-3.406818**	-3.412991*	-3.241348***
Money Supply	-1.937631	-6.951232***	-0.063071

Test critical value: \*=10%; \*\*=5%; \*\*\*=1%

Source: estimated E-views (3<sup>rd</sup> attachment)

Based on the Table 2. shows that all variables have been stationary at the first difference level, except foreign exchange reserves and. money supply. To avoid spurious regression, these data are changed to second difference level. Table 3. shows the result of the unit root test in second difference level.

**Table 3. The Result of Unit Root Test with Approaching of Augmented Dickey-Fuller (ADF) on Second Difference Level**

Variable	Intercept	Trend and Intercept	None
Foreign Exchange Reserves	-6.533432***	-6.409756***	-6.650106***
Money Supply	-10.73598***	-10.59915***	-10.88191***

Test critical value: \*=10%; \*\*=5%; \*\*\*=1%

Source: estimated E-views (4<sup>th</sup> attachment)

Table 3. shows that foreign exchange reserves and money supply has been stationary on the second difference level. So that all data variables in this study has been separated from spurious regression and can be used for the next analysis.

**Cointegration Test**

The result of cointegration test using *Engel-Granger* test displayed on Table 4.

**Table 4. The Result of *Engel-Granger* Cointegration Test**

	Intercept	Trend Intercept	and None	Information
Residual models	-3.774542***	-3.720432**	-3.829687***	Cointegrated

Test critical value: \*=10%; \*\*=5%; \*\*\*=1%

Source: estimated E-views (6<sup>th</sup> attachment)

It shows that there is a cointegration or long-term relationship between rupiah exchange rate with foreign exchange reserves, BI rate and money supply. Optimum lag test results are presented in Table 5.

**Table 5. Result of Optimum Lag Test**

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-1145.969	NA	2.18e+25	69.69506	69.87646	69.75610
1	-987.1393	269.5284*	3.83e+21*	61.03875*	61.94572*	61.34392*
2	-972.3841	21.46218	4.33e+21	61.11419	62.74674	61.66349
3	-959.6093	15.48450	5.95e+21	61.30966	63.66779	62.10310

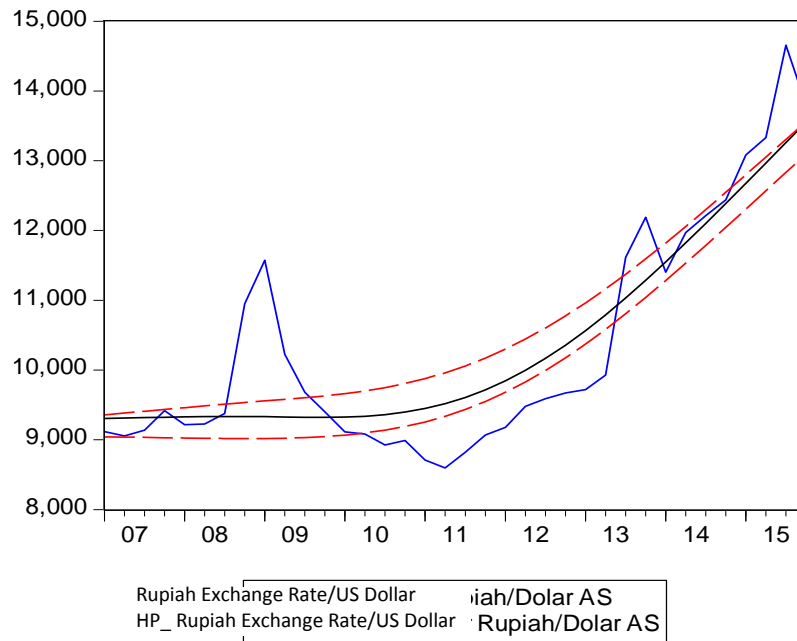
\* : the smallest value AIC, SC, HQ

Source: estimated E-views (7<sup>th</sup> attachment)

It indicates that rupiah exchanged rate is influenced by the foreign exchange reserve, BI rate and money supply at 1 (one) quarter or 3 (three) month before.

**Stability Test Using Hodrick Prescott (HP) Filter**

The results of stability tests using the HP *filter* approach shows that rupiah exchange rate against US dollar during the study period generally indicates that rupiah exchange rate against US dollar is unstable with rules  $\pm 1$  stdev (standard deviation) that has been set by Bank Indonesia. Only in some periods rupiah exchange rate against US dollar is in the range 1 stdev (standard deviation) in the long term trend or within the boundary stable.



Source: estimated E-views (9<sup>th</sup> attachment)

**Picture 2. HP Filter Long Term Rupiah Exchange Rate/US Dollar**

**Table 6. Summary of Test Results HP Filters Rupiah Exchange Rate/US Dollar**

	STDEV 1 (BI)		
	Undervalued Period	Stable Period	Overvalued Period
Rupiah Exchange Rate/US Dollar	2010(Q2,Q3,Q4); 2011(Q1,Q2,Q3,Q4); 2012(Q1,Q2,Q3,Q4); 2013(Q1,Q2)	2007(Q1,Q2,Q3,Q4); 2008(Q1,Q2,Q3); 2009(Q4); 2010(Q1); 2014(Q1,Q2,Q3,Q4)	2008(Q4); 2009(Q1,Q2,Q3); 2013(Q3,Q4); 2015(Q1,Q2,Q3,Q4)

Source: estimated E-views (9<sup>th</sup> attachment)

Note:

Stable Interpretation:

1. Stable if the exchange rate within the limits  $\pm 1$ .stdev
2. Unstable if the lower limit of the exchange rate pass ( $< 1$ .stdev) or the upper limit ( $> 1$ .stdev)

Based on Picture 2 and Table 6, can be seen the position of rupiah exchange rate against US dollar based restriction 1 stdev (standard deviation) set by Bank Indonesia. So it seems that from the 36 study period recorded the following results: (a) undervalued in the 13 period, (b) stable in the 13 period, (c) overvalued in the 10 period. Under valued of rupiah was happened at 2008 (Q2,Q3,Q4), 2011 and 2012 in each quarter, while in 2013 undervalued it is happened only in Q1 and Q2. Overvalued of rupiah are happened at 2008 and 2009 at Q1,Q2 and Q3 are because the impact of economic crisis globally, while under valued such as at 2011 and 2012 is main caused by the impact of the economic crisis in some Uni Europe countries such Greece, Spain, Italy. It is also caused by the impact of decreasing in international trade, tax revenue tend to decrease significantly, burden of government debt increase. In 2013 only at Q3 and Q4 and 2015, rupiah are over valued. The impact of economic crisis will effect the international trade from Indonesia, it also causes problem in liquidity. Of these results it can be concluded that rupiah exchange rate against US dollar is unstable over the study period 2007:Q1-2015:Q4. It is largely due to the external factors that



interfere especially the central bank monetary policy, United States and other International economic situation, as well as external conditions beyond the risk factors and expectation of a rational society to foreign exchange.

### **Error Correction Model (ECM)**

ECM testing was conducted to determine the possible imbalance in the short-term. ECM test interest adjustment ( $EC_t$ ) to correct such imbalance. The estimation results show in Table 7. below.

**Table 7. The Estimation Result of Error Correction Model (ECM)**

Variable	Coefficient	Standard Error	t-statistik	Probability
C	-75.19109	103.1322	-0.729075	0.4716
D(BIR)	-164.4533	157.6678	-1.043037	0.3053
D(CD)	-0.034273	0.012174	-2.815314	0.0085
D(JUB)	0.002858	0.000853	3.349222	0.0022
ECT(-1)	-0.859504	0.159294	-5.395724	0.0000
R-Squared	0.694622			
F-stats	17.05973			

Source: estimated E-views (8<sup>th</sup> attachment)

The negative sign (-) on coefficient  $EC_t$  shows valid or the validity of the model specification. ECM estimation results show the value coefficient  $EC_t$  is negative and significant at the 95% significance level. Means, the requirements for the estimation of ECM are met and models ECM declared valid. Coefficient  $EC_t$  (-1) is 0,85 or 85%, it indicates that the speed of adjustment of the exchange rate variable towards the long-term balance 85%. Based on the results of the estimation, the coefficient of determination  $R^2$  is 0,694622 indicating that short-term independent variable BI Rate, foreign exchange reserves, and money supply can explain and affect the dependent variable rupiah exchange rate by 69% and the remaining 31% is influenced by other variables not included in the model or equation.

### **The Effect of BI Rate to Rupiah Exchange Rate**

ECM estimation result obtained by the value of variable coefficients BI Rate is -164,4533. Negative sign on the ECM estimation result consistent with the hypothesis of study stating BI Rate has negative effect. However, based on the results of the partial testing in the short term, statistically BI Rate hasn't significant effect to rupiah exchange rate. However, in the long term BI Rate showed significant effect to rupiah exchange rate. It shows changes in the BI Rate has not responded directly by the exchange rate, rather it requires time (lag) of 1 (one) quarter or (three) months after the change of BI Rate.

The increase of BI Rate will push up the difference between the interest rates in Indonesia with interest rates abroad. With the widening of the interest rate differential encourage foreign investors to invest in financial instruments in Indonesia such as Indonesian Bank Certificate (SBI) because they will get a higher rate of return. This foreign capital inflows will in return drive the rupiah exchange rate.

### **The Effect of Foreign Exchange Reserves to Rupiah Exchange Rate**

ECM estimation results obtained coefficient value of foreign exchange reserves is -0,034273. Coefficient -0,034273 means that in the short-term, if the foreign exchange reserves rise by 1 million USD, it will cause a decrease in rupiah exchange rate of Rp. 0,034273. Based on the results of the partial examination, statistically foreign exchange reserves variable has significant negative effect to rupiah exchange rate with a confidence level of 95%. These

results correspond with the study hypothesis which states that foreign exchange reserves has significant negative effect to rupiah exchange rate. In addition, in the long-term, foreign exchange reserves variable also showed a significant effect with rupiah exchange rate.

The increase of foreign exchange reserves in the balance of payment provide a stimulus to make the rupiah appreciation. Then a large amount of foreign exchange reserves held then the foreign trust with the ability of our country to overcome external shocks will increase so that a country will be able to withstand the exchange rate of a currency of foreign currency depreciation.

### **The Effect of the Money Supply to Rupiah Exchange Rate**

ECM estimation result obtained by the value of the variable coefficients money supply is 0,002858. The coefficient 0,002858 means that in the short term, if the money supply increased by 1 million rupiah, it will cause a rise in rupiah exchange rate is Rp. 0,002858. Based on the results of the partial test, statistically money supply variable has significant positive effect to rupiah exchange rate. These results correspond with the study hypothesis which states that money supply has significant positive effect to rupiah exchange rate. In addition, in the long term, money supply variable also showed significant effect to rupiah exchange rate.

Based on the Purchasing Power Parity theory that the increase in money supply will cause the inflation in the country against foreign inflation, it will cause export prices of goods and services in the country become relative more expensive and not be able to compete with foreign goods from abroad. In this case Indonesian exports are likely to decline while imports from other countries are likely to increase. Impact, rupiah exchange rate will be under pressure and depreciated or the US dollar will appreciate against rupiah exchange rate.

### **Conclusions**

1. Based on the HP Filter approach is seen that from 36 studies recorded the following result: (a) undervalued in the 13 period, (b) stable in the 13 period, (c) overvalued in the 10 period. Of these results it can be concluded that rupiah exchange rate /US dollar is unstable over the study period 2007:Q1-2015:Q4. It is largely due to the external factors that interfere especially the central bank monetary policy, United States and other International economic situation, as well as external conditions beyond the risk factors and expectation of a rational society to foreign exchange.
2. BI Rate, foreign exchange reserves, and money supply significant influence simultaneously to rupiah exchange rate /US dollar, but partially, in the short term, foreign exchange reserves has negative effect and significant to rupiah exchange rate /US dollar. The greater the amount of foreign exchange reserves of a nation then the foreign trust in the ability of domestic to cope with external shocks will increase so as to appreciated the domestic currency, BI Rate hasn't significant effect to rupiah exchange rate /US dollar. Whereas in the long term, BI Rate has significant effect to rupiah exchange rate /US dollar, money supply has positive effect and significant to rupiah exchange rate /US dollar. An excess money supply in the economy of a country will raise the price of goods as measured by (term of money) so as to put pressure on the exchange rate of its currency against foreign currencies.

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## **DO HIGHER INTEREST RATES RAISE OR LOWER INFLATION?**

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### **Abstract**

Inflation and interest rates are two important macroeconomic indicators in economy. The aim of this research is to examine the existence of Fisher Theory for Indonesian economy, by regressing interest rate on rate of inflation in period 1980-2013. With co-integration and error correction technique, the results indicate that an increases of one percent in inflation rate lead to increase in interest rate at 0,133 percent in short-run and at 0,93 percent in long-run. This research can't confirm the existence of Fisher Theory in Indonesian economy in short-run, but this effect exists in long-run.

**Keywords:** *Fisher Theory, Co-integration Approach, Error Correction Model*

### **Introduction**

#### **1. Background Research**

Rate of inflation is a picture of the price movement of goods and services in general in one periode. High price reflect in high inflation, while relatively stable prices reflect in low inflation.

The uncontrolled inflation can have a negative impact on the economy. In periods of high inflation rate would disrupt banking efforts in the deployment of public funds. High inflation caused real interest rates to be down. This condition thereby reducing the desire people to save so that the growth of banking funds sourced from the public will decrease. In addition, real interest rates are relatively low compared to real interest rates abroad could cause outflow capital abroad.

The unstable prices are able to create unstable environment for economic decision makers. If consumers estimate the rate of inflation in the future is higher, it will encourage them to make purchases of goods and services on a large scale at the present time than to wait when the price has risen again. Similarly, banks or other lending institutions. If they suspect that the inflation rate will rise in the future, they will charge high interest rates on loans as a measure of protection in the face of declining real incomes and wealth (losses of real income and wealth) (Bradley, 1985).

Associated with the effect of this inflation, McKinnon (1973) suggests that inflation tends to lower the real interest rate, causing an imbalance in the capital market. This will cause the fund to offer an investment declines and depressed as a result of private sector investment to the bottom level of balance due to the limited offer of loanable funds (loanable funds). Therefore, during the inflationary effect in the direction of real interest rates are low and there is an imbalance in the equity markets, inflation adversely affected the decline in investment and economic growth.

Rising prices (inflation) can occur through three causes, namely the increase / boost charge (cost-push), increase / pull request (demand-pull) and structural stiffness (structural inflation) (Nanga, 2001). If there is a rapid increase in production costs exceed the productivity so that efficiency of the company will reduce the supply of goods and services to the market. The increase in fuel prices and electricity tariff can improve production costs. Demand pull inflation can occur because aggregate demand is too large compared to the aggregate production. The goods to be reduced due to the utilization of resources has reached a maximum level. The increase in civil servants' salaries can increase demand (purchasing

power) of aggregate. If supply can not keep pace with the increase in public demand for goods and services, then prices will rise.

The interest rate is a macroeconomic variable that could explain the relationship between the goods market (real sector) to the money market (financial sector). In the goods market, the interest rate has an influence on the investment company. A high interest rate reflects the high cost of borrowing and the resulting decline in interest in the company to borrow money for the purpose of investment. In other words, the increase of interest rate, the interest of companies to invest will be reduced. While in the money market, interest rates have an influence on the demand for cash by the public. High interest rates led to lower demand for cash, otherwise low interest rates led to demand for cash by the public is high.

The development of interest rates can be directly interfere with the development of banking. Higher interest rates on one hand can increase people's desire to save money so that the amount of funds banks will increase. Meanwhile, on the other hand high interest rates resulted in a decrease in production activities in the country. This resulted in the emergence of the problem of where the funds will be channeled. In the banking sector, with high interest rates, the bank is able to raise funds to be distributed in the form of credit to businesses. Conversely, if a decline in interest rate, which is lower than the interest rate abroad, will reduce people's desire to save money and encourage the transfer of funds abroad. So the bank will have difficulty in raising funds. But on the other hand, these conditions can trigger production and investment activities as a result of the low cost of credit for companies. Thus, to overcome these problems, monetary policy should be set in such a way that the interest rate can be maintained at an ideal level so it is still quite attractive for people to save their money in banks and not to burden the business world. Also the interest rates should be at a competitive rate than interest rates abroad.

### **Research Purposes**

It has been explained previously that the rate of inflation and the interest rate is an important economic indicators in an economy. How big is the existence of inflation affect the interest rate? The linkage between the interest rate to the inflation rate formulated by Fisher hypothesis. This hypothesis states that if there is an increase of one percent of the expected inflation rate, the nominal interest rate will be increased by one percent as well. Is the influence of the inflation rate to the interest rate in Indonesia in line with the Fisher hypothesis? Given the high rate of inflation is accompanied by interest rates could pose problems for the government's macro and policy makers. This study aimed to analyze the Fisher hypothesis on the Indonesian economy. This research use Co-Integration and Error Correction Model.

### **Literature Study and Development Hypothesis**

#### **1. Literature Study**

This study aimed to analyze the Fisher effect on the Indonesian economy. Fisher effect states that there is a relationship between the interest rate to influence inflation. The increase of one percent rate of inflation led to a rise in interest rates by one percent. This study used a regression model with interest rates as the dependent variable and the rate of inflation, money supply, and the government's budget deficit as an independent variable.

Inflation effect on interest rates. Almilia and Utomo (2006) conducted a study on the effect of inflation on interest rates on deposits in Indonesia using quarterly data 1999-2003 period. Results of these studies show that inflation is positive and significant effect on the rate of interest on deposits. Kandel's research (1996) showed a positive relationship between inflation and nominal interest rates

Berument and Malayali (1999) analyzed the behavior of interest rates associated with the Fisher hypothesis framework in the country of Turkey. The study obtain empirical evidence that inflation changes are expected to trigger an increase in interest rates. After considering the risk factors, the results of the analysis states that the decline in interest rates as a result of increasing levels of inflation. Fahmy studies and Kandil (2003) does not support the Fisher effect in the short term because of the inflation is not expected to affect the short-term interest rates. On the other hand, the correlation between macro variables proved to be extremely high when analyzed in the long term. Pelaez (1995) used co-integration analysis of the data quarterly inflation rate and the expected inflation rate, which is assessed on the interest rate of three-month treasury bill. The results showed that both variables, inflation and interest rates, is to be co-integration. Kolluri and Change (1982) uses some methodology approaches to the data in the USA in 1953-1978. They concluded that in this period, there is a strong relationship between the nominal interest rate to the expected inflation rate. Instead, that correlation was different when using the time period of 1953-1960.

Coppock and Poitras (2000) conducted a study on the Fisher effect in Brazil and Peru. Their results did not fully support the existence of the Fisher hypothesis.. After considering risk factors, they concluded that the interest rate is not always changed due to changes in inflation. Choudry et. al. (1991) stated that the Fisher effect was so great by monitoring the economic developments in the early 1980s. Mitchell-Innes (2008) conducted a study whether the Fisher effect occurs during periods of inflation targeting in South Africa 2000-2005. The study concluded that in the short run Fisher effect does not show its existence for a period of inflation targeting. Researchers believe there was the ineffectiveness of the policy set by the South African central bank (SARB) in controlling short-term interest rates. However, in the long term, this effect was partially influence.

Some other results were by Lee (2007), Fama and Gibson (1982), Hizing and Mishkin (1986), and Kandel et al (1996) found a partially Fisher hypothesis between inflation and interest rates, but it is not based on a one-for-one analysis. Panpoulou (2005) using the 14 OECD countries utntuk examine the Fisher effect and found that this effect exists between the interest rate and inflation-based one-to-one. Westerlund (2008) using panel data co-integration to test the Fisher effect in some OECD countries. Results of the study of the influence of these effects in its analysis. Johnson (2005) concluded that the inflation rate and the interest rate is to be co-integrated although the Fisher effect is not entirely have an influence. Lungu (1998) using the error-correction models to detect the influence of the Fisher effect in the UK. The final analysis showed that these effects occur in the long term

## **2. Hypothesis Development**

Based on the description above, this research is the first to formulate hypotheses about the effects of inflation on interest rates is as follows:

H1: The inflation rate positively affects the interest rate

Noegroho research results (2002) about the influence of money supply to the level of deposits in Indonesia relationship using the data in the period 1999-2001 shows that the money supply significantly and negatively related to the interest rate on deposits. Similarly, research conducted by Almelia and Utomo (2006) on the effect of money supply on the interest rate on deposits in Indonesia using quarterly data 1999-2003 period. The study succeeded in obtaining empirical evidence that the money supply significantly and negatively related to the interest rate on deposits. Research conducted by Noviyari (2008) on the effect of money supply on the interest rate savings using monthly data in the 2003-2007 period resulted in empirical evidence that the amount outstanding and significant negative effect on the level of interest on savings.

Obi et. al. (2009) investigated the Fisher hypothesis on the economy of Nigeria using the data in the time period 1970-2007. One variable that is supposed to influence the interest rate is the amount of money in circulation. Results of these studies to obtain empirical evidence that the money supply is positive and significant impact on the level of interest. Based on the above formulated the hypothesis of this study on the effect of money supply on interest rates is as follows:

H2: The money supply negative effect on the interest rate

Government budget management organized in many developed countries and in developing countries is to adopt a policy of budget deficit. Deficit budget policy means government spending is greater than government revenues. According to Hyman (2005) the government budget deficit is the excess of government spending of government revenue from taxes, fees, levies and charges obtained by the government. The amount of the deficit is determined as a percentage of Gross Domestic Production in the fiscal year concerned. By using this way to obtain information held government debt burden to national income.

If the government cover its budget deficit through the issuance of debt securities, it will have an impact on interest rate hikes. Funding needs by the government to cover the budget deficit the government led to the demand for funds (money) in the community increases. The interest rate is the cost (price) to borrow funds. If demand for funds in the community improve there will be an increase in the interest rate (Kunarjo, 2001).

Maryatmo research results (2004) indicate that the policy of the government budget deficit could raise interest rates. Burney and Yasmeen (1998) in his research on the effect of the government's budget deficit interest rates find empirical evidence that government budget deficits financed through borrowing on the national banking system and significant positive impact on the nominal interest rate. These results together with the results of other studies, such as Cebula (1998), Hoelscher (1986) and Khan (1988) in their study that also found empirical evidence links government budget deficit with a high interest rate. Based on the above hypothesis formulated three studies on the effect of the government's budget deficit to the level of interest is as follows:

H3: the government budget deficit positive effect on interest rates

## **Research Methods**

### **1. Research Design**

This study uses data interest rates, inflation, money supply, and the government's budget deficit in 1980-2013. Interest rate data used in this study is the level of investment interest calculated from the average value in one year. The inflation rate is calculated from the percentage change in the consumer price index. The money supply used is the amount of money circulating in the strict sense, is the sum of currency and demand deposits. Government budget deficit is percentage of the government budget deficit to the gross domestic production.

### **2. Research Sample**

Data on interest rates, inflation, money supply, and the government's budget deficit is sourced from Indonesia Statistics published by the Central Bureau of Statistics, Bank Indonesia Reports and Financial Memorandum and Articles of Revenue and Expenditure published by the Department of Financial Year 1980-2013.

### **3. Research Model**

Model functional relationship between the interest rate with the factors thought to influence later transformed into an econometric form as in equation (1) below:

$$TBT = \beta_0 + \beta_1 INF_t + \beta_2 JUB_t + \beta_3 DEF_t + \varepsilon_t \dots\dots\dots (1)$$



TBT is the interest rate in year t,  $\beta_0$  is constant and the regression coefficient  $\beta_1$  adalah inflation rate in year t (INFt),  $\beta_2$  is the regression coefficient of money supply in the year t (JUBt),  $\beta_3$  is the regression coefficient government budget deficit in year t (DEFT), and  $\epsilon$  is the error terms.

Observation data is processed to obtain a regression equation estimated using a model of ordinary least squares (OLS). Interest Rate (TB) as the dependent variable, while the inflation rate (INF), the money supply (JUB), and the government budget deficit (DEF) as independent variables as in equation (2) below:

$$TB_t = b_0 + b_1INF_t + b_2JUB_t + b_3DEFT_t + \mu_t \dots\dots\dots (2)$$

where (TB<sub>t</sub>) is an estimate of the interest rate in year t, b<sub>0</sub> are constants, and b<sub>1</sub>, b<sub>2</sub>, b<sub>3</sub>: regression coefficient estimates INF<sub>t</sub>, JUB<sub>t</sub>, DEFT, and  $\mu$ : residual.

This study uses time series data in 1980-2013. Time series data used in the study can be stationary and not stationary. The regression model is a regression model estimates derived from data that is stationary. The regression model estimates derived from data that is not stationary can generate spurious regression model estimation (spurious regression). Spurious regression model is usually marked by the fulfillment of the requirements of a good regression model, the independent variables that are used most of the significant Stats, a high coefficient of determination and F test were statistically significant. However, the value of the Durbin-Watson statistic is low and is usually lower than the coefficient of determination of the equation. (Nuchrowi and Usman, 2006).

**Results and Discussion**

Analysis of research data starting from stationary test, test the degree of cointegration, error correction model making, and then test the classical assumption, namely normality test, multicollinearity problem, test the problem of heteroscedasticity, and autocorrelation test. Stationarity test data is calculated using the test unit roots. The calculations show that the interest rate data series (TB), the rate of inflation (INF), and the money supply (JUB) is stationary at degree level. This is indicated by the count value for the regression coefficient t absolute TBT-1 ( $\delta$ ) = |-3,296291| greater than the critical value MacKinnon absolute significance level ( $\alpha$ ) 5% = |-2,963972|, the calculated value of t the absolute regression coefficient INFt-1 ( $\delta$ ) = |-4,782845| greater than the critical value MacKinnon absolute significance level ( $\alpha$ ) 5% = |-2,963972|, and the absolute value of t count for the regression coefficient JUBt- 1 ( $\delta$ ) = |-3,053658| greater than the critical value MacKinnon absolute significance level ( $\alpha$ ) 5% = |-2,963972|. However, for the data series the government budget deficit (DEF) is not stationary at degree level. This is indicated by the count value for the regression coefficient t absolute DEFT-1 ( $\delta$ ) = |-1,185608| smaller than the critical value MacKinnon absolute significance level ( $\alpha$ ) 5% = |-2,963972|.

Stationarity test data on degree-level lead to the conclusion that the interest rate (TB), the rate of inflation (INF), the money supply (JUB) in the study period is stationary. While the data series for the government budget deficit is not stationary at degree level. Therefore, the test continued to test the degree of cointegration for the government budget deficit data series. Based on statistical values it can be concluded that the series of data variables government budget deficit (DEF) is stationary on the degree of the (first difference). This is indicated by the count value for the regression coefficient t absolute DEFT-1 ( $\delta$ ) = |-7,756403| greater than the critical value MacKinnon absolute significance level ( $\alpha$ ) 5% = |-2,963972|. Likewise, the probability value (Prob.) Variable DEF = 0.0000 smaller than  $\alpha = 5\%$ .

Stationary result against the data series of all the variables observed and proved that the interest rate (TB), the rate of inflation (INF), and the money supply (JUB) stationary at degree

level, while the data series for the variable DEF stationary on the degree of the (first difference) , The research data were not stationary at the same degree. This indicates that the model is not a good estimation model. For the purposes of analysis necessary to test the possibility of long-term equilibrium relationship of observed variables. To perform the test against the long-term balance is done through cointegration test

Cointegration test is done by testing the stationary residuals. If the residuals from a regression model estimation is stationary shows that the regression model is a regression model the long term, which is a model that describes the relationship (cointegration) between the interest rate (TB), the rate of inflation (INF), and the money supply (JUB) in long-term. Residual stationarity testing regression model estimation using Augmented Dickey-Fuller Test

The calculation result of the data series residuals of the regression model estimate values obtained to calculate the absolute t lag regression coefficient = |-4,811065| residual is greater than the critical value MacKinnon absolute significance level ( $\alpha$ ) 5% = |-2,960411|. The probability value (Prob.) = 0.0005 is smaller than  $\alpha = 5\%$ . The test results reject the null hypothesis that the regression model estimation residuals have unit roots. Therefore it can be concluded that the regression model estimation residuals are stationary. Thus the estimate obtained regression model is a model of long-term equilibrium.

Cointegration test results showed that the regression model generated estimates of the long-term regression models. To obtain a short-term equilibrium model required a coefficient that corrects the parameters in the estimation model long-term, the error correction coefficient. Error correction coefficients obtained from the model error correction (error correction model / ECM). In other words, a discrepancy between the balance of short-term and long-term balance corrected through error correction mechanisms. So error correction mechanism is a tool to reconcile short-term behavior of an economic variable with the long-term behavior. (Gudjarati, 2003).

Error correction model (ECM), which describes the relationship between the interest rate effect (TB) with the rate of inflation (INF), the money supply (JUB), and the government budget deficit (DEF) used the following equation:

$$D(TB)_t = \beta_0 + \beta_1 D(INF)_t + \beta_2 D(JUB)_t + \beta_3 D(DEF)_t + \beta_4 (INF)_{t-1} + \beta_5 (JUB)_{t-1} + \beta_6 (DEF)_{t-1} + \beta_7 ECT$$

The magnitude of the regression coefficient of error correction term (ECT) = 0.946950 as required, which is positive, lies between 0 and 1. Therefore, it can be concluded that the regression model generated estimates are valid, so it can be used as an indication of the relationship (cointegration) long-term and short-term between the interest rate (TB) with the rate of inflation (INF), the money supply (JUB), and the government budget deficit (DEF).

Least squares models were used to analyze the cost effect relationship between variables were observed to obtain a good estimation model requires the fulfillment of the assumption of normality, non multicollinearity, homoskedasticity, and non autocorrelation. Therefore, the resulting ECM necessary to test the normality of the residuals obtained from the model.

Jarque-Bera calculated value = 1.160315 smaller than the critical value  $\chi^2 = 5.991$  (at  $\alpha = 5\%$  and  $df = 2$ ). The probability value (Probability) calculation results of 0.559810 is greater than  $\alpha = 5\%$ . These results show that the residuals of ECM obtained meet the assumptions of normal distribution.

The next step is testing for the possibility of multicollinearity problems. Multicollinearity problems arise when the independent variable of the other independent variables have a strong linear correlation. The results show the value of the probability F all auxiliary regression equation is smaller than  $\alpha = 5\%$ . This indicates a problem multicollinearity in ECM. Client's rule of thumb states that if  $R^2_{auxiliary}$  regression  $R^2$  is smaller than the total in the regression

model estimates have multicollinearity problem, then the problem can be ignored multikolinearitas. The calculations show regression  $R^2$  auxiliary2 (AUX2) and 3 (AUX3) is lower than the total  $R^2 = 0.557664$ . However, the regression  $R^2$  auxiliary1 (AUX1) higher than the total  $R^2$ . Thus the problem multikolinearitas in ECM can not be ignored.

The estimated regression equation containing multicollinearity problems resulting regression equation becomes invalid. It is therefore necessary treatment. One who recommended to tackle the problem of multicollinearity is to throw one of the variables that have a multicollinearity problem. For that we need independent testing of the correlation between the variables. The correlation between the variables independent test results showed that there is a significant correlation between the rate of inflation (INF) and money supply (JUB). This is indicated by the probability value (Prob.) 0.0031 is smaller than the 5% significance level. While the variable rate of inflation (INF) and the government's budget deficit (DEF) and between the money supply (JUB) with the government's budget deficit (DEF) did not correlate significantly. Thus to eliminate the problem of multicollinearity in the ECM must eliminate one of the variables are correlated. This research will eliminate the variable of money supply (JUB), because the purpose of this study was to test the Fisher hypothesis, namely the influence of the relationship between the interest rate (TB) and inflation (INF).

To ensure that the ECU generated a good estimation model, necessary to test the normality of the residuals obtained from the model. Jarque-Bera calculated value = 0.374482 smaller than the critical value  $\chi^2$  (at  $\alpha = 5\%$  and  $df = 2$ ) = 5.991. The probability value (Probability) calculation results of 0.829244 is greater than  $\alpha = 5\%$ . These results show that the residuals of ECM without JUB acquired meet the assumption of a normal distribution.

Error correction model that is not involved in money supply (JUB) tested the possibility of multicollinearity problems. The results show the value of the probability F all auxiliary regression equation is smaller than  $\alpha = 5\%$ . This indicates a problem multicollinearity in ECM. Client's rule of thumb states that if  $R^2$  auxiliary regression  $R^2$  is smaller than the total in the regression model estimates have multicollinearity problem, then the problem can be ignored multikolinearitas. The calculations show the auxiliary regression  $R^2 = 0.451541$  lower than the total  $R^2 = 0.540953$ . Thus the problem of multicollinearity in the ECM can be ignored.

Testing for heteroscedasticity problems in the ECM using Breusch-Pagan-Godfrey Test. To test the null hypothesis states that there is no regression model estimate heteroscedasticity problem. The calculation result of observation data obtained by  $n * R^2 = 1.875258$  with a probability value of 0.8661. With  $\alpha = 5\%$  and the degree of freedom5, the critical value  $\chi^2 = 11.07$ . The value of  $n * R^2 = 1.875258$  smaller than the critical value  $\chi^2 = 11.07$ , so the decision is to accept the null hypothesis testing are stated in the regression model contains no heteroscedasticity problem. This test can also be done by comparing the probability value with  $\alpha$  used. The calculations show a probability value (Prob. Chi-Square) = 0.8661 is greater than the significance level used, namely 5%. The test results accept the null hypothesis that the regression model estimation does not contain heteroscedasticity problem. Therefore it can be concluded that the estimated regression model (ECM) obtained without a variable amount of money in circulation (JUB) is free from the problem of heteroscedasticity.

Testing autocorrelation problem in the regression model estimation is done using Breusch-Godfrey Serial Correlation LM Test. To test the null hypothesis states that there is no regression model estimates the autocorrelation problem. The calculation result of observation data obtained by  $n * R^2 = 1.006038$  with a probability value is 0.6843. With  $\alpha = 5\%$  and a degree of freedom, the critical value  $\chi^2 = 3.841$ . The value of  $n * R^2 = 1.006038$  smaller than the critical value  $\chi^2 = 5.991$ , so the decision is to accept the null hypothesis testing are stated in the regression model contains no autocorrelation problems. This test can also be done by

comparing the probability value with  $\alpha$  used. The calculations show a probability value (Prob. Chi-Square) = 0.6843 is greater than the significance level used, namely 5%. The test results accept the null hypothesis that the regression model estimation does not contain the autocorrelation problem. It can be concluded that the estimated regression model (ECM) obtained free of problems autocorrelation.

The test results of the classical assumptions of the regression model estimates the conclusion that the regression model estimates meet the classical assumption, that the model is non multicollinearity, homoscedasticity, and non autocorrelation. Thus the estimated regression model (ECM) obtained valid used for analysis.

Activities subsequent analysis is testing of the estimation model (ECM) are obtained, which test the effect of each independent variable on the dependent variable (t test), test the ability of all independent variables explain the variation in the dependent variable (F test), and measuring the ability of variation values the dependent variable that can be explained by all the independent variables in the regression model estimation.

Test of the significance of the influence of the independent variable on the dependent variable in the ECM performed using the t test. Based on the test results will not be known whether the constants and the regression coefficients of each independent variable in the ECM is statistically different from zero (significant).

T test results showed regression coefficient for the independent variable changes ECM inflation rate (INF) and changes in the government budget deficit (DEF) differs significantly from zero. This is indicated by the value of the t-Statistic for the regression coefficient D (INF) = 2.659131 and D (DEF) = 3.220279 is greater than the value of the t-table (5%) = 1.645. Therefore the results of these tests reject the null hypothesis that changes in inflation and changes in the government budget deficit does not affect the interest rate. In other words, the test is able to prove that the rate of inflation (INF) and the government budget deficit (DEF) effect on the level of relationship (TB).

Error correction model (ECM) which is well demonstrated by the coefficient of error correction term (ECT) between 0 and 1 and ECT affect the level of interest (TB). The test results of the regression coefficient of error correction term (ECT) ECT shows the regression coefficient is 0.913891 as required, which is positive, lies between 0 and 1 and significant on  $\alpha = 5\%$ . Because the t-Statistic value = 4.051402 is greater than t-table = 1.645. Therefore it can be concluded that the regression model generated estimates are valid for use estimation.

In the error correction model (ECM) there is more than one independent variable, ie the inflation rate, the government budget deficit, the inflation rate lag, lag the government budget deficit, and error correction terms. Error correction model which is well demonstrated by the ability of all independent variables in explaining changes in the value of the dependent variable. For the purpose of the test F, in testing the null hypothesis states that all independent variables in the regression model estimation (ECM) is not able to explain variation in the dependent variable.

The calculations show that the calculated value F (F-statistic) = 5.892121 with a probability value (Prob. F) = 0.000993. F table value for  $\alpha = 5\%$  was 2.21. The calculated value F (F-statistic) = 5.892121 is greater than the value of F table ( $\alpha = 5\%$ ) = 2.21. The test results decided to reject the null hypothesis states that all independent variables in the regression model estimation (ECM) is not able to explain variation in the dependent variable. That is, the results of testing to obtain evidence that changes the rate of inflation (INF), changes in the government budget deficit (DEF), lag inflation (INFt-1), a lag government budget deficit (DEFT-1), and the error correction term (ECT) is together can explain changes in interest rates (TB). If the test is done by comparing the value of the probability of F statistics with  $\alpha$

will get the same results. The probability value (Prob. F) = 0.000993 smaller than  $\alpha = 5\%$ , so that the decision in this test is to reject the null hypothesis.

Independent variables used in the ECM needs to measure how its ability to explain the variation changes the value of the dependent variable. The coefficient of determination shows the percentage change in the value of the dependent variable variation can be explained by all the independent variables in the regression model. The calculation result shows that the coefficient of determination (R<sup>2</sup>) is 0.540953. This suggests that the variation of interest rates can be explained by the change in the change rate of inflation (INF), changes in the government budget deficit (DEF), lag inflation (INF<sub>t-1</sub>), a lag government budget deficit (DEFT-1), and the error correction term (ECT) is 54.0953 percent. While that can not be explained by all the independent variables is equal to 45.9047 percent.

Behavioral relationship between constant and independent variables with the dependent variable short-term and long-term behavior can be explained by the ECM. Short-term behavior and constant relationship between the independent variables with the dependent variable may know of constants and coefficients of regression estimation, namely  $\beta_0$ ,  $\beta_1$ ,  $\beta_2$ , and  $\beta_3$ . ECM in the estimation model, the magnitude of the constants ( $\beta_0$ ) = -0.100027 and the probability is 0.9315. At  $\alpha = 5\%$ , the constants are not statistically significant.

The magnitude of the regression coefficient changes in the inflation rate ( $\beta_1$ ) = 0.128947 and probability value of 0.0135. At  $\alpha = 5\%$ , in the short term inflation rate (INF) positive and significant impact on the level of interest (TB). The increase in the inflation rate of 1 percent, ceteris paribus, will raise the interest rate by 0.13 percent. Conversely, a decrease in the rate of inflation of 1 percent, ceteris paribus, will lower the interest rate by 0.13 percent.

The magnitude of the regression coefficient changes in the government budget deficit ( $\beta_2$ ) = 1.056873 and probability value of 0.0035. At  $\alpha = 5\%$ , in the short term the government budget deficit (DEF) positive and significant impact on the level of interest (TB). Based on changes in the value of the regression coefficient government budget deficit ( $\beta_2$ ) = 1,056873 indicates that if there is an increase of 1 percent the government budget deficit will result in a rise of 1.06 percent the amount of interest rate changes.

Regression coefficient error correction term (ECT) shows the speed of adjustment towards the long-term equilibrium. ECT is the magnitude of regression coefficients with a probability value amount 0.913891 0.0004. At  $\alpha = 5\%$  regression coefficient in the ECM ECT statistically significant. ECT regression coefficient of .913891 shows that about 91 per cent discrepancy in changes in the interest rate period has been correlated in subsequent periods by term equilibrium, so that the direction of the influence of the independent variables in the short term is expected to be consistent with the direction of the influence of the independent variables in the long term.

Long-term equilibrium constants and the relationship between the independent variables with the dependent variable is corrected using the coefficient of error term. Regression coefficients from the regression model estimated long-term value t count low, -0.647627 to 0.707095 for inflation and government budget deficits. With  $\alpha = 5\%$ , all independent variables have no effect on the dependent variable. That is, in the long term, the inflation rate lag (INF<sub>t-1</sub>) and lag the government budget deficit (DEFT-1) does not affect the interest rate. Long-term regression coefficient lag inflation rate (INF<sub>t-1</sub>) of 0.94960 indicates that there is an increase of 1 percent each inflation, then in the long run will raise interest rates by 0.95 percent. Long-term lag regression coefficient government budget deficit (DEFT-1) of 1.15582 indicates that each an increase of 1 per cent of the government budget deficit, then in the long run will raise interest rates by 1.16 percent.

### Conclusion and Recommendation

This study aimed to get empirical evidence for the Fisher hypothesis on the Indonesian economy. Fisher hypothesis states that the inflation rate positively affects the interest rate. The increase in the inflation rate of 1 percent would result in a rise in interest rate of 1 percent. The model used to analyze the effect of inflation on interest rates is a multiple regression model with the dependent variable is the interest rate and the independent variable is the rate of inflation, money supply, and the government's budget deficit.

The analysis of the model estimates obtained indicate a strong correlation between the independent variables and variable inflation in the money supply. In a regression model estimation in which two independent variables have a strong linear correlation shows the estimated regression models have a multicollinearity problem. To obtain a good estimate of the regression model, one of these variables must be issued in the regression model. This study aimed to examine the effect of inflation on interest rates. Therefore, in the subsequent analysis of independent variables in the regression model consists of only two, namely inflation and the government budget deficit. Based on results of this study can be concluded as follows:

First, in the short term, this research could not find the Fisher hypothesis on the Indonesian economy. The results showed in the short term, the increase in the inflation rate of 1 percent, ceteris paribus, lead to an increase in interest rate of 0.15 percent. Conversely, a decrease in the rate of inflation of 1 percent, ceteris paribus, will lower the interest rate by 0.15 percent. While the Fisher effect states that a 1 percent increase in the rate of inflation will raise interest rates at 1 percent as well.

Second, in the long term, this study managed to find the Fisher effect on the Indonesian economy. The results showed in the long term, the increase in the inflation rate of 1 percent, ceteris paribus, lead to an increase in interest rate of 0.957 percent (approximately 1 percent). Conversely, a decrease in the rate of inflation of 1 percent, ceteris paribus, will lower the interest rate of 0.957 percent (approximately 1 percent). Fisher effect stated that a 1 percent increase in the rate of inflation will raise the interest rate by 1 percent.

This study concluded that the rate of inflation and government budget deficits and significant positive effect on the level of interest. It means that the increase in inflation will affect interest rate. Likewise, the increase in the budget deficit the government will have an impact on interest rate hikes. The interest rate will determine the national investment and the investment needed to create jobs. Based on the results of this study suggested to the government to control inflation low and reduce the government's budget deficit. With inflation and government budget deficits are lower then interest rate will also be lower. Low interest rates greatly are needed by the economy to drive investment.

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## MODEL OF SUPPLY AND DEMAND THEORY BASED THEOANTHROPOSENTRIC

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### Abstract

Focus of this paper is to criticize Marshall's supply and demand theory. That theory was identified by strengths and weakness, so be looked up solution to make a perfect that theory. The result of analysis describe that Marshall's theory is a basic of most theory in study of economics. Monetary theory, consumer behaviour theory, fiscal theory, etc., was developed from that theory. On the other hand, Marshall's theory has some weaknesses if looked up from morality or religious perspective, because morality and religious value absent from theory. Therefore, some weaknesses of theory be repaired by inserting axis and reflector ordinate, which can be used to controlling outcome transaction from morality and religious value perspective. The new supply and demand theory is named universal-ethics supply and demand theory.

*Keywords: Marshallian, supply and demand theory, moral and religious value, universal-ethics.*

### Introduction

#### 1. Background

Curve of Supply and Demand Marshall very dominant in economics learning. Even the study of this curve is compulsory for economics students. The reason is because from this curve appear economic models used to analyze the economic activities. This is in line with the statement Mankiw (2000) which says that anyone that understand theory of demand and supply means already understand half of economics. A child if know well the theory of demand and supply can explain economic activity too.

Supply and demand curves Marshal is not without drawbacks. There are some findings that are contrary to the curve. First, Giffen, that his findings are famous as Giffen Paradox, stated that there was a situation where the increase in the prices of goods causes a person to consume more goods (Giffen and Lindsey, 1984, p.188-192; Nicholson: 1995, p .114). Second, Ernst Engel, that his findings are famous as Engel's Law, said that on the moment increasing income, on the other hand, there proportion down of expenditure on food (Nicholson: 1995, p.102). Third, The Production Possibility Frontier theory which says that the supply and demand curves Marshall assumes unlimited production (Nicholson: 1995). Whereas, in reality can be very limited production. These findings are of course opposed to the supply and demand curves of the Marshal. This differences according to Nicholson's theory is reasonable, because every theory has weaknesses of each. The weakness of the theory usually arise from a critique of the assumptions underlying the theory. Third opinion of the underlying theory of the Marshall also viewed from the assumptions on which became theoretical basis. As for Milton Friedman (1953) said that the theory should not only be seen from the assumption, since many theories developed by unrealistic assumptions. Supposedly, it is viewed from an ability to predict.

When viewed from the ability to explain or predict, curve of supply and demand Marshall has good power analysis. The curve may explain changes in demand, supply, prices, producer surplus, consumer surplus, oversupply, and so forth. Of course, basic assumptions, is *ceteris paribus*, remain in use. Analysis power can explains not only the course of microeconomics,

but macroeconomics also can be explained. Regarding the impact of tax policies, subsidies, interest rate, money supply, investment, foreign trade, can also be explained and predicted, although seeing it only from the tendency (trend) and not the value in numerical terms.

Another advantage of the supply and demand curves can be developed into economic models. Some economic models developed on the basis of this curve, such as the IS-LM, indifferent curve, the curve of production, the cost curve, and so on. Because of the flexibility and power of this development, the demand curve and supply the basis that must be learned in economics. However, because the philosophical basis of this theory is positivistic, which ignored the elements of religiosity, the model of curve is also characterized by ignoring the results of the element of religiosity. Of course, if it is analyzed by the values and ethics of religiosity there will be some shortcomings and this deficiencies are very significant in determining the well-being and harmony in life. Whereas, the nature of human religiosity is inherent in every human soul. It can't be ignored, because if there is an element of religiosity in economic theory be neglected it will have bad effect on the behavior of economic. In other words, if the economic theory that is formed ignore religious values, then the economy will behave ignore religious values. Whereas, religion is used to create harmony. Because disregard for the values of religiosity, it is natural that the main problems the economy until now have not been able to overcome.

The purpose of this article is to find the underlying weakness of supply and demand curves, then explain repairs to get supply and demand curves are new, that named Curve of Supply and Demand Based *Theoanthroposentric*. The new curve is equipped with an analysis of the ethical and religiosity so that the character does not merely materialistic and *homoeconomicus*, but also be spiritualistic and *homoreligious*.

## Overview Theory

### 1. Character of Curve of Supply and Demand Marshall

Supply and demand curves Marshall has its own characteristics. Some things can clarify the character, among others, the curve: 1) using the key variables that can explain the outcomes, in particular the price and quantity, 2) the assumption of *ceteris paribus*, 3) each variable tend incrementally, 4) contain concepts utilities, 5) to apply the theory of marginal utility, 6) can be used to analysing of reality, 7) use deduction method, 8) is a theoretical abstraction in the form of models, 9) each variable have a notation clearly. Completeness of these characteristics led to supply and demand curves which initiated by Marshall became the main analytical tool in economics.

### 2. Weaknesses of Curve of Supply and Demand Marshall

Marshallian's Model of Curve of Supply and Demand is followed and developed by many economists until rose up the new model, primarily used in conventional economic studies to date. Even so, that does not mean it is fully demonstrated perfection. Various weaknesses in the theory of supply and demand can be identified as follows: 1) Model of Supply and Demand is only using an economic approach, so the approach is not comprehensive, only partially only. Because, human behavior is not just a mere economic character. There are other variables that are dominant in influencing human behavior, such as religious doctrine, ethics and morality, and so forth. This factor is not described in the model. 2) The philosophy underlying this theory is utilitarian Benthamian. With a philosophy like that, axiology this theory leads to a practical level individualistic and tends to produce *homoeconomicus*. Basic philosophy utilitarianism tend to individualistic and only emphasizes the economic motive, it will lead to patterns that are a zero sum game with a tendency to lead to the hedonistic behavior. Two weakness shows subsequent weakness. 3) The lack of social awareness. Social care tends to be ignored and replaced with transactional interests. The third weakness could

impact was terrible, because it can loosen the vertices of sociality, which means it is contrary to the teachings of religious morality. In reality, people life generally attention to the religious side, naturally *psicosional*. Neglect of religious values will result alienated human identity.

### Research methodology

This study is a literature study (library research), with a focus on criticism of the Theory of Supply and Demand that used in economics. The methodology used in the study and this paper is the economic philosophy research methodology. This method uses the methodology of philosophy with the scope of the discussion about the economy, with the object under study is the Theory of Demand and Supply. Analysis approach use content analysis, along with critical analysis to uncover patterns *theoanthroposentric*, which indicated the existence of ethics, morality, and values of religiosity. Data of this study consisted of three things: 1. Formulation of the theory of dialectical process of the Supply and Demand, especially in graphical analysis model. This data is data that exist in the various references. 2. The theories of ethics, morality, and values religiosity that needs to be attached to the theory of demand and supply. This data also the data contained in the various references theorists, mainly about ethics and morality. 3. Data relating to the ontology, epistemology, axiology, and data about theory of demand and supply is patterned *theoanthroposentric*. This data is the result of a synthesis (point one and point two) with a theoretical approach. Thus, the type of data used is dominated by secondary data, with qualitative data.

The data analysis of this study refers to an interactive model, starting from: 1. criticism on the Supply and Demand Marshallian theory, which applies now. Then proceed with 2. Identify the theory of Ethics, Morality, and religiosity that can be integrated into the Theory of Demand and Supply. Then, the last stage produces 3. New Theory of Supply and Demand with analysis is more comprehensive with *theoanthroposentric* character, which can be explained with epistemology, ontology, and axiology.

### Results and Discussion

#### 1. Epistemology of Curve of Supply and Demand

Demand and supply curves Marshall did not emerge from a vacuum, but was inspired by the dialectic of previous economic thoughts. Economic thought of Adam Smith, David Ricardo, Karl Marx, and W.S. Jevon helped provide inspiration for Marshall to bring a new paradigm in economic analyzes. The new paradigm is characterized by changing the political economy become economics. Thus, the position of economics equivalent to mathematics, physics, biology, equally governed by nature and not by policy. With this paradigm, the economic thought Marshall has a biological economic character, and not dynamics economic. The basic assumption underlying the Marshall's thought same as that used by Adam Smith and David Ricardo, it is the natural freedom coupled with a model of the evolution of thinking of theorists, such as Charles Darwin, Herbert Spencer and William Graham Sumner. With the pattern of this view, the individualist pattern, perfect competition, and the market economy makes the hallmark of Marshall's thought. Patterns of Marshall's thought can be looked from the various things that was him thought, such as the principle of supply and demand, determination of price, cost of production, the theory of the behavior of producers and consumers, short term and long term *equilibrium*, and so on.

Marshall's thoughts are actually a lot reinforce the ideas of Adam Smith and David Ricardo that based on universal prosperity and natural freedom. For example, a discussion of the value of a product. Smith and Richardo equally say that the value of a product is determined by the cost of production. However, this opinion was opposed by the School (marginal) Austria which argued that the value of a product is not determined by the cost of production, but rather by a utility such products. This utility which raises demand with a certain standard of

value. The last two arguments are synthesized by Marshall. Marshall explained that the cost to produce a product can be classified as real costs and the absolute cost. Especially for real cost does not depend on the utility. But consumers also determine the value of a product through its utility assessment. This synthesis of which is then described in curve of demand and supply.

Demand and supply curve shows the combination of ideas, among others, Cournot's thought that states that demand is influenced by the price ( $Q_d = f(P)$ ). Cournot's thought was described by Marshall became axis ( $Y = P$ ) and the ordinate ( $X = Q$ ) in the curve. The demand curve, which is depicted as a line of demand, which drawn sloping from the left top to the bottom right shows the behavior of consumers. Base of rationale is similar to the idea of utility is often stated by the school of marginal, like Jevon, Menger, Walras. While the supply curve, which is described as a line of supply, which increased from the lower left to the upper right shows the behavior of producers. This thoughts adopted the pattern of theory of Richardian costs.

Marshall combine the two curves like work of scissors, to indicate the point of balance that describes the price. On the demand and supply curves, Marshall to give the *ceteris paribus* assumption. This assumption said that consumer incomes are fixed, substitution commodity prices also remain, as well as expectations also remain. In essence, this assumption is limit the discussion only on the objects discussed only. Things that are not covered considered fixed. This assumption is to strengthen the argument of the curve. However this assumption is confirmed that the characteristic of curve is partial *equilibrium* and short term.

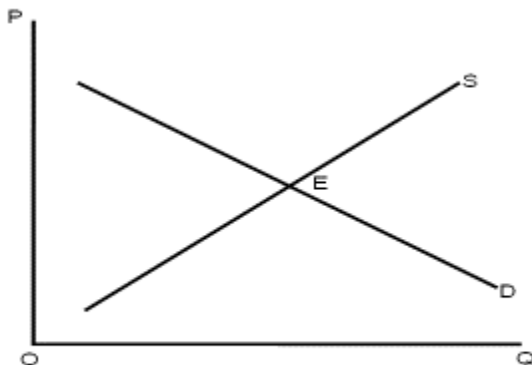


Figure. 1.  
Curve of Equilibrium Supply and Demand

The balance point (*equilibrium*) that occurs as a picture of a meeting between supply and demand is formed by the rationality of choice of consumers and producers. The rationality of choice arise from the assumption of limited resources in the transaction, so it appears a series of alternative ideas for utilization. This behavior is then led to the rationality of choice, which is expressed in an effective and efficient decisions. Rationality of choice boils down on individual prosperity. Pull attract individual prosperity between producers and consumers, like as there are those who organize, but did not appear (the invisible hand), which issue the price. Marshall's reasoning like a real inspired by Adam Smith.

Supply and demand curves, in which depict the price, actually contains the concept of marginal cost and marginal value. These two concepts contained in the slope of the curve. For example, the supply curve depicted obliquely from bottom left to top right shows that the incremental cost of production due to the addition of production, and vice versa. However, in the supply and demand curves, Marshall does not assume a limited production and the absence of other products that will be chosen by the consumer. So that the curve can only explain a transaction on one product and could not explain where many products currently on

the market. These limitations were later criticized and improved by Frontier, then became the concept of production possibility frontier that underlie the emergence of general *equilibrium* models.

Although there are drawbacks, but the theory of supply and demand was initiated by Marshall, as outlined in the shape of this curve, is very powerful and can be used to show the behavior of the market. Even able to predict events that will happen. On the strength of this theory, Milton Friedman, Samuelson, Mankiw (2000), Sukirno (2002), appreciate it properly, so it is natural when curve of Supply and Demand Marshall is used in the teaching of basic science of Economics.

## 2. Ontology of Curve of Supply and Demand

Demand and supply curves were first introduced by Marshall. The curve, as shown above, explaining that the quantity demanded (Q) is a function of the price of the item (P). The demand curve illustrated with line D (read: demand). These curves as a representation of the law of supply. When prices of goods decreased, assuming *ceteris paribus*, then the quantity demanded will increase. Similarly, the opposite applies. While the demand curve described by a line S, which is a representation of the law of demand. When the market price increases, assuming *ceteris paribus*, the number of items offered will increase. Likewise, the opposite applies. The meeting between supply (supply) and demand (demand) shows the equilibrium price or *equilibrium*. The curve that later became famous to this day, as many economists use models of this curve to perform economic analysis, as well as explaining the theory of monetary economics, international trade theory, the theory of monopoly, the theory of fiscal policy, and so on, all developed on the model of demand and supply curves.

The theory of supply and demand of Marshall has a strong characteristics. There are several things that can be associated with his character, such as: 1) using a key variable that could explain the outcome in particular, 2) using the assumption of *ceteris paribus*, 3) each variable described has a character incremental, 4) use the concept of utility, 5) combining the theory of marginal utility curve (supply and demand), 6) explanation of reality requires example, 7) use deduction method, 8) capable for abstracting a theory into the form of models, 9) of each variable denoted. Completeness of these characteristics that led to the theory of supply and demand Marshall is like to be the main analytical tool in economics.

Strength of characteristics of this theory able to be developed further. Therefore the few next economists many who developed theories with Marshallian patterns like that. A number of economists, among others: Frank H. Knight (1959) an American economist, succeeded in developing a theory of Marshall in the theory of total production. In theory it contains other theories, such as the theory of marginal product and average product, as outlined in the form of graphs Marshallian analysis.

Furthermore, Knight's thought inspires Jacob Viner (1892-1970), known as the pupil Knight. Viner gave rise to the theory of perfect competition were also analyzed graphically Marshallian like his teacher. Similarly, Edward Chamberlain and Joan Robinson also develop with the same pattern to analyze the monopoly market and oligopoly market (Truet & Truet: 1987).

## 3. Axiology of Curve of Supply and Demand

These weaknesses in demand and supply curves Marshall, as described (in point B.2.) on the above, when described in terms of the image will be more evident. In the figure, the demand curve is represented by a line indicating the downhill slope from top left to bottom right has been acceptable with logical reasoning. The reality is so. Moreover, the theory of this demand even be appreciated and be referred to as the law of demand. Similarly, what happened on the theory of supply, and the theory of supply was recognized to be the law of supply. Figure a

line with a slope slanted from bottom left to top right is able to explain the normal behavior of the offering. Nevertheless, under certain circumstances this theory can't correspond to the original format. In reality that is not normal, such as when the trend, it could be just the supply theory and demand theory has a discrepancy with the law. But in some time then, the condition will become normal again. For example: the trend of the sale of shares in the capital market. When a blue cheap stock prices decline, based on the theory of demand, sum of demand for the stock should be rise. The demand curve is supposed to be getting away from the Y axis and getting closer to the horizontal line (Q). But it could be, it will not increase demand, but on the contrary demand will turn into deals. Similarly, what happened on the supply side, when the price falls, it will be more and more deals. This trend however is valid only for a moment. The market will take immediate corrective action and the condition will become normal again, and the theory will work again. Regarding the trend itself is already anticipated by theoretical with assuming *ceteris paribus*. Determination of this assumption is actually a way to break the shutdown effort to this theory.

*Ceteris paribus* assumptions that inherent in this theory is quite strategic, it's just that these assumptions and other characters from the theory of supply and demand can't explain about morality. By using graphical analysis, meetings between the supply and demand will indicate the price as a form of balance. If the offer of fixed and demand increases, the demand curve shifts to the right, thus point meeting with the supply curve will show a new equilibrium price is higher than the original price. Conversely, if the decline in demand while supply remains, the demand curve will shift to the left, and the equilibrium price would be lower (Sukirno: 2000; Mankiw: 2000).

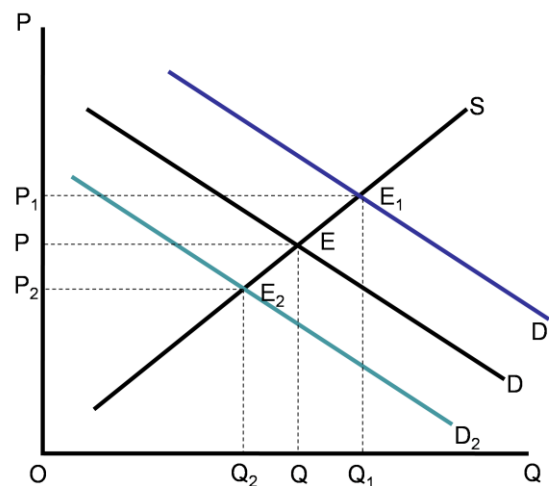


Figure. 2.  
A Shift in the Demand Curve

If happened is fixed demand while the supply decreases, the supply curve shifts to the left top, thus point meeting the demand curve will show the new price increases. Conversely, if demand remains and supply increases, the supply curve shifts to the right below, and the equilibrium price will be lower than the original price before.

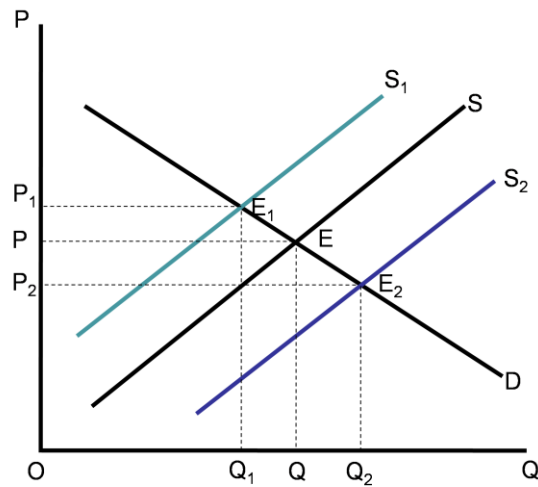


Figure. 3.  
 A Shift in the Supply Curve

Like what is shown in the supply and demand curve (Fig.2) above, the addition of demand will shift curve upward. This shift has meaning that the increase was only for individual perpetrators of such requests. Social benefits can't be demonstrated by the shift of the curve. Because, the offender requests only consider the benefits for themselves.

Judging from the usefulness of a product that could give rise to the demand, the product could be useful for social and beneficial to the individual, it can also be beneficial for individual products but it is not beneficial to society. There is also the social goods that benefit but does not benefit the individual. However, in a review of social life, what is beneficial for social must be considered as benefit to the individual. This last condition must be understood, as the basis of social life that is concerned with public interests above personal interests. Regarding the usefulness of products as described above, in the supply and demand curves it is ignored. Besides, take into account the usefulness of a product, especially for socially very important, for the sake of harmonization.

As an illustration, the increase in demand for liquor, or drugs (drugs), and other items that could disturb the public. When the offer fixed then would shift the demand curve upward. This upward curve shift, in economic terms can be defined as an increase in economic growth. Although it could also be interpreted as inflation. However, due to the triggers is a demand, it can be interpreted as a trigger of the wheels of the economy. After the economic system adjusting then there is the expansion of the economy. What is defined as economic growth is actually inversely proportional to the benefit perceived by society. Security becomes prone to be disturbed, the nation's morality can be degraded, and also religious values be ignored. Under these conditions, personal interests inversely with social interests. When it should be, the interests of individuals positively correlated with social interests. If that happens like this last condition, economic growth really reflecting the welfare of society. Growth process such as this is actually expected, not economic growth that ignores morality and values of religiosity as described at beginning.

#### 4. Curve of Supply and Demand based Religious-Morality

Absence aspects of morality and values religiosity as in the theory of supply and demand is the weakness of this theory. This weakness should be addressed to complete the theory, so

that it axiological benefits can really guarantee the fulfillment aspect of morality and religious values. As a form of repair this weaknesses, then was made up the new curve as follows:

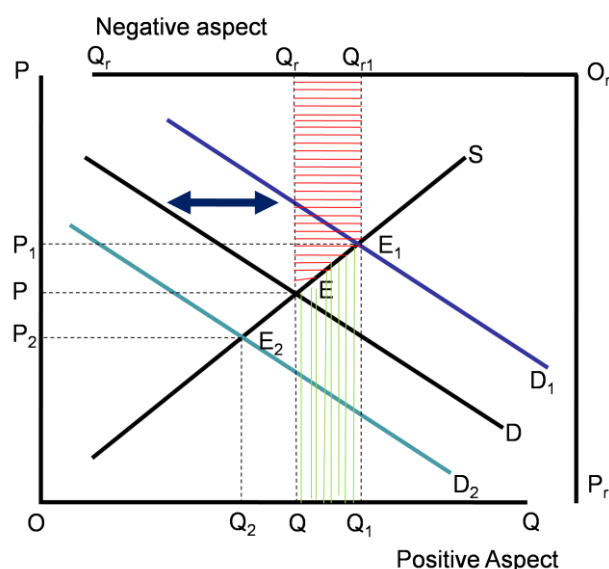


Figure. 4.  
Shift of Demand Curve with benefit Overview

The curve above is given additional  $Q_r$  axis that shows the reflector of the axis  $Q$ , and  $P_r$  axis which is the axis  $P$ . The function of reflector axis is for view and measure the impact of behavioral activity, which is the standard size is a benefit to society. If the benefits of economic transactions was negative for society, which is characterized by neglect aspects of morality and values religiosity, then the impact is measured through  $Q$ -axis reflector ( $Q_r$ ). Conversely, if the positive benefits for social community, then the impact is measured from the axis  $Q$  usual.

Based on the above image can be exemplified, for example, an economic transaction price increases due to fixed supply but demand is increasing, it can be analyzed by two viewpoints. First, if an increase in demand from  $D$  into  $D_1$  does not cause negative excesses to people's lives, which is marked by the fulfillment aspect of morality and values of religiosity, the impact is also positive. Economic increase commensurate area  $EE_1QQ_1$ . The transaction should be supported because there benefit for many people generally. Second, if the increase in demand from  $D$  to  $D_1$  will lead to excess negative to people's lives, which is characterized by the non-fulfillment aspect of morality and values of religiosity, which is an example of real such as transactions financed out of the proceeds of corruption, financed from the result of illegal deforestation, consumption goods and services that forbidden by religion, deals with the political hidden agenda as money politics and so on, need to be seen from the origin point reflector ( $O_r$ ). When viewed from this point, although economic transactions increased (when viewed from the origin point ( $O$ )), which actually happened was a decrease in the values of the economy itself. The decline amounted  $EE_1Q_rQ_r1$  area. Thus, such transactions do not need to be supported.

Similarly, what happened on the supply side. Figure 5 below, which shows a shift in the supply curve is based on a review of benefits, explaining that the supply can be increase and also can be reduce. Addition of supply will shift the supply curve to the right side, while the reduction will shift the curve to the left. All related to price. When the number of deals



decreased while demand remains then the price will increase, and if the supply is increases while demand remains, price will come down. The mechanism can be described as follows:

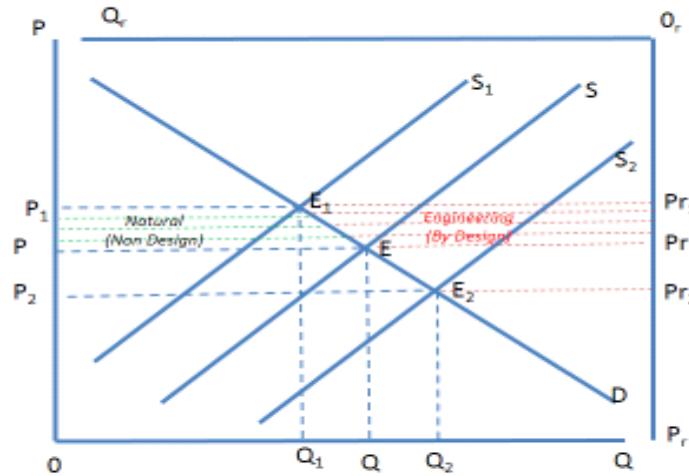


Figure 5.  
Shift of Supply Curve with Benefit Overview

On the market that amount of demand is fixed, the price of goods could rise because of the number of deals decreased. Decreasing this offer can be caused by two things: first, a mechanism that occurs naturally, duly, and without any engineering (usually this happens there is a perfectly competitive market). Second, the mechanisms involved in engineering with the aim of raising prices. Things like this usually occurs in monopolistic market conditions (read: monopoly bidders allowed to do).

On the first mechanism, the price increase would reduce consumer surplus, and the surplus was transformed into the benefit of the seller. Surplus area which transformed commensurate with area  $P_1E_1EP$ . Consumer surplus diminishing commensurate it, and area of surplus producer be increase commensurate it. Throughout the mechanism that is natural, it does not matter. Because of something that happens naturally in the review of moral or religious reasons is legal. But if that happens is because of the role of engineering to raise the price of goods, in addition to reduced consumer surplus area covering earlier, the seller actually suffered a real losses. Precisely due to the (seller's) behavior, they has decrease morality commensurate with  $Pr_1E_1EP_r$  area. What is gained from the economic benefits of actions was not comparable with the decline of morality as a result of his actions. The economic benefits to be temporary, but the decline of morality can be very long, even must be accountable to God, in the afterlife. Therefore, Religion teaches that the behavior that leads to tyranny, as do sellers in this discussion, must be avoided. Because it was included destructive behavior.

As a result of her destructive behavior, actually does not have to just wait for accountability in the Hereafter, but its impact in the world can be directly felt. In a perfectly competitive market, for example, a seller who does such behavior like this would soon be abandoned by consumers. When the seller abandoned by consumers, then the destruction of businesses already occurred. In the monopoly market there is a dependency of consumers against the seller. But the monopoly behavior itself is already constrained by rules that prohibit monopolies, such as the law on anti-trust, the establishment of commission for competition oversight, and the like.

### Discussion Philosophically

In reality, human beings can't be separated from the role of religion, be it religion that is classified as heavenly religions nor non-divine religions are often termed civil religion. The role of religion is important for humans because as underlying of belief about supernatural power, and by human was termed as the Lord. Known as the supernatural power, because that power is the source of all power, including the power that is in man. Therefore, humans are generally subject to the power of the supernatural. However, this submission is generally associated with consciousness. When the man was aware of the presence of the One who supernatural, then people would obey. But if consciousness is decreasing, even if up to the point of unconsciousness, then it is not perceived supernatural powers. Thus, the underlying issue is the awareness of God's presence.

Human consciousness toward God is generally highest when the human being is in the area of religion. When the man was outside a religious context, for example in the areas of politics, economics, law, and so on, often people do not realize that God is always present. On this sort of thing, as if happens dichotomy that religion is at *theocentrism* context, and non-religious are at *anthropocentrism* context. Whereas, in the reality human can't be separated from God. Therefore, the two contexts should be integrated into a single concept, namely *theoanthropocentrism*. So people #always realize that God is who created man, therefore, humans must worship him. The use of reason in life is always framed by the worship of God. Accordingly, Islam has demonstrated great teaching that underlined this *theoanthropocentrism*. Lord with all his powers provide an opportunity for man to use his reason to act, and his actions will be accountable. Forms what will be accounted for by humans has been demonstrated based on divine revelation conveyed by the Prophet Muhammad, which noted in the Al-Quran and Al-Hadith. Human actions framed by a vision of rahmatan lil'alamin. This means, that any human activity should lead to the responsibility before God Almighty.

In the context of the theory of the Supply and Demand Marshallian above, this theory simply laid on anthropocentric position, which seems out of context of human moral values and religious teachings. As a result of human behavior that is detached from the teachings frame of this religion, the economic aspects size is only limited to the size of the monetic character. Never measured based on moral values and religious teachings. Thus, on the theory of supply and demand Marshallian it clearly showed a separation between economics and religion. The impact is, human behavior was entirely accounted for by the man himself, so the size is right or wrong only about the size of a useful or not for the man himself. The more that a lot of useful, then it is a good action. Because the standard size is monetic value, then goodness is simply measured by the accumulated value monetic as much as possible. This mindset is the style of capitalism, which corresponds to the teleological-individualistic behavior.

The impact of teleological-individualistic behavior is the emphasis on achieving the objectives for the pleasure of the individual alone, regardless of social interest. This kind of behavior is usually referred to as hedonistic. Of course this is different from the teachings of Islam's emphasis on the balance between individual interests and social interests. Individual interests should be sought, but social interests should not be ignored. There is a communitarian values that should be considered. Thus, all behavior in Islam leads to harmonization, between individual and social, between humans and other creatures, as well as between man and God. This harmonization is a form of equilibrium, which also means minimizing conflict.

Marshall's theory is teleological-individualistic, this actually could also be oriented to social. However, the nature of sociality that is displayed will be patterned utilitarianism-Benthamian which has credo "the greatest happiness of the greatest number" (Suseno, 1997). This creed

when embodied in the policy will overlook the minority, because only oriented to the interests of the majority. Of course this is different from the Islam that obliging Muslims to empower minority parties.

The discovery of weaknesses in Marshallian's theory that does not mean to close all the forces in the theory. The strengths of theory still be recognized, and that weakness to be overcome. By addressing weaknesses like the discussion above, it means that has brought the Marshallian's theory of supply and demand have become theory of supply and demand universal-ethical. That is, this theory can be used universally by promoting ethical values, which derived from moral values and teachings of Islam. Therefore, the thoughts of Marshall still adopted, although there are additional reflector axis.

### Conclusion

Marshallian's theory of demand and supply is the result of a long dialectic through various discussions conducted by previous thinkers. It therefore has the power that can be used universally. Only, his character which is anthropocentric led to the theory stop at the level of teleological-individualistic that ignore the social aspect. Although basically the theory of Marshall could be implemented in the review of social, but the ends of the stops on utilitarian theory that ignores the role of the minority. Character as it causes weakness in the theory of Marshall there on a moral aspect, especially if judged by the teachings of Islam. Due to the maturity of Marshall's theory is not in doubt, the weakness in the moral side of this, by the author, repaired with theoanthropocentris paradigm that takes into account the moral values and teachings of Islam. The shape of the correction is done by entering the reflector axis. The presence of reflector-axis is able to look at the role of moral and religious teachings. Thus the new supply and demand curves follow universal-ethical pattern.

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## PROBIT LOGIT ANALYSIS ON ECONOMIC CRISIS INDICATOR CASE STUDY: INDONESIA

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### Abstract

In regulation of law no. 4. 2008 on Financial System Safety Net (FSSN/JPSK in Indonesia) Chapter I Article 1 Paragraph 2 state that financial crisis is a financial condition that has failed to effectively carry out its function and role in the national economy. Economic crisis in Indonesia is an event that indicates that mitigation aspects that play a role in preventing crises have failed to carry its preventive measures. This study tried to propose an early warning system that can predict the incidence of the economic crisis as crisis prevention efforts. The economic crisis that is discussed in this study is the financial crisis, banking crisis and debt rescheduling. Model development of early warning systems is done by binary logit regression method. Crisis dating also selected in order to make validation tools of crisis dating. In the process of model development, this study uses data from the macro economy 1986Q1-2008Q3 year. The independent variable is the economic indicators of some previous studies derived from macro-economy. The dependent variable of the model is the 24-month crisis signals derived from the economic crisis dating method by KLR (Kaminsky and Reinhart Lizondo), Zhang, KLR modified and Zhang modified. Parameter estimation process performed by using the enter method, stepwise backward, and Stepwise forward. Selection of the best models take into account the number of variables included in the model, the goodness of fit, the error value, and hit ratio.

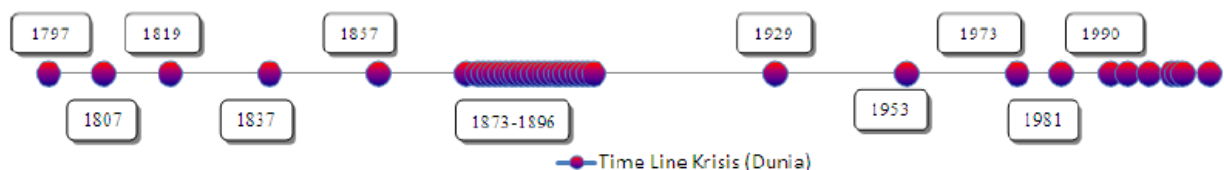
Of the 26 economic indicators, only 13 indicators were used as independent variables to estimate the model. Results in each model predictions indicate that there are four variables included in the model (the financial crisis), 8 variables included in the model predictions of the banking crisis, and the 13 variables included in the debt crisis predictions model. The model was validated using a sample hold-out as many as 23 observation data and produce a level of 87.1% hit ratio for the financial crisis, 72.3% for the banking crisis, and 75.45% for debt rescheduling crisis.

The best crisis dating chosen is KLR method. Selections of crisis dating methods are performed by comparing the signal to noise ratio (signal to noise ratio). KLR method selected with a value of 6.7.

**Keywords:** *Early Warning System, Economic Crisis, Binary Logit Regression, Crisis Dating*

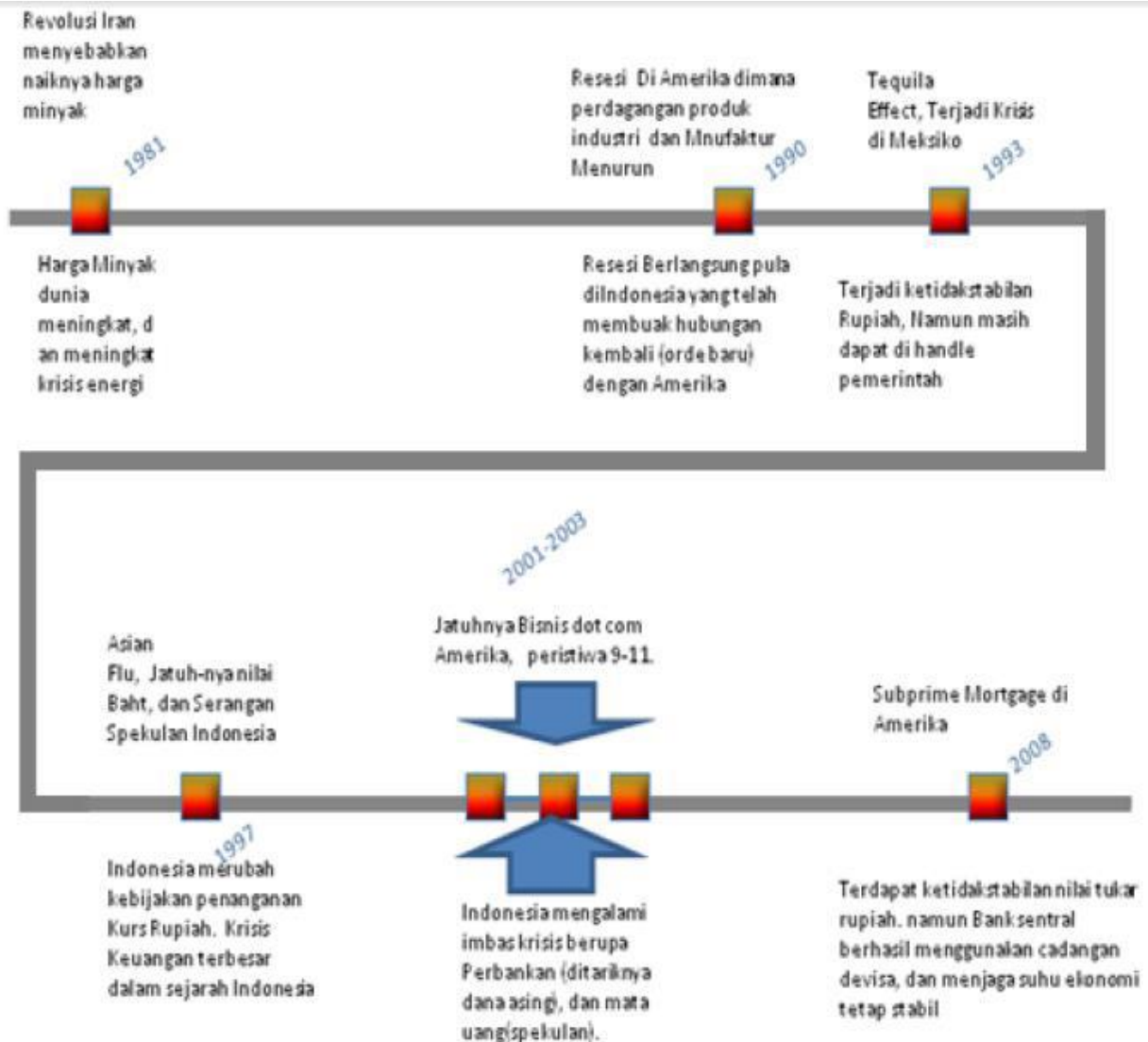
### Background

In the 1990s, the world has experienced four times the wave of crisis. Causing downturn in economic activity (recession America, Tequila Effect, the Asian Flu, and "9-11"). The same is repeated in the 2000s caused by Subprime Mortgage, an incorrect application on mortgage loans in the United States who have a spread impact to not only housing, but also the financial markets, industrial sectors to the government in the United States that indicated with their massive bail out by the government in the industrial sector. Some of World Bank Records that many events indicating the event of economic crisis as shown in the time line pic below.



Crisis is a dating of condition where financial condition has failed to effectively perform its functions and its role in the national economy (Regulatory Act of 2008 FSSN 4 Chapter I Article 1, paragraph 2/ Undang-undang JPSK No.4 Tahun 2008 Bab I pasal 1 ayat 2 (ind)). While the economic crisis is an event where the economic system are no longer capable of sustain its healthy activities (Borg, 1996).

It can be seen in Figure 1.2 that Indonesia have occurred eight crisis times. But the perceived worst crisis occurred in 1997. As the impact of this crisis, economic activities became paralyzed because as more and more companies are closed as well as rising unemployment. This is compounded by the natural disaster that comes in repeatedly, namely the failure of the rice because of drought the worst over the last 50 years, pests, forest fires massively in Kalimantan, and riots (reforms) that hit much of the city in mid-May 1998.



Interestingly, in June 1997 Indonesia was in a condition that far from the crisis. In contrast to Thailand, Indonesia have low inflation, trade surplus of more than 900 million USD, the currency supply outside the huge, more than 20 billion USD, and the bank sector were good (worldbank.com). The crisis in 1997 began with an attack originating from the country of Thailand this was further compounded by structural weaknesses in Indonesia's economy. Domestic trade regulations are rigid and the import monopoly that makes economic activity becomes inefficient is an example of such weaknesses.

At the same time the lack of transparency of financial data makes the occurrence of uncertainty, so that the entry of foreign funds that pass through a weak banking system is not detected (Tarmidi, 1999).

From the table below, it is shown that a sizeable foreign exchange reserves and the realization of the budget still shows a slight surplus is a good indicator of economic conditions at the time. All the causes of the crisis can be sustained by the current economic structure. Money market turbulence that occurs so sudden yet at massive scale in July 1997, when Thailand floated the baht, rupiah began making strong attacked in August.

	1990	1991	1992	1993	1994	1995	1996	1997
Pertumbuhan ekonomi (%)	7,24	6,95	6,46	6,50	7,54	8,33	7,93	4,65
Tingkat Inflasi (%)	9,93	9,93	5,04	10,18	9,66	8,96	6,63	11,60
Neraca Pembayaran (US\$ Juta)	20,099	1,201	1,743	741	806	1,516	4,451	-10,021
Neraca Percagangan	5,352	4,801	7,022	8,231	7,901	6,533	5,948	12,964
Neraca Berjalan	-324	-4,392	3,122	-2,298	-296	-676	-7,801	-2,103
Neraca Modal	4,746	5,929	18,111	17,972	4,008	10,589	10,989	-4,845
Pemerintah (neto)	633	1,419	12,752	12,753	307	336	-522	4,102
Swasta (neto)	3,021	2,928	3,582	3,216	1,593	5,907	5,317	-10,78
PMA (neto)	1,092	1,482	1,777	2,003	2,108	43,146	6,194	1,833
Cadangan Devisa Akhir Tahun (US\$ Juta)	8,661	9,868	11,611	12,352	13,158	14,674	19,125	17,427
(bulan impir nonmigas c&rf)	4,7	4,8	5,4	5,4	5,0	4,3	5,2	4,5
debt-service ratio	30,9	21,0	31,6	33,8	30,0	33,7	33,0	
Nilai tukar Des (Rp/US\$)	1,901	1,992	2,062	2	22	2,308	2,383	4,65
APBN* (Rp Milyar)	3,203	433	-551	-1,852	1,495	2,807	818	456

On August 14, 1997, floating-exchange regularly exchanged with floating exchange-free. In the state of Rupiah falls, IMF helps with 23 billion USD aid package. But the amount still fell deeper due to investor panic, a low amount of sales, and demand for the US Dollar higher. Rupiah and the Jakarta Stock Exchange touched its lowest point in September 1997. Such conditions lead to economic collapse in Indonesia.

Finally, BI said Indonesia was in a state of crisis on August 14, 1997. Furthermore, BI was forced to lose-free the rupiah exchange rate against foreign currencies (US Dollar) so that the value of the rupiah during the free fall of USD 2450 per USD to USD 13 513 per USD. This crisis occurred when the economic fundamentals in the period was otherwise well and lauded by the World Bank according to the World Bank report for Developing Countries (1997) and Hollinger (1996). Indonesia's economic fundamentals expressed both quite high due to the economic growth, controlled inflation rate, unemployment rate is relatively low, and the overall balance of payments surplus despite the current account deficit, but still controllable.

The government has done a lot of effort in order to overcome the crisis. Those efforts can be divided into two groups based on the time and purpose, namely curative and preventive. Curative measures is the effort made after the crisis and aims to improve the situation were broken when the crisis is over. Preventive efforts are made before the crisis and aims to minimize the impact that would be caused by the crisis. As in good example in preventive measures, Singapore is the only country that did not experience any problems when the crisis in 1997 (Lestano, 2003), at which time all other countries in Asia are experiencing a crisis (that's why it was named ASIAN flu). This is because in addition to Singapore has a good

banking and monetary structure. Another cause is also because the Singapore Government had previously predicted the possibility of a crisis (Straits Times, 1999).

Based on these experiences, Government as represented with Central Bank requires an system system that able detect the occurrence of the financial crisis, the banking and debt rescheduling, as an effort to increase the nation's readiness in the face of economic crisis.

Later on we will mention it as Early Warning System (EWS). The concept of EWS which is a system that consists of a precise definition of the crisis and its mechanism in predicting the crisis (Edison, 2003). This concept needs to be applied to both the economic system that runs. It aims to increase the readiness to detect the onset of the economic crisis long before the crisis took place, making it easier to take preventive measures and recovery plans before the crisis occurred.

Type of crisis discussed in this study are three, namely; the financial crisis, banking, and debt rescheduling. The financial crisis is a crisis of the most common. This crisis is characterized by an increased index of price pressures in the money market ended at currency inflation. The banking crisis occurs in the banking system that will have an impact on the real sector sustainability as the backbone of the economy. The banking crisis can to be stated as an indication of a financial crisis. Rescheduling debt crisis (debt crisis) due to the inability of a country to conduct its foreign debt payments on schedule. The debt crisis can be said to be indicators of problems occurring in a country on its ability to pay its foreign debt.

## **Theoretical Background**

### **1. Economic Crisis**

The essence of macroeconomics is how running / functioning of a country's economy as a unified whole (Blanchard, 2000). Beside the interaction between GDP, unemployment rate, and the index of the prices in order to understand how the economy works the failure of the system should make into concerns. According to Bordo, et.al. (2001), the economic crisis is a situation where the economic system is not failure by one economic system to do its job correctly.

According Dumitrescu (2009) crises are categorized into four parts, namely, the banking crisis, the financial crisis, the double crisis, and crisis of all. However, the most common is the financial crisis over the termination of the Bretton Woods system. Until 1930, most of the focus of economics are in the industry and the company. But when the great depression (big depression) attack the United States in the year, and then supported by the development of the concept of national income and statistical science, scientific macro economy began to grow. According to Mark (1986) described by Blanchard (2000) At the time of the initial ideas for the macro economy comes from J.M Keynes, which uses the concept to explain fluctuations in aggregate demand for between output and unemployment. The economic crisis resulted in losses on the macro economic situation, in which entities at the macroeconomic consists of governments, communities, businesses, and overseas. In this section will discuss the history of the crisis in Indonesia, the definition of the crisis are discussed in this study and the indicators that influence the onset of the crisis.

### **2. Crisis Definition**

In this research will be discussed about the economic crisis that consists of a Financial Crisis, Banking Crisis, and Debt Crisis. Currency Crisis (CC) According to Kaminsky, et.al. (1997), which was mentioned again by Tambunan (2002), crisis is defined as situations where the impact of an attack on a country's currency against the sharp depreciation in the value of the currency, a large decline in foreign exchange reserves, or a combination of both. While the crisis according to the laws and legislation FSSN in Chapter I of Article 1, paragraph 2, states



that the financial crisis is a condition that has failed to effectively perform its functions and its role to sustain the stability national economy.

In the measurement, many economists has done efforts in developing methods to measure the pressure of currency, and dating on the financial crisis. Eichengreen, et.al. (1996) are some of the economists that measure pressure as the base currency crises calendar. Definition dating on the research is inspired by the monetary model Girton and Roper (1997) where the value of an index that consists of weighting the relative changes in the exchange rate, foreign exchange reserves, and interest rates that exceed certain limits. In this study, the probability of occurrence is considered independent to the time of crisis.

Dating methods by Eichengreen, et.al. (1996) is widely criticized so many other alternatives calendar methodology is the development of this method. Kaminsky, Lizondo and Reinhart (1998), and Kaminsky and Reinhart (1999) following the methods generated by Eichengreen, but by eliminating the element of lower interest rates because interest rates have been regulated by the Central Bank in the study sample (sample in 1970s until 1980s). Significant changes are also made by Zhang (2001) in the context of the crisis calendar. Zhang (2001) conducted a dating method by imposing limits on the indicator as great influence each other and independent of time.

In this study conducted a comparison of four types of calendar according Lestano and Jacob (2003) is the best dating methods. The method then will be called KLR, KLR modified, Zhang and Zhang modified methods. The use of the word "modified" in previous research is to take into account interest rate index as the determinants of price pressures. Banking crisis (BC) Is the crisis that occurs when there is a decrease in bank capital and ther repairing costs for the stability is high (Caprioand Klingebiel, 1996). Lindgren et.al. (1996) defines banking problems as "significant extensive short unsoundness of crisis" where the banking problems are localized regional problem and does not require great effort in his healing. The banking crisis means that their event where the failure of the banks, or a change in the portfolio have impacts on the collapse of financial institutions, or government interference. This study made a list of the banking problems of know-1980s to mid- 1996 and included 181 members of the IMF.

Dermirguc, -Kunt and Detragiache (1997) defines a banking crisis as an incident in which the ratio of the pressure of banking assets that do not work in excess of 10 percent and recovery costs exceed 2 percent of GDP. Kaminsky and Reinhart (1999) marked a banking crisis as an event where; (i) the failure of banks leading to the closure, merger or acquisition by one or more financial institute. (ii) the existence of a massive bail out support from government on one or more financial institutions, followed by the subsequent assistance. The crisis is stopped until the completion of the government's intervention to the issue.

Scheduling Crisis Debt/Debt Crisis (DC) The crisis is interpreted as an approval of the debt crisis in the rescheduling of debt payments, or negotiation, the remaining debt and unpaid debt, and the IMF agreement with a country (Lestano, 2008). This crisis indicate that there is something wrong in a country, so that the country can not pay its debts as well. Some studies used a combination of the definition of the debt crisis, others use a single event, or even measuring the amount of debt that is scheduled, or remaining debt on a country. Berg and Sachs (1988), Lee (1991), the Balkans (1992), Lanoie and Lemarbre (1996), and Marcessi (2003), has a similar definition of the debt crisis is an event where there is a debt rescheduling of a debtor country to the creditor.

More broadly, debt rescheduling is defined as the mechanism by which the debtor offers to creditors, a new contract that allow the debtor does not perform a default. It could be by extending maturities, and delayed payments, debt relief, reduction of budget ceiling; and others. The approach used by McFadden, et.al. (1985) and Hajivassiliou (1989.1994) is to include all three elements in the crisis of debt rescheduling. It is the existence of unpaid debt

from interest payments, as evidence of the problems of a country in debt. Besides the event of a rescheduling of debts, the intervention by the IMF related to debt payments, and the amount of arrears that exceed the minimum limit.

### **3. Economic Crisis In Indonesia**

Economic crisis that occurred in Indonesia, began to be documented in 1980. The causes of these crises and timeline can be seen in Figure 1.2. The picture shows the incidence of crisis is starting to look and had enough impact on Indonesia condition. Previous events did not show a significant impact on the macro-economic conditions of the state of Indonesia, so it is not included on the timeline. In 1981, the revolution happened in Iran impact on declining oil production. This causes the oil production in the country and other countries in the Middle East to be very high. Countries with a high level of industrialization and requires supply of fuel also affected. The decline in production and price volatility in developed countries provide immediate impact on developing countries including Indonesia. (Meyer, 1990).

Up Until 1997, external noise doesn't seem to have impact on economic condition in Indonesia. Besides the impact is not so great in the ASEAN countries, the government was still able to stabilize the currency turmoil that occurs with high foreign exchange reserves. One crisis was in Indonesia timeline marker is no longer buffered by the enactment managed-float system on the real price of the currency. In 2011, the biggest crisis occurred because of an epidemic of the so-called Asian flu in Asia. Starting from the collapse of the financial system of Thailand, and Indonesia also affected. 2008 was the year the financial crisis in Indonesia. Attacks that cause these events are examples of external attacks that caused the crisis in Indonesia. It started in the United States with the subprime mortgage cases. It caused panic and withdrawal of foreign capital, especially from America. The impact of this is significant panic that caused the suspense of JCI /IHS (ind-red) for some time due to a fall in some stock prices sharply due to panic investors.

### **4. Economic Crisis Indicators**

Basically, the calculation of the effect of macro-economic indicators in developing countries more by GDP than the GNP (Ghafari, 2007). This reason is an indicator of the various sectors that affect economic growth in Indonesia. Based on the International Standard Industrial Classification (ISIC) economy sector is included. That means Agriculture, Mining, Refining Industry, Electricity, Energy, Water, Building, Trade in Services and Hospitality, Transportation & Communications, Financial Institutions, Leasing and Business Services and others are included.

The state budget has three functions, namely allocation (to provide public goods are not supplied by private), distribution (role in lowering the income gap between the layers of society), and stabilization (by maintaining macroeconomic stability and high growth that adequate employment opportunities). Balance of payments, illustrates the relationship of payment for trade, services, and capital between countries to another for a given period (IMF, 2006). Generally have the following structure; Current Account, the balance of trade (exports, imports of goods) and the balance of services (production factors remuneration to be paid and obtained from abroad). Capital Account, calculate capital inflows and capital out of capital both government and private capital. Monetary Movement, the total number of BOP, if negative, the surplus, if positive then the deficit. In this study, the economic indicators that affect financial crises are grouped into four sectors according to studies conducted in crisis detection. In the Appendix A it described macroeconomic indicators that considered having the strong significance with crisis events. The first three columns show the name of the indicator and the reasons why the selected indicators. The next column shows the indicators of the study who gained. The last three columns show hypothetical indicators on the financial

crisis, banking, and debt rescheduling. A plus sign (+) indicates a strong correlation to the economic crisis instead (-) indicates a weak correlation to the crisis is concerned. The last column is from research which found indicators.

**5. Multivariate Analysis / Binary Logit Regression**

Multivariate analysis is the application of statistical methods in order to analyze multiple variables associated with the object being studied. Application of multivariate analysis is there in different fields, one of the problems that often use this type of analysis is the classification. Problems concerning the classification of frequently encountered in everyday life, the problem may be related to the fields of marketing, finance, operations, and others (Hair, et. Al., 2006). In multivariate analysis, there are two commonly used classification methods, namely discriminant analysis and binary logit regression. Kurt (2006) as cited by Permana (2009) mentions that a binary logit regression classification method is quite good compared with discriminant analysis, at least when there are metric or parametric as the independent variables formulated.

Binary logit regression is a form of regression is used to predict a category and binary dependent variable. It will generate a binary logit equation with multivariate relationship between several independent variables and the dependent variable. The dependent variable (Y) in the form of two categories denoted by 0 and 1, while the independent variable (x) are variables that can predict the probability of occurrence of Y. In binary logit regression, the dependent variable can be either metric or non-metric, for the case of independent variables has more than two categories, which can be used multinomial logistic regression to find a solution. Besides the size of the sample, the Hair (2006) suggested the number of samples to perform binary logit regression is 400 observations / sample and each category has at least 20 observations.

The use of binary logit regression is commonly used in fields such as medicine, marketing, and others. In the marketing field for example, the formula can predict whether a person would want to make a purchase or not. The dependent variables in such cases are define to when someone who bought a similar product (Y = 1) and one will not make a purchase (Y = 0). Independent variables used relating there to, for example, income, age, gender, and occupation. Binary logit regression model the dependent and independent variables through the transformation of the dependent variable into logit variable as the natural log of the odds ratio. So, if the dependent variable is represented by (Y) and the independent variable number n is denoted by x '= (x1, x2, x3, ... xn). Probability results denoted by P (Y = 1 / x) = (x). Equation 2.3 and Equation 2.4 shows the logit equation of logit regression and logit regression models and π (x) is a great probability of the occurrence of an event.

$$g(x) = \ln \frac{P_{event}}{1-P_{event}} = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 \dots + \beta_k x_k \dots (2.3)$$

$$\pi(x) = \frac{e^{g(x)}}{1 + e^{g(x)}} \dots \dots \dots (2.4)$$

Where

G(x) = Logit Equation

Π(x) = Probability occurrence of an event (Dependent Variable (y) equal to 1)

X = Independent variable

B = logistic discriminant coefficient logit form

Binary logit results in the form of binary numbers (between 0 and 1), requires that the output is at 0 and 1. Therefore, the relationship between π (x) and the independent variables

expressed in logit curve that has the shape of a curve like the letter s, called sigmoid curve. The lower the value of the independent variable, the closer probability occurrence to 0, the larger, the more corresponding curve approach to 1. If the probability value is above the cut-off value (this research will use 0.5), then the output will be ranked on the dependent variable = 1, otherwise if the dependent variable is close to 0, it will be classified on the dependent variable = 0. Economic Crisis The essence of macroeconomics is how running/ functioning of a country's economy

### **Problem Statement**

Based on the background, we need to find a best-fit early warning system in such extent to a model that can be used to detect the financial crisis, banking, and debt rescheduling in Indonesia in order to increase preparedness in the face of external attack

Questions then evolved into:

- What kind of Crisis researched this study? How to determine the event that crisis?
- What are the indicators that involved in this research?
- What are Variables that influence the incidence of the crisis?
- How binary logit regression method can be done in the search for a model detectors economic crisis in Indonesia?
- What kind of models generated from these methods?
- What is the application of the model in the form of early warning system, and what kind of implementation?
- In what ways have these applications can improve government readiness in the face of external attack?.

### **Research Object and Methodology**

The research methodology in this thesis is made in the logic order of problem solving in a systematic and clear ways. Every stage of the research is very important to conduct scientifically accountable and easily understood.

#### **1. Research Design**

Broadly speaking, the research carried out by the method of literature study, data collection, implementation of the entire indicator model of economic crisis, as well as modeling early warning system for the Economic Crisis. The whole scheme of this study illustrated in the diagram below:

#### **2. Research Implementation**

##### **A. Literature Study**

The literature study was conducted to understand the theories and troubleshooting tools that are required in the study. The theories were studied include macroeconomic theory, economic crisis, and the Early Warning System. In addition, the application of the theory of SPSS as a data processor and the dashboard concept as data publishers has also been studied. Results from studies conducted literature can be found in theories.

##### **B. Research Variable Indications**

After the study of literature and field research, then we move towards to more technical studies. At this stage, we indicate variables that expected to affect the onset of economic crisis in Indonesia. The variables of this research are the collection of reliable indicator affects the crisis that comes from several studies on the economic crisis. Lestano (2003) and Dumitrescu (2009) is a reference in determining what variables can be given more attention in the context of predicting the incidence of crises.

### **C. Data Collection**

Because the study focuses on understanding, models, and indications of anomalies in the economic system, then the data requirement is considered important. The validity and accuracy of data is a top priority at the step of this research. In this study collected economic data which will be processed into indicators of the economic crisis. The data will become the basis for the determination of the occurrence of a crisis.

International Financial Statistics (IFS), a collection of financial statistics of states, created by the International Monetary Fund (IMF), is one of the sources used in this study. Due to limited data because the number of missing data, the modeling of the data used is limited to the 2008 second quarter.

### **D. Variable Reduction for Crisis Determination**

The reduction process variable is done in two ways. The first, it carried out due to lack of observational data, perform data processing beginning to look for arrangement allowing for regression analysis. These heuristic methods produce economic indicators used as independent variables.

The second process is carried out by factor analysis of each variable. Apparently due to data shortage, The results of factor analysis was not possible to be implemented the binary logit regression model in this study.

### **E. Model estimation**

This part of the researches will describes the steps in building and designing prototype models in.

#### **1. Data Processing and Modeling Crisis**

Data processing associated with crisis models generation done by collecting economic data, contained on paper (Kaminsky et al, 1998 and Dermirgüç, -Kunt and Detragiache, 1997) that discussed the indicators of crisis. The basis of measurement models of this crisis more emphasis on indications in the Indonesia's balance of payments. Analysis were made of factors that indicate an effect on the financial crisis occurrence. Before performing the analysis, there are several stages to go through as described in Theory. The stages are as follows:

- Crisis Dating Crisis definition as the application of economic crisis is one of the issues that needed to be clear in this study. This process is hoped to able to distinguish between crisis and no crisis condition. Later it will be needed for signaling process to be more valid, based on the historical data available.
- Definition of Data Needed To perform the analysis of the characteristics and the measurement crisis risk level, the data relevant to define and influence the occurrence of a crisis is necessary. Macroeconomic data are pieces o will be used in conducting the analysis. To facilitate processing of data, these data need to be structured and categorized in advance. The data used is based on the sources of previous studies regarding detection.
- Data Sourcing and Preprocessing At this stage, we collect, filter, and transform the data. Data filtering is done to solve the data that has no value or data that does not make sense, while the data transformation processes include processing and calculations need to be done so that the data can be used as inputs into the model were designed. In addition to the treatment of missing data was done, one of them with a hot-cold imputation to fill the data needed (example of World oil price/WOP data).

#### **2. Alternative Evaluation and Selection Model Prediction for Early Warning System: The binary logit regression**

In this phase, we evaluate and select of alternative models that will be used to predict the crisis in the early warning system to be designed. We had two major steps in this research, the first characterization of the crisis process that uses multiple models dating the crisis and the process of getting the signal crisis of crisis. Then, we formulate the economic crisis model by using variables generated and used in the first step.

- **Crisis Characterization** Crisis characterization is made to determine the behavior of crises that have occurred in Indonesia. The use of this model aims to divide the indicators which are likely to affect the crisis. In this scheme, there are three stages to be made are: (i) identification of calendar crisis, (ii) a decrease in the calendar to get a signal crisis of crisis, and (iii) the classification of economic indicators into classes based on the crisis. In practice, there are several methods that can be used as mentioned in the Background Theory.
- **Crisis Warning Model** There are two stages to be carried out in designing a crisis warning models, namely the determination of the variables used in measuring the crisis and the detection process of the crisis. The determination of the variables that will be used to measure dealing with the crisis conducted by examining the correlation of variables will be considered in the measurement of crisis. This phase is done with the treatment of several scenarios of predict income variables in the model calculations. The output of this stage is getting the right composition of variables to build the model of crisis. The second stage is to build a model of crisis by using binary logit regression method. This method was chosen because of the many advantages that have been described in theories. The output of this stage is the emergences of models that can be used to detect the crisis, based on the variables in this case are economic indicators

### **3. Model Verification and Validation**

In this stage we tested the design in accordance with the expected bank researchers and parties. This testing includes verification and validation. This process is carried out as mentioned in theories. Hold-Out Samples used in this process. The results will be compared with the model that has been built to see if the model is valid or not.

### **Analysis**

At the beginning of the data collection process, We collected data from IFS IMF output edition August 2010. The data is taken from financial data for the state of Indonesia, which is marked with the code 62, of the time in 1960 Q1 to 2010 second quarter. While the data collected include the exchange rate, financial condition, liquidity internationally (including reserves), the state of the Central Bank, the state of the real sector recorded state), derivatives of money, interest rates, foreign exchange flows, balance of payments, foreign investment and the financial situation of the Indonesian government.

The number of observations obtained is 200 data. However, because of the data incompleteness, we used 190 observational data, from 1961 first quarter to 2009 fourth quarter. These data have not been revealed to be macro-economic indicators. These data are incomplete from IFS that cultivated filled from the World Bank. For global economic data, we took IFS code for the United States Treasury Bill Rate, and the exchange rate of the USD, while the price of world oil obtained from oilprice.net.

### **1. Data Processing**

In the data processing activities, we compiled form previously obtained data. From the study found 26 variables indicating an indicator of the economic crisis. For the assessment of current account, we used Real Exchange Rate (REX), Export Growth (EXG), and Import Growth (IMP), Term of Trade (TOT), and Current Account Year (CAY) (Kaminsky et al.

(1998); Berg and Pattillo (1999); Kamin et al. (2001); Edison (2003); Dermirgüç, - Kunt and Detragiache (2000); Lanoie and Lemarbre (1996); Marchesi (2003)). For External Sector (Capital Account), we used Ratio of M2 to Exchange Reserves (MFR), and Growth of Foreign Exchange Reserves (GFR) (Kaminsky et al., (1998); Berg and Pattillo (1999); Kamin et al. (2001); Edison (2003); Dermirgüç, - Kunt and Detragiache (2000);). Financial Sector Mengginalan Growth in M1 (GM1), growth of M2 (GM2) Multiplier M2 (MMM), ratio between Domestic Credit to GDP (DCT), The remaining balance of M1 (ERM), Interest Rate Annual (RIR), The ratio of Love Flowers Borrow and Save (LDS), Commercial Savings Bank (CBD) and the ratio of Reserve Bank (RRA) (Berg and Pattillo (1999); Edison (2003), Kamin et al. (2001)). Indicators used to represent the real sector, which is the ratio of tax to GDP (FBY), Public Debt to GDP (PBY), Growth of Industrial Production (GIP), Changes in Stock Prices are integrated (CSP), Value Inflation (INR), GDP per capita (YPC), as well as the growth of national savings (NSR) (Kamin et al., (2001); Lanoie and Lemarbre (1996); Berg and Pattillo (1999)). Global Growth sector indicated with world oil prices (WOP), American interest rates (USI), and the growth of world industrial (ICY) (Edison (2003); Kamin et al. (2001)).

In a previous study Real exchange rate are used deviation from trend as transformation. However, in this study the real exchange rate of the currency is a real value. This is because at some observations currency values are the same (on 1969Q1-1970Q1, 1970 Q3-1971Q2, and on 1971Q3- 1978Q3). So it does not give the actual value at the time of the trend seen (usually per month).

## 2. Crisis Dating

The process of the financial crisis dating are used to select the best methods of research results (Dumitrescu, 2009), which states that the method Kaminsky Lizondo Reinhart (hereinafter referred as KLR), Zhang, and the second dating method that has been modified by Lestano (2003) is a dating method best in detecting crises, KLR method is a method of measuring pressure of the crisis which was designed by Kaminsky, Lizondo and Reinhart (1998). This method uses the price of the currency market with a relative change of the ratio of foreign exchange reserves. KLR modified model (KLRm) according to Lestano (2003) is a modified model using interest rates as variables are discussed. Zhang method is dating method created by Zhang (2001). The uniqueness of this method is that this method uses dynamic threshold value. This method is one method that is considered the best by Dumitrescu (2009). The fourth method used is a method in which Zhang has been modified to use the timeframe is two years behind (t-8).

Meanwhile, to measure the incidence of banking crises and a crisis of debt rescheduling, this study used data from several previous studies on the incidence of the crisis is concerned. Additional data requested to complete. from sources that can be trusted, such as news and other similar studies. News searches conducted by the basic theory described in the dating crisis theories. The result of the banking and debt rescheduling crisis generate 13 times frequency of the events that can be seen in the following table:

Tanggal	Kejadian
November tahun 1992	Jatuhnya Bank Summa yang juga menjatuhkan tiga bank lain
November tahun 1997	Pemerintah Melikuidasi 16 Bank
Desember tahun 1997	Bank Indonesia Mensubsidi Likuiditas bank komersial sebesar 5% dari GDP
Januari tahun 1998	Pemerintah Menjamin Simpanan Deposito Nasabah 100% terkecuali Bank International
April tahun 1998	Pemerintah menutup tujuh bank swasta : Bank Surya, Bank Subentra, bank Istimarat, Bank Pelita, bank Hokindo, Bank Deka, dan Bank Centris
Mei tahun 1998	BCA diambil alih oleh Pemerintah. Bank Nusa Int'l, Bank Angkasa, dan Bank Nasional Komersial di merger menjadi Bank Nasional
Agustus tahun 1998	Pemerintah menutup tiga Bank Swasta: Bank Unum Nasional, Bank Modern, Bank Dagang Nasional Indonesia. Dan mengambil alih, Bank Danamon, Bank BCA, PDFCI, dan Bank Asia Tara. Bank Jaya Int'l, Bank Arta Media, dan Bank Ciputra, di merger menjadi Bank Mashill
Oktober 1998	Bank Dagang Negara, Bank Bumi Daya, Bank Pembangunan Indonesia, and Bank Exim merger menjadi Bank Mandiri .
Maret 1999	Pemerintah Menutup 38 Bank Swasta Nasional
Juni 2000	Bank Danamon Merger dengan 8 bank swasta
Oktober tahun 2000	Pemerintah menutup dua bank swasta nasional, Bank Prasadha Utama dan Bank Ratu
September tahun 2002	Pemerintah Melakukan Merger 5 bank nasional : Bank Bali, Bank Patriot, Bank Universal, Bank Prima Express, dan Bank Artha Media
Juli 2009	Pemerintah dan Bank Indonesia melakukan <i>Bail Out</i> pada Bank Century dalam upaya pencegahan krisis

Penjadwalan Hutang	Kejadian
Desember 1966	<i>Re-schedule</i> Hutang negara
Oktober 1967	<i>Idem</i>
Oktober 1968	<i>Idem</i>
April Tahun 1970	<i>Idem</i>
Juni tahun 1998	Persetujuan restrukturisasi 80,23 milyar Dolar
september tahun 1998	Bantuan penyembuhan krisis
April tahun 2000	Penjadwalan ulang pembayaran hutang disesuaikan dengan harga pasar. Hutang diatas 15 tahun diberikan kelonggaran hingga 2-3 tahun. Dan hutang diatas 20 tahun diberikan kelonggaran hingga 10 tahun
April tahun 2002	<i>Idem</i>

### 3. Selection of Crisis Indicators as Independent Variables

In order to ensure the validity of research data, the chosen few indicators of a crisis has been discussed as an independent variable. Availability of data become one of the filter. Availability of data illustrated as table below.



No.	Var	Pengertian	Rata-rata	Std. Deviasi	Jumlah data
1	REX	<i>Real Exchange Rate</i>	2962,0783	3525,87522	162
2	EXG	<i>Export Growth</i>	,1623	,33919	171
3	IMP	<i>Import Growth</i>	,1482	,25205	171
4	TOT	<i>Term of Trade</i>	,0477	,21335	164
5	CAY	<i>Current Account to GDP</i>	,1918	2,59126	106
6	MFR	<i>M2 to Foreign reserve</i>	-,0220	,16606	49
7	GFR	<i>Growth of Foreign Reserve</i>	,1934	,47414	158
8	GM1	<i>Growth of M1</i>	,1819	,11746	50
9	GM2	<i>Growth of M2</i>	,1853	,16330	50
10	MMM	<i>M2 money multiplier</i>	-,0419	,07275	50
11	DCY	<i>Ratio of Domestic credit to GDP</i>	-,1547	,09585	23
12	ERM	<i>Excess Real M1 balance</i>	2.8712	3.23247	23
13	RIR	<i>Domestic Real Interest rate</i>	175,2006	149,56499	131
14	LDS	<i>Lending and Deposit rate Spread</i>	,6597	,14682	83
15	CBD	<i>Commercial Bank Deposit</i>	,0169	,03859	19
16	RRA	<i>Ratio Bank to Reserve Asset</i>	,2180	,03531	23
17	FBY	<i>Ratio fiscal balance to GDP</i>	-,0150	,02836	30
18	PBY	<i>ratio of public debt to GDP</i>	40,7946	122,88466	162
19	GIP	<i>Growth of industrial production</i>	,0071	,16296	143
20	CSP	<i>change in stock prices</i>	,1732	,35877	44
21	INR	<i>inflation rate</i>	,4909	1,89106	170
22	YPC	<i>GDP per capita</i>	,6749	3,34241	171
23	NSR	<i>National saving growth</i>	3,1755	27,89202	171
24	WOP	<i>World Oil Proce</i>	,1162	,42731	54
25	USI	<i>US Interest rate</i>	,0254	,21229	171
26	ICY	<i>Industrial Country GDP</i>	4,2330	15,21335	120

Due to data limitations, we did heuristic efforts in determining which variables to estimate parameter model prediction of the crisis.. Basically this is done by selecting an amount variable combination with the amount of data required to estimation the process. This process

is done to some scenarios the existence with valid and assumptions-filled results. This process done as a basis of the scenario selections of independent variables.

#### 4. Model Compilation

From these measurements we drafted some modeling scenario that have been mentioned earlier. In brief selection of methods is illustrated as table below Obtained from the previous process, we compiled independent variables used to estimate the parameters of the prediction model is the result of Scenario 2 (Step 3) and Scenario 5 which contains selected economic indicators. The variables were entered into the model are: REX, EXG, IMP, CAY, GFR, RIR, LDS, GIP, INR, YPC, NSR, USI, ICY. The independent variable results of Scenario 5 were used to compare the performance of the model selected.

No	Skenario	Variabel Digunakan	Metode	Hasil
1	Skenario 1	Seluruh (1961 - 2008)	Regresi Logit Biner Metode: enter Penanggalan: KLR	Tidak Ada (Kurang Data)
2	Skenario 2		Regresi Logit Biner Metode: Stepwise Backward Penanggalan: KLR, Zhang	
2.1	Skenario 2. 1	REX, EXG, IMP, TOT, CAY, MFR, GFR, GM1, GM2, MMM, RIR, LDS, RRA, FBY, GIP, INR, YPC, NSR, USI, ICY	Regresi Logit Biner Metode: Stepwise Backward Penanggalan: KLR, Zhang	Tidak Ada (Redundant/Kurang Data)
2.2	Skenario 2. 2	REX, EXG, IMP, CAY, MFR, GFR, GM1, MMM, RIR, LDS, GIP, INR, YPC, NSR, USI, ICY	Idem Step 1, Multikoleniaritas GM2, DCY thd GM1	Tidak Ada (Redundant/Kurang Data)
2.3	Skenario 2. 3	REX, EXG, IMP, CAY, GFR, RIR, LDS, GIP, INR, YPC, NSR, USI, ICY	Idem Step 1, Penghapusan Data Yang kurang	Model Skenario 2
3	Skenario 3	Seluruh (1961 - 2008)	Reduksi Data dengan Faktor Analisis; Idem Skenario 1 (Lestano, 2003)	Tidak Ada (Solusi Tidak Unik)
4	Skenario 4	REX, EXG, IMP, CAY, INR, YPC, NSR, USI, ICY	Pengelolaimpollan Variabel dalam Empat Sektor penyebab Krisis Ekonomi (Faktor Analisis)	Tidak Ada (Solusi Tidak Unik)
5	Skenario 5	LDS, WOP, TOT, GFR, CAY	Listwise Regression pada 5 Variabel	Model Skenario 5

The dependent variable used in the construction of the model is a signal of the financial crisis (with the KLR, KLRm, ZHANG, and ZHANGm methods), a banking crisis, and the crisis of debt rescheduling. Detailed observation data are used as many as 89 time period of data. The data is divided into 66 pieces of data for the prediction model parameter estimation and 23 data to perform validation methods hold out. The results of the scenario still are used to analyze what happens when the data are used to estimate the parameters of the data added. The data used in the estimation process are 75 pieces of data. As for the validation sample used 33 data.

#### 5. Crisis Detection Model

Selection of the best model according to Gujarati (2003) are selected based on variables included in the model, the model of which contain significant variables. So in any model estimation method parameter (enter, stepwise forward and stepwise backward), the last step suggested used. In the last step, the model contains the most significant variables. Katz (1999) states that a model with fewer variables is preferable than on that has too many. This is done to minimize multicollinearity, apart from ease of explanation of the model so that it can be understood by various parties. Here are the results of parameter estimation model used on any type of crisis. Alternatives models are built based on three types of parameter estimation method, is enter, stepwise forward and stepwise backward. Step colored column is the end where the opinion Gujarati (2003) is applied.

**A. Financial Crisis (KLR)**

In the table above, the best model is selected from enter methods Step 1st and Step 10th from backward methods. Goodness of fit value between the two models are not too different. But the model BW Step 10th selected for this model since it has fewer variables and test value HL close to unity rather than a model from the enter method.

Metode	Step	jumlah variabel	(-2LL)	Cox& snell	Negel kerke	HL Test	Hit Ratio		Total Prediksi
							krisis = 0	krisis = 1	
Base		0	80,970				100,0%	0,0%	69,7%
<i>ENTER</i>	1	13	34,114	0,508	0,719	0,285	95,7%	85,0%	92,4%
FW	1	1	55,330	0,322	0,455	0,494	84,8%	60,0%	77,3%
BW	1	13	34,114	0,508	0,719	0,285	95,7%	85,0%	92,4%
BW	2	12	34,139	0,508	0,719	0,273	95,7%	85,0%	92,4%
BW	3	11	34,201	0,508	0,718	0,494	95,7%	85,0%	92,4%
BW	4	10	34,296	0,507	0,717	0,520	95,7%	85,0%	92,4%
BW	5	9	34,384	0,506	0,716	0,602	95,7%	85,0%	92,4%
BW	6	8	34,524	0,505	0,715	0,062	95,7%	85,0%	92,4%
BW	7	7	35,194	0,500	0,708	0,595	93,5%	85,0%	92,4%
BW	8	6	37,824	0,480	0,679	0,720	93,5%	80,0%	89,4%
BW	9	5	39,594	0,466	0,659	0,992	89,1%	70,0%	83,3%
BW	10	4	42,013	0,446	0,631	0,979	87,0%	70,0%	81,8%

**B. Financial Crisis (KLRm)**

The following table contains a summary of the model parameter estimation method. Seen on table below there is one estimation of enter method, two estimation methods forward and 11 backward estimation method. Alternative model chosen is a method enter Step 1st, Step 2nd forward method, and the method of backward Step 11th. In the table above, the best model is selected enter method Step 1st and Step 11th of backward methods. Values goodness of fit between the two models is not too different. But the model BW Step 11th is selected for this model discount fewer variables and test value HL close to unity rather than a model on the enter method.

metode	Step	jumlah variabel	(-2LL)	Cox& snell	Negel kerke	HL Test	Hit Ratio		Total Prediksi
							krisis = 0	krisis = 1	
Base		0	62,586				100,0%	0,0%	81,8%
<b>ENTER</b>		<b>13</b>	<b>29,525</b>	<b>0,394</b>	<b>0,643</b>	<b>0,554</b>	<b>98,1%</b>	<b>75,0%</b>	<b>93,9%</b>
FW	1	1	52,833	0,137	0,224	0,634	98,1%	0,0%	80,3%
FW	2	2	43,353	0,253	0,413	0,402	96,3%	41,7%	86,4%
BW	1	13	29,525	0,394	0,643	0,554	98,1%	75,0%	93,9%
BW	2	12	29,526	0,394	0,643	0,560	98,1%	75,0%	93,9%
BW	3	11	29,551	0,394	0,643	0,052	98,1%	66,7%	92,4%
BW	4	10	29,574	0,394	0,642	0,051	98,1%	66,7%	92,4%
BW	5	9	29,631	0,393	0,642	0,063	98,1%	66,7%	92,4%
BW	6	8	29,860	0,391	0,638	0,551	98,1%	66,7%	92,4%
BW	7	7	31,134	0,379	0,619	0,576	98,1%	58,3%	90,9%
BW	8	6	33,243	0,359	0,586	0,349	94,4%	58,3%	87,9%
BW	9	5	37,817	0,313	0,511	0,876	96,3%	50,0%	87,9%
BW	10	4	38,826	0,302	0,494	0,873	96,3%	41,7%	86,4%
BW	11	3	42,169	0,266	0,434	0,983	96,3%	41,7%	86,4%

**C. Financial Crisis (Zhang)**

In the table above, the best model is selected from enter method Step 1st and Step 8th backward methods. The goodness of fit between the two models is not too different. However BW Step 8th models selected for this model discount fewer variables and test value HL close to unity rather than a model on the enter method.

metode	Step	jumlah variabel	(-2LL)	Cox& snell	Negel kerke	HL Test	Hit Ratio		Total Prediksi
							Krisis = 0	krisis = 1	
Base		0	89,975				100,0%	0,0%	57,6%
<b>ENTER</b>		<b>13</b>	<b>38,459</b>	<b>0,542</b>	<b>0,728</b>	<b>0,632</b>	<b>89,5%</b>	<b>82,1%</b>	<b>86,4%</b>
FW	1	1	69,091	0,271	0,364	0,002	73,7%	64,3%	69,7%
FW	2	2	63,742	0,328	0,441	0,053	73,7%	71,4%	72,7%
FW	3	3	57,769	0,386	0,519	0,421	84,2%	67,9%	77,3%
FW	4	4	52,953	0,429	0,577	0,174	81,6%	75,0%	78,8%
BW	1	16	38,459	0,542	0,728	0,632	89,5%	82,1%	86,4%
BW	2	15	38,516	0,541	0,728	0,506	89,5%	82,1%	86,4%
BW	3	14	38,587	0,541	0,727	0,592	89,5%	82,1%	86,4%
BW	4	13	38,758	0,540	0,725	0,682	89,5%	89,3%	89,4%
BW	5	12	39,317	0,536	0,720	0,999	86,8%	82,1%	84,8%
BW	6	11	40,060	0,531	0,713	0,979	81,6%	82,1%	81,8%
BW	7	10	41,264	0,522	0,701	0,604	84,2%	82,1%	83,3%
BW	8	9	43,181	0,508	0,682	0,556	81,6%	85,7%	83,3%

**D. Financial Crisis (Zhangm)**

There was no difference in the results produced by the dating method of Zhang and Zhang modified. In the table above, the best model is selected enter method Step 1st and Step 8th backward methods. The goodness of fit between the two models is not too different. But this time it will have a method with the enter Step 1st.

metode	Step	jumlah variabel	(-2LL)	Cox&snell	Negelkerke	HL Test	Hit Ratio		Total Prediksi
							krisis = 0	krisis = 1	
Base		0	89,975				100,0%	0,0%	57,6%
<b>ENTER</b>		13	38,459	0,542	0,728	0,632	89,5%	82,1%	86,4%
FW	1	1	69,091	0,271	0,364	0,002	73,7%	64,3%	69,7%
FW	2	2	63,742	0,328	0,441	0,053	73,7%	71,4%	72,7%
FW	3	3	57,769	0,386	0,519	0,421	84,2%	67,9%	77,3%
FW	4	4	52,953	0,429	0,577	0,174	81,6%	75,0%	78,8%
BW	1	16	38,459	0,542	0,728	0,632	89,5%	82,1%	86,4%
BW	2	15	38,516	0,541	0,728	0,506	89,5%	82,1%	86,4%
BW	3	14	38,587	0,541	0,727	0,592	89,5%	82,1%	86,4%
BW	4	13	38,758	0,540	0,725	0,682	89,5%	89,3%	89,4%
BW	5	12	39,317	0,536	0,720	0,999	86,8%	82,1%	84,8%
BW	6	11	40,060	0,531	0,713	0,979	81,6%	82,1%	81,8%
BW	7	10	41,264	0,522	0,701	0,604	84,2%	82,1%	83,3%
BW	8	9	43,181	0,508	0,682	0,556	81,6%	85,7%	83,3%

### E. Banking Crisis

metode	Step	jumlah variabel	(-2LL)	Cox&snell	Negelkerke	HL Test	Hit Ratio		Total Prediksi
							krisis = 0	krisis = 1	
Base		0	90,523				100,0%	0,0%	56,1%
<b>ENTER</b>	1	13	0,000	0,746	1,000	1,000	100,0%	100,0%	100,0%
FW	1	1	73,497	0,227	0,305	0,772	78,4%	62,1%	71,2%
FW	2	2	60,567	0,365	0,489	0,110	89,2%	69,0%	80,3%
FW	3	3	54,440	0,421	0,564	0,016	86,5%	75,9%	81,8%
FW	4	4	49,773	0,461	0,617	0,306	89,2%	79,3%	84,8%
FW	5	5	41,600	0,523	0,701	0,865	86,5%	82,8%	84,8%
FW	6	6	38,478	0,546	0,731	0,837	86,5%	82,8%	84,8%
BW	1	13	0,000	0,746	1,000	1,000	100,0%	100,0%	100,0%
BW	2	12	16,039	0,676	0,906	0,999	94,6%	96,6%	95,5%
BW	3	11	18,052	0,666	0,893	0,990	91,9%	96,6%	93,9%
BW	4	10	20,222	0,655	0,878	0,988	91,9%	96,6%	93,9%
BW	5	9	21,930	0,646	0,866	1,000	91,9%	93,1%	92,4%
BW	6	8	24,625	0,632	0,846	0,620	91,9%	89,7%	90,9%

The results of the chosen model that built from backward method Step 6th. Selection of the banking crisis prediction model is best done by selecting three alternative methods enter, forward stepwise method step 6th, and backward stepwise method step 6th. Those selection process is taken from the model produced by the estimation method that uses a backward step 6th that include 8 variables in the model. Because the models produced by the enter method, the resulting classification has tremendous value/polar. At the time of validation, the results were not sensitive enough to predict the occurrence of crisis. The purpose of the model is to detect what is the probability of a crisis. With this model, the probability of always reaching 100% or 0%. This does not make decision makers able to distinguish precisely on the result and will made a lot of wrong classification performed in this model (proven in the signal to noise ratio is smaller than the best model). So this leaves two alternative models. Of the two

alternatives have the best model is the model Backward, this is the reason that instead of the Forward, Backward method has the advantages of the various indicators even the number of variables is almost the same.

### F. Debt Rescheduling Crisis

Metode	Step	jumlah variabel	(-2LL)	Cox&snell	Negelkerke	HL Test	Hit Ratio		Total Prediksi
							krisis = 0	krisis = 1	
Base		0	77,346				100,0%	0,0%	72,7%
<b>ENTER</b>	<b>1</b>	<b>13</b>	<b>0,000</b>	<b>0,690</b>	<b>1,000</b>	<b>1,000</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>
FW	1	1	61,727	0,211	0,305	0,011	97,9%	33,3%	80,3%
FW	2	2	38,218	0,447	0,648	0,626	93,8%	61,1%	84,8%
FW	3	3	32,239	0,495	0,717	0,211	93,8%	66,7%	86,4%
FW	4	4	19,008	0,587	0,850	0,994	97,9%	77,8%	92,4%
FW	5	5	13,933	0,617	0,895	1,000	95,8%	88,9%	93,9%

metode	Step	jumlah variabel	(-2LL)	Cox&snell	Negelkerke	HL Test	Hit Ratio		Total Prediksi
							krisis = 0	krisis = 1	
<b>FW</b>	<b>6</b>	<b>6</b>	<b>0,000</b>	<b>0,690</b>	<b>1,000</b>	<b>1,000</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>
BW	1	13	0,000	0,690	1,000	1,000	100,0%	100,0%	100,0%
BW	2	12	0,000	0,690	1,000	1,000	100,0%	100,0%	100,0%
BW	3	11	0,000	0,690	1,000	1,000	100,0%	100,0%	100,0%
BW	4	10	0,000	0,690	1,000	1,000	100,0%	100,0%	100,0%
BW	5	9	0,000	0,690	1,000	1,000	100,0%	100,0%	100,0%
BW	6	8	0,000	0,690	1,000	1,000	100,0%	100,0%	100,0%
BW	7	7	0,000	0,690	1,000	1,000	100,0%	100,0%	100,0%
BW	8	6	0,000	0,690	1,000	1,000	100,0%	100,0%	100,0%
BW	9	5	14,647	0,613	0,888	0,996	95,8%	94,4%	95,5%
BW	10	4	19,008	0,587	0,850	0,994	97,9%	77,8%	92,4%
BW	11	5	13,933	0,617	0,895	1,000	95,8%	88,9%	93,9%
<b>BW</b>	<b>12</b>	<b>6</b>	<b>0,000</b>	<b>0,690</b>	<b>1,000</b>	<b>1,000</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>

There was an interesting finding on evaluation of predictive models for reschedule its debt crisis. The results shown from the selection method is the same between forward and backward method. It is claimed that composition of 6 variables on the outcome of forward and backward method is the most optimal choice. So based on the above table, also from the outcome variables included in the model, the model chosen is the result of the model parameter estimation method backward.

For the methods of selecting a predictive model of rescheduled debt crisis, the three selected alternative is the method enter, step 6th of forward stepwise method, and step 12th of backward stepwise method. The process of selecting an alternative model of financial crisis made by visualized at the value of goodness of fit, hit ratio, and the number of variables.

In the estimation process prediction models reschedule its debt crisis, a result of the forward and backward stepwise method showed the same value in terms of the accuracy of the model. This suggests that at some observation, prediction model is able to exactly 100% distinguish a

state of crisis and normalcy. In the validation process capability model in detect crisis turned out to be only 75%. All the best model selection based analysis using ratings from Gujarati (2003), Katz (1999), Assessment Goodness Of the fit of the model (-2LL, R2, Hosmer and Lemeshow test), and hit ratio. This is done because the model validation showed no anomaly of the resulting model.

**6. Model Validation**

Cut-off values used on all models is a 0.5 as recommended by Hair (2006). Cutoff values used to determine a potentially economic situation can be called a crisis or not. When the crisis occurrence probability value stated above 0.5, then it will be considered a crisis. Otherwise not be considered a crisis. There are no studies that explain exactly how the cut off is ideal in order categorization of a crisis in Indonesia. Then default this study using 0.5 as the cutoff values. Alternative models are validated using hold out samples as many as 23 data. These samples were taken at random at a complete observation, and not used in model development. Hold out samples consists of data crisis and not a crisis for all types of crises. Composition of crisis events of the sample data is shown in Table.

jenis krisis	Krisis	Tidak Krisis
KLR	10	13
KLRm	8	15
ZHANG	10	13
ZHANGm	10	13
Bank	10	13
Debt	7	16

From those dating method, we classified signal to noise ratio with the results as followed.

(prediksi/ aktual)	krisis keuangan				Banking	Debt
	KLR	KLRm	Zhang	Zhangm		
(1,1)	9	1	5	5	6	4
(1,0)	2	1	4	4	2	1
(0,0)	11	13	9	9	11	15
(0,1)	1	7	5	5	4	3
Total	87,3%	52,7%	59,6%	59,6%	72,3%	75,45%
S/N	6,7	1,8	1,6	1,6	2,8	4,8

We chose three best models that had been validated. This model was chosen from the best models of the four methods of dating the financial crisis, and the best model of alternative prediction models of banking and debt rescheduling crisis. Selection of the best models on the financial crisis is analyzed from the ratio of signal to noise.

**7. Crisis Dating Method Selection and Analysis**

Referred to Edison (2001), one of the aspects of a good early warning system is to define the crisis we want to monitor. So during the implementation, an early warning system will capable of detecting the crisis. The reasons why a crisis is defined and characterized in the form of a mark on one observation has important step in this research. The dating of the financial crisis on the research done by four methods as Dumitrescu (2009) became the best crisis dating methods. The dating method is a method of dating KLR, KLR m, Zhang and Zhang m. The letter m indicates the method has been modified that also indicated on the

method performed by Lestano (2003). It basically adds an element of interest rate into account currency market pressure index (Exchange Market Pressure Index / EMPI).

The dating of the crisis on the banking crisis and debt rescheduling is done by marking the presence of a second event that indicates the occurrence of the crisis. Understanding of the banking and debt is less stringent than the financial crisis. In this study, the dating of banking crises and debt rescheduling is limited to incidents that are public are marking something happens. As in the banking crisis, this study only discusses events on mergers, nationalization, bank closures, and any strong issues that rise up to the media. As for the debt rescheduling crisis news about their country and the IMF agreement and how the debts were paid that serve as a basis for a crisis event.

We aware these methods will cause confusion about which is called the crisis and which is not? For the banks, whether the banking crisis happen? Is it just the crisis that is localized just happened? To reschedule its debt crisis, whether the country is still unable to pay arrears to certain restrictions but is already considered the debt crisis? There is anxiety beta error occurs. It will be explained how the dating of the financial crisis, the banking and debt rescheduling best selected and used in this study.

The indicator that shows the financial crisis is expressed in the EMPI. This index becomes a portrait on an observation, whether at the time of the crisis to the size of a particular observation time. For KLR and KLRm method, called the crisis a positive identification when EMPI exceeds a certain threshold (using boundary beta 2 and -2). Limits the value used in the method of Zhang identify crisis is 3 times sigma to exchange rates and interest rates (on Zhang modified), and -3 times sigma for foreign exchange reserves of observation EMPI.

Selection of crisis-dating methods done by comparing each of dating method's results, since dating method that will either signal yielding good results. When the signal is good, then a good model can be constructed. From the logic of this research, we chose the best model (model with a signal to noise ratio is high) as an indicator in determining the best dating methods. Indicators have been selected for addition to representing the truth of classification, this ratio also compares how well the model of comparative classification of right and wrong. The election results dating the crisis best are dating the crisis which was conducted by KLR. The results of the model constructed by this method generates value signal to noise ratio that quite convincing, ie 6,67 (table of signal to noise ratio).

This value is considered the greatest, when considered from the comparison of the value of the model derived from the calendar with three other methods namely; 1.75 (KLR m), 1.55 (Zhang), 1.55 (Zhang m).

## Conclusion and Future Research

### 1. Conclusion

In this study, we had has defined several types of economic crisis. The economic crisis that is discussed in this study are: the financial crisis, banking crisis, and the crisis of debt rescheduling. The financial crisis is a situation in which there is the impact of an attack on a country's currency on sharp depreciation in the value of the currency, a large decline in foreign exchange reserves, or a combination of both.

The banking crisis is the event where; (i) the failure of banks leading to the closure, merger or acquisition by one or more financial institute; (ii) the existence of a bail out from government on one or more financial institutions, followed by the subsequent assistance. Crisis of debt rescheduling is considered as an incident in a country where the debt is not paid from interest payments, as evidence of the problems of a country in debt, event of rescheduling of debts, the intervention by the IMF related to debt payments, and the amount of arrears that exceed the limit minimum.



The best crisis-dating methods were selected from the four best method according Lestano crisis and Jacob (2008) is the method of KLR, KLR modified method, Zhang and Zhang are modified. Dates crisis based on the best signal to noise ratio is KLR method that does not use interest rates as an instance variable in determining the onset of the crisis. Statistical approach using discriminant analysis can help in developing predictive models of economic crisis. This model can be applied in the detection of early warning system of economic crisis. In the context of multivariate discriminant analysis, binary logit regression form as a form of regression is used to predict a binary dependent variable that is based on the independent variable. In this study, the dependent variable is the signal of the crisis in the next eight quarters after observation. The process of getting a signal indicating the crisis will be a crisis or a crisis will not happen. Construction of the model is done by considering the macro-economic variables that are considered influential in the event of a crisis in studies that have been done before. The development of the model is done by using methods enter and stepwise, where Stepwise conducted using forward and backward. Obtained from this process models to predict the financial crisis, banking crisis and debt crisis Scheduling as shown in Equation 6.1, 6.2, and 6.3.

o Financial Crisis-Prediction Model:

$$G(t) = -1,1705 - (7,681 * USI) + (39,764 * YPC) - (4,818 * GFR) - (0,001 * REX) \dots \dots \dots (6.1)$$

o Banking Crisis-Prediction Model:

$$G(t) = 3,52 - (0,13 * ICY) - (24,781 * USI) (93,372 * YPC) - (34,02 * INR) - (11,55 * GIP) - (18,68 * LDS) (13,33 * GFR) - (22,04 * IMP) \dots \dots \dots (6.2)$$

o Debt Rescheduling Crisis-Prediction Model:

$$G(t) = 302,72 + (0,6783 * ICY) - (86,73 * USI) - (21,554 * NSR) + (1137,8 * YPC) - (807,44 * INR) - (165,2 * GIP) - (662,9 * LDS) - (0,14 * RIR) - (85,1 * GFR) + (1,412 * CAY) - (209,88 * IMP) + (86,14 * EXG) + (0,0125 * REX) \dots \dots \dots (6.3)$$

From the models, we obtained a significant variable in predicting the financial crisis, banking, and debt rescheduling. Ie: REX, EXG, IMP, CAY, GFR, RIR, LDS, GIP, INR, YPC, NSR, USI, ICY contained in the above mentioned model. Binary logit regression methods assume that there is no relationship between one observation to the other, the application of the monthly data can be made similar to those carried out in this thesis. It is expected to use the same method with different data (monthly) can produce better models in predicting the crisis.

## 2. Future Research

The application of this model requires data to be updated periodically to correct validity of the model. It should be placed at an application with fast and accurate data access. One suggestion is the application placement on Bank Indonesia as central bank monetary sector, such as balance of payments bureau and the bureau of economic and monetary policy.

The variables included in this study are very limited. This happens because of the extremely limited information (mainly public) the recording of financial statistics. This limitation resulted in the selection process needs to be holding back the independent variables used for the reason the number of observations and add unnecessary processes in the processing of the

data if it is incomplete observation data. It is expected that implementing this model can perform better recording on the statistics of the financial system so that the parties can conduct research in order to better detection of crisis.

Testing directly by RDG has not been done, but the felt by comparing the decisions taken without and with the model needs is sufficient for the model. Tests with models can be simulated with the decision-making process at the time that has passed as in 2010-2016. The method in predicting the crisis is not only covered in the multivariate analysis, ANN (Artificial Neural Network) or artificial neural networks can be implemented with an excess of the failure by the application to update the model according to historical data.

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Appendix A. Economic Indicator for Economic Crisis  
Appendix A. (Continued) Economic Indicator for Economic Crisis  
Appendix B. Economic Indicator for Economic Crisis

## CONSUMER'S PERCEPTIONS TOWARDS E-MARKETING: A SCALE DEVELOPMENT STUDY

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### Abstract

World is changing at a remarkable pace and so does the world of marketing. The limited options to communicate with the target audience have been widening. Even the technology has profoundly changed the way consumer process communication. As we entered the twentieth century, the Internet became the hottest marketing channel ever known. The overall objective of this research is to examine the perceptions of respondents towards E-marketing and its implications thereof. In this study both quantitative and qualitative research methods had been adopted but more emphasis was laid on the quantitative research. The research required the study of individuals who were exposed to E-marketing. The study involved the analysis of primary data collected through sample from one of the prosperous states of India i.e. Punjab and Union Territory of Chandigarh.

A non-disguised structured questionnaire was used for data collection. Questionnaire was pre-tested and as a result of pre-testing it was modified and revised suitably. The sample of 568 respondents was drawn by using non-probabilistic Judgmental sampling Technique. The factor analysis technique applied on perceptions of the respondents regarding the various attributes in E-marketing revealed specific factors, which clearly define the perceptions of the respondents. The results indicated that the Respondents prefer Varieties in the products to be purchased online as they are free to take decisions regarding choice of product and services they want based on their previous experience and product information they got through the process of E-marketing. The respondents also understand the risk aspect in E-marketing and their decision to buy online is based on the website reputation and personal information's protection provided by the merchants. The path analysis conducted using Structural Equation Modeling technique revealed that the most of the variance in the perceptions toward E-marketing is explained by the two different variables (factors) "Product Variety" and "Desired facilities". In nutshell it can be said in order to develop positive attitude of consumers toward E-marketing the marketers, must focus on these qualitative attributes of E-marketing. As far as the "Perceived Risk" factor having least variance, respondents consider E-marketing as more risky as they do not feel security in online transactions.

**Keywords:** *Privacy, Spamming, Spyware, E-mail Safety, Security, Risk.*

### Introduction

The rapid acceptance of the Internet as a commercial medium has caused firms/marketers to try out with the innovative ways of marketing thus changing the shape of selling schemes. As far as traditional marketing is concerned "Marketing is human activity aimed at filling the need and want through the exchange process" (Kotler, 2004). Dibb et al. (2001) have produced a wider definition of marketing, according to them, "Marketing consists of individual and organizational activities that facilitate and expedite satisfying exchange relationships in a dynamic environment through the foundation, distribution, packaging and pricing of commodities, services and ideas". The motive of marketing remains the same satisfying consumers by making a strategy to deliver the proper message to the correct people, the only thing has changed is the means of communication, as Smith and Chaffey (2001) have remarked that E-marketing is Achieving marketing objectives through applying digital

technologies. Though commercial enterprises will go forward to attain utilization of traditional marketing methods, such as advertising, sales promotion, personal selling, direct mail and Public Relationship, E-marketing adds a whole new element to the marketing mix. According to Strauss and Frost (2001) E-Marketing is the employment of electronic data and applications for planning and carrying out the conception, distribution and pricing of ideas, goods and services to create exchanges that meet individual and organizational goals. E-marketing campaigns not only create product awareness, but as well reflect a generation of advertising with benefits such as self-selectiveness, interactivity, full integration of several media and marketing capabilities targeted towards specific individuals, states or cultures (Wehling, 1996).

E-marketing has become a critical part of the overall marketing efforts, and begun to make measurable results (Haines, 2001). In today's competitive business environment, losing clients is very easy as the competitor is just a click away. Implementing E-marketing strategy, hence, requires an adequate understanding of changes in the way customers think and act on the World Wide Web. In other words, in a dynamic business environment, E-marketing is capable of hacking through the clutter to provide a valued chance for commercial enterprises to improve accessibility to the world and thrive (Mainardi, 1998). Present Paper studies the perceptions of respondents towards E-Marketing and their implications for the marketers thereof.

### **Review of Literature**

It is universally acknowledged fact that good research cannot be made without critically studying what already exists in relationship to it in the form of general literature and specific work done by the researchers. The review of related literature, therefore, is considered as a prerequisite to actual planning and execution of research work. Hence, for proper discernment of the research work, sincere efforts have been constituted to review the associated literature. In the present study an effort has been made to tabulate and summarize the results of the surveys taken in charge by various researchers on different aspects of E-marketing.

**Table 1. Classification of Factors and Variables Concerned with E-marketing:**

Factors	Variables	Researcher(s)
Product Variety	Products Offered	S. Jarvenpaa (1997), EC (2012), Arnold et al. (1980), Louviere and Gaeth (1987), Anderson (2009), Quelch and Loisa (1996), Vijayasarathy (2002), Tonita Perea et al. (2004)
	Customer service	Ho and Wu (1999), Jedd (2000), Anderson (2009), Sara Rodriguez (2009)
	Product's information	Kleinmuntz and Schkade (1993), Alba et al. (1997), Zack (1993), Coleman and Levine (2008), Syed and Norjaya (2010), Peishih and David (2004), Tonita Perea et al. (2004), Kuo (2003)
	Previous experience	Pine and Gilmore (1998), Dillon and Reif (2004), D. Gefen et al. (2003), R.A.Shang (2005), Gefen and Straub (2000), Tonita Perea et al. (2004), Syed and Norjaya (2010)
	Choice and availability	Arnold et al. (1980), Louviere and Gaeth (1987), EC (2012), Coleman and Levine (2008), Syed Shah et al. (2010)
	Freedom of choice	Coleman and Levine (2008), Syed Shah et al. (2010), Quelch and Loisa (1996), Jarvenpaa (1997), Vijayasarathy (2002)
Perceived Risk	Privacy Protection	Robert and Anne (2001), Wang and Wang (1998), Guangying (2009), Prema Nakra (2001), Ponnurangam and Lorrie (2006),

		David and Dane (2006), Mohsen and Ilja (1999)
	Website reputation	Jarvenpaa et al. (1999), Syed and Norjaya (2010), Doney and Cannon (1997), Anderson and Weitz (1989), Ganesan (1994), Pavlou (2003), Keen (1999)
	Email Safety	Chaffey et al. (2003), Buckner and Gillham (2000), Satinder and Rishi Raj (2012)
	Children protection	Deborah (2007), Mohsen and Ilja (1999),
	Guarantee of Reimburse	Special Report (2007)
User Friendliness	Time saving	Mohsen (1999), Mohamed and Vanessa (2007), P.L. Alreck and R.B. Settle (2002), Rajasree et al (2009), Hoyer (1984), John (2008)
	Ease of use	Davis (1989), Guangying Hua (2009), Childers et al. (1997), Chao Wen et al. (2011), Bhattacharjee (2001), Reedly et al. (2000), Ghose and Dou (1998), John (2008)
	Convenience	Mohsen Attaran (1999), Li, H et al. (1999), Zhang and von Dran (2000), Mohamed and Vanessa (2007), B. Kidwel, and R. Jewel (2003), John (2008), Quelch and Loisa (1996)
	Save money	Sara Rodriguez (2009), Civic Consulting (2011), Quelch and Loisa (1996), EC (2012)
Desired Facilities	Return policy	Civic Consulting (2011), Jarvenpaa and Todd (1997), Vijayarathy and Jones (2000), Maes (1999), EC (2012), Unsigned (1999), Davis et al. (1995)
	Guarantee of Safe delivery	First Data report (2008), Syed Shah et al. (2010), Dall'Olmo et al. (2005), Bhatnagar et al. (2000)
	Lower Handling Fees	Hess, Chu and Gerstner (1996), Jupiter Communications (2000)

Arnold et al. (1980) and Louviere and Gaeth (1987) found order to satisfy the heterogeneous customer preferences, the online marketers must offer a variety of products and services relevant to the dynamics of their heterogeneous customers' segment. They must place their products in a manner that the customer feels that it is for them alone. Granting to the account of the EC (2012), consumers buy online for a number of causes ranging from cheaper product availability to the determination of the best quality merchandise. The basic intent of online shopping seems to be flexibility and convenience in ordering the merchandise from anywhere and at whatever time. It also emphasized upon the relief of finding various products involved. The basic influential factors for online market appear to be product quality and product quantity.

Product quality means consistency between the quality specification of Internet shopping mall and real character of the physical product. Variety is concerned with the assortment or a range of goods available from a shop. Customers are also more likely to prefer trade centers on web with several products available (S. Jarvenpaa, 1997). According to Anderson (2009) online shopping decrease the distribution costs, including reduced spending on physical stores, rents and shelf spaces. Variety of items sold online can be further extended as a result; online buyers can select best suited products at ease. Jarvenpaa (1997), Vijayarathy (2002) and Tonita Perea et al. (2004) revealed consumers attitude towards E-marketing may be influenced by quantity of products offered by the online marketers.

In order to convert potential customers into real ones and retain them for a long time marketers need to depends, on the *customer services* they offer and the satisfaction that consumers perceive to gain (Ho and Wu, 1999). Jedd (2000) revealed web marketers often see more client satisfaction due to better delivery time or client services. The velocity at which ordered items are delivered is important for online consumers. Anderson (2009) opined web marketers must provide different forms of services to consumers like decrease the distribution costs, including spending on physical stores and shelf spaces with information technology. Sara Rodriguez (2009) indicated that the that the time invested in searching for online savings as percentage of a product buying strategy help the customers to economize money. They feel more filled and positive about their purchases that are created online by them.

The manner in which product's information is displayed influences decision processes by affecting the ease of carrying out different processing operations (Kleinmuntz and Schkade, 1993). Alba et al. (1997) and Zack (1993) opined unique feature of online shopping environments that is very high degrees of interactivity. The latter is a multidimensional construct, the key facets of which include reciprocity in the exchange of information, availability of information on demand, customization of content and real-time feedback. Coleman and Levine (2008) opined that consumers are more likely to shop online, use web based free applications to get first-hand experience and information for a particular product of interest.

Syed and Norjaya (2010) are of the view that word of mouth and quality information appear to have a significant relationship with online brand trust. Peishih and David (2004) revealed web marketers want to present potential customers with the detailed right information at the right time. Differences in product type may lead to differences in waiting time before arriving at a purchase. Tonita Perea et al. (2004) brought out the attitudes of consumers toward online shopping and intention to shop online depend upon the key factor like availability of required information for online shopping. On the other hand, Kuo (2003) emphasized that online fashion retailers are losing consumers and sales because the colors on e-commerce sites often do not represent accurately the real colors of the merchandise being sold.

Pine and Gilmore (1998) stressed upon the customer's *previous experience*. According to him, it has its unparalleled importance and is thought to be a critical part of any online purchase. Dillon and Reif (2004) is also of the view that the consumer's previous experiences with online shopping have a significant influence on their next time online purchasing decisions.

Gefen et al. (2003), Shang (2005) and Gefen and Straub (2000) discovered that the previous online buying experience is a crucial factor of behavior. The beliefs and behavior of consumers may switch with time as they earn more knowledge and experience from previous online transactions. Tonita Perea et al. (2004) and Syed and Norjaya (2010) stressed upon the former experience of online shopping. The researchers thought that the online experience and brand reputation appear to deliver a confident relationship.

Syed Shah et al. (2010) establish that product variety and choice and availability are the central elements which determine the consumer's satisfaction of online shopping. Arnold (1980) and Louviere and Gaeth (1987) disclosed to satisfy various customer preferences, marketers must display varying products to its aspects so that they can select products according to their demands. Coleman and Levine (2008) supposed that nowadays consumers are taking more sophisticated online searches to support a daily purchase decision, expecting easily available info about products and services.

Also, Coleman and Levine (2008) opined that online consumers are more concerned with online market since they are expecting easily availability of products and *freedom of choice*. Syed Shah et al. (2010) found that consumers' online shopping satisfaction is influenced by freedom to select and deliver performances as they are the central elements which determine

their conclusions in addition to reliability and product diversity. Quelch and Loisa (1996) revealed Internet use has more utility for clients because they can get on the Web site and quickly find out where to find the lowest prices for a specific product or service. Consumers benefit from the online shop because it reduces search costs for products, product related information and freedom of selection. Jarvenpaa (1997) and Vijayasarathy (2002) revealed online trust antecedents that relate to the user's Web site experience may be impacted by the freedom to choose the product and purchase it.

Robert and Anne (2001) revealed information about consumer's private life is more promptly usable and more easily captured on the Internet as compared to offline technologies. Wang and Wang (1998) opined with a rising involvement in online shopping, privacy protection concerns has been debated to be the greatest barrier to shopping online. Guangying (2009) revealed perceived ease of usage and privacy policy has a significant influence on the user's acceptance of online banking. Perceived ease of usage is of less importance than privacy and security. Protection is the most important factor influencing user's acceptance. Businesses pertaining to Consumer privacy rights have become more dangerous as the nature of information exchanged over the Web begins to cover sensitive areas such as health, taxation and social security records.

Vendors have a legal responsibility to take up steps to protect not just the data, but also the privacy rights of their customers (Prema Nakra, 2001). Ponnurangam and Lorrie (2006) took an exploratory survey to earn an initial understanding of attitudes about privacy among the Indian high tech work force. The results revealed an overall deficiency of awareness of privacy issues and less worry about privacy in India than has been found in similar studies carried in the United States. David and Dane (2006) found that the kind of data and the type of privacy policy statement play a lively part in determining consumer willingness to provide personal information via the net. They also advised that legally mandated privacy statement would be no more effective than strongly worded voluntary policies. In a survey taken by the (FTC) Federal Trade Commission and reported to congress in 1998, it is found that only few websites provide notice of their information collection practices to consumers (Mohsen and Ilja, 1999).

Jarvenpaa et al. (1999) conceived the web reputation to be the indicators of trust. The most investigated component of most examples on e-commerce's trust is trust in the online merchant. Surveys have established that the size and reputation of an online merchant greatly influence consumer trust (Syed and Norjaya, 2010). Doney and Cannon (1997), Anderson and Weitz (1989) and Ganesan (1994) rivalled reputation of the online merchant has been indicated as key factor that lead to consumer trust in a seller organization.

The better the seller's reputation, the more likely would be consumers' trust on that internet site. Pavlou (2003) exposed the online business and web marketers not just depends on the consumer's perception of the cartel in the internet transaction as a means of online shop but also on the reputation of the web based retailer as reliable marketers. Keen (1999) revealed amount of information an online consumers gets plays a very crucial role in the influence of the decision of the consumer. In number, insufficient information about the uncertainty could mean a fiscal responsibility to the job as it is a big risk factor in reputation and consumers are less likely to engage in business proceedings.

Chaffey et al. (2003) opined E-mail has become an important marketing tool to construct and maintain closer relationships with guests as well as expectations. Hence, e-mail marketing has become a popular alternative for several online companies. Buckner and Gillham (2000) looked at the natural actions and practices of social email us. It was found that contact frequency by email resembled that of telephone use more closely than conventional mail. Text quantity of emails tended to be less viable than posting communications and email usage less time dependent than telephone use. Satinder and Rishi Raj (2012) revealed E-mail is a new



innovative communication tool that substitutes the fax and telephone to remove the barrier of distance, but along with this commercial email is a great problem for the online customers, hence emails are less secure. Most of the respondents delete spam emails without reading. Security and threats are considered most important concerns for the use of Email and Internet. Deborah (2007) opined Congress enacted the Children's Online Privacy Protection Act to address privacy and safety hazards created when children under 15 years of age use the Internet. To protect children, the Act imposes requirements on operators of websites or online services directed to minors, and other operators with actual knowledge that they have collected personal data from minors. Mohsen and Ilja (1999) stressed upon the filtering software programs to enable family members to be restricted from the sites that may not be age appropriate. Parental controls are also available through online services. Moreover, kids need to be advised so as not to give out real information in chat rooms and encourage them to post messages only under supervision.

In E-marketing consumers demand Guarantee for the reimbursement of money in case of non delivery of merchandise or any loose from marketer side (Special Report, 2007). If the traffickers are not capable to present the product to consumers or there is a loss due to marketers' negligence, it becomes the responsibility of marketers to reimburse the funds to consumers.

According to Mohsen (1999), the online consumer market is developing tight and offers convenience as well as saves time. Mohamed and Vanessa (2007) identified transaction efficiency and time savings as important online shopping factors that are utilitarian. P.L. Alreck and R.B. Settle (2002) revealed online shopping media has been watched as a more timely savior than traditional media of shopping. Rajasree et al (2009) emphasized that consumer is less likely to abandon their shopping cart as waiting time is increased. This might indicate that consumers may not be deterred by slight delays towards the close of the online shopping procedure. Time stressed consumers are less concerned with the price and tend to use simple tactics such as buying what they purchased last time (Hoyer, 1984). John (2008) revealed internet users' attitudes about online shopping are not wholly uniform. They are willing to shop online because it is convenient and a time-saver, but they too do not like posting personal or credit card data over the net.

*Ease of use* is defined as the individual's perception that using the new technology will enhance or improve their performance (Davis, 1989). Guangying Hua (2009) opined perceived ease of habit has a significant impact on consumers' adoption of online banking. Childers et al. (1997) discovered the degree of interactivity that a Web site offers is a strong element in online shopping, because experiential consumers usually find more comfort in interactive environments. Chao Wen et al. (2011) developed an integrated model by examining perceived ease of use and perceived enjoyment factors that directly or indirectly influenced consumers' continuance intention in the context of online shopping.

Bhattacharjee (2001) empirically examined that an individual is more likely to be intended for continued usage when such usage is perceived to be useful. Easy to use the web for shopping is an important determinant of e-selling. Web based activities that are ascribed to factors such as usefulness, information on e-marketing, convenience, easy to use and website quality must be integrated with the overall marketing strategy in order to hold the corporate aims of the e-marketing (Reddy et al., 2000). John (2008) revealed that internet users are willing to buy online because it is convenient and easy to use, but they also do not like posting personal or credit card data over the net. Ghose and Dou (1998) found that websites that are more interactive and easygoing to use are perceived to be of more value by consumers.

Li. H et al. (1999) establish that clients who purchase through the cyberspace are more convenience oriented and less experience oriented. These consumers regard convenience as the most important factor in purchase decisions during shopping, because they are time

constrained and do not mind buying products without touching or feeling them if they can save time in this room. Mohsen Attaran (1999) revealed online consumer marketplace is getting fast, although online shopping offers convenience and keeps time. Zhang and Von Dran (2000) made an effort to appraise the quality of website on the basis of users' satisfaction and dissatisfaction. Their studies revealed convenience as the website design feature that can be regarded as hygiene and motivator factor contributing towards user satisfaction with a web site. Mohamed and Vanessa (2007) identified after-sale service, convenience, cost and time savings as the important online shopping usefulness factors. B. Kidwel, and R. Jewel (2003) opined when facing time pressure, confidence in products and convenience play important roles in the buying decision. John (2008) revealed online consumers are willing to transact online because it is convenient, but they too do not like submitting sensitive information over the net. Quelch and Loisa (1996) revealed consumer's feels more of ease with the growth of E-marketing as they can search and make purchases on the Web in a more conducive and convenient way.

Sara Rodriguez (2009) opined consumers indicate that the time spent in searching for online savings as percentage of a product buying strategy help them to keep money and researching products online made them feel more positive around their purchase decision. Consumers estimate that they keep open more in the online purchase than to buying the same product in a shop (Civic Consulting 2011). Quelch and Loisa (1996) stressed that with the growth of the internet, consumer gets more empowered because he can go on the Web and quickly find out where to find the lowest prices for a special product or service which become the grounds of laying aside money. Consumers benefit from the Internet because it reduces search time for products/services and linked information. EC (2012) reported the principal movement of consumers shop online is low priced good quality merchandise. The basic factor for shopping online seems to be savings in money and the flexibility in ordering any time of the daytime.

Civic Consulting (2011) reported delivery and concerns regarding returning a product or replacing and repairing a faulty product are the issues ruling, followed by concerns regarding abuse of payment card details and personal information. The *return policy* must be displayed on the web. Jarvenpaa and Todd (1997) and Vijayasathy and Jones (2000) revealed online consumers have shown their concerns over delivery and return of merchandise purchased online. Maes (1999) revealed Consumers have little or no information as well as knowledge about the reputations of web merchant. Policies and procedures such as returns, shipping/handling and extra support are hazy at best. E-commerce Survey Project (2000) found online consumers said return policies influence their decision to shop with web vendors. Unsigned (1999) and Davis et al. (1995) revealed online shopping websites have done plenty to give customers the same assurance in their return policies as traditional merchants do. Return policies of any online shopping company can work as an important repurchase strategy.

First Data report (2008) found consumers indicated that online marketers' assurance of quality and purchase will match quality expectations and best online price are effective motivating factors. Syed Shah et al. (2010) found that product diversity and delivery performances are the key factors which influence consumers' satisfaction of online shopping. Dall'Olmoet al. (2005) revealed web marketers have found out that if they can shorten the perceived risk of purchase by facilitating returns, offering guarantees, Safe delivery, lowering shipping costs and charging competitive prices, the consumer is often willing at least to try buying online. Bhatnagar et al. (2000) revealed consumers consider apparel products to be risky to purchase on the network because of doubt about color, fabrics, and convulsion.

Hess, Chu and Gerstner (1996) examined the strategic role of non-refundable shipping fees to mitigate returns by catalog consumers. Consistent with the hypothesis, empirical analysis suggested that fees increase with the value of the merchandise ordered, even when prices

remain constant. Lewis (2005) estimated how shipping fees affect order size and site traffic. He found that free shipping gets more customers, but lower average order sizes. Incentives that offer lower shipping fees on larger orders as well increase the order value. Free transportation is considered the most efficient marketing tactic in e-tailing. Customer dissatisfaction with shipping fees is highlighted by survey results that indicate over 60% of online buyers have abandoned a shopping cart at checkout when shipping fees are added and 50% of online consumers list shipping fees as their principal complaint about Internet retailing (Jupiter Communications (2000)).

### **Research Methodology**

To study the perceptions of respondents towards E-Marketing convenience sampling is used to collect data from individuals who could reasonably interpret the E-marketing and form ethical viewpoint to issues in E-marketing, hence in the present study those individuals has been included who are educated and exposed to E-marketing. The study has been conveyed via electronic mail and face-to-face interviews. A total of 640 survey questionnaires had been sent out, to which 598 questionnaires received. Apiece of the responses received has been screened for errors, incomplete or absent answers. Attempts have also been taken to contact the affected respondents through e-mail for clarification and corrections, especially for missing or blank answers. Nevertheless, responses that had more than 25% of the questions in the survey questionnaire left unanswered or incorrectly answered has been tossed away from data analysis. For those responses that caused a few blank answers (less than 25% of the questions) and which involved 5-point interval-scaled questions has been ascribed with a midpoint scale of 3. Later on the screening process carried out, only 568 responses have been considered complete and valid for data analysis. This represents a success rate of 94.66%, which is reckoned to be good in view of time and price constraints.

To study the causal relation existing between the variables in the present study, the following null hypothesis was framed:

Ho: There is no significant association between the explored factors of the respondents regarding E-marketing with their perceptions towards the phenomenon of e-marketing as a whole.

#### **1. Data Analysis**

The factor analysis technique applied on perceptions of the respondents regarding the various variables (attributes) in E-marketing revealed specific factors, which clearly define the perceptions of the respondents. Four factors extracted from the eighteen variables explained 66.072% of variance and each component was defined by at least three scale items. These specific factors extracted were *Product Variety*, *Desired facilities*, *Perceived Risk* and *User friendliness*. These factors explain the perceptual attributes of e-marketing which were considered to be significant by the respondents.

#### **2. Scale Development and Refinement**

A scale was developed to identify the factors revealing the perceptions towards E-marketing. The literature for the same was reviewed as shown in literature survey and variables were selected to obtain the perceptions of the answerers. During the discussion, with the experts in the area of E-shopping or marketing, many details were appended and edited. The final of 18 items were selected for survey and these items were to be rated on a five point Likert scale by the respondents.

Item wise reliability analysis was executed on selected variables to keep back and delete scale items for preparing a reliable scale. The scale generated for this objective was refined and purified for reliability validity and unidimensionality. Inter item correlations and Cronbach's alpha statistics were used to conduct reliability analysis and to know extend to which items were correlated with a lot of items under consideration.

### **3. Factor Analysis Results**

Exploratory factor analysis was conducted as a means of data reduction, to ascertain if the face validity of the items held (Pallant, 2001). The particulars of the attitude scales were subjected to principal component analysis (PCA) using SPSS. Prior to performing PCA the suitability of data for factor analysis was evaluated. The correlation matrix revealed many coefficients of .3 and above as shown in Table 3.

The Kaiser-Meyer-Olkin (KMO) measure was 0.921 surpassing the recommended value of .6 (Tabachnick and Fidell, 1996; and Kaiser, 1974) and the Bartlett's Test of Sphericity (Bartlett, 1954) reached statistical significance, supporting the factorability of the correlation matrix. PCA revealed the presence of four components with Eigenvalues exceeding 1, explaining 66.072 percent of the variation. The variance explained by each component is presented in Table 4.

**Table 2. Scale Reliability Analysis (E-marketing)**

Variables	Communalities		Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Mean	Std. Dev.
	Initial	Extraction				
Privacy Protection	1.000	.613	.597	.891	3.53	.943
Website reputation	1.000	.745	.600	.974	3.53	.936
Email Safety	1.000	.676	.581	.919	3.52	.826
Children protection	1.000	.581	.563	.873	3.52	.961
Reimburses Guarantee	1.000	.600	.554	.871	3.58	.957
Time saving	1.000	.726	.620	.874	3.34	.978
Ease of use	1.000	.652	.594	.905	3.34	.877
Convenience	1.000	.627	.565	.924	3.38	.843
Save money	1.000	.769	.599	.922	3.34	.963
Various Products	1.000	.745	.659	.917	3.62	.991
Customer service	1.000	<b>.535</b>	.612	.908	3.64	1.201
Product's information	1.000	.567	.619	.943	3.63	1.182
Previous experience	1.000	.610	.623	.951	3.52	.796
Choice availability and	1.000	.636	.623	.897	3.60	1.149
Freedom of choice	1.000	.553	.610	.865	3.63	.948
Return policy	1.000	.740	.617	.834	3.59	.982
Safe delivery	1.000	<b>.781</b>	.599	.918	3.67	.921
Low Shipping Fees	1.000	.737	.653	.910	3.62	.982

**Table 3. Correlation Matrix of E-marketing's Variables**

	D1	D10	D14	D15	D18	D2	D3	D4	D5	D6	D8	D9	D11	D12	D13	D7	D16	D17
D1	1.00																	
D10	.584	1.00																
D14	.537	.698	1.00															
D15	.512	.564	.483	1.00														
D18	.492	.549	.541	.505	1.00													
D2	.338	.303	.324	.272	.289	1.00												
D3	.375	.376	.325	.306	.306	.580	1.00											
D4	.304	.326	.316	.378	.329	.541	.526	1.00										
D5	.360	.313	.347	.355	.384	.678	.589	.584	1.00									
D6	.300	.299	.309	.369	.380	.476	.393	.388	.366	1.00								
D8	.366	.383	.350	.305	.395	.343	.336	.362	.397	.539	1.00							
D9	.359	.356	.317	.429	.316	.376	.352	.327	.313	.593	.488	1.00						
D11	.341	.314	.354	.284	.284	.475	.393	.345	.325	.634	.475	.436	1.00					
D12	.309	.309	.311	.310	.258	.404	.364	.354	.330	.575	.475	.520	.551	1.00				
D13	.365	.359	.359	.378	.325	.343	.359	.305	.343	.533	.457	.447	.484	.537	1.00			
D7	.382	.364	.339	.333	.287	.378	.347	.361	.318	.428	.373	.440	.452	.490	.378	1.00		
D16	.385	.322	.383	.387	.309	.395	.401	.306	.305	.445	.386	.418	.442	.432	.423	.648	1.00	
D17	.463	.376	.300	.338	.348	.406	.408	.381	.368	.446	.440	.454	.404	.466	.447	.597	.650	1.00

Inter-item correlation: Mean=.398, Minimum=.258, Maximum=.698, Range=.439, Max/Min=2.701, Variance=.009, N=18

**Table 4: Factor Analysis Results for E-Marketing (Varimax-Rotated results and scale reliability)**

Variables	Factors			
	F1	F2	F3	F4
Various Products	.802			
Choice and availability	.716			
Previous experience	.700			
Product's information	.657			
Freedom of choice	.652			
Customer service	.627			
Website reputation		.823		
Email Safety		.776		
Guarantee of Reimburse		.724		
Privacy Protection		.702		
Children protection		.699		
Save money			.819	
Time saving			.769	

Convenience			.728	
Ease of use			.727	
Guarantee of Safe delivery				.801
Return policy				.762
Lower Shipping/Handling Fees				.735
Eigen Value	7.786	1.711	1.395	1.001
% Variance	43.255	9.506	7.751	5.558
Cumulative % Variance	43.255	52.762	60.513	66.072
Scale Reliability alpha (Cronbach's Alpha)	.865	.857	.848	.837
Cronbach's Alpha= .922, Kaiser-Meyer-Olkin Measure of Sampling Adequacy= .921, Bartlett's Test of Sphericity (Approx. Chi-Square= 5269.048 , Df= 153, Sig=0.00, Mean=63.31				

The value for communalities using principal component analysis ranged from .535 to .781 (Table 2). Here, it is apt to mention that commonality >0.5 is sufficient for the explanation of constructs (Hair et al., 2009). All these values show factors analysis has extracted good quantity of variance in the items. Hence, all the requisites of reliability, validity and unidimensionality are met.

#### Pearson Correlation Analysis

Pearson's Correlation Coefficient (Pearson's  $r$ ) is a method of calculating the relationship between variables. Correlation analysis was used to measure the degree of relationship between the 18 main independent variables of E-marketing. The principal aim to conduct correlation analysis was to assess whether the eighteen main variables were independent from each other or not. As a regulation of thumb, if a correlation coefficient value of  $r$  indicates 0 in.2, there is a weak relationship between the variables. If  $r$  values of .3 to .6, generally considered moderate, and .7 to 1 is strong (Dancey and Reidy, 2007). Granting to the scale used if all the 18 items get a rating of 5 each, the total score would be 90. The average score of the respondents was 63.31 (Table 4). The correlation matrix was calculated as indicated in Table 3. The mean correlation was .398 and it varies from .258 to .698 with a range .439. There was a sufficient correlation to go ahead with factor analysis.

#### 4. Extraction of Factors

In order to identify the underlying dimensions of E-marketing, exploratory factor analysis was employed. The respondents were asked to rate eighteen variables, on a five point Likert scale, ranging from strongly disagrees to strongly agree. All the factors having loading more than 0.5 were considered good and in the present concern the loading ranged from .627 to .823. Items with factor loadings <0.5 were removed. The four factors, so generated have Eigen values ranging from 1.001 to 7.786. The factor analysis results are validated as shown in table 5.

##### A. Product Variety (F1)

The first factor alone has explained 43.25% of the total variance in the factor analysis solution and has been labeled as *Product Variety*. It includes six variables; i.e. *Various Products, Choice and availability, Previous experience, Product's information, Freedom of choice and Customer service*. The results indicated that the online marketers must offer varieties in the products to consumers as they free to take decisions regarding choice of product and services they want from them based on their previous experience and product information they got

through the process of E-marketing. In order to convert prospects into consumers, web marketers must take care of the products quantity in online malls. The Scale reliability alpha of this factor is .865 and factor loading ranges from .627 to .802. *The various Products variable* has highest loading in this component. The inter item correlation ranges from .623 to .749 and item to total correlation ranges from .610 to .659. It covers 7.786 of the Eigenvalues.

#### **B. Perceived Risk (F2)**

Five variables are loaded on the second factor. This factor is labeled as *Perceived Risk* as based on five variables consumers revealed there is no *Email Safety, Privacy Protection, Children protection and Guarantee of Reimburse*; moreover marketer's *Web site reputation* influence the decision of customers either to go or not for the online purchase. The results revealed consumers consider E-marketing more risky as they are not safe online. Hence to frame favorable perception marketers must insure the consumers should not face any kind of risk in E-markets. Online marketing planners can overcome the barrier of perceived risk if they find the techniques to generate sufficient trust among their potential customers. Online marketers should be able to understand the problems the customer faces, and take adequate steps to build trust in order to overcome them. This factor has explained 9.506% of the total variation in the factor analysis. The factor loading ranges from .699 to .823. The inter item correlation ranges from .628 to .751 and item to total correlation ranges from .554 to .600. It covers 1.711 of the Eigen values.

#### **C. User Friendliness (F3)**

Factor third is developed with another four variables; i.e., E-marketing offers *Convenience, Save money, Time saving and Ease of use* benefits to consumers. It has been labeled as *User Friendliness*. This category's results indicated that it is important for online marketers to create user friendly websites by adding features in it which are attractive for consumers. As far as the web sites of the merchants were concerned consumer prefer these websites to be user friendly, convenient and easy to use. This factor has explained 7.751% of the total variation in the factor analysis and indicates the importance of this factor in online shopping behavior. The factor loading ranges from .727 to .819. The inter item correlation ranges from .638 to .738 and item to total correlation ranges from .565 to .620. It covers 1.395 of the Eigen values.

#### **D. Desired Facilities (F4)**

Factor fourth *Desired Facilities* developed from the three variables i.e. *Guarantee of Safe delivery, Return policy and Lower Shipping/Handling Fees*. The results indicated that respondents demand facilities from the merchants in the form of *Guarantee of Safe delivery, Lower Shipping/Handling Fees* etc. All these elements were considered as the predominant predictors of consumers' purchasing decisions. This factor has explained 5.558% of the total variation in the factor analysis. The factor loading ranges from .735 to .801. The inter item correlation ranges from .686 to .726 and item to total correlation ranges from .599 to .653. It covers 1.001 of the Eigen values.



**5. Validation of Factor Analysis Results**

Taking Table 5 into account, an attempt has been made to validate the factors analysis results by calculating “Correlation between summated scales” and “Correlation between representative of factors and summated scales”.

**Table 5: Validation of Factor Analysis Results for E-Marketing**

Table 5 (a) Correlation between summated scales

Factors	Product Variety	Perceived Risk	User friendliness	Desired Facilities
Product Variety	1			
Perceived Risk	.447**	1		
User friendliness	.456**	.476**	1	
Desired Facilities	.489**	.461**	.404**	1

\*\*Correlation is significant at the 0.01 level (2-tailed).

Table 5 (b): Correlation between representative factors and summated scales

Factors/Variables	Product Variety	Perceived Risk	User friendliness	Desired Facilities
Various Products	.821**	.397**	.487**	.509**
Website Reputation	.446**	.839**	.361**	.389**
Save Money	.428**	.435**	.838**	.372**
Guarantee of Safe Delivery	.534**	.369**	.430**	.878**

\*\*Correlation is significant at the 0.01 level (2-tailed).

The score of the correlation between the four factors in E-marketing was < .489, therefore they are independent from each other, and multi-collinearity is not occurring at all. The Pearson correlation matrix (Table 3) was used to express the relationship between the variables in the research model and exemplify the relationship between the factors (Table 5) constituting the overall attitude variable, and the other overall variables used for this work. Preliminary analysis was performed to ensure no infringement of the assumptions of normality, linearity and homoscedasticity. The values for communalities range from .535 to .781. Here, it is apt to mention that Eigenvalue > 1.0 and communalities > 0.5 are sufficient explanations of constructs (Hair et al., 2009). The factor analysis results were valid as the correlation among summated scales and representative variables was high (> 0.5) and it was low among summated scales (p < 0.5).

**6. Confirmatory Model of Factors Affecting Consumer’s Perceptions toward E-Marketing**

SEM (structural equation modeling), which includes measurement model and path analysis, is an effective way to determine the causal relationships between constructs and their underlying measurement suitability; and Amos software with maximum likelihood estimation is applied to implement SEM. Confirmatory factor analysis is used to examine the reliability and robustness of the questionnaires after collecting the data again.

The loading factor values of each manifest variable are higher than 0.6, the suggested threshold value is 0.6 (Bagozzi & Yi (1988), indicating that internal consistency and convergent validity are good; composite reliability (Construct reliability) and the Cronbach's

$\alpha$  value of each construct are higher than 0.8 (the suggested threshold value is 0.7), also the average variance extracted of each construct is greater than 0.5 (Table 4), indicating good reliability.

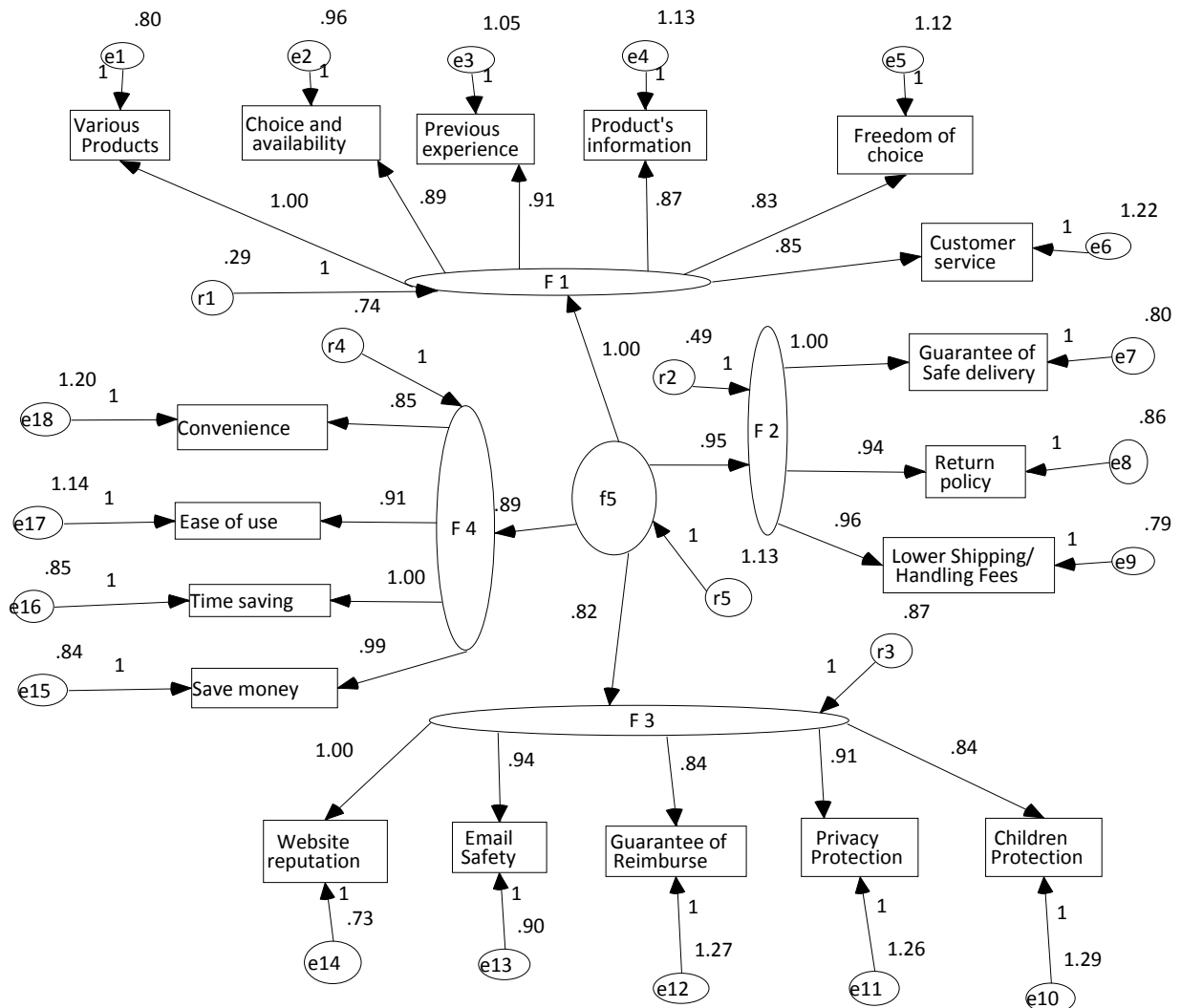
Table 6: Fit Indices and Guidelines for Model Analysis (E-marketing)

Fit Index	Guidelines (Recommended)	Model Values
Chi Square		367.237
CMIN/DF	Between 1 and 5	2.825
NFI	>0.9	.931
TLI	>0.9	.946
GFI	>0.9	.935
AGFI	>0.9	.914
RMSEA	<0.05	.052
P	<0.05	0.000

For the overall assessment of the measurement, multiple fit indexes are reported in Table 6 from which we can see that the model is reasonably consistent with the data, with all the fit indexes better than the recommended values.

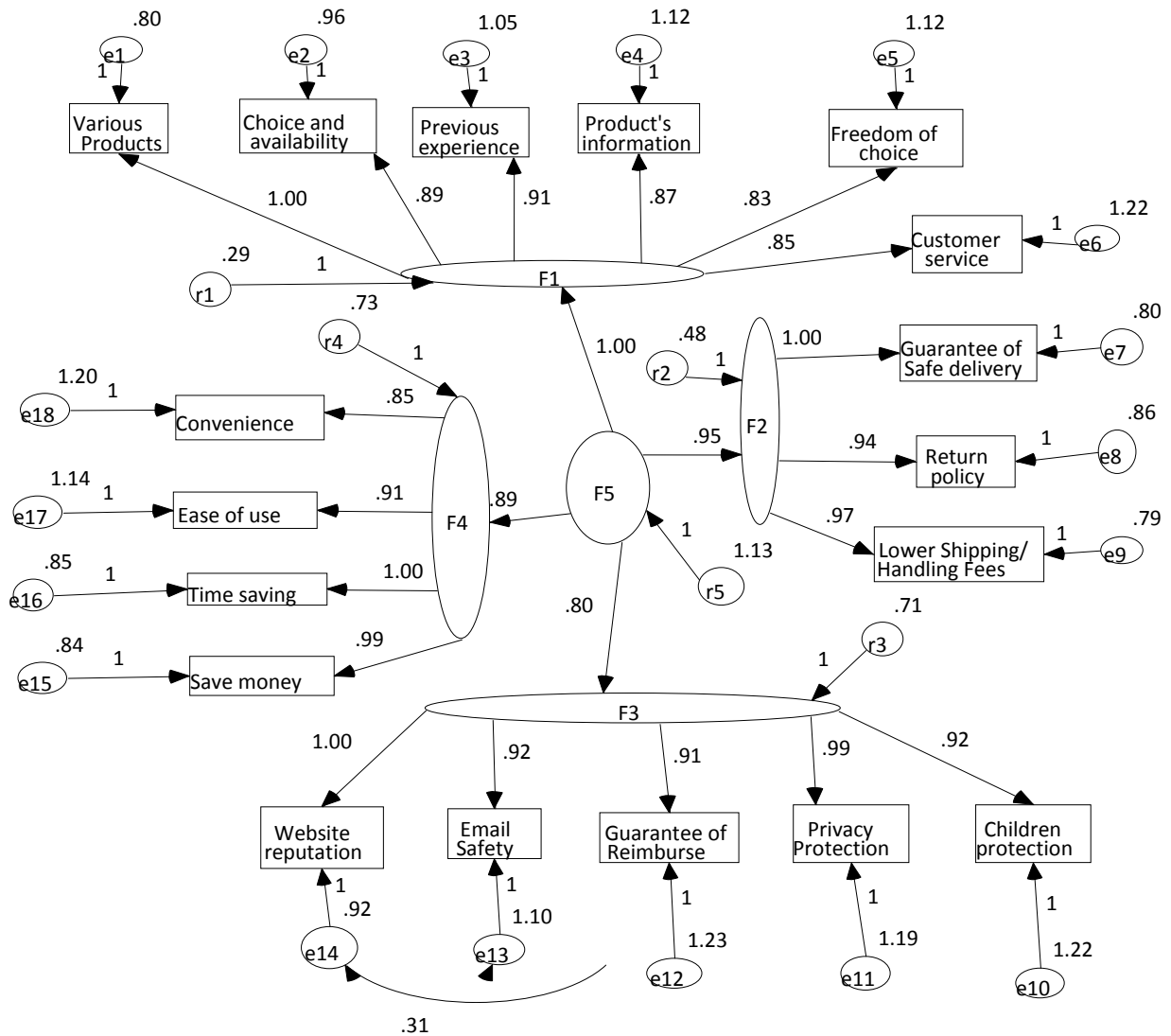
**7. Structural Model: Path Analysis**

Overall fit indexes are reported in Table 6, which shows that the model is reasonably consistent with the data, with all the fit indexes better than the recommended values. Figure 2 indicates the path loadings in addition to t values for each path.



**Figure 1: Proposed Structural Relationships of Perceptual Factors and Consumer's Perceptions towards E-Marketing**

The suggested model (Fig 1) has the RMR greater than the five as it should be  $<0.5$  according to the guidelines set up by the different experts. Hence the necessary modification was performed based on modification index, standardized residual values, regression weights and so on. Finally, the model was modified as shown in figure 2. The values for various fit indices, chi-square, level of significance and outcome of factors/items on E-marketing are shown in table 7. In case of Modified structural relationships two variables (web site reputation and E-mail safety) of “perceived risk” factor have influence on each other. After suggesting the relationship among both these two variables, the model has been found significant.



**Figure-2: Modified Structural Relationships of Perceptual Factors and Consumer's Perceptions toward E-Marketing**

F1- Products Variety

F2- Desired Facilities

F3- Percived Risk

F4- User Friendly

F5- Perceptions towards E-marketing

### Discussion of Results

The results in figure 2 show that path loading on *Product Variety* (coded-F1) factor ranged from .83 to 1.0. The path loading of 1.0 for *various products* and 0.91 for *previous experience* show that these items play a more important role for this construct as comparing to other items. The basic influential factor for online shop appears to be product variety. Variety is concerned with the assortment or a range of goods available from a shop as customers are likely to impose an Internet center with several products. Dillon and Reif (2004) revealed shopper's previous experiences with online shopping or purchase has a significant influence on their next time online purchasing decisions. Here, it is important to note that the path loading of *Product variety* factor is 1.00 which is higher as comparable to other three factors. In order to develop the favorable attitude of consumers, marketers must focus on the quantity of products as per the need of consumers.

The other variables in this factor are *the Choice and availability*, *Customer services*, *Product information and freedom of choice*; all these are loaded significantly. The path loading on *Desired Facilities* (coded-F2) factor has the range from .94 to 1.00. There are three items in this factor with significantly loaded. The maximum loading is for the *Guarantee of safe delivery* (1.0) and *Lower Shipping/Handling Fees* (.97) showing the variance for this factor. The path loading of this factor on perception towards *E-marketing* (Code F5) is .95 which is second highest among all factors. In this factor it is suggested, online marketers should provide adequate services to consumers regarding safe deliver of ordered product as well as return policy if product delivered to consumer is damaged or not according to customer's order. Moreover, online marketers must charge less Shipping/Handling Fees.

The *Perceived Risk* (Coded F3) factor has path loading from .91 to 1.00. The results indicate that the loading of *website reputation* (1.00) played more dominating role for this factor. All the loadings are different and sufficient to explain this factor. Here we note that *Email safety* and *Children Protections* have the same loading of 0.92, indicating the closeness of these constructs. The path loading of this factor on perception towards E-marketing is 0.80 which is least as compare to other factors. Robert and Anne (2001) revealed information about their private life is more readily available and more easily captured on the Internet as compared to offline technologies. Consumers have negative online behavior due to risk concern in E-marketing like there is no guarantee of Reimburse for Losses, no children protection online, no protection to consumer's personal information as well as no Email safety. Email marketing is becoming the cause of Spam. Here it is important to note that website reputation and Email safety both are influencing of each other. To some extend the children protection is based on the website reputation as the loading of Email safety and children protection is same.

The path loading on *User friendliness* (coded-F4) factor has the range from .85 to 1.00. There are four items in this factor with significantly loaded. The maximum loading is for *time saving* (1.0) and *save money* (.97) showing the dominance of this factor. The path loading of this factor on perception towards *E-marketing* (Code F5) is .89. This category's results indicated that it is important for web merchants to create user friendly websites by adding features in it which are attractive for consumers. The Ho hypothesis has been rejected as the all the extracted variables have significant loading to reveal the attitude towards the phenomenon of e-marketing as a hole.

### **Effect Estimates of Factors and Variables**

Here the effect estimates of factors and their variables have been identified for consumer's Perceptions toward E-Marketing. A comparison can be made among proposed model and modified model based on the values of Fit indices given in the Table 7.

Table 7: Effect Estimates for Perceptual Factors Affecting Consumer’s Attitude toward E-Marketing

Factors/Variables affecting consumer’s Perceptions toward attributes of E-marketing	E-marketing Decisions Effect Estimates			Comparison of Models	
	Total	Direct	Indirect	Figure 4.1	Figure 4.2
				Chi square= 394.71, DF=131, RMR= .097, RMSEA= .060 GFI= .930, AGFI= .909, PGFI= .713, NFI= .926, RFI= .914, IFI= .949, TLI= .941, CFI= .949, Significance Level= 0.000 The model is not significant as RMR is very high	Chi square= 367.24 DF= 130 RMR= .056 RMSEA= .052 GFI= .935 AGFI= .914 PGFI= .812 NFI= .931 RFI= .919 IFI= .954 TLI= .946 CFI= .954 Significance Level= 0.000 The model is good even RMR is around .05 (DF difference is 1)
Product Variety	1.000	1.000	0.000		
Desired Facilities	.951	.951	0.000		
Perceived Risk	.800	.800	0.000		
User Friendly	.892	.892	0.000		
Various Products	1.000	0.000	1.000		
Choice and availability	.894	0.000	.894		
Previous experience	.913	0.000	.913		
Product's information	.867	0.000	.867		
Freedom of choice	.828	0.000	.828		
Customer service	.850	0.000	.850		
Website reputation	.800	0.000	.800		
Email Safety	.738	0.000	.738		
Guarantee of Reimburse	.729	0.000	.729		
Privacy Protection	.791	0.000	.791		
Children protection	.736	0.000	.736		
Save money	.884	0.000	.884		
Time saving	.892	0.000	.892		
Convenience	.758	0.000	.758		
Ease of use	.808	0.000	.808		
Guarantee of delivery	.951	0.000	.951		
Return policy	.893	0.000	.893		
Lower Shipping Fees	.918	0.000	.918		

A comparison can be made among proposed model and modified model based on the Fit indices values given in the Table 7. The path analysis conducted using a Structural Equation Modeling technique revealed that the most of the variance in the perceptions toward E-marketing is explained by the two different variables (factors) “*Product Variety*” and “*Desired facilities*”. The total effect estimate showed that this effect was high for “*product variety*” (1.000) and “*Desired Facilities*” (0.951). It was least for “*Perceived Risk*” (.800). Here, it is also interesting to note that items total effect was very high for *Various Products* (1.000) and *Guarantee of Safe delivery* (0.951); hence, these items play a more important role in developing consumer online behavior as compared to other items. The other items also have a significant loading on E-marketing concerns. The results indicate that in order to develop positive attitude of consumers toward E-marketing marketers must focus on attributes of E-marketing given in Table 4.6. It can be inferred that respondents demand facilities from the marketers in the form of Guarantee of Safe delivery, Lower Shipping/Handling Fees etc. All these elements have been considered as the predominant predictors for developing perception towards E-marketing. The respondents also demand, online marketers must offer huge quantity of products to consumers as they free to take decisions regarding choice of product and services they want from them based on their previous experience and product

information they got through the process of E-marketing. In a nutshell it can be said in order to develop positive attitude of consumers toward E-marketing or to convert prospects into consumers, the marketers must focus on above stated attributes of E-marketing.

### **Limitations and Further Research Directions of The Study**

As this is the first ever research conducted on Punjab and Chandigarh data, it has set the basis for further inquiry. Firstly, random sampling techniques are not employed in this research; the ability of the piled up information to understand the total population is thinned out because only consumers in principal cities of Punjab and UT Chandigarh were sampled. A random sample covering the whole of Punjab and UT Chandigarh should be applied to test whether the results from this study are replicated. Secondly, the sample size was relatively modest. A larger sample should be used to implement any future research in this area. The respondents claimed were both online and offline customers and the legal age of attendees were college-educated, students or employees in serving industries, so the samples may be overly concentrated in some particular consumer groups, rendering bias in measuring the consumers online shopping experience and lifestyle. Thus, the results obtained may reflect only these groups' characteristics. It is proposed that future research could possibly diversify into more consumer groups so that the outcomes can be employed more broadly.

### **Conclusion**

In the light of the above analysis and discussion the conclusion drawn there from implies that the E-marketing is a powerful selling technique, which bears a substantial impact upon the perceptions of the consumers. The results indicated that the Respondents prefer Varieties in the products to be purchased online as they are free to take decisions regarding choice of product and services they want based on their previous experience and product information they got through the process of E-marketing. The respondents also understand the risk aspect in E-marketing and their decision to buy online is based on the website reputation and personal information's protection provided by the merchants. Respondents also demand facilities from the merchants in the form of Guarantee of Safe delivery, Lower Shipping/Handling Fees etc. The path analysis conducted using a Structural Equation Modeling technique revealed that the most of the divergence in the perceptions toward E-marketing is explained by the two different variables (genes) "Product Variety" and "Desired facilities". As far as the "Perceived Risk" factor having least variance, respondents consider E-marketing as more speculative as they do not feel secure in online transactions.

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## CRONOLOGICAL ANALYSIS OF BRAND TRUST: A CONSTRUCT PROPOSITION

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### Abstract

“Brand trust” is the fundamental concept in customer relationship management. To make it understandable, both academics and practitioners conceptualise the term in the form of definition. However, the scholars define it differently and seems inconsistently. This fact has led to various perception and partial understanding on it. To help with this issue, around twenty five papers which contain or discuss on definitions are selected and examined. The journals are chronologically analyzed by decades. Descriptive qualitative approach is used in this research. From literature investigation, it is found that although they have various definitions, the key words refer to the same or similar meaning such as: confidence/confident, belief, willingness to rely on feeling of security. However, further analysis suggests that chronologically, the definition of “brand trust” has been evolving and can be categorized into three phases, before the year of 1990, between 1991 to 2010 and 2011 till now.

**Keywords:** *Brand Trust, Chronological, Definition*

### Introduction

In this global market, building and maintaining a relationship with customers are the key success to win the competition (Alhaddad 2015) and brand trust is the foundation to build the relationship (Chaudhari & Holbrook 2001, Fischer & Gartner 2015). Research on brand trust also suggests the importance of the factor. It has an impact on brand loyalty (Chaudhari & Holbrook, 2001), purchase intention (Herbst, et al 2013 ) and customer commitment (Morgan & Hunt 1994, Ballester 2000). Researches have been conducted on the issue (Hosmer 1995) both theoretically and empirically (Fischer & Gartner 2015). However, in defining the term, they have different opinions (Hawass 2013, Fischer & Gartner 2015), incomplete and inconsistent definition (McKnight 2002).

The differences have to be analysed further since the differences could make researchers difficult to compare one research result to others (McKnight, et al 2002) and integrate the different perspectives on trust and find an agreement on its nature (Ballester 2011). Some scholars from different fields (psychology, sociology, economics, management, marketing) have investigated on the concept of trust (Ballester 2011). There are three approaches on trust conceptualization. Personality psychologists assert trust as an individual characteristic, while social psychologist believe that trust is an expectation of a specific transaction and the individual with whom someone is transacting. In contrast, economists and sociologists consider trust as an uncertainty reduction of institutions which lead to trust associated with transaction (Lewicki and Bunker 1995).

The study of Lewicki and Bunker (1995) indicate that different disciplines impact the concept of trust. This study goes further by deepening the concept from different angel, that is from chronological analysis. To make it more systematic, the research problem of this paper could be formulated as follows: 1). How is the development of brand trust definition from 1970’s till now? and 2). What is the proposed construct of brand trust?

### Literature Review

#### 1) 1971-1980

*Trust* is firstly defined as “the confidence that one will find what is desired from another, rather than what is feared (Deutsch 1973). He considers *trust* as a belief that someone will receive what is expected. In an interaction, someone is always wondering what they will get from others. He/she always expects the benefit or positive impact of the interaction. In line with Deutsch’s concept, Worchel (1979) declares that *trust* is the confidence that they will obtain as expected. The expectation must cause a positive outcome, despite the possibility that it may cause a negative one. The possibility between positive and negative outcome is called risk. In this decade, *trust* is understood as the social interaction or individual relationship.

## 2) 1981-1990

*Trust* is essential in business and social interaction. *Trust* is defined as “confidence in the face of risk” (Lewis and Weigert 1985). Broader definition is suggested by Schurr and Ozanne (1985). As cited in Ruparelia (2010), they define *brand trust* as “a belief that an exchange partner is reliable and will fulfil the perceived obligations of the relationship”. Similar to Schuur and Ozanne, Costa and McCrae (1987) define *Brand Trust* as “willingness to rely on an exchange partner in whom one has confidence”. These last two definitions imply that trust should be mutual. Trust is the bonding of business interaction.

While the previous author use partners in their definition, Anderson and Weitz (1989) use party instead. They, as cited in Tan, et al (2013) define *Brand Trust* as “one party’s belief that its needs would be fulfilled in the future by actions undertaken by the other party”. In line with that definition, Anderson and Narus (1990) define *brand trust* as “the firm's belief that another company will perform actions that will result in positive outcomes for the firm as well as not take unexpected actions that result in negative outcomes”. Anderson and Narus (1990) focus on the perceived outcome in defining *brand trust*. In this decade, *brand trust* is defined in a wider scope. If in the previous decade, *brand trust* refers to one or person (personal relationship), in this decade, *brand trust* is considered as mutual belief between partners or parties (organizational relationship).

## 3) 1991-2000

*Brand trust* is defined as “a condition linking certain optimistic opportunity about another’s intention with respect to oneself in risky state of affairs” (Boon and Holmes 1991). *Brand trust* reflects the compared condition level between opportunity and treat as the consequence of interaction. Moorman et al (1992) define *brand trust* as “a willingness to rely on an exchange partner in whom one has confidence”. In line with Moorman, Morgan and Hunt (1994) define *Brand Trust* as “when one party had confidence in an exchange partner’s reliability and an integrity”. Both definitions of trust highlight the psychological aspect of confidence/reliability while integrity relates to attributes such as consistent, commitment, fair, responsible, and honest. Less complicated definition is suggested by Hess (1995). *Brand Trust* means “the consumer’s brand perceptions: altruism, honesty and potential performance of the product”. He mentions three dimensions of brand trust; altruism, honesty and product performance. Mayer et al (1995) asserts that *brand trust* means “the willingness of a party to be vulnerable to the actions of another party”. Vulnerable means the uncertain condition of the future which is called risk. Rousseau et. al (1998) defines brand trust as “a psychosomatic state comprising the intention to recognize susceptibility based upon constructive prospect of the intentions or behavior of another person”.

## 4) 2001-2010

Chaudhuri and Holbrook (2001) defines *Brand Trust* as “willingness of the average consumer to rely on the ability of the brand to perform its stated function”. This definition stresses on the concept of willingness which refers to an intentional behavior and reliance. This definition

also implies that *trust* is comparing the brand performance and promised function. The stated function leads to consumers' expectation. Consumers will trust the brand when the brand meets their expectation. Ballester & Aleman (2001) provides support for this notion. They conceptualized *brand trust* as "a feeling of security that the brand will meet consumption expectations". Brand does not only refer to a product but also partnership relation between a product and consumers but also the relation between personal character and social interaction (Ballester & Aleman, 2001). Ballester (2003) defines *Brand Trust* as "the confident expectations of the brand's reliability and intentions". Reliability dimension is based on the belief that the brand will fulfill the promised values. While intention dimension refers to consumers' belief that the brand will respond to their interest when consumption in their best interests when unexpected problems with product consumption arise Cristau (2006) as cited in Bouhlel et al (2011) defines *Brand Trust* as "a feeling of security that is held by the consumer that the brand will meet their consumption expectations". The feeling of security comes from their prior experiences with the brand or other recommendation. This definition parallels with Ballester and Aleman's definition. Afzal, et al (2010) defines *Brand Trust* as "dependency on other parties at the level of risk with their own willingness". Ruparelia et al. (2010) believes that the awareness of brand attributes will positively impact the business, whether online or traditional one. By focusing on activities contributing to build and maintain brand trust, marketing resources can be optimally and effectively used.

Brand trust correlates with two dimensions, first, credibility and second, performance satisfaction. Credibility reflects honesty and compliance between product, advertisement and other communication. Performance satisfaction refers to product delivery whether the product quality is as expected (Reast 2005).

### 5) 2011-now

Ballester (2011) defines *brand trust* as "Feeling of security held by the consumer in his/her interaction with the brand, that it is based on the perceptions that the brand is reliable and responsible for the interests and welfare of the consumer". He further suggests two dimensions of brand trust, viability and intentionality. Viability reflects technical dimension in nature. It concerns the perception that the brand can fulfill the consumers' need. Intentionality dimension refers to the consumers' confidence that the brand will help and care with the problems that might arise in the future. The brand will not take advantage of the consumer vulnerability. Miao & Lee (2012) defines *brand trust* as "a consumer psychological state of confidence and positive expectations from a brand". *Brand trust* can be seen as a factor of two dimensions, brand reliability or cognitive-based trust and brand intentionality or emotion-based trust (Hawas 2013). Ulfat et al (2015) defines *brand trust* as "consumers' perception' instead of 'consumer behavior', keeping in view all the items associated with this head". Brand trust is consumer perception, comparing to consumer behavior. Brand trust relates to what people think.

### Methodology

This study adopts descriptive qualitative approach. The author investigates the literature from various reputable journals. Definitions proposed by scholars are analyzed chronologically by decades to find out the development concept of brand trust. It is assumed that the changes of definitions represent the change of the environment both in academic world and practical one.

### Findings and Discussion

The definition of brand trust is changing from time to time. The following table describes the development of brand trust definition and its dimensions.

**Table 1**  
**Definitions of Brand Trust and their Dimensions**

<b>Decades</b>	<b>Author, Year</b>	<b>Definition</b>	<b>Dimension</b>
B E F O R E  1 9 9 0	Deutsch (1973)	the confidence that one will find what is desired from another, rather than what is feared	1. performance
	Worchel (1979)	expectation, which may cause a positive outcome, despite the possibility that it may cause a negative outcome	1. performance
	Schurr and Ozanne (1985)	a belief that an exchange partner is reliable and will fulfil the perceived obligations of the relationship	1. belief 2. reliable 3. perceived obligation
	Lewis and Weigert (1985).	confidence in the face of risk, not a mere predictability	1. confidence 2. risk
	Costa and McCrae (1987)	willingness to rely on an exchange partner in whom one has confidence	1. rely on 2. Confidence
	Anderson and Weitz (1989)	one party's belief that its needs would be fulfilled in the future by actions undertaken by the other party	1. belief 2. fulfilled need in the future
	Anderson and Narus (1990).	the firm's belief that another company will perform actions that will result in positive outcomes for the firm as well as not take unexpected actions that result in negative outcomes	1. belief 2. perceived outcome
1 9 9 1 - 2 0 1 0	Boon and Holmes (1991)	a condition linking certain optimistic opportunity about another's intention with respect to oneself in risky state of affairs	1. Optimistic opportunity 2. Intention 3. Risk
	Moorman, et al (1992)	a willingness to rely on an exchange partner in whom one has confidence	1. rely on 2. Confidence
	Morgan and Hunt (1994)	when one party had confidence in an exchange partner's reliability and an integrity	1. Confidence 2. Reliability 3. Integrity
	Barney and Hansen (1994)	the mutual confidence that no party to an exchange will exploit another vulnerability.	1. Confidence 2. vulnerability
	Hess (1995)	the consumer's brand perceptions: altruism, honesty and potential performance of the product	1. Reliability 2. altruism 3. honesty
	Mayer, Davis, and Schoorman (1995)	the willingness of a party to be vulnerable to the actions of the another party.	1. Willingness 2. Risk
	Rousseau et. al.,1998).	psychosomatic state comprising the intention to recognize susceptibility based upon constructive prospect of the intentions or behavior of another person	1. Intention 2. Constructive Prospect
	Chaudhuri and Holbrook (2001)	willingness of the average consumer to rely on the ability of the brand to perform its stated function	1. brand performance

	Ballester & Aleman (2001)	a feeling of security that the brand will meet consumption expectations”.	1. A feeling of security 2. Brand expectation
	Ballester et al (2003)	the confident expectations of the brand’s reliability and intentions	1. reliability 2. intentions
	Cristau (2006)	a feeling of security that is held by the consumer that the brand will meet their consumption expectations	1. a feeling of security 2. brand expectation
	Afzal, et al (2010)	dependency on other parties at the level of risk with their own willingness	1. dependency 2. risk
	Ballester (2011)	Feeling of security held by the consumer in his/her interaction with the brand, that it is based on the perceptions that the brand is reliable and responsible for the interests and welfare of the consumer	1. viability 2. intentionality
	Miao & Lee (2012)	a consumer psychological state of confidence and positive expectations from a brand	1. Consumer confidence 2. Positive expectation
	Ulfat et al (2015)	consumers' perception instead of consumer behavior, keeping in view all the items associated with this head	1. Consumers' perception 2. Consumer behavior

From the above table, it can be clearly seen that although they have various definitions, they have similar key words in meaning such as: confidence/confident (Deutsch 1973, Morgan and Hunt 1994, Ballester 2003, Lin and Lee 2012), belief (Anderson & Weitch 1989), willingness to rely on (Costa & McCrae 1998, Choudhuri & Holbrook 2001), and feeling of security (Cristau 2006, Ballester 2011). However, it is interesting to know that, chronologically, the conceptual definition of brand trust can be divided into three phases: First, before the year of 1990, *brand trust* refers to personal or social interaction (Deutsch 1973, Schurr and Ozanne 1985, Costa and McCrae 1987 and Anderson & Weitz, 1989). Second, between 1991 to 2010 some authors define *brand trust* as personal relationship or parties (Morgan and Hunt 1994, Boon and Holmes 1991, Moorman, et al 1992). Some other scholars define brand trust as the relationship between consumers and product (Chaudhuri and Holbrook 2001, Ballester 2003 and Cristau 2006). One author, in this decade, defines brand trust as the relationship between consumers and brands (Hess 1995). The last, between 2011-now, brand trust is defined as the relationship between consumers and the brand (Ballester 2011, Miao & Lee 2012 and Ulfat et al 2015).

### **Conclusion**

Drawing from the above discussion, it is evident that the definition is evolving from year to year. The development is supposed as the reflection of the social and business changes both in academic and empirical world. In the beginning (in and before 1990), trust is defined as personal and social relationship. In the second phase (1991-2010), trust is considered as the confident perception to parties and product or brand. While in the last phase (in 2011 and after), trust refers to a belief between consumer and brand.

Consistent with the above findings, the authors propose the construct of brand trust as *consumers' belief or perception to the reliability of given products and integrity of persons,*



parties or brands in fulfilling their expectations based on their stated promises or their own experiences and confidence that the brand will care to the problem that may arise. This definition covers the previous conceptualization of brand trust which consists of three dimensions, psychological, cognitive and intentional dimensions. Belief or perception is emotional based trust dimension which is quite personal and situational. Cognitive-based trust dimension of this definition refers to consideration of consumers in deciding whether the brand could meet their expectation and intentional dimensions means a belief that the brand will not take the advantage to the consumers

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## **EXPLORING TECHNOLOGY SWITCHING PHENOMENA IN CAPITAL INTENSIVE MARKETS**

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### **Abstract**

This paper explores the factors that lead to technology switching in capital intensive markets. This issue is critical for rapidly changing technologies because consumer demands have to be defined accurately to avoid their switching to competing products. In this study, MRI research centers are used to track the switching process globally and product innovativeness was monitored using the online patent system and through interviews. Interviews with industry experts and lead users were conducted to study the technology switching phenomena and its antecedents. Findings reveal that product innovativeness is the main cause behind technology switching, which is deemed essential to sustain competitive advantage.

### **Introduction**

Users, as individuals and organizations, switch from an old technology to a new one in the hope of achieving a better competitive advantage in the market and ensuring long-term success. In this research we emphasize the notion of technology switching rather than brand switching, because switching of high technology products is done to obtain better technological capabilities rather than to become associated with a specific brand. Although the literature uses the concept of brand switching for a wide range of products and services to examine the process and associated factors that cause the replacement of one brand by another, we believe that the case is different in the matter of switching high technology products.

In rapidly changing market users' requirements are difficult to define (Krieg, 2004; Bhattacharya et al., 1998), the significance of advanced product capabilities becomes critical for users. Research has shown that in such markets, lead users can be integrated in the innovation process to assist in identifying the right product features and preferences (Lettl et al., 2006; Thomke and Von Hippel, 2002). Therefore, firms should identify those users and incorporate them in the product development process using an open innovation platform, in order to enhance product innovativeness and the market value of products (O'Cass and Heirati, 2015).

### **Literature Review**

Different theories were used to explain the switching behavior of consumers and buyers, including consumer behavior, consumer satisfaction, organizational learning, social networking, social exchange, consumer behavior, decision making, migration, consumer resource allocation, and equity theory (Low and Johnston, 2006). These theories are deemed effective in establishing a concrete argument to elucidate switching behavior based on the perspective they take into account. For instance, if switching behavior is judged as replacement in the relationship between users and firms to generate more profit, then it is best described using social exchange theory. However, the context in which each theory is selected is highly dependent on the nature of the product or service being investigated. For example, Money (2004) used a social network approach to elucidate the process of assessing banking and insurance services, and their influence after purchase.

The decision to replace a technology is reached if the new technology can generate sufficiently more capabilities than the old one. New technological capabilities are derived from product innovativeness as new product features (Al-kwifi and McNaughton, 2011).

Thus, the theoretical foundation of this research is established in the dynamic capabilities theory, where changes in technological capabilities can occur as changes in organization capabilities (Helfat, 2000), which would impact the behavior and overall performance of the organization. This condition puts significant pressure on an organization to adopt more innovative products to sustain its competitive advantage, because this product encompasses special capabilities that offer exceptional competences for the organization (Eltantawy, 2016). Some studies have however evaluated switching behavior at the organizational level by monitoring different products: service providers (Yanamandram and White, 2006), computer workstations (Heide and Weiss, 1995), banking (Wathne et al., 2001), financial industry (Liu et al., 2005), telecommunication services (Low and Johnston, 2006), and hardware retailers (Ping, 1997). Since products used by organizations are more specialized so as to meet certain needs and are more technology-intense (John et al., 1999; Glazer, 1991), organizations are keen to focus on long-term relationships and engage in cooperative activities that result in greater benefits for both partners (Flint et al., 2002). This has led to greater focus on relationship marketing that is built on commitment and trust (Morgan and Hunt, 1994), where different marketing activities should be directed toward establishing, developing, and maintaining successful relationship with customers (Palmatier et al., 2006; Rauyruen and Miller; 2007).

The study emphasized that the most influential and significant element in reaching the verdict to move to a new technology is product features that enhance a user's capabilities, followed by product variety, research collaboration, and product service. Subsequently, Al-kwifi et al. (2014) repeated the same study on mass market users of medical imaging technology, and concluded that when making the choice to switch to a new technology, product features is still the critical element in order to help organizations sustain competitive advantage or achieve a more competitive position.

Al-kwifi and McNaughton (2013) pioneered the concept of partial and complete switching, which highlights the significance of technology switching at the organizational level. In this concept, organizations who are in danger of losing competitive advantage and who, for various reasons, are not able to surrender the old technology will choose to implement partial switching by keeping the old technology and adding another new technology, and operating them simultaneously. In this way, the organization avoids taking a major risk that disturbs its operation and commitment. On the other hand, when other organizations feel the need to terminate their relationship with the old technology, and when their survival depends on more advanced technology, then they implement complete switching by completely replacing the old technology by a new one.

The significance of the product innovativeness does not come from creating a robust and low-cost product only (Wu and Chyu, 2004), but also from empowering it with the right capabilities to enhance current user competencies and influence new users towards adopting it (Yang and Jiang, 2006; Danneels, 2002). The concept of product innovativeness was first introduced by Booz-Allan and Hamilton (1982), where a two-dimensional map was developed, "Newness to the Market" with "Newness to the Company". Later, Kleinschmidt and Cooper (1991) used product innovativeness to measure its impact on market performance. They found that product advantages, derived from innovative product features, is the number one factor in market success for new products, which is consistent with recent findings for the factors behind brand switching of high technology products (Msaed et al., 2016; Al-kwifi et al., 2014). Kleinschmidt and Cooper (1991) emphasized that innovative products offer unique customer capabilities and differentiate these customers from other users, thereby increasing the product's attractiveness and success in market.

Product innovativeness to the firm can be based on the extent of a firm's R&D activities and resources to produce new technology for the firm, including something that is patentable, and

differentiate the company position among competitors. On the other hand, product innovativeness for the market (user) is perceived differently, as users are looking for product superiority (based on the new product features), which offers dramatic improvements over existing product features (Fang, 2008; Im and Workman, 2004). Some researchers prefer product innovativeness at the market level because product success is measured mainly by user acceptance and increased market share. Firms might claim that they produce cutting-edge innovations, but those might not secure market success when introduced. Also, innovations that are new for the firm may not be novel to the market, because companies try to imitate the features of competitors. However, exploring both dimensions of product innovativeness might provide deeper insight into the factors behind product success.

Determining lead users will have a critical influence on product innovativeness, as they can speed the innovation process by providing important insights into market needs. Lettl et al. (2006) demonstrated that highly motivated users and an open innovation process are important to the early innovations phases of the medical equipment industry, especially when those users come from diverse competencies and are integrated in a supportive environment (Shaw, 1985). In medical technology markets, the development of innovative products with the right features requires high levels of collaboration with lead users of such markets, because they have special performance requirements and quality standards, unlike users of other markets. Those users are important for testing and verifying the reliability of new product features on patients, and determining if the product meets safety standards.

Morrison et al. (2004) explored the importance of asking lead users to test and verify the validity of different applications, ensuring a faster adoption by mass-market users who look for a reliable and tested application. Numerous studies have demonstrated the value of integrating lead users to increase product innovativeness and market success (Johnson et al., 2006; Bonner and Walker, 2004).

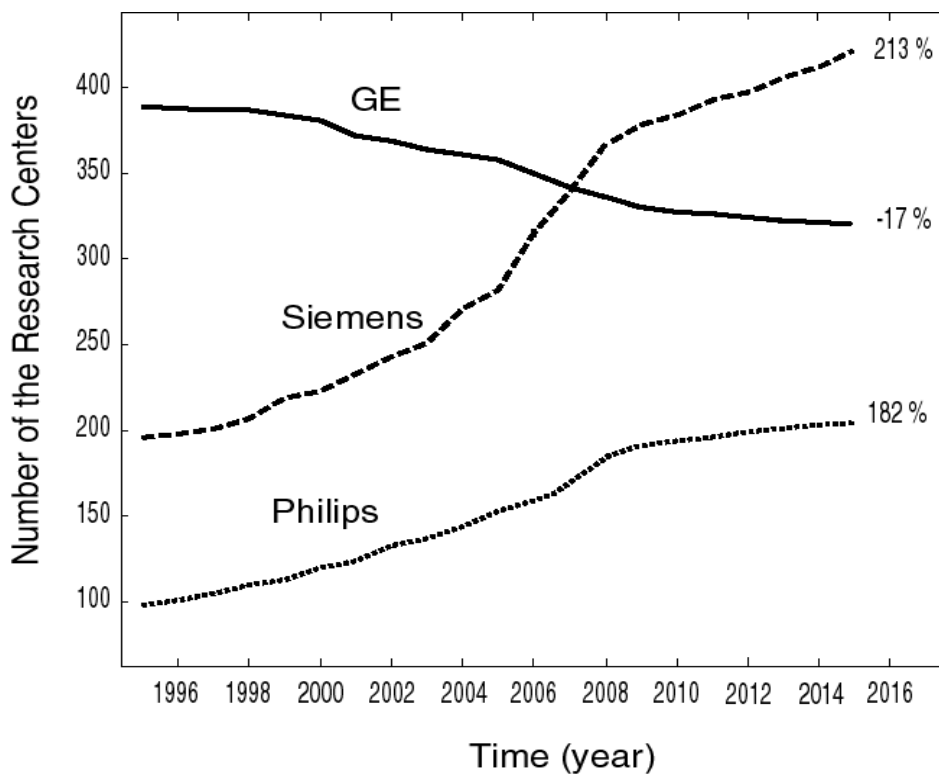
Many companies worldwide have created special programs to integrate lead users in the product development process (Bilgram et al., 2008), through open innovation programs and virtual communities. The open innovation programs allow leading-edge users to access and modify the product features to enhance their performance, and even to build new advanced features (Gassmann et al., 2010). The virtual communities are an online community-based innovation, which are created by the firm to connect users that have similar interests (Hienerth and Lettl, 2011; Fuller et al., 2006), in order to exchange ideas and identify important issues for further improvement.

## **Method**

Three secondary sources are used, namely, International Society for Magnetic Resonance in Medicine (ISMRM) conference proceedings (ISMRM, 2015) and US Online Patent Office (USPTO, 2015). The first source was used to track technology switching of MRI research centers worldwide, and the third was used to determine product innovativeness at the firm level. The primary source includes interviews with MRI research centers and industry experts. The collected information is used to confirm the relationship between product innovativeness and technology switching, and determine the impact of lead user integration on enhancing product innovativeness. We decided to interview industry experts and some lead users who have intensive experience using the three technologies. These interviews are essential to determine the product innovativeness at the market level and its impact on technology switching. Accordingly, we interviewed three MRI industry analysts and twenty MRI scientists, each with over 20 years' experience in the MRI field.

**Results**

Figure 1 shows technology switching that took place in MRI research centers (university hospitals) worldwide from 1995 to 2015. In 1995, 387 research centers utilized GE-MRI technology, while 196 and 98 centers operated Siemens and Philips technologies, respectively. As research centers began to grow their clinical and research activities by updating or by purchasing another MRI technology, more research centers started to use Siemens-MRI technology in their functions, with the number of centers operating Siemens technology approaching 422 over 20 years, or 213% increase over the 1995 number. On the other hand, the number of centers operating Philips-MRI technology also rose steadily, to reach 204 centers, or 182% growth over the 1995 number. Nonetheless, the number of centers operating GE-MRI technology continued to decrease over the same period to a low of 321 centers, representing 17% decline in the number of research centers reported in 1995. This substantial change in market share of different firms indicates that some technologies were more captivating by motivating MRI research centers to adopt them. Tracking the process of technology switching using conference database provides strong evidence that this behavior is occurring within MRI research centers around the world.



**Figure 1. MRI technology switching**

Table 1 shows the list of product innovative capabilities deemed essential by study participants to make an MRI technology attractive and motivate its adoption (by switching). These capabilities represent combined attributes that make the operation of research centers more effective and efficient, leading to better competitive advantage in the market (Al-kwifi and McNaughton, 2011). Participants emphasized that the decision to switch to a new MRI technology is based on evaluating and ranking these capabilities across different firms, in order to select a technology that has an acceptable performance for the overall capabilities. Although no technology provides a perfect functionality in all the listed aspects, each

participant rated the list of product capabilities for the three MRI technologies based on a scale of from 1 to 5 (as least preferred to most preferred). The final ranking based on the aggregated mean value of the list came as follows: Siemens (most preferable technology), Philips, GE (least preferable).

**Table 1. List of product innovativeness capabilities**

Product innovativeness capabilities	
1-	Advanced applications
2-	Image quality and speed
3-	Reliability (low down time)
4-	Effective product service
5-	User friendly interface
6-	Patient-comfort features (ease of in-out, noise)

**Discussion**

Figure 1 provides clear evidence that technology switching is taking place in the MRI market among the major MRI firms. In this study, the behavior is documented for a 20-year period using a reliable source of data. The fact that this behavior is occurring in the research centers segment (lead users) indicates that the product capabilities of one technology are not able to meet the requirements of those users (AL-kwifi et al., 2014), and a critical decision is therefore made to switch to another technology to sustain the competitive advantages.

Therefore, when a new technology is adopted, the following aspects have to be considered carefully to ensure smooth and effective exploitation of the new technology: (1) MRI technologists must undergo training to control the new technology proficiently; (2) engineers and scientists (an important element in the research centers) should become familiar with the new software design, in order to integrate and test new research ideas; (3) clinical operations downtime during the switching process must be carefully assessed, which demands transferring critical patients to nearby hospitals; and (4) the building configurations must be adjusted to fit the specifications of the new technology.

Technology switching toward Siemens scanner, however, was the dominant behavior over the past 20 years. This represents a clear indication that Siemens technology was offering superior product innovativeness to users, to motivate them to switch despite the high switching costs (Shi et al., 2015). This claim is supported by participants' ranking of different MRI technologies based on their overall product innovativeness capabilities. Although the product innovativeness at the firm level for Siemens is close to that for GE in terms of the registered MRI patents, participants believe that these patents are basically new discoveries rather than actual capabilities, unless they are integrated as product features that address users' demands in meaningful ways (Franke et al., 2009).

To overcome the challenge of defining users' needs and changing preferences, Siemens was successful in utilizing a dynamic open innovation system that increases the level of interaction and collaboration with lead users (Ades et al., 2013), and integrates them in the product development process (Ngo and O'Cass, 2013). This is a critical step, as the development cycle of MRI technology entails close cooperation between research centers and MRI firms, in order to test and validate new applications on patients (Lettl et al., 2006). In practice, each MRI development needs an FDA approval before being launched to market, to ensure its safety on human subjects, a condition that encourages a strong collaboration between MRI firms and research centers to enhance the innovation cycle of MRI technology. Our research confirms that the level of product innovativeness can be enhanced by sustaining a strong relationship with lead users (Lettl et al., 2006). Interestingly, lead users in the MRI research



centers are acting as external research hubs for firms and a rich source of market information. Thus, sustaining a strong relationship with them would enhance the innovative capacity in generating new product features (Franke et al., 2006).

### Future Research Directions

More research is needed to investigate new schemes to define and integrate lead users, in order to involve them in the product innovation process, even if they are spread globally. Knowledge for building high technological capabilities is not limited to just one geographical location but can be spread across different regions. Therefore, there is a need to find ways to detect the most talented users and adopt a system that links them into the product development process. Firms need to look behind local borders to seek knowledge that is not accessible in regional centers and universities; such external knowledge can be essential to enhance the innovative capacity of firms (Laursen and Salter, 2006). We propose to investigate the role of new online interaction technologies in linking users worldwide (Fuller et al., 2006), such as social networks and discussion boards where user feedback and comments from various regions could add significant information to describe personal experiences and unique product capabilities. The importance of ranking talented users can also be explored, where active users who have shown a keen interest and provided useful information will have higher status in the online system. Such users can be monitored closely to review and examine their inputs, or asked to test and review new product features.

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**THE RELATIONSHIPS BETWEEN ATTITUDES TOWARD COUNTERFEIT  
BRANDED LUXURY PRODUCTS AND SOCIAL STATUS INSECURITY WITH  
STATUS CONSUMPTION AND VALUE CONSCIOUSNESS AS MODERATORS**

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**Abstract**

We examine the relationship between social status insecurity of Malaysian consumers, which influences their attitude toward counterfeit branded luxury products as well as the effects of the relationship that are moderated by consumers' status consumption and value consciousness. The result indicates that consumers' social status insecurity, status consumption, and value conscious are significant predictors of their attitudes toward such products. Customers' social status insecurity has a direct influence on their attitude toward counterfeit branded luxury products. If they were very concerned about their social status or if they were value conscious they would have a favorable attitude toward such products. Also, if they were feeling highly insecure about their social status combined with low value consciousness, they would also have a favorable attitude toward such products. Some variations in the moderation or interaction effects of consumers' social status insecurity on their attitude toward counterfeit branded luxury products were found at different values of status consumption and value consciousness. Some implications of the findings are also discussed.

**Introduction**

Counterfeiting of products is defined as "any unauthorized manufacturing of goods whose special characteristics are protected as intellectual property rights (trademarks, patents and copyrights)" (Chaudhry *et al.*, 2005, p. 60). Counterfeiting is an important and growing worldwide problem, occurring both in developed as well as less developed countries since the 1970s (Bian and Veloutsou, 2005; de Matos *et al.*, 2007; Geiger-Oneto *et al.*, 2013; Yoo and Lee, 2012). Counterfeit products are goods that appear the same to genuine products except that the brand labels they use are copied from the genuine product labels (Cohen, 2005). For example, trademark counterfeiting is now considered as the most serious problem by many multinational corporations doing business in China (Chow, 2003). China is now considered as the world's largest source of counterfeit products (Chapa *et al.*, 2006). Counterfeit products can be classified as either "deceptive" and "non-deceptive" (Zhang and Zhang, 2015). Deceptive counterfeits are typically non-genuine products packaged and sold as genuine brand named products with the intention that consumers may buy them without realizing they are in fact counterfeits. In contrast, non-deceptive counterfeits are also typically non-genuine products in which the consumers, at the time of purchase, are aware that they are buying counterfeit products (Hoe *et al.*, 2003). The markets for these products have been growing rapidly, particularly within the past few decades (Phau and Teah, 2009). Despite the fact, that many countries have signed agreements to protect intellectual property rights, counterfeit branded luxury products are still readily available in the world markets (Hung, 2003). For example, a report published in 2015 by the European Union's law enforcement agency, Europol, called Malaysia as one of the main "countries of provenance for counterfeit goods" and "home of piracy" (Europol, 2015; Ng and Choy, 2012). As reported by Abraham and Toh (2015), there were 1,811 cases of confiscated goods worth more than \$3 million in Malaysia in 2013. In addition, during the months of January to March of 2014, a total of 11,704

premises were raided nationwide, involving 235 cases and seizures of about \$250,000 worth of counterfeit items. These figures are indicative of the increased efforts made by the Ministry of Domestic Trade, Cooperatives and Consumerism of Malaysia to combat product counterfeiting and piracy.

Despite the abundance of studies on understanding consumers' behavior pertaining to purchasing of counterfeit luxury products, the seriousness and growth of counterfeiting product markets persists. Although other factors have been found to affect consumers' ATT, the scope of the current research is confined to the examination of consumers' social status insecurity (SSI), value consciousness (VC), and status consumption (SC) pertaining to counterfeit branded luxury products. We believe that individuals form strong connections to the ATT as the responses to their SSI, VC, and SC. Thus, the objective of this study is to test the relationships between SSI on ATT with SC and VC as moderators. It should be noted here that this paper focuses only on the perceptions of Malaysian consumers towards non-deceptive counterfeit branded luxury products.

## **Theoretical Background and Hypotheses**

### **1. Attitude toward Counterfeit Branded Luxury Products (ATT)**

According to the theory of planned behavior (Ajzen, 1991), purchase behavior is determined by purchase intention, which in turn is determined by attitudes (Fishbein and Ajzen, 1975). Previous studies have found that a person's attitude toward a behavior instead of toward a product is a better predictor of the behavior (Fishbein and Ajzen, 1975; Penz and Stöttinger, 2005). Consumers' intentions to buy counterfeit products depend on a number of factors including their attitudes toward the products, their perceptions about the risk involves with the products, whether they have purchased counterfeit products before, as well as on their subjective norm, integrity, price-quality inference, and personal gratification (de Matos *et al.*, 2007). For digital products, an attitude of "It is a theft but not a crime" seems to prevail among the millions of people who acquired illegal copies of records, movies and software, or even making their own copies at home (Balestrino, 2008). To a lot of people, buying and/or selling counterfeit luxury brands is not regarded as a serious offence as compared to other illegal acts (Phau, Sequeira, and Dix, 2009). In one study, Bian and Veloutsou (2005) found that about one-third of consumers would knowingly buy counterfeit products if their prices and quality are right and 29 percent would not consider product counterfeiting as harmful as long as the products do not endanger the life of the buyer. Phau, Sequeira, and Dix (2009) found that integrity is the only factor that influences a consumer's attitude toward counterfeits, but it does not necessarily decrease his willingness to purposely buy counterfeit luxury brands. They also found that the useful life of a counterfeit luxury brand significantly influences a consumer's willingness to buy such a brand. In another study on Singapore consumers, Phau, Teah, and Lee (2009) found that consumer attitudes toward counterfeit luxury products play an important role in affecting their purchase intention. In addition, they found that the social influence of consumers plays an important role in their intention toward purchasing counterfeit goods. Despite their stable income, price and quality of CBL products relative to their genuine ones still represent an incentive for them to opt for the CBL products. However, this is not the case for Vietnamese consumers where, according to Ha and Tam (2015), this group has less support and intention to purchase counterfeiting products.

### **2. Social Status Insecurity (SSI) and ATT**

Social status insecurity (SSI) refers to "the degree to which an individual is concerned with appearing low-class or feels uncertain about his or her social standing" (Wyatt *et al.*, 2008, p. 361). In other words, consumers may conspicuously consume certain products just to avoid social anxiety (i.e., the fear of being judged and evaluated negatively by other people, leading

to feelings of inadequacy, inferiority, embarrassment, and humiliation). Some consumers may consume luxury products to reflect their self-identity, group-identity, and/or social status (Strizhakova *et al.*, 2008, 2011). Phau, Sequeira, and Dix (2009) found that the extent to which consumers consider a brand as symbolic or functional would influence their willingness to buy counterfeit luxury brands. They also found that symbolism and prestige play an influential role in consumers' knowingly buying counterfeit luxury products. Sometimes, the need for some consumers to show off their status to others as if they were well to do and could afford to purchase luxury goods could be due to their feeling of insecurity about their social status or simply to avoid of being regarded by others as low-class (Geiger-Oneto *et al.*, 2013). Thus, this feeling of insecurity could make them buy luxury products/brands in their effort to alleviate the feeling. Thus, our first hypothesis is:

H<sub>1</sub>: SSI has a direct positive influence on ATT.

### 3. Status Consumption (SC) and ATT

Consumption behavior of consumers can be influenced by status and prestige considerations (Baek *et al.*, 2010; Goldsmith *et al.*, 2010). Many people conspicuously consume luxury products to signal their wealth to others (Nelissen and Meijers, 2011). Owning status goods could boost consumers' ego as well as repair their psychological wounds, especially for those with low social esteem (Sivanathan and Pettit, 2010; Twenge and Campbell, 2002). The term luxury or status goods is defined as "goods for which the mere use or display of a particular branded product reflects prestige onto the owner, apart from any functional utility" (Grossman and Shapiro, 1986, p. 3) In other words, people consume luxury products because the products convey certain luxury status. Thus, if they could not afford to buy genuine products which are usually expensive, they might resort to buying counterfeit ones if such products exist in the market (Phau and Teah, 2009), particularly if the products are almost the same as the genuine ones. Furthermore, McFerran *et al.* (2014) pointed out that there is a paradox in luxury consumption. They observed that when consumers purchase luxury brands, they might want to show heightened feelings of accomplishment (not arrogance), but to others, they instead might signal arrogance (rather than accomplishment). Also, Nwankwo *et al.* (2014) and Sharif and Kassim (2015) found that Muslims are not fundamentally different from western consumers with regard to predispositions toward luxury consumption. In addition, Perez *et al.* (2010) found that by consuming counterfeit luxury goods it enables consumers to construct an image of "savvy" individuals who are able to optimize their resources, able to have fun and adventure, and able to fool others without getting caught. However, results from previous studies have shown that individuals seek status by buying luxury brands because they believe those brands could enhance their influence and status in social relationships (Nelissen and Meijers, 2011; Ridgeway and Erikson, 2000). Therefore, we next hypothesized:

H<sub>2</sub>: SC has a direct positive influence on ATT.

### 4. Value Consciousness (VC) and ATT

Value consciousness (VC) is a concern for paying lower prices, subject to some quality constraint (Lichtenstein *et al.*, 1990). Smart shoppers perceive buying counterfeits as value for money (Mohd Nordin *et al.*, 2013). It is evident from previous research (Ang *et al.*, 2001; Phau, Teah, and Lee, 2009) that consumers who are more value-conscious will subsequently have a positive ATT. A possible explanation for this finding may be due to the assumption that high SSI and SC consumers may pay more attention in wanting to fulfill their need to be equal to those in higher social class, but they do not have the financial ability to do so (Wee *et al.*, 1995). Hence, our next hypothesis is:



H<sub>3</sub>: As the VC of consumers increases, their ATT become more favorable

However, as the importance given to SC increases, the likelihood of a consumer choosing a genuine luxury product increases more than the likelihood of him/her buying a counterfeit one (Geiger-Oneto *et al.*, 2013). As a result, they will more likely choose genuine luxury products over their counterfeits. Alternatively, for consumers who feel concerned about their social status but lack the financial capability, they will likely choose counterfeits (for them, it is the only way to own such brands) over genuine luxury products because the visible luxury attached to the counterfeits serves to fend off the negative perception of others on them (Charles *et al.*, 2009). Thus, we expect SSI and status SC to influence their brand type choice. This leads us to the following hypothesis:

H<sub>4</sub>: Higher SC strengthens the influence of SSI toward favoring their ATT ( $SSI_i \times SC_i$ )

Alternatively, the relationship between SC and ATT may be moderated by VC. Thus, we assume that the dependence of consumers' ATT on SC may likely depend on their level of VC. For example, consumers who choose genuine luxury products over counterfeits are not particularly concerned about their value. However, when both VC and SC are high, the consumers would opt for counterfeits over genuine luxury products for their value (Geiger-Oneto *et al.*, 2013). Thus, we hypothesized:

H<sub>5</sub>: The strength of the relationship between SC and ATT depends upon VC, such that SC is strongest when VC is high and weakest when VC is low ( $SC_i \times VC_i$ ).

H<sub>6</sub>: The strength of the relationship between SSI and ATT depends upon VC, such that SSI is strongest when VC is high and weakest when VC is low ( $SSI_i \times VC_i$ )

H<sub>7</sub>: The strength of the relationship between SSI and ATT depends upon SC and VC, such that SSI is strongest when SC and VC are high and weakest when SC and VC are low ( $SSI_i \times SC_i \times VC_i$ )

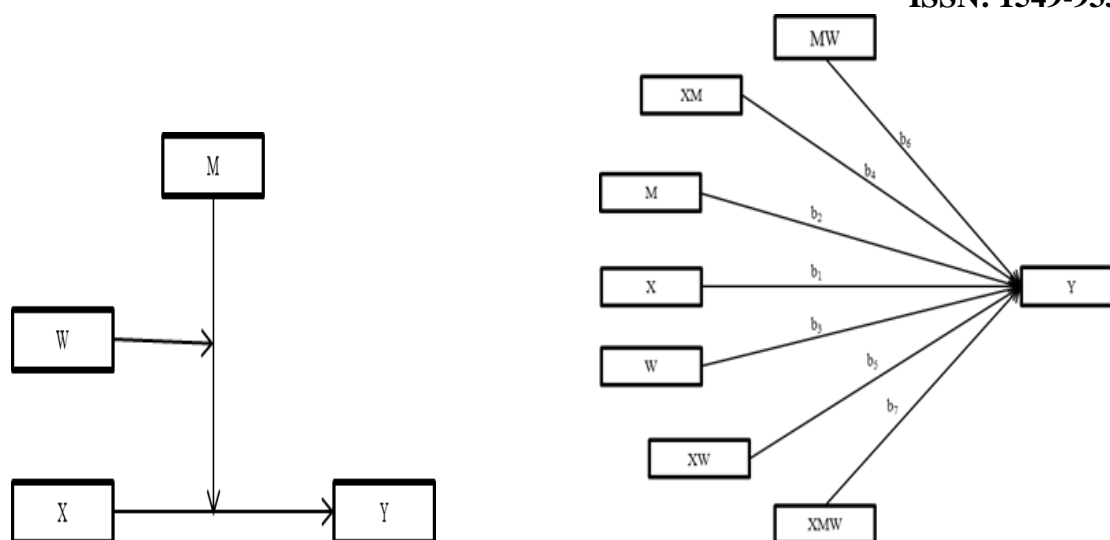
In summary, the above hypotheses can be tested by comparing the conditional effect of X on Y by M and W as moderators (in this case, Y is ATT, X is SSI, M is SC, and W is VC). This model includes age as the control variable (covariate). Of interest is the relationship between ATT and SSI with SC and VC as moderators that can be depicted as:

$$Y = i_Y + b_1X + b_2M + b_3W + b_4XM + b_5XW + b_6MW + b_7XMW + e_Y,$$

where the conditional effect of X on Y is

$$\theta_{X \rightarrow Y} = b_1 + b_4M + b_5W + b_7MW$$

Therefore, based on the above hypotheses, the proposed theoretical framework of this study is depicted in Figure 1.



Legend: M = SC; W = VC; X = SSI; Y = ATT

**Figure 1. Conceptual and Statistical Diagrams**

## Method of Data Collection and Analysis

### 1. Variable Measures and Validation

All items in the survey questionnaire were adapted from established studies (Lichtenstein et al., 1990; Wu, 2001; Wyatt *et al.*, 2008; Eastman *et al.*, 1999; Ang *et al.*, 2001). The items were measured using a six-point Likert scale (1 = “Strongly disagree”, 6 = “Strongly agree”; and 1 = “Not at all”, 6 = “Definitely will”). We used a force-point Likert scale because the surveys were conducted in conservative markets where there is a tendency for the respondents to opt for “safe” or middle ground answers (Garland, 1991). The questionnaire was translated from English into two languages, -- Arabic and Malay (Bahasa Malaysia). To ensure that the two versions of questionnaires have the same meaning in both languages we used Brislin’s (1986) back-to-back translation method. The Cronbach’s alphas are all greater than 0.70 (Bagozzi and Yi, 1988), which indicate good reliability.

#### A. Social Status Insecurity (SSI)

We employed the same measures developed by Wu (2001) and Wyatt *et al.* (2008) of social status insecurity (two items): “Others view me as second class”, and “People bias against me”. We found these scales to have good reliability of  $\alpha = .797$ .

#### B. Status consumption (SC)

We assessed SC using Eastman *et al.* (1999)’s four-item SC scales. The following example illustrate how each of the four items is worded: “I a buy product because it has status”, “Interest with new product with status”, “Willing to pay more for product with status”, and “Valuable product has snob appeal”. From the assessment, we found that the items displayed good reliability ( $\alpha = .822$ ).

#### C. Value consciousness (VC)

The VC seven-item scale was based on Lichtenstein *et al.* (1990): “Lower prices with quality”, “Compare prices of different brands for best value”, “Check prices at different stores for best value”, “Concern about low price and quality”, “Compare prices with the brand I

normally buy”, “Maximize the quality with the price”, and “Getting my money's worth”. We found this scale to have good reliability ( $\alpha = .788$ ).

**D. Attitude Toward Counterfeit Branded Luxury Products (ATT)**

We employed Ang *et al.*'s (2001) measures of attitude towards counterfeit luxury products or services. This measure contains evaluations of attitudes towards the products (“...to buy counterfeit luxury brand products”, “luxury counterfeit products benefit the society”, “without counterfeit brand products many people cannot enjoy luxury products”, “the original luxury brand product outlets are not available”, “outlets are easily accessible”, “I do not feel guilty” and “...exactly what I needed”). We found this scale to display a good reliability ( $\alpha = .796$ ).

**2. Data Collection and Analysis Methods**

We hired a professional service provider to distribute the survey questionnaire conveniently from the Kelang Valley (Kuala Lumpur and its surrounding areas) of Malaysia. We used descriptive statistics and moderated moderation three-way interactions model in SPSS with PROCESS program by Andrew Hayes (2016) ([www.afhayes.com](http://www.afhayes.com)) to test the hypotheses and SEM was used to conduct CFA, using the IBM SPSS version 20 and IBM AMOS version 22 software, respectively.

**Results**

A total of 346 completed and useable questionnaires were collected. The data consisted 67.6 percent female and 32.4 percent male respondents between the age of 25 to 34 years old (41.9 percent), followed by 36.1 percent between the age of 18 to 24 years old, and 22.0 percent who were 35 or more years old. The education levels of the respondents were almost evenly split between diploma holders (40.2 percent) and college graduates (bachelor’s degree holders, 43.1 percent), and only 16.8 percent were high school graduates. The vast majority of the respondents’ monthly income were below RM3,000 (70.5 percent), whilst 21.4 percent were between RM3,001 to 5,000, followed by 8.1 percent whose incomes were RM5,000 and above. (Note: 1USD = 3.57 Ringgit Malaysia (RM)). It can be argued that the group with incomes below RM3,000 could be biased because of its over-representation relative to other groups in the sample. However, previous studies have found that consumers’ income is not a significant factor affecting their purchases of counterfeit products, particularly if they are in lower income brackets (Ha and Tam, 2015; Norum and Cuno, 2011). For example, in the US, Norum and Cuno (2011) found that income is a significant factor that reduces the intention to purchase counterfeit products, only if it is above \$100,000 per annum. Thus, we can now conclude that there is no sampling bias occurred in this study.

The independent variables that are predicted to influence ATT are SSI, SC, and VC. In addition, respondent’s age was included as a control variable. The descriptive statistics and correlation matrix for the independent variables are shown in Table 1.

**Table 1. Descriptive Statistics Assessment of Reliability, Convergent Validity and Discriminant Validity, and Correlation Matrix for the Independent Variables**

Independent variables	CR	AVE	MSV	ASV	SSI	SC	VC	Age
Social status insecurity (SSI)	0.800	0.667	0.102	0.080	3.341 (.995)			
Status consumption (SC)	0.816	0.690	0.068	0.051	.185**	3.397 (.989)		
Value consciousness	0.835	0.718	0.090	0.065	.261**	.172**	4.831 (.646)	

(VC)				
Age	.154**	0.089	.154**	1.860 (.750)

Significant at  $p < 0.01^{**}$

SD = Standard deviation; CR = Composite reliability; AVE = Average variance extracted; ASV = Average shared variance; MSV = Maximum Shared Variance.

Note: Reliability and validity thresholds (Hair *et al.* 2010): Reliability = CR > .70; Convergent validity = AVE > .50; Discriminant validity = ASV < AVE or MSV < AVE (Hair *et al.*, 2010). Diagonal elements are means and standard deviations (in parentheses) and non-diagonal are correlation elements.

Next, we established the convergent and discriminant validities, as well as the reliability of the data by doing a confirmatory factor analysis (CFA) using IBM AMOS version 22 software, before moving on to test the hypotheses. A summary of the CFA result is shown in Table 1, which indicates a good fit for the model comprising the SSI, SC, and VC ( $\chi^2$  (16) 62.19,  $p = .001$ , GFI = 0.96, CFI = 0.95, RMSEA = 0.09). Preliminary analyses were conducted to ensure no violation of the assumptions of outliers, normality, linearity, multicollinearity, homoscedasticity, and independence of residuals. No case that violates the assumptions was found.

### 1. Moderated Moderation (Three-Way Interactions Model)

The results in Table 2 show that the model fits the data well [ $F$  (7, 346) = 10.268,  $p < 0.000$ ,  $R^2 = 0.144$ ]. Low R-squared value of 14.4 percent is expected in any field that attempts to predict human behavior, such as in this study, which typically has R-squared values lower than 50 percent (Frost, 2013).

The first three hypotheses predicted a relationship between SSI, SC and VC on ATT. The results in Table 2 indicate that the main effects — SSI [ $b = .207$ ,  $t$ -value (345) = 4.36,  $p < .000$ ], SC [ $b = .139$ ,  $t$ -value (345) = 2.59,  $p < .009$ ] and VC [ $b = .196$ ,  $t$ -value (345) = 2.70,  $p < 0.006$ ] — are statistically significant predictors of ATT. Thus H<sub>1</sub>, H<sub>2</sub>, and H<sub>3</sub> are supported. Interestingly, none of the interactions effects are significant (except for the second interaction effect, i.e., int\_2 between SSI and VC, which is significant). Thus, H<sub>4</sub>, and H<sub>5</sub>, are not supported, but H<sub>6</sub> is marginally supported [ $b = -.124$ ,  $t$ -value (345) = -1.86,  $p < .063$ ]. The following section discusses in details the conditional effect of SSI on ATT at values SC and VC.

**Table 2. Model Summary [n-346]**

Model = 3 Y = ATT; X = SSI; M = SC; W = VC							
Statistical Controls: CONTROL= Age							
Outcome: ATT							
Model Summary							
	R	R-sq	MSE	F	df1	df2	p
	.380	.144	.570	10.268	8.000	337.000	.000
Model							
	b	SE	t	p	LLCI	ULCI	
Constant	3.521	.112	31.322	.000	3.300	3.743	
SC	.139	.053	2.622	.009	.035	.243	
SSI	.207	.046	4.525	.000	.117	.297	
int_1	.067	.054	1.241	.216	-.039	.174	
VC	.196	.071	2.765	.006	.057	.336	

int_2	-.124	.067	-1.862	.063	-.255	.007
int_3	.065	.067	.964	.336	-.068	.198
int_4	-.092	.067	-1.385	.167	-.223	.039
Age	-.065	.060	-1.100	.272	-.183	.052

Product terms key:

- int\_1 (SSI x SC)
- int\_2 (SSI x VC)
- int\_3 (SC x VC)
- int\_4 (SSI x SC x VC)

R-square increase due to three-way interaction:

	R2-chng	F(1,df2)	df2	p
int_4	.005	1.918	337.000	.167

Source: The output of the analysis

As shown in Table 3, the effect of SSI on ATT is also likely to depend on the importance an individual places on SC and VC. A summary of the results in Table 3 is summarized in Table 4. The following paragraphs discuss the conditional effects of SSI on ATT at each level of importance given to SC and VC.

**2. VC<sub>low</sub>; SC<sub>low</sub>; SC<sub>average</sub>, and SC<sub>high</sub>.**

When VC and SC of an individual is low, SSI was found to have insignificant relationship with ATT [*t-value* (345) = 1.185, *p* < 0.170]. As shown in Table 4, as the SC increases and the VC remains constant, SSI was found to have a significant positive effect on ATT [*t-value* (345) = 3.920, *p* < 0.000]. Similar effect occurred, i.e., when SC increases to a high level, SSI was found to have a significant effect on ATT [*t-value* (345) = 4.762, *p* < 0.000].

**3. VC<sub>average</sub>; SC<sub>low</sub>; SC<sub>average</sub>; and SC<sub>high</sub>.**

Results in Table 4 indicate that at an average level of importance an individual places on VC and low level given to SC, SSI was found to have marginally predicted ATT [*t-value* (345) = 1.579, *p* < .072]. The influence of SSI on ATT was found to be positively significant when average [*t-value* (345) = 4.256, *p* < .000] and higher levels [*t-value* (345) = 4.586, *p* < .000] of importance were given to SC.

**Table 3. Results of Conditional Effect of X on Y at Values of M and W**

Conditional effect of X on Y at values of the moderator(s):								
VC	SC	Effect	se	t	p	LLCI	ULCI	
-.646	-.989	.162	.118	1.375	.170	-.070	.394	
-.646	.000	.287	.071	4.055	.000	.148	.427	
-.646	.989	.413	.090	4.566	.000	.235	.590	
.000	-.989	.141	.078	1.806	.072	-.013	.294	
.000	.000	.207	.046	4.525	.000	.117	.297	
.000	.989	.274	.062	4.412	.000	.152	.396	
.646	-.989	.120	.081	1.476	.141	-.040	.279	
.646	.000	.127	.054	2.372	.018	.022	.233	
.646	.989	.135	.077	1.756	.080	-.016	.285	

Model = 3,

M = SC; W = VC X = SSI; Y = ATT

Source: The output of the analysis

**Table 4. Summary of Moderated Moderation 3-Way Interactions**

VC (W)	SC (M)	Effect (slopes for SSI, <i>b</i> )	<i>t</i> -value	<i>p</i>	What happened?
Low - .646	Low - .989	.162	1.185	.170	SSI does not predict ATT
Low - .646	Ave .000	.287	3.920	.000***	SSI predicts ATT
Low - .646	High .989	.413	4.762	.000***	SSI predicts ATT
Ave .000	Low - .989	.141	1.579	.072	SSI marginally predicts ATT
Ave .000	Ave .000	.207	4.256	.000***	SSI predicts ATT
Ave .000	High .989	.274	4.586	.000***	SSI predicts ATT
High .646	Low - .989	.120	1.304	.141	SSI does not predict ATT
High .646	Ave .000	.127	2.291	.018*	SSI predicts ATT
High .646	High .989	.135	1.816	.080	SSI marginally predicts ATT

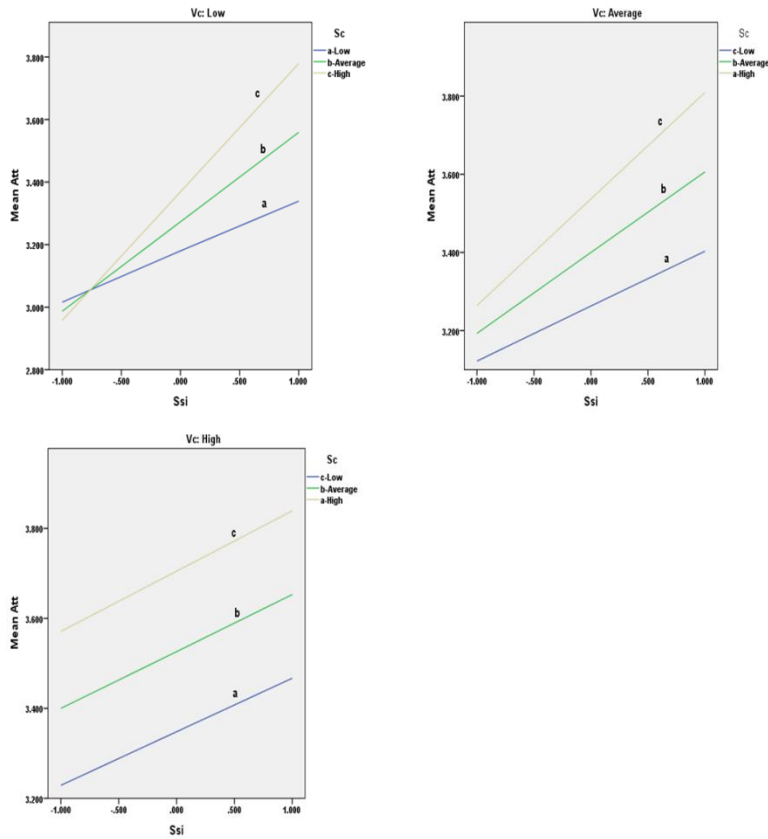
\*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$

Note: Values for quantitative moderators are the mean and plus/minus one SD from mean.

**4. VC<sub>high</sub>; SC<sub>low</sub>; SC<sub>average</sub>; and SC<sub>high</sub>.**

Results in Table 4 show that at high level of VC and low level of SC, the relationship between SSI and ATT was found to be insignificant [ $t$ -value (345) = 1.304,  $p < 0.141$ ]. As expected, as value of SC increases (i.e., average level), the relationship between SSI and ATT was found to be statistically significant [ $t$ -value (345) = 2.291,  $p < 0.018$ ]. Finally, when higher level of importance was given to SC, SSI was found to have marginally predicts an individual's ATT [ $t$ -value (345) = 1.816,  $p < 0.080$ ].

In summary, the effect of SSI on ATT was found to have similar pattern when different levels of importance an individual places on SC and VC as depicted in Figure 2. Thus, H<sub>7</sub> is not supported.



**Figure 2. Conditional Effect of SSI on Attitude Toward Counterfeit Branded Luxury Products with SC and VC as Moderators**

### Discussion and Implications

In this study, we examine the relationship between the social status insecurity of Malaysian consumers that resulted in them having a favorable attitude toward counterfeit branded luxury products. We also examine the effects of the relationships that are moderated by consumers' status consumption and value consciousness. Based on the results of our hypothesis testing, the consumers' social status insecurity, status consumption, and value conscious were found to be significant predictors of their attitudes toward counterfeit branded luxury products. However, the interaction effect between social status insecurity and value conscious was found to be marginally significant.

The results provide support for four of the seven hypotheses. First, customers' social status insecurity has a direct influence on their attitude toward counterfeit branded luxury products. Thus, if the customers were feeling insecure about their social status, one way in which they could alleviate this feeling is by buying counterfeit branded luxury products in order to show to their social group that they could afford to buy "branded luxury products". Second, if the customers were very concerned about their social status, they would have a positive attitude toward counterfeit branded luxury products, indicating that by owning such products it would increase their status in the society. Third, if the consumers were value conscious, i.e., they prefer to save money by opting for products that are lower in prices (subject to certain quality constraint) then they would have a favorable attitude toward counterfeit branded luxury products. This means that they would be willing to purchase such products. Finally, if the consumers were feeling highly insecure about their social status combined with low value

consciousness, they would have a favorable attitude toward counterfeit branded luxury products.

Interestingly, after scrutinizing further the interaction or moderation effects of consumers' social status insecurity on their attitude toward counterfeit branded luxury products at different values of status consumption and value consciousness, we found some variations in the moderation effects. Firstly, there is an interaction effect that is moderated by customers' value consciousness between customers' social status insecurity and their attitude toward purchasing the counterfeit branded luxury products. In other words, the strength of the relationship between the two depends on the strength of the customers' value consciousness. Secondly, an increase in consumers' status consumption coupled with a constant value consciousness result in the consumers having significant effects on their attitude toward counterfeit branded luxury products. Finally, a reasonable increase in the level of consumers' status consumption (but not at the high level), combined with a constant or average level of their value consciousness result in a significant influence of social status insecurity on the attitude towards counterfeit branded luxury products. Thus, our findings extend the findings by previous researchers by examining some factors that moderate the influence of consumers' social status insecurity on their attitude toward purchasing counterfeit luxury products.

Our analyses have generated several meaningful findings that present some implications for marketing managers and researchers. Our results show that Malaysian consumers would go for counterfeit luxury products when they are feeling socially insecure, when they are going for status consumption and when they have low value consciousness. Indeed, their status consumption and value consciousness play very important roles in predicting the relationship between their social status insecurity and attitude toward purchasing counterfeit branded luxury products. Thus, with this understanding, marketing managers who market authentic branded luxury products in Malaysia or in other countries with a similar environment to that of Malaysia will be able to design appropriate marketing strategies in their attempt to attract customers to purchase their products instead of the counterfeit of such products.

Finally, our study is not without any limitations. Firstly, our use of convenience sample represents a weakness of this study. Secondly, our data came only from the Klang Valley of Malaysia. Hence, future research should cover a wider spectrum of the population of the country.

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**THE EFFECT OF KNOWLEDGE ON CONSUMER RIGHTS TOWARD  
COMPLAINTS DELIVERY ON CELLULAR TELECOMMUNICATION PRODUCTS  
IN BANDAR LAMPUNG.**

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**Abstract**

Consumer knowledge of their right to deliver complaints to businesses (services) and presentation of the complaint is indeed protected by the law, in this case the law No. 8 of 1999 on Consumer Protection on article 4 point d entitles consumers to deliver complaints, if the provider do not provide services as they have of the agreement. The research methodology using SEM analysis using the sample of respondent of provider users in Bandar Lampung. The analysis shows that there are three models: first model, shows that before adding moderating variable, the result acquired does not obtained significant value. The second model shows that after moderating variable consumer knowledge were added, the results are significant. The third model, indicates that the interaction between the quality of service and customer knowledge variables to provide additional impact is not too large. This means that the interaction between Service Quality and Consumer Sciences only provide great influence on the intention to give the complaint. This tentative conclusion is obtained that the socialization of education about consumer knowledge has been done and the results show that respondents are not fully aware of their rights to make complaints.

**Keywords:** *Quality of Service, Consumer Sciences, Complaint Intention*

**Background**

Rapid telecommunication development in Indonesia has enable communication to be easier, with the capability of service from various telecommunication support, thus exploring internet with high speed has become an added value from telecommunication in Indonesia. Cellular telecommunication development has proven to gives enormous effect to every party and even leverage the economy. With the developing cellular technology and considerable amount of users, hence the telecommunication infrastructure to increase. However, the revolutionary breakthroughs' rapid growth from cellular telecommunication is not followed with the knowledge about right and responsibility of a consumer toward the telecommunication products chosen.

Dependency towards telecommunication and the convenience to acquire the product has made the product excessively consumed, even if they are aware of that matter and what they not realize is the rights which obtained by consuming the respective telecommunication products. Consumer ignorance on their rights when consuming a product may affect after the product purchase. Consumers who unaware of a product' terms and their rights will certainly unable to file a report if the product they consume is not corresponding to their expectations, focus of this research is the telecommunication products which is substantially consumed and possess considerable amount of terms and condition which is occasionally not written clearly.

**Table 1.1 Top Brand Telecommunication Product Index**

Brand	TBI	TOP
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Simpati	34.6%	TOP
XL Prepaid	14.1%	TOP
IM3	14.0%	TOP

Table 1.1 shows that in Indonesia, there is three Top Brand telecommunication products which is Simpati, XL and IM3. These three provider were compete each another with each respective superiority they possess, yet Simpati is still become the primary Top Brand which allegedly because Simpati is a provider with the latter experiences on serving the consumer in Indonesia compared to other providers.

**Table 1.2 Consumer Respond**

No	Questions	Answer		Amount
		Yes	No	
1	Are you satisfied with the service of provider you use?	12	8	20
2	Are you incline to convey a complaint?	13	7	20
3	Are you aware of your rights as a consumer?	3	17	20

Table 1.2 shows that a part of consumer feels dissatisfy to the provider they use and they are inclined to file a complaints to telecommunication producer, yet they are unaware of their rights as consumer. Consumer ignorance are caused by the lack of education from producer on a product especially communication product which typically the terms and conditions is not written in detail. Several cases experienced by consumers is the consumer are not served with the appropriate service corresponding to their rights to be appropriately served which one of them is customer service' regards, greets and smile, as well as no acquiring the clear information concerning to the product before purchasing. Majority of consumers understand the terms and conditions of a product with their own experience when consuming the product, not from producer' education.

Fair education is required to make customer acknowledge the rights they possess when consuming a product and the terms owned by the product itself. If the customer were not acquiring the adequate education, there will be considerable amount of matter like a customer who has a perception of quality of a product but when it is consumed, it not live up to their expectations, as a customer with lack of education from the producer, the consumer will always have higher perception about quality of a product. The ignorance of certain terms of a product and rights they possess, will surely limit the latitude of the consumers itself.

On the other side, with the fair education from producer, there will be mediation between producer to consumer by incoming complaints to producer, which will be responded and properly solved to preserve the rights of consumers and enables product innovation by following the consumer apparent needs.

The importance of consumer education on a product are purposed to make consumer become more critical on rights they possess, especially toward products in telecommunication sector, because of that, the research regarding to consumer protection especially telecommunication product is essential.

Consumer ignorance is caused by lack of education from the producers on a product, especially telecommunication product which the terms and conditions is not thoroughly written. On the other side, with fair education from producer, there will be mediation between producer to consumer by incoming complaints to producer, which will be responded and

properly solved to preserve the rights of consumers and enables product innovation by following the consumer apparent needs.

The importance of consumer education of a product is purposed to make consumer more critical on the rights they possess, especially on telecommunication products. Therefore, it is necessary research about the effect of knowledge upon consumer rights towards complaints delivery on cellular telecommunication products in Bandar Lampung. The methodology which will be utilized is descriptive verification. The data will come from questionnaire and literature, meanwhile the source of data are consumers of telecommunication products resided in Bandar Lampung.

On one year period, the researcher will finalize the research until research result seminar with finishing several stages of proposal organizing, data collection, data input, data calculation, calculation result analysis and research report organizing. On the second year of research, it will later be expanded as an output in the form of educating socialization for consumers, partnering with YLKI as body with is purpose to increase the critical awareness of consumers about their rights and responsibilities, enabling the consumers to secure their self and the environment.

### Consumer Protection Law

Az. Nasution explained that consumer law is the whole principle or regulation of law which manage the relation and problems between various parties each another related with goods and/or consumer service, in social life. While consumer protection law is part of the consumer that includes the principles or rules which regulates, and also contains properties that protect consumer interests.<sup>1</sup> So the consumer protection law is the law governing the protection of consumers against the transaction which conducted. Consumers themselves means that the end user of a products and services. Among consumers can not be called as a consumer, but is referred to as business operators.

Business actors are makers of finished products or parts and also produces natural products and *services provider*.<sup>2</sup> Businessman purposed on this article is businessman in service sector which is telecommunications service provider known as providers. In Indonesia a lot of telecommunications providers service, (after the era of the free market), but this article only specified on 3 major providers in Indonesia, namely, Telkomsel, Telecomindo and Indosat.

General provisions on consumer protection in the field of Indonesian law regulated in Law No. 8 of 1998 on Consumer Protection (hereinafter referred to as the Act PK). Article 4 BFL listed consumer rights, namely:

- a. The right to comfort, security, and safety in the consumption of goods and / or services;
- b. The right to choose and obtain goods and / or services in accordance with the exchange rate and conditions and guarantees promised;
- c. The right to correct, clear and honest information about the condition and guarantee of the goods and / or services;
- d. The right to be heard about opinions and complaints on goods and / or services used;
- e. Entitlement to advocacy, protection and mediation in appropriate consumer protection;
- f. The right to receive guidance and consumer education;

<sup>1</sup> Ahmadi Miru and Sutarman, 2011, *Hukum Perlindungan Konsumen*, Jakarta: RajaGrafindo Persada, page.

<sup>2</sup> Husni Syawali and Neni Sri Imaniyanti, Ed, *Hukum Perlindungan Konsumen*, Mandar Maju, Bandung, 2000, page. 45 italic is additional from the writer.

- g. The right to be treated or serviced properly and honestly and not discriminatory;
- h. The right to obtain compensation, compensation and / or reimbursement, if the goods and / or services received are not in accordance with the agreement or not as it should be;

While businesses have rights and obligations set out in Article 6 and 7 of BFL. Article 6 BFL declare their 5 rights for businessmen namely:

- a. The right to receive payment in accordance with an agreement on condition and exchange of goods and / or services traded;
- b. The right to legal protection of consumer action with bad intention;
- c. The right to proper self-defense in the judicial settlement of consumer disputes;
- d. The right for rehabilitation of goodwill if it is proved that the consumer loss is not caused by the goods and / or services traded;
- e. The rights stipulated in other laws and regulations.

In addition to article 6, paragraph 7 of BFL listed on the obligations of businessmen, namely:

- a. Acting in good intention in conducting its business activities;
- b. Providing accurate, clear and honest information about the condition and guarantee of the goods and / or services and explain the usage, repair and maintenance;
- c. Treat or serve customers properly and honestly and not discriminatory;
- d. Guaranteeing the quality of goods and / or services produced and / or traded under the provisions of the quality standards of goods and / or services are applicable;
- e. Giving consumers a chance to test and / or try the goods and / or services as well as the guarantee and / or warranty on goods manufactured and / or traded; f. Compensation, indemnity, and / or replacement if the goods and / or services received or used by consumer if it is not in accordance with the agreement.

Article 4 point d of this law clearly entitles the consumer to present the complaints of discontent on the services provided by the provider. and businesses are obliged to listen and provide solutions to any inconvenience felt by consumers, it is as confirmed in Article 7 point d stating that businesses have an obligation to guarantee the quality of goods or services which are traded based on the provisions of the quality standards of goods and services applied. Of a product (service) in which consumers feel aggrieved, article 7 point f gives the order for the business to provide compensation, indemnity and or replacement if the goods or services received or used by consumer is not in accordance with the agreement.

### **Research Methodology**

The population of this research is all the providers in Bandar Lampung, the sample used is active users of Telkomsel, XL and Indosat providers. Provider respondents which used were 151 people which is a combination of the Telkomsel, XL and Indosat provider. Data analysis using Structural Equation Model with SPSS statistical tool. The initial step will be seen first whether there is a relationship between the Quality of Service and Complaints intentions variables from users of the provider, after which it will be add a moderating variable namely Consumer Knowledge about their rights, which will eventually seen that the interactions between the Quality of Service and Intention to give complaint.

### **Research Result and Managerial Implications**

In the analysis of respondent data it can be inferred that of 151 active provider users, active users of the three providers were dominated by women between the ages of 18-23. The active user is also dominated by the students where the Education Socialization of Consumer Rights were held for three sessions during this research period. The frequency distribution of respondents from the user side is dominated by the Telkomsel provider, in which the Telkomsel provider is the earliest to be known by Lampung people, followed by XL and Indosat.

## 1. Respondent Distribution Frequency Based on Telkomsel Operator User

### A. Consumer Knowledge

#### Knowing the Provider Service Outlet Location

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Very Not Knowing	1	1,1	1,1	1,1
Not Knowing	4	4,5	4,5	5,6
Enough Knowing	22	24,7	24,7	30,3
Knowing	40	44,9	44,9	75,3
Very Knowing	22	24,7	24,7	100,0
Total	89	100,0	100,0	

Frequency distribution of Telkomsel provider users shows that almost all respondents knew the location of the service provider' outlets, but there are 20% of respondents who feel that the information on the location of the outlets is still not well established. This is presumably due to a lack of knowledge of the provider about the service provider location outlets.

In the table of frequency distribution knowing service provider' phone number showed a fairly good value that is known by the Telkomsel provider users. This shows that the majority of consumers allegedly to ever have phone call on this service provider.

#### Knowing Consumer Rights

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Not Knowing	7	7,9	7,9	7,9
Enough Knowing	31	34,8	34,8	42,7
Knowing	35	39,3	39,3	82,0
Very Knowing	16	18,0	18,0	100,0
Total	89	100,0	100,0	

On the frequency distribution table shows that the Telkomsel provider users already know their rights as consumers. This is presumably because it was their awareness of their Knowledge because of Education Socialization to the Telkomsel provider users about their rights in submitting the complaint if there are deficient in service felt from provider.



**Knowing Responsibilities as Consumer**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Knowing	6	6,7	6,7	6,7
	Enough Knowing	36	40,4	40,4	47,2
	Knowing	36	40,4	40,4	87,6
	Very Knowing	11	12,4	12,4	100,0
	Total	89	100,0	100,0	

On this distribution table shows that Telkomsel provider user already acknowledge their responsibility as consumer. This is presumably because the existing awareness about responsibility from Education Socialization to Telkomsel provider users about their responsibility in giving complaints if there is deficient in service felt from provider.

**Knowing the Content of Consumer Protection Act**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Not Knowing	26	29,2	29,2	29,2
	Not Knowing	19	21,3	21,3	50,6
	Enough Knowing	20	22,5	22,5	73,0
	Knowing	19	21,3	21,3	94,4
	Very Knowing	5	5,6	5,6	100,0
	Total	89	100,0	100,0	

On this distribution table shows that Telkomsel provider users already know the content of Consumer Protection Act. This is presumably because it was their knowledge of the contents of the Consumer Protection Act. This is presumably because the knowledge is acquired from Education Socialization to provider users in delivering complaints if there is deficient in service felt from provider.

**2. Service**

**Available Facilities**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Netral	12	13,5	13,5	13,5
	Setuju	58	65,2	65,2	78,7
	Sangat Setuju	19	21,3	21,3	100,0
	Total	89	100,0	100,0	

At this frequency distribution table shows that the provider Telkomsel users feel that the facility is available from the provider Telkomsel has been well perceived. This is presumably because consumers have felt the service was good in terms of facilities consisting of comfortable lounge chairs available, toilets were clean, room VIP services and their queue numbers corresponding to the service to its customers.

**Cleanliness in Service Outlets**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	14	15,7	15,7	15,7
	Agree	55	61,8	61,8	77,5
	Very Agree	20	22,5	22,5	100,0
Total		89	100,0	100,0	

At this frequency distribution table shows that the Telkomsel provider users felt that the cleanliness of Grapari is already well. This is presumably because the consumer has to see that the waiting room at the service Customer Service is good and in a state that is clean and well maintained so that consumers feel comfortable in delivering complaints.

**Employees in Service Outlets were Properly Dressed**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	8	9,0	9,0	9,0
	Agree	61	68,5	68,5	77,5
	Very Agree	20	22,5	22,5	100,0
Total		89	100,0	100,0	

At this frequency distribution table shows that the Telkomsel provider users feel that the existing Grapari employees perceived is well dressed. This is presumably because consumers have noticed that the appearance of employees in Customer Service has been perceived both in appearance as well as friendly and courteous in serving consumers, so that consumers feel comfortable in delivering complaints.

**Employees in Service Outlets**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	10	11,2	11,2	11,2
	Agree	57	64,0	64,0	75,3
	Very Agree	22	24,7	24,7	100,0
Total		89	100,0	100,0	

At this frequency distribution table shows that the Telkomsel provider users feel that employees in Grapari are felt to be reliable in serving consumers. This is presumably because the consumer has the feeling that the employees in the Customer Service is very eager to serve the consumer, so that consumers feel comfortable in delivering complaints.

**Service Outlets Conserve the Queuing Culture for Consumer**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	7	7,9	7,9	7,9
	Agree	56	62,9	62,9	70,8
	Very Agree	26	29,2	29,2	100,0
Total		89	100,0	100,0	

At this frequency distribution table shows that the Telkomsel provider users feel that the existing queuing culture in Grapari has been very good. This is presumably because Telkomsel has a queue system in the form of numbers through a machine that is used in accordance with

the needs of consumers, so that consumers feel comfortable in delivering complaints. In addition, the Quick Service for consumers who just ask a few questions that are biased directly solved by special officers without going through Customer Service.

**Employees in Service Outlets were Punctual in Serving Consumer**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	2	2,2	2,2	2,2
	Neutral	10	11,2	11,2	13,5
	Agree	61	68,5	68,5	82,0
	Very Agree	16	18,0	18,0	100,0
	Total	89	100,0	100,0	

On this frequency distribution table shows that the Telkomsel provider users feel that the employees in service outlets are punctual in serving consumers. This is presumably because consumers have felt that the queue number services takes only about 10-15 per consumer, so that consumers feel the waiting time is not too long to deliver complaint.

**Employees in Service Outlets were Friendly in Serving Consumers**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	9	10,1	10,1	10,1
	Agree	65	73,0	73,0	83,1
	Very Agree	15	16,9	16,9	100,0
	Total	89	100,0	100,0	

On this frequency distribution table shows that the Telkomsel provider users feel that the employees at the service outlets is friendly in serving consumers. This is presumably because consumers have felt that the employees are very friendly and responded with alacrity to consumer complaints, so that consumers feel comfortable in delivering complaints.

**Employees in Service Outlets Willing to Accept Suggestions from Consumers**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	2	2,2	2,2	2,2
	Neutral	9	10,1	10,1	12,4
	Agree	65	73,0	73,0	85,4
	Very Agree	13	14,6	14,6	100,0
	Total	89	100,0	100,0	

On this frequency distribution table shows that the Telkomsel provider users feel that the employees at the service outlets were friendly in serving consumers. This is presumably because consumers have felt that the employees are very friendly and responded with alacrity to consumer complaints, so that consumers feel comfortable in delivering complaints.

**Services Provided were Proper to the Promises**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Disagree	1	1,1	1,1	1,1
	Disagree	1	1,1	1,1	2,2
	Neutral	9	10,1	10,1	12,4
	Agree	68	76,4	76,4	88,8
	Very Agree	10	11,2	11,2	100,0
	Total	89	100,0	100,0	

At this frequency distribution table shows that the Telkomsel provider users feel that the services provided are proper to the promises. This is presumably because consumers have felt that the service is very suitable to face a consumer complaint, so that consumers feel comfortable in delivering complaints.

**Employees in Service Outlets were Trying to Understand Consumer Needs**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	1,1	1,1	1,1
	Neutral	9	10,1	10,1	11,2
	Agree	65	73,0	73,0	84,3
	Very Agree	14	15,7	15,7	100,0
	Total	89	100,0	100,0	

On this frequency distribution table shows that the Telkomsel provider users feel that the employees at the service outlets are trying to understand the needs of consumers. This is presumably because consumers have felt that the employees are very friendly and responded with alacrity to the needs of consumers, so that consumers feel comfortable in delivering complaints. The perceived needs of consumers, among others, the ignorance of consumers on the product, bad signal or a SIM card that cannot be used. The perceived consumer complaints can be well resolved by Telkomsel.

**3. Complaint Intention**

**Will Complain if there are Services which are not Compatible**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	1,1	1,1	1,1
	Neutral	7	7,9	7,9	9,0
	Agree	31	34,8	34,8	43,8
	Very Agree	50	56,2	56,2	100,0
	Total	89	100,0	100,0	

On this frequency distribution table shows that consumers are not reluctant to make complaints when there are services which are not deemed compatible. It is suspected that the socialization of education play a good role in providing knowledge to consumers in the intention to make complaints.

**Will Try to Get Compensation Incompatible Service**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	3	3,4	3,4	3,4
	Neutral	16	18,0	18,0	21,3
	Agree	33	37,1	37,1	58,4
	Very Agree	37	41,6	41,6	100,0
	Total	89	100,0	100,0	

At this frequency distribution table shows that consumers will try to get compensation if there are services that are incompatible. It is suspected that the socialization of education play a good role in providing knowledge to consumers in the intention to make complaints. Compensation can be souvenirs, prize draw or toll-free from Telkomsel.

**Will Forget Unpleasant Experiences**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Disagree	54	60,7	60,7	60,7
	Disagree	12	13,5	13,5	74,2
	Neutral	12	13,5	13,5	87,6
	Agree	10	11,2	11,2	98,9
	Very Agree	1	1,1	1,1	100,0
	Total	89	100,0	100,0	

At this frequency distribution table shows that consumers are not going to forget the unpleasant experience if it is felt that there are services that are incompatible. It is suspected that the socialization of education play a good role in providing knowledge to consumers in the intention to make complaints. A less pleasant experience here can be in the form of no solution in delivering the complaint or the waiting time which is too long.

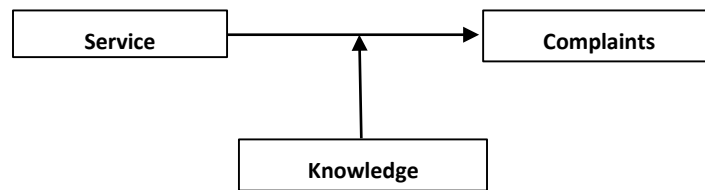
**Data Analysis**

**Model Summary**

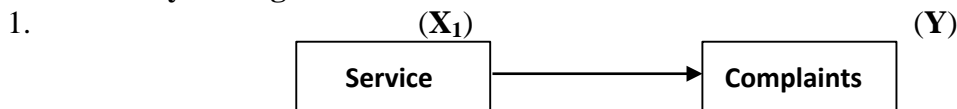
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				Sig. F Change
					R Square Change	F Change	df1	df2	
1	.130 <sup>a</sup>	.017	.010	.45711	.017	2.557	1	149	.112
2	.256 <sup>b</sup>	.066	.053	.44713	.049	7.724	1	148	.006
3	.293 <sup>c</sup>	.086	.067	.44378	.020	3.241	1	147	.074

- a. Predictors: (Constant), Pelayanan
- b. Predictors: (Constant), Pelayanan, Pengetahuan Konsumen
- c. Predictors: (Constant), Pelayanan, Pengetahuan Konsumen, Interaksi

The analysis shows that there are three models in the test phase of dependent and independent variable as well as moderation variable in this study which shown through the following framework:



**Model Analysis Stage:**



$$Y = a + b_1 x_1 + et$$

$$Y = 2.808 - 0,152 x_1 + et$$

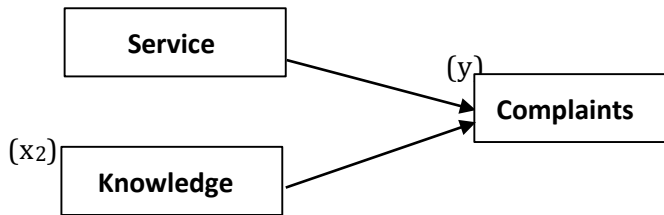
(p = 0,112)

Adj - R<sub>2</sub> = 0,10 (10 %)

P = 0,112

In this model the stages of statistical analysis showed that the Quality of Service of the three provider has not provide a significant influence on the intention to give the complaint. Quality of Service consists of several dimensions: TERRA and complaints intentions when there are services that are incompatible, the intention would be to try to get compensation from the service that is incompatible as well as consumers will forget the unpleasant experience from the service provider.

2. (x<sub>1</sub>)



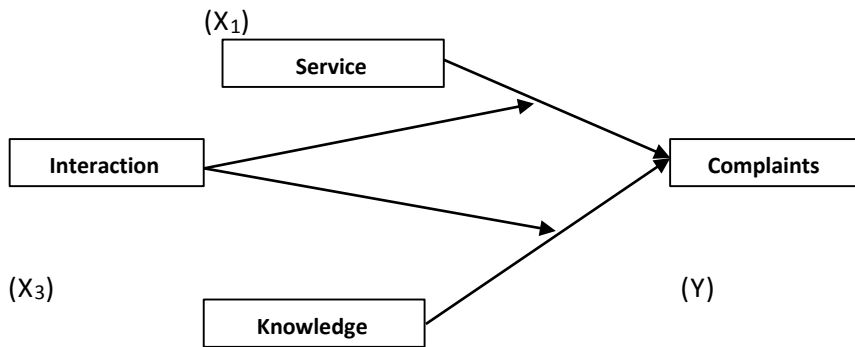
$$Y = a + b_1 x_1 + b_2 x_2 + et$$

$$Y = 3,211 + 0,201 x_1 - 0,173 x_2 + et$$

(0,35)      (0,006)

Adj - R<sup>2</sup> = 0,53 (5%) , P = 0,006

At the stage of this model, statistical analysis showed a significant result. The existing consumer knowledge moderation variable provide very good additional influence on the intention to give complaint on the provider users, especially users of Telkomsel provider. Adding an additional moderation variable increase complaint intention as much as 53% for the provider. Consumer knowledge on whether consumers knows the location of the outlets, determine the number of service providers, aware of consumer rights, aware of consumer rights to know the contents of the Consumer Protection Act.



$$Y = a + b_1 x_1 + b_2 x_2 + b_3 x_3 + et$$

$$Y = -570 + 1,142 x_1 + 0,985 x_2 + et$$

(10,031)    (6129)    (0,074)

Adj - R<sup>2</sup> = 0,67 (67%)  
 (P = 0,074)

At the stage of this model, statistical analysis showed significant gains, but only provide additional influence which is not too large. The result of the interaction between consumer knowledge and quality of service only provides an additional effect of 67% from the previous which was 53%. Anticipated additional effect that are not too big were caused by consumer provider that has not been previously informed about his rights provisions in delivering the complaint.

### Conclusion and Recommendation

Conclusions obtained in this study is that the quality of service have a significant influence on the intention to make complaints through consumer knowledge as a moderating variable.

Additional influence felt is not too large allegedly due to lack of consumer knowledge about the rights of consumers and their respective ideologies of Consumer Law Protection. Socialization has been done to provide additional knowledge for users of providers and recommendation for further research is to add more study variables, the factors that influence consumers to make complaints and the existing intervening variable namely respondent characteristics i.e gender, income and level of education were allegedly will influence consumers to make complaints intentions.

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## THE IMPACT OF POLITICAL CONFLICT 2013/ 2016 ON TOURISM BUSINESSES' MARKETING PERFORMANCES: THE CASE OF LIBYAN SMES

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### Abstract

The current study seeks to attain the following objectives: (1) to develop a comprehensive construct to measure marketing performance of Libyan Tourism Businesses; (2) to investigate Libyan managers' attitudes towards their businesses' Marketing Performances; (3) to identify the effect of Libyan political crisis 2013/ 2016 on Libyan Tourism Businesses' marketing performances; and (4) to introduce some key recommendations and implications for theory and practice.

In terms of research methodology, a comprehensive construct was developed based on literature review to collect the required data. A number of (15) components and (82) items were generated to capture the marketing performance domain. This construct was reviewed and assessed by a pool of (8) academicians at Management Schools of Libyan universities. Top management nominees in Libyan tourism businesses in Benghazi City were targeted in two different occasions: the pilot-study and actual field work. A number of (65) tourism agencies, (7) hotels, (3) airlines representatives has been targeted in this research. Out of (400) questionnaires circulated, only (113) questionnaires were returned with (98) deemed valid for data analysis.

The key finding of the study is that there is noticeable decline in marketing performance of Libyan tourism businesses. The Libyan Political Crisis (2013 – 2016) has negative effect on businesses' marketing performances as well. Furthermore, demographical and institutional factors demonstrated to have no significant impact on the research results.

The key value of this research is that it is conducted under crisis circumstances, and it might be the first work to concentrate on measuring marketing performance of Libyan tourism businesses. Additionally, the focus was placed in particular on the crisis's effect. Therefore, this article enriches international marketing literature with findings from the Arabic and North African region. Practically, the paper demonstrates the consequences of (exceptional events) political crises on tourism industry's performances. Therefore, foreign businesses, Libyan decision makers and tourism businesses' managers should take advantages from the results of this research. Finally, the paper concludes with limitations and future research.

**Keywords:** *Marketing Performance, SMEs, Libyan Political Conflict*

### Introduction

The Libyan Political Crisis 2013/ 2016 refer to the dispute that has erupted among the three Libyan political bodies: the elected authorized Parliament named Libyan House of Representatives, the old one called Libyan General National Congress and the newly formed body named the Presidential Council.

This conflict has developed to a grinding war reflected negatively on the State of Libya. These transformations in Libya from the Libyan Transition Council to General National Congress to Libyan House of Representatives to the recently established body Presidential Council (2016) have occurred as a result to the failure in building the Libyan State.

The failure of General National Congress in establishing and stabilizing the Libyan state has caused several negative aspects such as lack of security, spread of chaos, emergence of organised crimes, assassinations, close of public and private educational institutions, destructions of airports, delay of airlines services and affects all economic activities in general. In this study, the focus was placed on the impact of this crisis on the marketing

performances of Libyan Tourism businesses.

Reviewing the extant literature has proved that Tourism marketing is an important component of income for several economies. Similar to other important sectors, this sector can be affected by instability and bad political environment at crisis's times. Generally speaking, the tourism marketing is considered as the most important sector that contributes in developing the economies of several countries in the world. This industry is ranked fifth of the exports of more than 80% of the countries in the world, where those countries are visited by millions of tourists every year.

According to United Nations World Tourism Organization (UNWTO) Report (2012), London was visited by 17 million tourists; Paris was visited by 16 million tourists, and New York was visited by 15 million tourists. In addition, the spending on tourism marketing costs huge amount of money and generates millions and billions of revenues.

Tourism marketing is also a source of competitive advantages to numerous countries. It is an important source of national income, a source of foreign currency, employment of citizens, and reduction of inflation rate. The tourism industry generates more than 250 billion U.S. dollars for countries in which there are potential tourism activities. In the United States alone, tourism marketing creates more than five million jobs, and slightly more in Europe. The situation in Africa is different. This continent was described as one of the fastest regional tourism in the developing world (Chaudhary, 2010). For instance, since the beginning of the first eight months of the year (2012) the rate of tourists in Africa was 6% higher than the global average 4%, which made the UNWTO increase its expectations to double the number of international tourists in Africa by 2030 to reach 134 million instead of 50 million currently. This, in turn, reflects the importance of national and international scientific research in tourism marketing field.

### **Research Problem**

As explained above, the importance of the tourism marketing as a major component of economy is critical to both developed and developing countries, especially those that have the potential of tourism pillars such as seas, beaches, rivers, mountains, deserts, entertainment, national attractions, and services in general.

In the Arab world and the African continent especially the Middle East and North Africa, it can be noted the importance of tourism marketing in Turkey, Jordan, Egypt, Tunisia, Morocco, Lebanon, and Syria, which relies heavily on tourism field as a major supplier of income. It also creates approximately millions of jobs for citizens. These countries have been affected by what is called the Arab Spring revolutions that swept through these countries recently as mentioned in the Global Competitiveness Report (Schwab, 2013).

By looking at Libya as one of the Arabic and African countries, it is observable that Libya possesses an enormous tourism wealth stretches along the country, but the governmental interest in the tourism marketing sector as one of governmental institutions is very weak as evaluated by global indicators.

Libya was ranked 104 out of 130 countries in the world, according to the World Economic Forum Ranking in 2008, and ranked 112 out of 133 countries in 2009/2010. Libya was out of rank in the years 2010 up to 2013 due to Libyan 17th of February Revolution and no data was available.

The country ranked 108 out of 148 countries in the year 2013/ 2014 and ranked 126 out of 144 countries surveyed in the year 2014/ 2015 according to the Global Competitiveness Report (Schwab, 2015).

This backwardness is due to several reasons: the sharp decline in the number of tourists, the lack of airlines services, the shortage of excellent hotels, the decrease in services' quality of local hotels, the absence of strategies for the tourism programs and recreational services, the

abuse and mistreatment of guests, the lack of reliable public transport services (Trains; Taxis; Buses), the poor communication system (Internet Services; Landlines; Mobile Phones), the absence of reliable financial services (Money Transfer; Money Exchange; Cash Machine; Visa Card Services), barriers of language etc. (Elkrghli & Elgimati, 2013).

The aforementioned motivations were a stimulating power to conduct the current paper to measure the extent to which the Libyan Political Crisis 2013/ 2016 has an effect on the marketing performance of Libyan tourism businesses.

### **Research Objectives**

The current paper aims to achieve these key objectives:

- To design a comprehensive marketing performance construct captures broader range of marketing domain.
- To determine the extent to which the Libyan Political Crisis 2013 / 2016 has an effect on the Libyan Tourism Sector from participants' perspectives;
- To determine to what extent demographical factors affect the research results;
- To determine to what extent institutional factors affect the research results;
- To put forward some theoretical and empirical implications contribute to the marketing literature and practices during crises' times from non-western countries' perspectives.

### **Literature Review**

In his speech to the world in the World Tourism Day (17 / September / 2016: Tourism For All – Promoting Universal Accessibility), the United Nations Secretary- Ban Ki-moon stated that "Tourism has become a powerful economic sector, a passport to prosperity and peace, and a transformative force improving millions of lives as almost 1.2 billion people travelling abroad each year over the world". This statement highlights the influential role of tourism on countries' economies.

The literature on political crisis effect on tourism sector has gone through significant developments in recent years. Several hospitality businesses, travel agencies and airlines companies in the world faced critical circumstances in which they experienced different crises. For instance, natural disaster of the Deadly Indian Ocean Tsunami in 2004 is a clear example of natural catastrophe. The attack of 11 September 2011 in the USA and the 2008 global economic crisis are also examples of such crises (Laws, Prideaux, and Chon, 2007, Kritayanavaj, 2009). These crises have a very significant negative effect on the marketing performance of tourism businesses.

In his study in Fiji Island, Singh (2009) found severe impact of political environment on tourism marketing efficiency in the country. The study revealed proliferation of malicious groups and political unrest. This has an impact on the image of the country, which consequently discouraged tourists to plan their visits. This also has an effect on the international relations with other countries who have been immensely contributing to the revenue from tourism industry. Ultimately, this has negatively affected the marketing efficiency.

In their studies in Thailand, Silk 2008; Chachavalpongpun, 2009; Shen, 2009 and Smeral, 2010 revealed that the political conflicts and turmoil have a severe effect on tourism industry. In other studies, Hani (2006) and Basu, et al., (2012) outlined that the ongoing political instability in the Middle East has affected the International Tourism to Jordan, Lebanon and Egypt.

In Turkey, Tekin (2015) examined the impacts of political and economic uncertainties on tourism market. Based on tourist arrivals and statistics on tourist flows, the study revealed that the tourism market in Turkey is indirectly affected by the political instability and following economic crisis in Russia. Furthermore, the domestic and regional political instabilities surrounding Turkey have negatively affected the tourists' flows.

Recently, several countries in the Middle East and North Africa such as Palestine, Syria, Lebanon, Turkey, Iraq, Egypt, Yemen, Saudi Arabia and Libya have been experienced critical crises caused sharp decline in international tourist arrivals. This, in turn, has affected the tourism marketing returns.

The previous reviewed studies have conclusively showed the impact of political crises on tourism sector performance in various countries of the world, including developing countries in Asia and Africa.

The marketing performance of tourism sector is considered one of the most important aspects that have been dramatically affected by the political and economic crises in the world.

Performance, as generally defined, is the end result of an activity (Wheelen and Hunger, 2002), and the initial interest in marketing performance was prominent in the 1960s (e.g. Sevin 1965; Feder 1965).

Reviewing the extant literature in this field demonstrated that marketing performance and its measurement is a problematic and complex issue.

Business performance monitoring provides managers with enormous ways for planning, controlling, and improving their businesses' performances. This issue is always fraught with difficulties and no agreement has been reached yet on how to perfectly measure performance using unified methods that can be used at all times (e.g. Dess and Robinson, 1984; Rhyne, 1986; Chakravarthy, 1986). In their extensive survey, (Jimenez-Zarco, et al., 2006) reviewed the performance measurement literature. They concluded that the emphasis was exclusively placed on the achievement of limited number of key financial measures, based on the information provided by the financial or accounting offices (e.g. Crosby and Johnson 2001; Neely et al. 2000). This has been one of the main reasons why several studies have highlighted increasing dissatisfaction with traditional methods of performance measurement (e.g. Brignall and Ballantine 1996; Ghalayini and Noble 1996). A great deal of the criticism comes from the following critical points: (1). they have short term orientation (Dekimpe and Hanssens 1999). (2). they have limited diagnostic power (Day and Wensley, 1988). (3). there is no agreement on measures that need to be used (Clark, 1999). (4). there are difficulties in making comparisons between companies (Clark, 1999). (5). they fail to measure and monitor multiple dimensions of companies' performance (Eccles, 1991).

In addition, the use of financial measurements only reflects the traditional emphasis on the accounting and financial aspects of companies' work. A wide variety of studies has also recognised the significance of non-financial measures such as customer satisfaction (Szymanski and Henard 2001), customer loyalty (Gurviez 1997), brand equity (Keller, 1998) and human capital (Srivastava et al. 1998) as indicators of the degree of success. Therefore, interest in the analysis of intangible assets has increased considerably. This, in turn, opens the door for several new dimensions that have not yet been considered.

Furthermore, the financial measures disregard other internal and external dimensions that are essential for adapting the company to the new competitive environment. Moreover, performance is highly influenced by other environmental elements, such as market, technology, competition, customers, economic conditions, organizational learning ability...etc. Hence, throughout the 1980s and 1990s, different approaches emerged that recommended the use of marketing measurements such as market share or customer orientation as indicators of business profit or market success (e.g. Rust et al. 2000; 2003).

Additionally, the complexity of business environment in which firms operate, causes a great

challenge. Hence, developing integrated systems that contain financial and non-financial measures are recommended (e.g. Waggoner et al. 1999; Yenyurt 2003). For this reason, throughout the past three decades different methods have been established such as Strategic Measurement Analysis (SMA), Performance Measurement Questionnaire (PMQ), developed by Dixon, Nanni and Vollmann in (1990), Balanced Scorecard (BSC) proposed by Kaplan and Norton in the early (1990s).

The later has been viewed as a pioneering approach; this approach has served as a basis for the development of subsequent approaches such as those of Ittner et al. (2000), Edvinsson (2002), and Lev (2002). This method identifies the weaknesses and vagueness of previous measurement approaches, and offers a clear description of what companies should measure in order to balance the financial view. This method enables organizations to clarify their vision and strategy, and translate them into action.

In earlier time (1987), Walker and Ruekert perceived that marketing literature focused on three dimensions: efficiency (sales growth, market share, effectiveness (low cost), best performance (profit, return on investment), and adaptability. In addition, Clark (1999) stated that several large businesses depend on (50 – 60) items to measure their performances. This is in line with Ambler and Roberts, (2005) argument that marketing performance is essentially a multi-dimensional construct.

After a decade, Amber and Kokkinaki (1997) reviewed (150) article of performance measurement during (1991 – 1995), and they found three common metrics out of nineteen. Financial and non-financial measures were used in the literature surveyed. In another research, Ambler et al., (2001) developed a generalized framework of marketing measurement consists of six categories: financial, competitive, consumer behavior, consumer intermediate, direct trade customer and innovativeness. However metrics usage is substantially moderated by size and sector, which also moderates the association between orientation and performance. Furthermore, Ambler, et al., (2004) identified 19 metrics that could be regarded as primary, and might serve as a short-list for initial selection. However, the sector was also proved to importantly moderate that selection.

In an earlier study, Clark (1999) indicated that marketing managers are dissatisfied with traditional marketing measures. This is due to the difficulty in making accurate assessment. Hence, they asked for non-financial measures to be used. This is also the recommendation of Ittner and Larker (2003), and Rajagobal (2008) who specified that businesses should not restrict the measurement process to financial measures only. Pond and Show (2003) reviewed (46) articles on marketing performance measurement. They found that (63%) of published papers deployed subjective assessment approach, (36%) used a combination of subjective and objective assessment methods, while the remaining (1%) studies utilized the objective assessment.

In a recent study, Osullivan, et al., (2009) suggested using the subjective assessment on condition making accurate comparisons with the closest competitor in the market. In another study in Libya, Elkrggli (2010) used objective and subjective performance assessment, and he detected strong positive correlation between them. Hence, using one of which would be sufficient to give an indication about businesses performances evaluation. These conclusions have been reached in previous research as well (Maines et al., 2002).

In summary, the literature reviewed above confirms that critical events and political crises have severe influence on marketing performance of tourism sector businesses. In addition, several approached can be used to evaluate marketing performance. Subjective and objective can be successfully used as strong positive correlation was found between them. That means using one of which would be sufficient to assess marketing performance. Other institutional and environmental factors were noticed to have an influential impact on marketing performance as well.

### **Research Hypotheses**

For the purpose of achieving the goals of the study, it was necessary to refer to the relevant literature and put forward the following hypotheses:

- There is no relationship between the Libyan Political Crisis 2013 / 2016 and the marketing performance of tourism businesses in Libya;
- There is no difference among participants' views regarding marketing performance of tourism businesses according to demographical factors;
- There is no difference among participants' views regarding marketing performance of tourism businesses according to institutional factors;
- There is no difference among participants' views regarding the Libyan Political Crisis's effect on marketing performance according to demographical factors;
- There is no difference among participants' views regarding the Libyan Political Crisis's effect on marketing performance according to institutional factors.

### **Research Methodology**

To achieve the research objectives, a structured procedure was adopted as follows:

#### **1. Research Variables**

Marketing performance and Libyan Political Crisis are the main variables of the study. The effect of some demographical factors (qualification; experience and organisational position) has been tested. Business size (Institutional factor) effect on research results has been examined as well in the study.

#### **2. Measurement & Scaling**

As discussed in the literature review, measuring business performance in general and marketing performance in particular is always fraught with difficulties and no agreement has been reached yet among scholars on certain construct that should be used for all businesses (e.g. Dess and Robinson, 1984; Rhyne, 1986; Day and Wensley, 1988; Eccles 1991; Brignall and Ballantine 1996; Gurviez 1997; Srivastava et al. 1998; Dekimpe and Hanssens 1999; Clark, 1999; Neely et al. 2000; Crosby and Johnson 2001; Yenyiyurt 2003).

Due to the issue of confidentiality of financial data, and after extensive revision to marketing literature, a comprehensive construct was developed to measure marketing performance. This newly developed construct consists of 82 items distributed into 15 sub-components covers wide range of marketing performance aspects. These (82) items were tested in the pilot-study and purified in the actual field work and reduced to (70) items with strong internal consistency.

Additionally, the Libyan Political Crisis construct has been developed as well. The construct consists of 7 items reflects the effect of Libyan Political Crisis on Tourism Businesses' marketing performances. The full instrument was reviewed by (8) management academicians. This step was taken as an essential phase to ensure greater validity degree and reliability (Churchill, 1979).

Validity means the degree to which a measurement tool can measure what it is supposed to measure (e.g. Anastasi and Urbina, 1997; Hair, Babin, Money and Samouel, 2003; Oluwatayo, 2012.). The reliability refers to the internal consistency of questionnaire items and its ability to represent the concept to be measured and the possibility of replication (e.g. Jack and Clarke, 1998; Cavana et al., 2011). Five-point Likert Scale has been adopted. This choice was made due to its common use in marketing research (e.g. Anderson, 2002; Hair et al, 2003; Malhotra and Peterson 2006; Dawes, 2008), and for its appropriateness to the Libyan culture. Table (1) presents the reliability analysis process.

**Table 1. Reliability Analysis**

Frequency	Marketing Performance Component	No. of Items	Cronbach's Alpha	Items Removed
1	Marketing Expenditure	4	0.89	-
2	Marketing Planning	6	0.84	1
3	Marketing Organisation	5	0.87	-
4	Marketing Staff	6	0.83	1
5	Marketing Mix	8	0.78	4
6	Marketing Environment Response	6	0.90	1
7	Customer Management	5	0.76	2
8	Marketing Information System	3	0.67	-
9	Marketing Technology	3	0.62	-
10	Market Segmentation	4	0.81	-
11	Purchasing & Storage Management	3	0.71	-
12	Marketing Contribution in Production Development	4	0.85	1
13	Marketing Contribution in Profit	5	0.88	2
14	Marketing Mentoring	5	0.84	-
15	Marketing Competitive Power	3	0.69	-
	Overall Marketing Performance	70	0.96	
	Libyan Political Crisis's Construct	7	0.73	-

From table (1) above it can be noticed that Cronbach's alpha values for marketing performance construct ranged from (0.67 to 0.96). These values are suitable and pass the lower acceptable level suggested in the literature (e.g. Churchill, 1979; Nunnally and Bernstein, 1994; Hair, et al., 2005; Cavana et al., 2001; Shelby, 2011). Hence, all items with Cronbach's Alpha values less than (0.65) and with weak correlation less than (0.20) this procedure was taken to guarantee high degree of validity and reliability (e.g. Streiner and Norman, 2003; Rattray and Jones, 2007).

### **3. Sampling**

A comprehensive survey was conducted to target all tourism businesses located in Benghazi City. A number of (65) business acting in tourism, airlines and hospitality were counted. Only businesses' owners, managers and officers were targeted in the safe areas of the city, while those located in unsafe areas were inaccessible. Questionnaires were distributed through two phases: pilot study and actual field work. Using face-to-face method, the distributions process was undertaken with the help of postgraduate students at University of Benghazi and the Academy graduate students. As a precautionary procedure, (400) questionnaires were distributed. Out of this number, only (113) retrieved with (98) deemed valid for analysis.

### **Data Analysis**

After collecting the data, it has been necessary to resort to the most appropriate statistical techniques. SPSS has been used as shown below:

#### **1. Descriptive Analysis**

The next section of analysis depicts the results obtained from participants in the Libyan tourism businesses acting in Benghazi City.

#### **2. Business Size**



Business size is one of the key factors that might affect the research results. For that reason, businesses' data were collected and analysed in the table below.

**Table 2. Businesses' Size (Number of Employees)**

Number of Employees	Frequency	Percentage %
< 50 employees	86	88
50 up to < 250 employees	6	6
≥ 250 employees	6	6
Total	98	100

Table 2 shows the size of tourism businesses in Benghazi. Employees' numbers were chosen as indicator for business size. The table explains that 88 % of businesses are small-sized, 6 % of businesses are medium-sized, and 6 % of businesses are large-sized. Therefore, the results are mainly relevant to small businesses acting in Benghazi City in Libya.

**3. Participants' Qualifications**

Qualification is one of the most important elements upon which the recruitment process is based especially for high-rank positions. This is the reason that leading businesses pay more attention to educational issues at work. More details can be found in Table 3.

**Table 3. Participants' Qualifications**

Qualification	Frequency	Percentage %
Master/Ph.D.	8	8
Bachelor / High Diploma	51	52
Tertiary School	35	36
Secondary School and Less	4	4
Total	98	100

From Table 3 it can be seen that most of the participants (60.4%) hold a high degrees. This might be taken as a positive indication on the recruitment policies in place in the tourism businesses under investigation. In addition, this might increase the confidence in the data collected.

**4. Organisational Positions**

The organisational positions of participants are important elements as the views of individuals and their perceptions might be different. This difference might affect the research results. To that end, Table 4 shows the organisational positions of participants.

**Table 4. Participants' Organisational Positions**

Organisational Position	Frequency	Percentage %
Owner / General Manager	39	40
Manager / Director	30	31
Bureau officer	6	6
Others	23	23
Total	98	100

Table 4 shows that 77 % of participants occupy high positions in their businesses as owners and managers. Hence, they might have different views on the key issues under investigation. In addition, their organizational positions imply that their answers should be considered more valuable than any other lower-rank people at work.

**5. Work Experience**

The experience is important element that might be used as a sign of confidence indication in participants' information provided. The long experience is a good indicator of practical knowledge of the work at business. Experience will have a great impact on peoples' attitudes and practices. This issue was investigated and the results presented in Table 5.

**Table 5. Participants' Experience**

Experience	Frequency	Percentage %
< 5 years	42	43
5 up to < 10 years	47	48
≥ 10 years	9	9
Total	98	100

Table 5 shows that the vast majority of participants (91%) have small to moderate experience at work as their experiences did not exceed 10 years. This might not be deemed as an excellent indication of reliable information gathered from participants. In addition, this might be interpreted that the tourism sector is newly developed business and its early stages.

**6. Marketing Performance Evaluation**

The personal views of individuals at organizational positions might be different, and this might affect their perceptions towards diverse organizational issues. To that end, marketing performance was evaluated based on decision makers' views at businesses. The results are presented in table 6.

**Table 6. Marketing Performance Means**

Marketing Performance Component	Mean	SD
Marketing Expenditure	2.51	0.19
Marketing Planning	2.70	0.77
Marketing Organization	2.50	0.91
Marketing Staff	2.35	0.98
Marketing Mix	3.03	0.56
Marketing Environment Response	2.68	0.84
Customer Management	3.31	0.68
Marketing Information System	3.23	0.77
Marketing Technology	2.18	0.71
Market Segmentation	2.72	0.55
Purchasing & Storage Management	2.32	0.90
Marketing Role in Production Development	2.09	0.76
Marketing Contribution in Profit	2.36	0.70
Marketing Mentoring	2.56	0.90
Marketing Competitive Power	2.55	0.57
Overall Marketing Performance	2.69	0.56

Table number (6) shows an evident decline in overall mean scores of marketing performance and its sub-components. The overall average marketing performance mean score reached (2.69) out of (5) points on Likert Scale, while the mean scores of sub-components ranged between (2.09) to (3.31). This decline reflects a decrease in marketing performance of tourism companies operating in Benghazi city.

**7. Libyan Political Crisis & Marketing Performance**

To identify the extent to which the Libyan Political Crisis has an effect on marketing performance, a group of questions directed to respondents and the results are presented in Table 7.

**Table 7. The Correlation between Libyan Political Crisis & Marketing Performance**

Items	Mean	SD	Pearson Correlation R	Significance
Marketing Performance	2.69	0.56	-	-
Libyan Political Crisis	3.76	0.64	-	-
The Correlation		-	0.48	0.000

From table (7) it can be clearly noticed that the mean score of Libyan Political Crisis' factor reached (3.76) out of (5) points on Likert Scale. This increase in the mean score illustrates the noticeable negative influence of the Libyan Political Crisis on marketing performances of Libyan tourism businesses as revealed by participants.

To increase the emphasis on research objectivity, it was reasonable to resort to Pearson correlation, which revealed the existence of significant relationship as P-value was less than (0.05). This significance came as a result to the existence of negative medium correlation between the two variables: marketing performance and Libyan political crisis reached (-0.48). This result supports the views of participants regarding the effect of the crisis on marketing practices. Hence, the first null hypothesis, which states that "there is no relationship between the Libyan political crisis and the marketing performance of Libyan tourism companies ", will be rejected.

**8. Demographical & Institutional Factors' Effects**

To test the effects of personal factors (qualifications, job experience and organizational positions), and the institutional factors (the company's size measured by number of employees) on the research results, it has been necessary to resort to One-way Analysis of Variance (ANOVA) and display the results in table 8.

**Table 8. Analysis of Variance**

Essential Factors	Political Crisis			Marketing Performance		
	Decision	Result	P-Value	Decision	Result	P-Value
Demographical & Institutional Factors						
Qualification	Accept	No Differences	0.54	Accept	No Differences	0.06
Experience	Accept	No Differences	0.25	Accept	No Differences	0.20
Organisational Positions	Accept	No Differences	0.44	Accept	No Differences	0.09
Number of Employees	Accept	No Differences	0.83	Accept	No Differences	0.13

From table (8) above, it can be noticed that analysis of variance did not display any significant differences between participants' responses that might be attributed to demographical or institutional factors. This is due to P-values, which are greater than alpha value ( $\alpha = 0.05$ ). Therefore, it has not been possible to reject the remaining four null hypotheses: "There is no difference among participants' views regarding marketing performance of tourism businesses according to demographical factors"; "There is no difference among participants' views regarding marketing performance of tourism businesses according to institutional factors"; "There is no difference among participants' views regarding the Libyan Political Crisis's effect on marketing performance according to demographical factors", and finally "There is no difference among participants' views regarding the Libyan Political Crisis's effect on marketing performance according to institutional factors".

In other words, all participants at different organisational levels with their different qualifications and experiences in tourism businesses shared the same attitude and perception towards the effects of the Libyan political Crisis on Marketing Performances.

### **Discussions and Conclusions**

In reference to the procedural analyses shown above, general conclusions might be drawn as follows:

#### **1. Key Findings**

The key findings of this research are there is an evident decline in marketing performance of tourism companies in Benghazi City. This deterioration can be attributed to the weakness in marketing practices. In addition, the decline in marketing performance can be attributed to the negative effect of the Libyan Political Crisis as evidenced in the field work of the current research. Hence, there is a negative significant correlation between the Libyan political crisis and the marketing performance of tourism businesses surveyed. This results are in line with previous research conducted in several parts of the world (e.g. Laws, Prideaux, and Chon, 2007, Silk 2008; Kritayanavaj, 2009; Singh, 2009;; Chachavalpongpon, 2009; Shen, 2009 and Smeral, 2010; Hani, 2006 and Basu, et al., 2012; Tekin, 2015).

Furthermore, no substantial differences among participants' perceptions were spotted regarding marketing performances of the responded businesses. Qualifications, organizational possessions, and empirical experiences proved to have no effect on participants' responses. This, in fact, implies that all participants, regardless of their demographical composition, agree on the negative effects resulted by the Libyan Political Crisis. Finally, business size is confirmed to have no effect on the results of this study. This means that all targeted SMEs, regardless of their sizes and date of establishments, have been negatively affected by the

Libyan Political Crisis.

## **2. Implications**

The current study is of high-value for academicians and practitioners in the field of marketing for the following reasons: (1) This study can be classified within the rare Arabic and African studies dealing with marketing issues in Libya especially during crisis' time; (2) The study can be viewed on the basis of being a new contribution to the marketing literature in developing countries and transitional countries in the field of tourism marketing performance, and how it has been affected by the Libyan Political Crisis (2013/ 2016); (3) Decision makers in the Libyan government and tourism institutions might benefit from the findings of this research to enhance marketing practices and performances ;and (4) International bodies and foreign businesses (investors) interested in the Libyan tourism sector might also benefit from the results of this research. This will provide a good background about the tourism marketing practices in Libya and how the external environment has an influential impact on the marketing performance.

## **3. Limitations and Future Research**

As is the case in scientific research, there is no research claiming perfection and this work is not an exception. Several challenges face researchers such as time constraints, cost and scope of study. This research has encountered some of these limitations as it has not been possible to target all tourism companies in the whole country. Tourism businesses in Benghazi City only were included in this survey. This, in fact, means that the results might not give indications to generalise marketing challenges to the whole tourism businesses in Libya. Therefore, future work funded by the State or public research institutions might reuse the construct of the current study to target tourism companies in Libya and make a comparative study. Another intriguing future research is to use concrete financial data taken from financial statements of tourism companies to measure their financial performances and compare that with the results of this study. This intriguing future research should add to the marketing literature as no research has been done, to the best of the researcher's knowledge, using this approach in Libya. Finally, the current paper has been undertaken under crisis' conditions. Hence, several businesses could not be reached due to the state of war and instability in Benghazi City. It would be a great research opportunity to replicate this research after stabilizing the city over the coming years.

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**USER GENERATED CONTENT ANALYSIS OF TOURISM INDUSTRY OF  
INDONESIA**

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**Abstract**

Indonesia is becoming the favorite destination of many international tourists and there is a need to analyse the hidden patterns of information in the online content generated by these tourists. This study is about unfolding the user generated content related to top tourism destinations of Indonesia with the assistance of unstructured data taken from twitter. In this study the popularity of tourism sites will be revealed by using twitter as social media platform. The tweets will be collected related to the identified tourism sites and they will be calculated to check the popularity of the particular destination. The data collection will be done with the help of open source software R. R software will be used to fetch the tweets from the twitter and these tweets will be stored in the distributed file system of Hadoop. Apart from checking the popularity of the tweets, sentiment analysis and emotion classification of tweets will also be done to check the hidden opinions of the tourists about the tourist destinations. This study also attempts to solve the various issues faced by tourists on the selected destinations. Comprehensive analysis will be done with the help of Wordcloud, which gives the most prompting words in the form of visualization. Wordcloud helped to find the most trending words in the text. INTRODUCTION

There is lot of growth in tourism industry and it is one of the fastest growing sectors in the world. It is one of the components of economic and social growth in a region. For many developing countries, it is the main component of the employment generation and is the source of income also. Decades ago, tourism is limited to the regions of Europe and America. But now lot of new destinations have emerged in addition to these regions. According to UNWTO, around 500 million tourists travel between the months of May and August 2016. This puts a lot of scope for the other tourist destinations to attract lot of tourist. Indonesia is also a very popular tourism destination located in South East Asia and it comprises of almost thirteen thousand islands.

The total population of Indonesia is around 215 million covering almost 200 ethnic groups. The national language of Indonesia is Bahasa Indonesia. The reason why Indonesia is popular as tourist destination is because of its location on the globe. Indonesia is close to the equator and is gifted with the rich flora and fauna. The diversity ranges from rich paddy fields to grasslands and snow covered peaks. The destinations in Indonesia are Sumatra, Java, Bali, Kalimantan, Sulawesi, Maluku and Nusa Tenggara.

Social media is considered as a very important online networking tool. Wikipedia defines social media as computer-mediated tools that allow people, companies and other organizations to create, share, or exchange information, career interests, ideas, and pictures/videos in virtual communities and networks.

Social media is used for communicating with other people by putting reviews and other user generated content. Apart from communication, it is also used for gathering information about a particular tourist place. There are various social media platforms like Facebook, Twitter, Google+ where users can share their views or suggestions with other users who are on the same social media platform.

The social media platforms for tourism industry provide internet users with rich knowledge about any tourist place from the visitor's perspectives. It also provides the reviews about

particular hotels so that the visitors can pick the right hotel according to their choice. The research published by Simms (2012) concluded that the user generated content is the most preferred medium by majority of travellers who are visiting the tourist place for the first time. This research clearly appreciates the value of user generated content in the tourism industry.

With the new techniques for text analytics, this content can be analysed to gain some insights from this data. The most widely technique used in text analytics in sentiment analysis and emotion classification.

Sentiment is the expression of view or behavior. Sentiment analysis is a technique in text mining, where the gathered text is classified into various sentiments like positive, negative and neutral sentiments. Various algorithms are also available for classifying text into different emotions such as anger, surprise, disgust, sadness, joy, happiness.

Sentiment analysis technique is widely used to find the attitude of customers on any defined topic or issue. Hotel industry also uses sentiment analysis on the collected reviews to find the mood of their customers towards their services. (Bollen et al.)

Zeng & Gerriston (2014) discussed lot of issues in context of social media. English is a very dominating language around the globe and on internet but it is a big disadvantage for non-English speaking countries. There should be some multi language platform where information from different sources can be shared.

According to Gartner, Big data is high-volume, high-velocity and/or high-variety information assets that demand cost-effective, innovative forms of information processing that enable enhanced insight, decision making, and process automation.

Hadoop is a framework to handle the big data using the java based programming. Hadoop is having two major components, HDFS and MapReduce. MapReduce is used for parallel programming and HDFS uses scale out architecture which provides scalable storage with lot of reliability on commodity hardware.

Hive is a data warehouse layer on top of HDFS. It is mostly used to analyse the structured data by various organizations who are handling Big Data. Hive is the project of Facebook and later on it came under the Apache foundation and became open source. Hive uses databases and tables to store the data in HDFS. HiveQL is the SQL like language which is used to perform queries over the stored data. The queries typed in HiveQL automatically get converted to MapReduce so that parallel processing of data takes place.

### **Review of Literature**

Estela Marine-Roig & Salvador Anton Clave (2015) studied the online image of Barcelona with the assistance of social media by using big data analytics. The author had considered the travel blogs and online travel reviews by tourists to support smart destinations. The four main stages of their methodology included web hosting selection, data collection, pre-processing, and the last stage is analytics. Batch processing is used in their methodology in which the data is collected first and then analyzed. The study concluded that the UGC analytics is an important asset to develop marketing strategies and in applying analytics to destination management. They also determined the ability of Barcelona to develop as a smart city with the aid of big data analytics.

Cristian Bucur (2015) in this paper the author proposed a platform for extraction and summarizing of opinions expressed by users in tourism related online platforms. The researcher also clarifies that extracting opinions from user generated reviews, regarding aspects specific to hotel services, are useful for both clients looking for accommodation, and also hotels trying to improve their services. The proposed system in the study extracts hotel reviews from internet and classifies them, using an opinion mining technique. The platform is evaluated by the author using a manually pre-classified dataset of user reviews. In the paper

the efficiency of algorithms is also analyzed using text mining domain specific measures, and these are also the proposed methods for improving the results.

Alan S. Abrahams et.al (2012) In this research, the author applied text mining approach on the online discussion forums created by vehicle enthusiasts. The researchers used sentiment analysis approach which they found to be insufficient for complaint detection of the customers. So they invented a new system known as Vehicle Defect Discovery System which is a very reliable and generalized defect discovery system. The author discovered the SMOKE words which are related to other automotive industry and they validated their words on other brand also. Their findings suggest that this system is very useful for doing sentiment analysis of customer complaints but when it comes to vehicle defect discovery then this technique should not be used. The major implication for researchers is that they may have to find domain specific words for other industries.

Alžbeta Kiráľová & Antonín Pavlíček (2014) did their study on development of social media strategies in tourism destination. In their study the researchers discussed that social media is a vital aspect in connecting the tourists with their destinations with the assistance of internet. The study also focused on the usage of social media, forms of campaigns and how to execute those campaigns. The result of the study clearly indicates that the social media should be used by the destinations to remain competitive. The authors also recognized the vital features of successful social media strategy in their research. The paper is concluded that an effort to implement new software for the purpose of branding is valuable although the implementation is a very laborious task.

Amir Gandomi & Murtaza Haider (2016) in their study tries to explore the meaning of big data through the academicians and practitioners by defining the three V's of Big Data i.e. Volume, Velocity and Variety. The main emphasis of the researchers is to explore the analytical methods related to big data. The various techniques discussed for the big data analytics in their research were text analytics, audio analytics, social media analytics, video analytics and predictive analytics. The authors also highlighted the fact that big data constitutes mainly comprises of 95% of unstructured data. The research also found that present analytical techniques were used to analyze the small datasets, and in the coming era, real time analytics could be an upcoming technique due to the growth in social media and mobile apps. Their study also focused on devising new predictive analytics techniques for the structured data.

Robert P. Schumaker et.al (2016) The research is about the tourism of Italian city Cilento. In this research the author used geo tagged social media data from twitter. This data is used to characterize the spatial, temporal and demographic features of the flow of tourists in the city of Cilento. The research questions answered in this research were related to demographic profiles of the tourists to determine the movements of various demographic groups, patterns of flow of tourist in the region and the factors which differentiate the tourist destination from others in the region. The findings gave insight on the tourists visited the city Cilento. The domestic tourists dominated the tourism of the city. The study also suggests that the destinations on coastline are very popular and these locations are well connected because of the good transport facility.

Raissa Uskenbayeva et.al (2015) proposed a data integration model. In the paper, the researchers presented various approaches to connect HADOOP database with R. Hadoop database consists of libraries in HDFS which is the storage component of HADOOP and R is a very popular statistical tool. The various ways to integrate R and HADOOP and also presented the benefits and limitations of each approach. The authors also discussed various approaches for performing complex and simple MAPREDUCE jobs.

Saifuddin Ahmed et.al (2016) twitter is a very popular social media tool and it is widely used as an election campaign tool especially in developed western countries. The authors explored

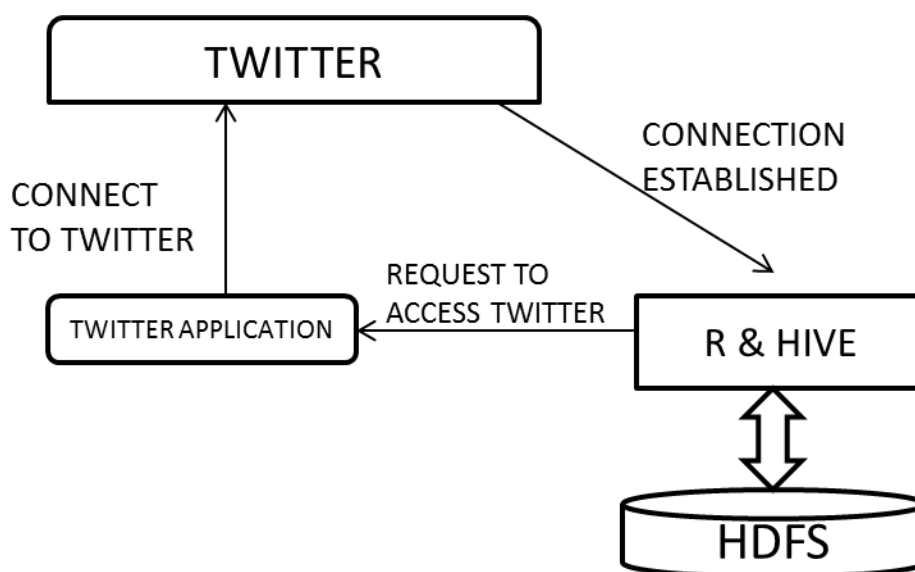
the use of twitter as a campaigning tool in lesser developed countries like India. The researchers investigated the use of twitter in the 2014 general elections. In their study 98,363 tweets were collected from the official accounts of the eleven political parties. The researchers also measured the contribution of first time voters by keeping in mind the internet availability in the states. The researchers also investigated that some major parties which are established used twitter to criticize their opponents and to supplement their offline strategies whereas the new and upcoming party used twitter for their own promotion. The authors in their research concluded that the twitter is positively associated with the success of the political parties and it is a very appealing social media tool for engaging first time voters also. This research is limited to the tweets that were in English language only and the tweets in regional languages were excluded from the research.

### Objectives

- To check the popularity of the tourist destination with the help of twitter Analysis.
- To perform sentiment analysis to get insights from social media data.
- To perform in-depth analysis of tweets using advanced visualization techniques

### Research Methodology

The tweets related to the selected tourist places were extracted from the twitter website. To fetch the tweets, twitter developer account needs to be created. With the help of developer account, twitter application will be created to mine the text from twitter. The application provides the access token and keys for the authentication. The software used for mining the tweets from twitter is R. R is a very popular statistical tool but due to its popularity in the field of text analytics, it is used in this research to extract the tweets from twitter. All the user generated content from the twitter will be saved in HDFS. HDFS is the Hadoop distributed file system which is used to save the voluminous data irrespective of any schema in the data unlike the traditional RDBMS. Rhdfs package is used to connect R to HDFS. With this connectivity there is no shortage of storage space for the data as Hadoop gives the opportunity to save enormous data by using scale out architecture.



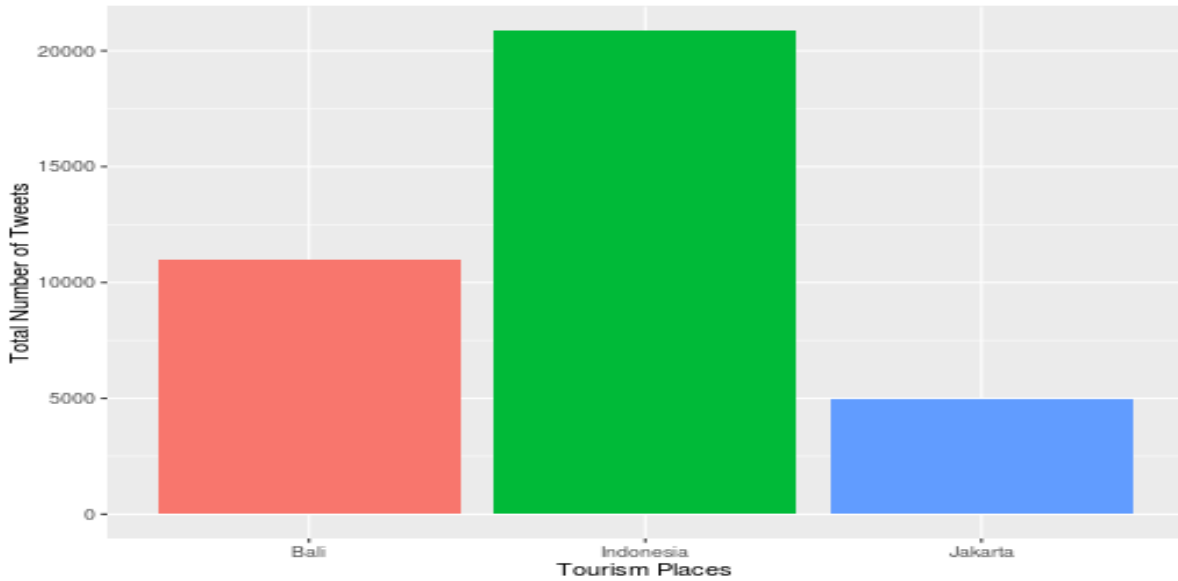
After the creation of big data framework and collection of data, sentiment analysis and emotion classification techniques will be performed to analyze the collected text. In the sentiment analysis the text is categorized into positive text and negative text. The text which does not fall into any of the categories will fall under neutral category. The text is also classified into various emotions to find the mood of the twitter users. The prominent words in the text will be found with the advanced visualization techniques like word cloud.

By using Apache Hive, popular hashtag were found to check the trending topics on twitter. The influential users, follower's count and friend's count and the popular time zones were also found with the help of Hive to get the holistic view of the collected data

### **Analysis and Discussion**

The tourism places selected were Indonesia as a whole, and Bali and Jakarta from within the Indonesia. The total numbers of tweets collected from these places were shown with the help of the bar graph.

Table 1



**Indonesia**

A total number of 20,869 tweets related to Indonesia have been collected from twitter. The word cloud of the tweets is made from which some of the prominent words are highlighted. By analyzing the word cloud of the tweets, it is analyzed that the words like ‘Jakarta’, ‘Bali’, were right at the center of the cloud. But word cloud is not specifying the significance of these words used in tweets, rather it is prompting to the most used words. To analyze the impact of these words, sentiment analysis and emotion classification of the tweets is done. The following diagram shows some of the tweets related to Indonesia with their respective emotions and sentiments.

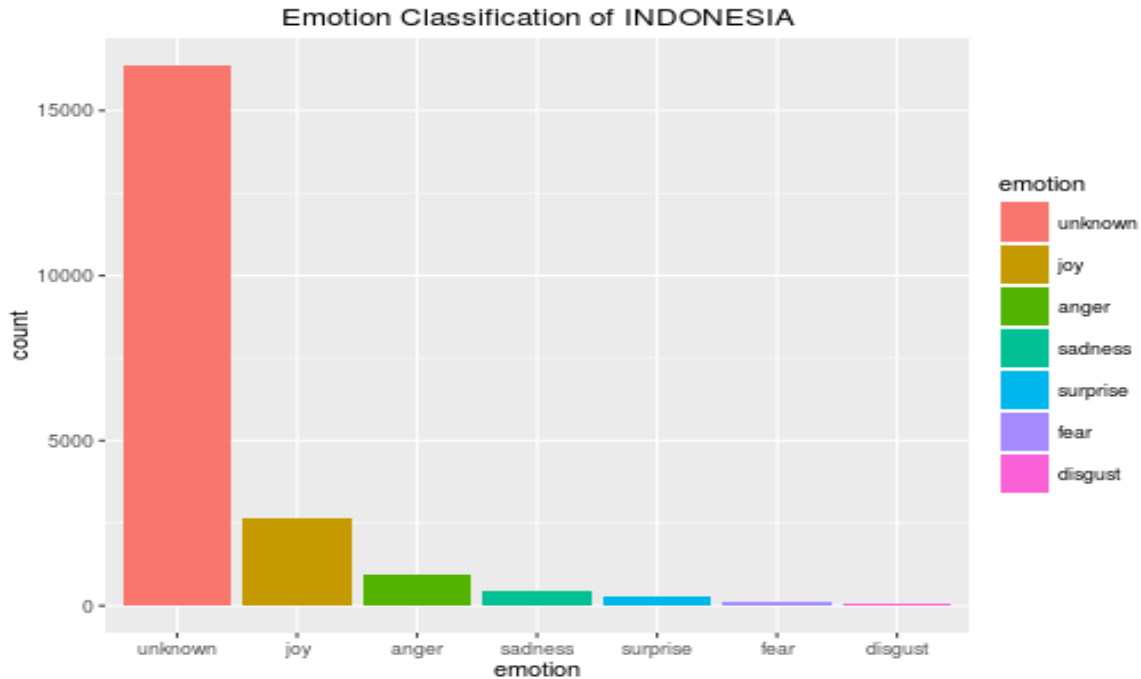
428	you are the creator of your life work hard and travel...	unknown	positive
430	disability inclusive education in indonesian islamic e...	unknown	positive
432	throwing spray at lagundri bay lagundri nias lagund...	unknown	positive
433	indonesia indon are on the level of th century europ...	unknown	positive
434	you are the creator of your life work hard and travel...	unknown	positive
435	my trip to lombok indonesia taken by oneplus onepl...	unknown	positive
436	my trip to lombok indonesia taken by oneplus onepl...	unknown	positive
438	you are the creator of your life work hard and travel...	unknown	positive
439	indonesia indon are on the level of th century europ...	unknown	positive
441	indonesia indon are on the level of th century europ...	unknown	positive

Figure 2





Table 3



**Bali**

Tweets related to Bali were collected with the help of R software. 10,961 tweets were collected from twitter to do social media analysis of Bali. The word cloud of Bali suggests the words like “happiness”, “push award skathniels”, “amazing”, which puts Bali in the ‘joy’ category in the emotion classification. The tweets having these words are giving a positive impact to Bali in sentiment analysis.

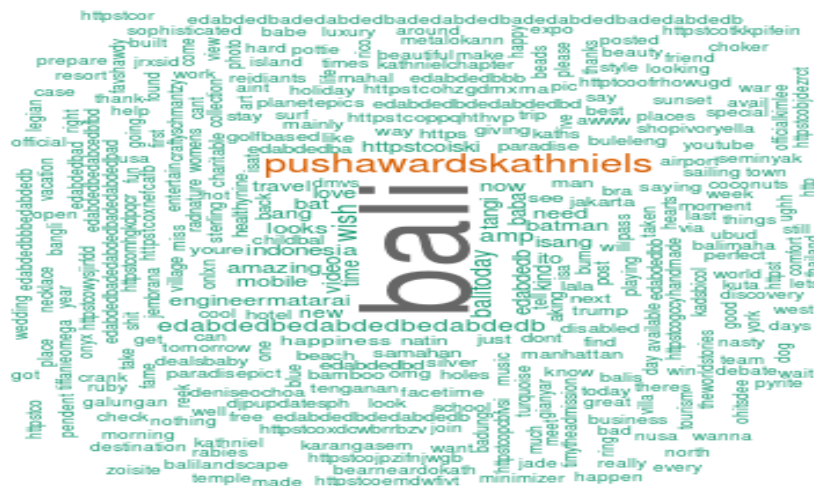


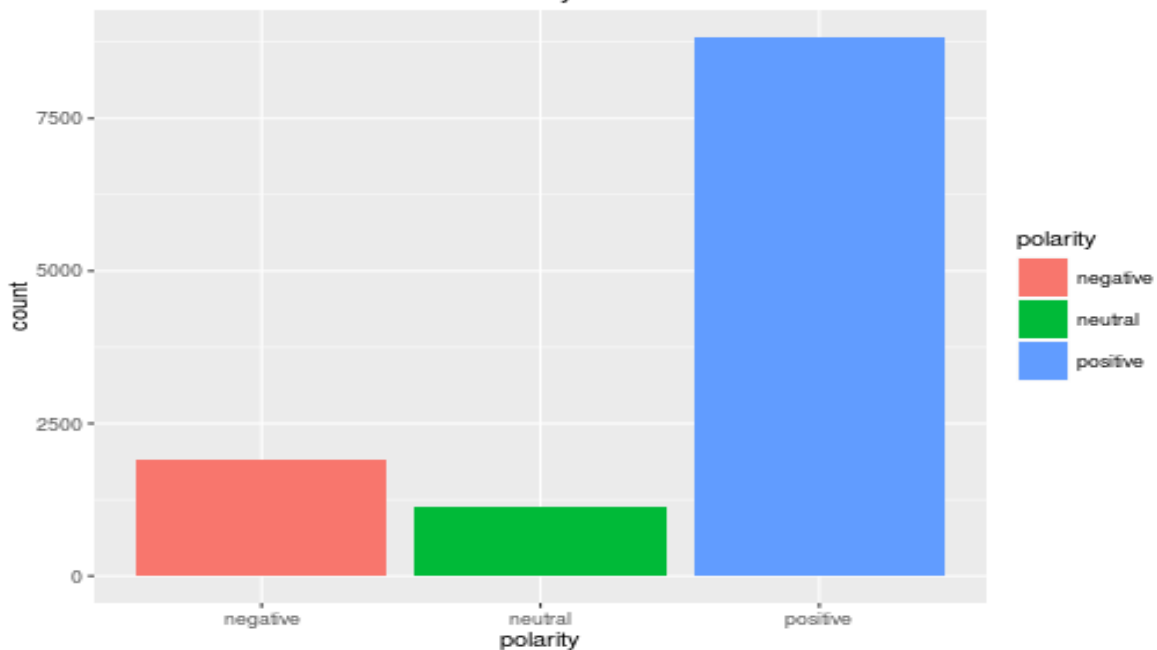
Figure 4  
 Some of the tweets related to Bali are shown in the diagram below:

	text	emotion	polarity
1	my heart is crying from rewatching my favorite film ...	joy	neutral
2	bali looks amazing 🍀🍀🍀🍀🍀🍀🍀🍀🍀🍀🍀🍀🍀🍀🍀🍀🍀🍀🍀🍀...	surprise	positive
3	usa hot dealsbali comfort revolution frontclose shap...	joy	positive
4	hrc at asean amp east asian summit in bali	unknown	positive
5	thx lora saving it to read soon	unknown	positive
6	samahan natin ang aking baba i wish you happiness...	joy	positive
7	internet is a luxury many dont have	unknown	positive
8	from pottie baba bal bali love and now my tangi 🍀...	joy	positive
9	a man playing bamboo music to entertain a disable...	unknown	negative
10	no trip to bali is complete without visiting the ancie...	unknown	positive
11	bali is my second home 🍀🍀🍀🍀🍀🍀🍀🍀🍀🍀🍀🍀🍀🍀🍀...	unknown	positive
12	subak an ancient irrigation system in use today in b...	unknown	positive
13	bali looks amazing 🍀🍀🍀🍀🍀🍀🍀🍀🍀🍀🍀🍀🍀🍀🍀...	surprise	positive

Figure 5

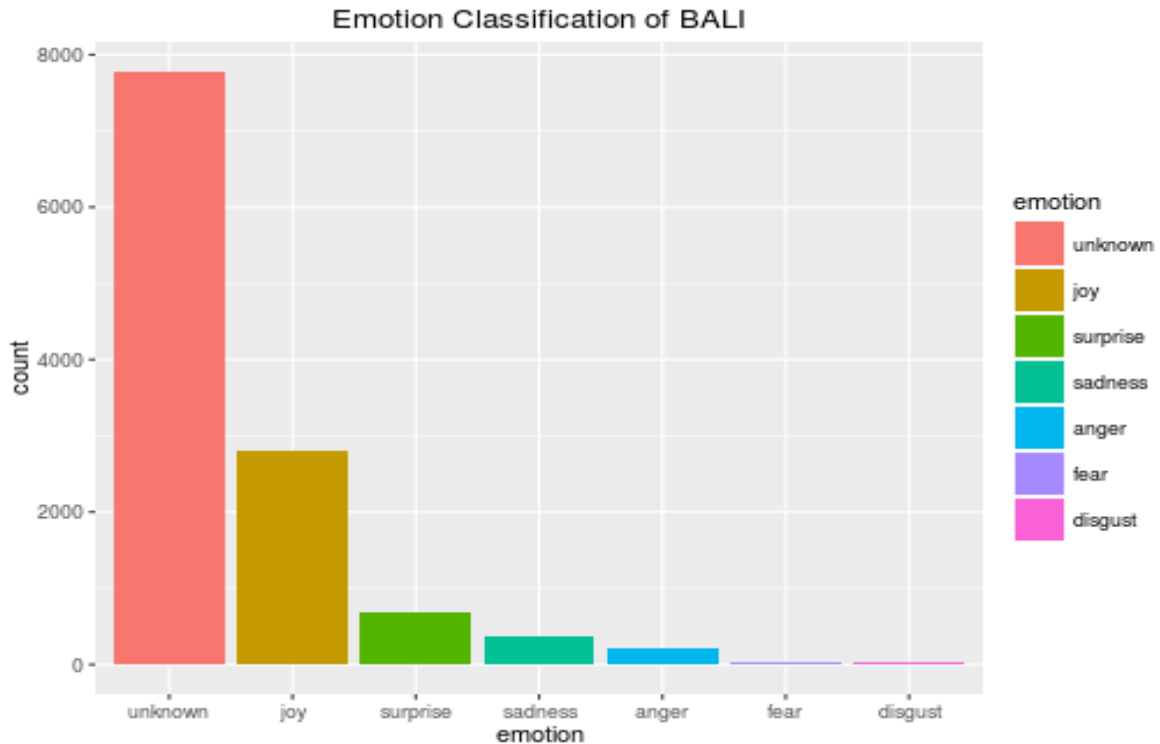
Sentiment analysis of Bali suggests the positive image of the islands. This positive image is due to the scenic beauty of these islands. The negative tweets were due to some local issues prevailing in the islands like Rabies, drought situations, drugs etc.

Table 4  
 Sentiment Analysis of BALI



Although lot of tweets are falling into ‘unknown’ category, but still the graph clearly suggests the joyous mood of the twitter users towards the Bali Islands. There are push awards by ABS-CBN which are putting the native people and tourist of Bali in joyous mood.

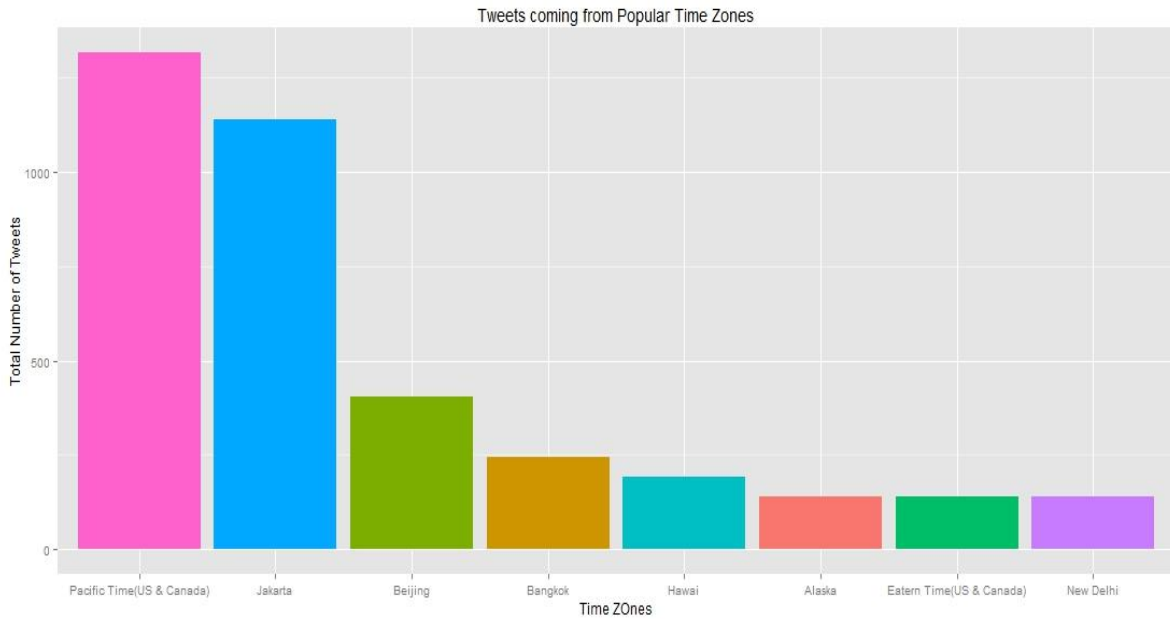
Table 5



Since Bali is a popular tourism place in this research, further analysis is also done with the help of Hive. Social Capital of twitter account/user is also calculated with hive by finding the number of followers, friends and re-tweet count from the twitter.

Popular time zones were also found with Hive. The graph given below gives a clear understanding of the popular time zones where Bali is very much talked about. Popularity of the time zones is reported through the number of tweets coming from their respective zones. From the graph, the Pacific Time (US and Canada) time zone is very popular as lot of web traffic is coming from these zones. Jakarta is at second place. It is also observed that Bali is also a talked about destination in Beijing also. But the Eastern Time zone is giving very less attention to Bali as very less number of tweets was coming from Bali.

**Table 6**



The diagram below gives the list of popular hash tags from the tweets of Bali. These hash tags were found by running queries in Hive. The graph shows that ‘bali’ is a very popular hashtag. Other hash tags were ‘Balitoday’, ‘aldubikawlang’, ‘Gianyar’, ‘mtwikathniel’, ‘karangasem’.

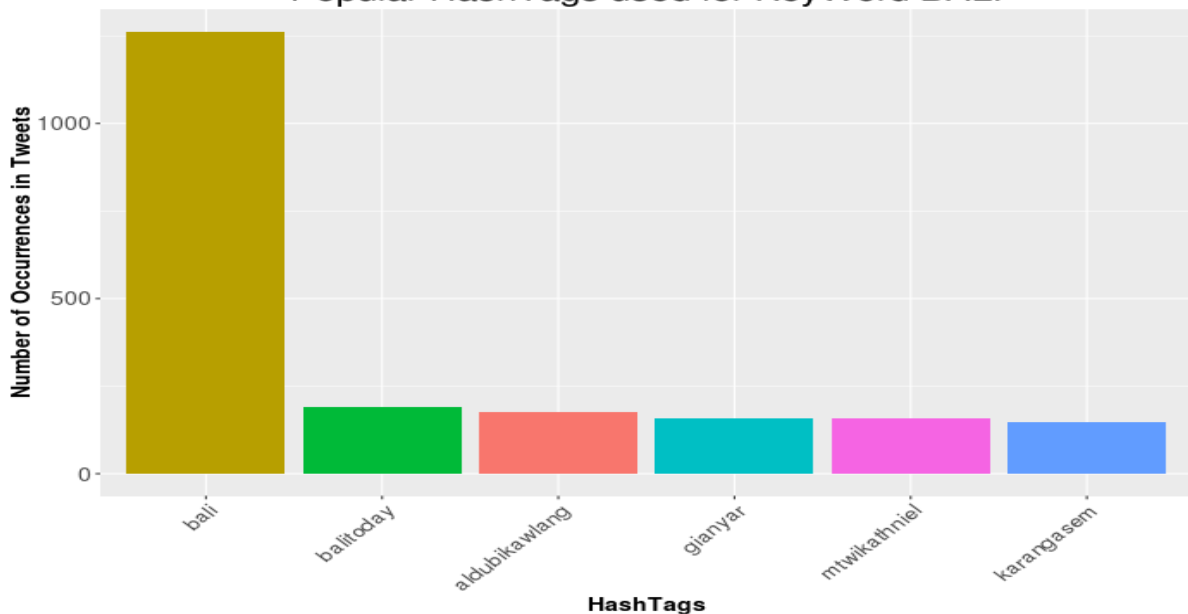
‘balitoday’ is related to any news or happening in bali.

‘gianyar’ is a regency in the province of Indonesia and Bali islands.

‘mtwikathniel’ are Indonesian celebrity.

‘karangasem’ is a regency in Indonesia. It covers the eastern part of Bali.

**Table 7**  
 Popular HashTags used for KeyWord BALI



Popular re-tweets counts were also found by using Hive. Re-tweets are those tweets which are reposted. The below graph shows the twitter users who are very popular, because when they

put any tweet, then that tweet is re-tweeted most of the times. Here some information is given about the popular twitter users.

‘MartinGarrix’ is the record producer, musician and DJ by profession.

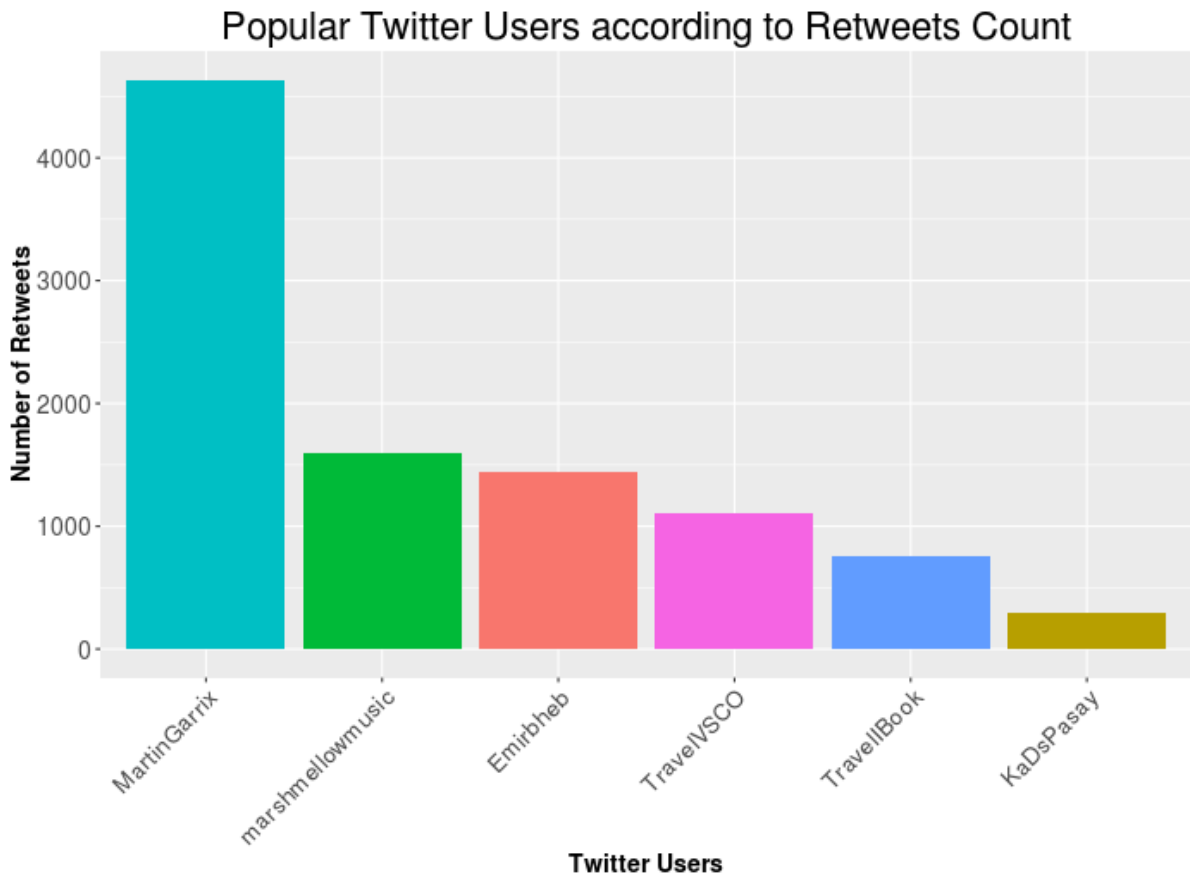
‘marshmellowmusic’ is also a music producer and DJ.

‘Emirbheb’ relates to movies and celebrities.

‘TravelVSCO’ is the account where tweets related to travel destinations were posted.

‘KaDsPasay’ is also related to KathNiel.

Table 8



After that, the users with most number of followers will be found. The graph shows the top 6 users having highest follower’s count. This confirms that Maliq Music is very popular according to Friends Count as they were having close to 37,000 followers for their account. The account ‘Balitoday’ is also getting attention here because lot of twitter user are following their account.

‘MaliqMusic’ is music band based in Jakarta

‘Balitoday’ is related to any news or happening in Bali.

‘gran\_tourismo’ are travel and food writer from Combodia.

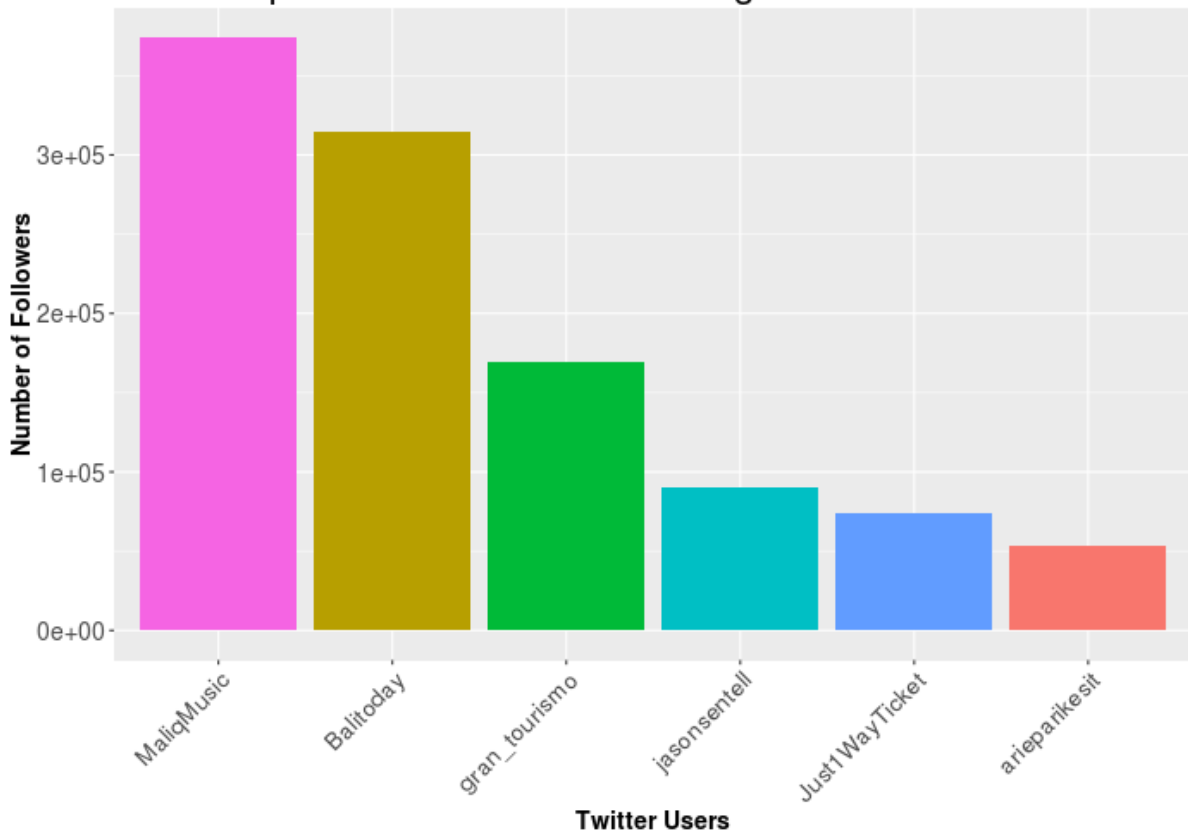
‘jasonsentell’ is a scuba diver

‘Just1WayTicket’ is a travel blog

‘arieparikesit’ is the CEO/Founder of Kelana Rasa Culinary Solutions.

**Table 9**

Popular Twitter Users according to Follower's Count



\*1e+05 = 10,000, 2e+05 = 20,000, 3e+05=30,000

The graph given below will shows the list of users who are having the most number of friends in their account. The list is shown in decreasing order. It shows that 'Jasonsentell' is the most popular user/account because it is having maximum friends.

'balitoday' is related to any news or happening in Bali

'jasonsntell' is a scuba diver

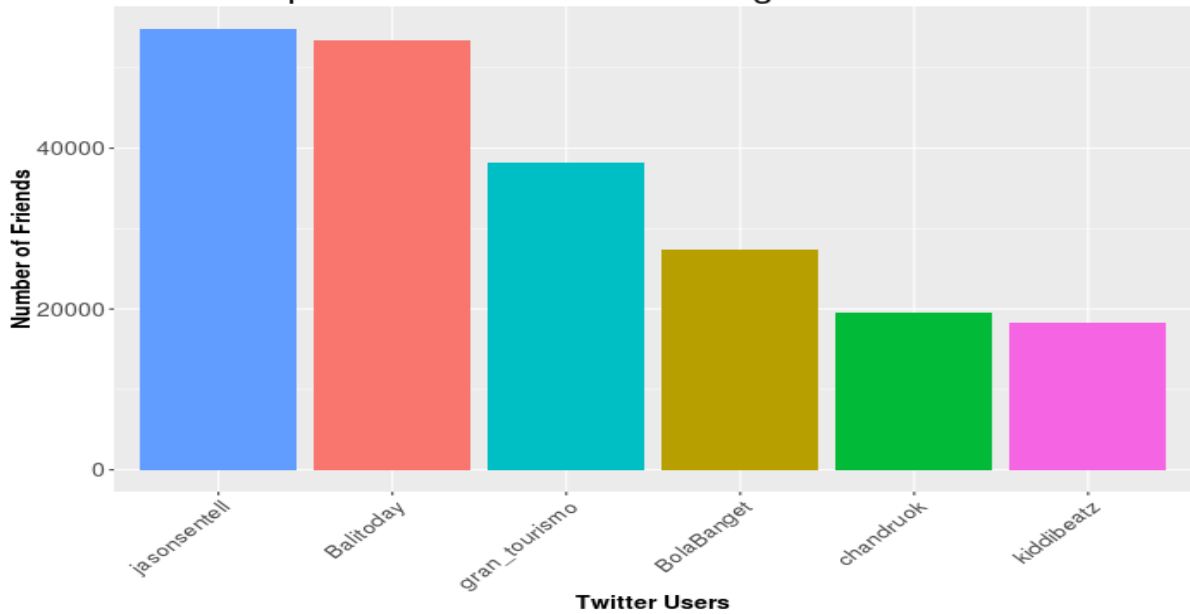
'gran\_tourismo' are travel and food writer from Cambodia.

'BolaBanget' is a website where sports news were shown

'chandruok' is s a person from Tanzania

'kiddibeatz' is a very famous BeatBoxer from Canada

**Table 10**  
**Popular Twitter Users according to Friend's Count**



**Jakarta**

The word cloud of the Jakarta is highlighting the words 'hotel', 'discount'. The significance of these words will be seen in the sentiment analysis and emotion classification.



**Figure 6**

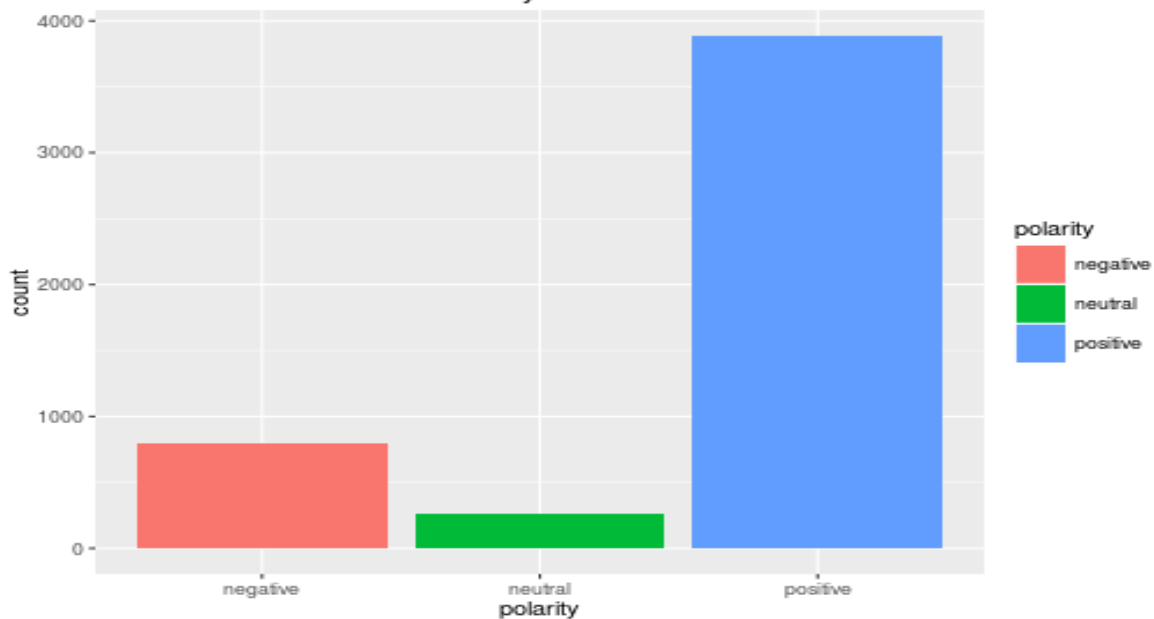
Tweets searched for the Jakarta are shown in the diagram below with their respective emotions and sentiments:

	text	emotion	polarity
7	happybirthdaymaggiegrace nothing but love for you...	joy	positive
28	this is the time when i was busy in my own world 🌀...	joy	positive
43	live on periscope we r in jakarta 🌀🌀🌀🌀🌀🌀🌀🌀...	joy	positive
44	hotel jakarta reddoorz near ragunan zoo onlyidr bef...	joy	positive
45	hotel jakarta reddoorz near ragunan zoo onlyidr bef...	joy	positive
46	live on periscope we r in jakarta 🌀🌀🌀🌀🌀🌀🌀🌀...	joy	positive
50	hotel jakarta reddoorz near rs fatmawati onlyidr bef...	joy	positive
58	good food with no filter latepost culinary jakarta sin...	joy	positive
99	proud to be an official partner ofjakarta world forum...	joy	positive
106	good evening jakarta jakarta sudirman bunderanhi ...	joy	positive
111	great northern maple syrupjakarta bogor depok tan...	joy	positive
130	live on periscope we r in jakarta 🌀🌀🌀🌀🌀🌀🌀🌀...	joy	positive
141	love this pict 🌀🌀🌀🌀🌀🌀🌀🌀🌀🌀🌀🌀🌀🌀🌀🌀🌀...	joy	positive
142	jakarta with hemmy pic	joy	positive
162	happy international peace day peaceday peaceday ...	joy	positive

Figure 7

Sentiment analysis suggests that lot of tweets fall into positive category. All the tweets falling into the positive category were due to the tweets mentioning the discounts in the hotels. Whereas the negative tweets are due to the congestion in Jakarta. Some users mentioned in their tweets that it is difficult to breathe in Jakarta.

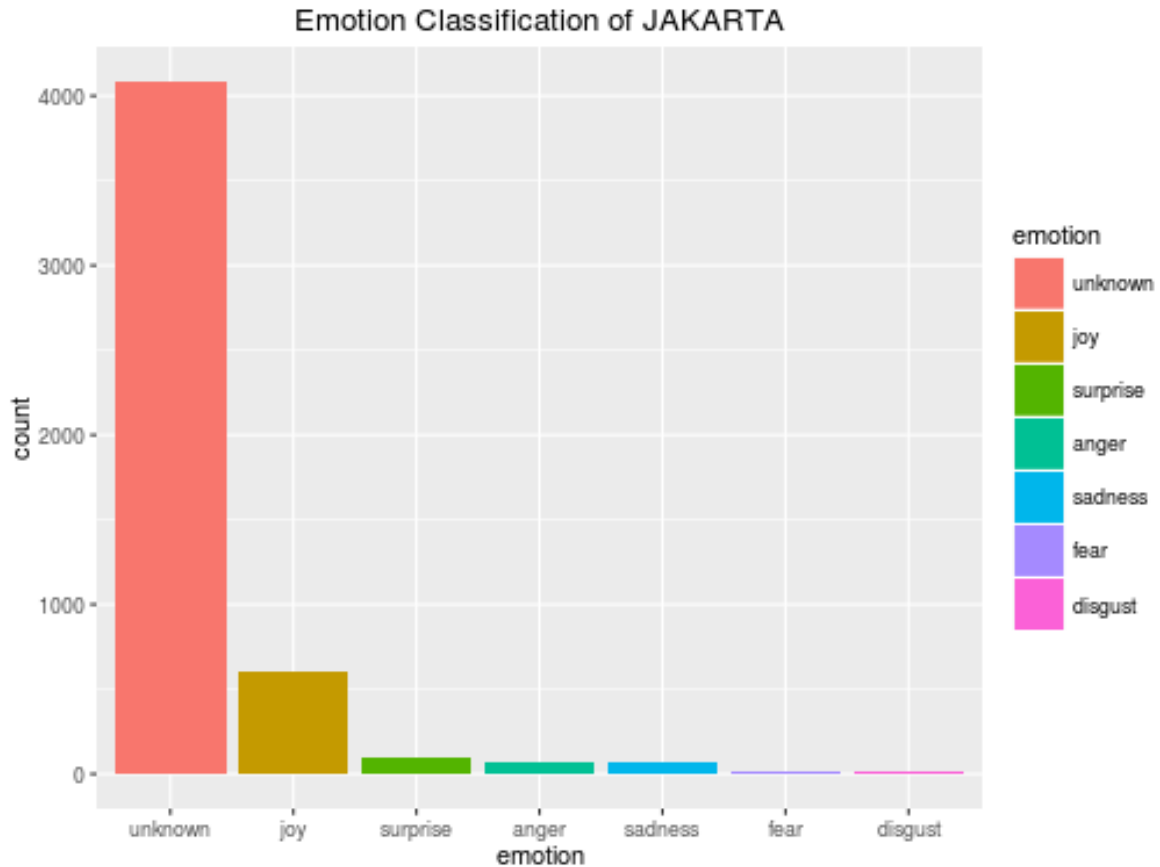
Table 11  
 Sentiment Analysis of JAKARTA



Emotion classification suggests high percentage of tweets in joy category, whereas other categories are in the same proportion. Anger among people is due to the congestion in Jakarta.

Table 12





### Suggestions

According to the collected data, there are some negative tweets related to terror alerts in Indonesia. These kinds of tweets can decline the tourism rate in Indonesia. This can directly affect the GDP of the country as the tourism is the major source of income in Indonesia. Tweets related to terror alerts can also cause panic among the tourist and native population of Indonesia. So whenever these tweets were posted on twitter, either the government or tourism ministry should give assurance to the tourists and native population or they should provide some helpline numbers to counter these kinds of tweets. With this people can get the official status of the issue that has been emerging on social media. One issue related to orang-utan is coming in the content collected from twitter. It is perceived that there will be extinction of orang-utan due to the palm oil production. On social media orang-utan are very popular, so there needs to be a check on the population of orang-utan as it is an attraction among tourist coming to Indonesia. Tweets related to bullet trains in Indonesia are also gaining positive attention on twitter. According to the content this project is in collaboration with the Chinese firm. This project needs to be kick started by the government as it is getting good response on the social media.

In the word cloud of Jakarta, most of the positive tweets related to Jakarta are from the discount offers given by the hotels of the Jakarta. Some tweets are also pointing to the flash floods in Jakarta. The government can also plan disaster management in future for the floods. If the disaster management is planned through twitter also, then it can be successful. In some tweets, users compared the Jakarta to the concrete jungle and showed some anger by saying that it is difficult to breathe in Jakarta. Some strategies can be made to curb the traffic problem so that natural beauty remains intact with the image of Jakarta.

People are praising the beauty that is lying within the Bali islands. The beauty in Bali is attracting them the most. The tourism sites of Indonesia are attracting the tourist by showing them the picturesque views from Bali. This is a very good strategy to attract the tourist and

they should continue with these strategies. From the collected data, it is analyzed that drugs is also an issue in rural parts of Bali. This is hampering the image of Bali islands as many countries have raised a war against drugs. So in order to tackle this situation, the government should come with some anti-drug campaigns also. There are lot of negative tweets about people tweeting about the arrest of man who is playing music for disabled child. This is putting a negative impact on the government of Bali. One man also posted images of fake eggs in Bali and many people are disturbed by watching this image. Government needs to higher their food standards to cover up these kinds of food issues. According to the collected there are some deaths due to rabies. The Indonesian government should think about the stray dogs so that they cannot trouble the tourists as tourist are the main source of revenue in the country. Some vaccination camps can be setup for the stray dogs or they should caught and put at some place under the surveillance. Lot of people are talking about the drought situation in Bali. Government should ensure that there will not be any drought situation and if there is any, then they should provide comfortable stay to the tourists who are arriving in the country. The government should inform the social media users through tweets about their new policies or new initiatives taken, so that there should be an assurance for the tourists who are arriving in their country.

When the analysis of time zones is done from the tweets having Bali as keyword, then it is realized that majority of the tweets were coming from the Pacific Time Zone where as less number of tweets were from Eastern Time Zone. If Bali Tourism wants to focus on new tourism packages then it can directly target the Pacific Time Zone as Bali is already popular in this Time Zone. To increase the magnitude of their tourism industry, the ministry can build new advertisement strategies where the Bali is less popular by considering the amount of tweets that particular time zone is generating.

It is suggested that the influential users should be targeted to spread any information, news or promotional message as the twitter user getting more number of re-tweets is considered as an influential user having high social capital. Their tweets posted on twitter will get extensive viewers that mean they are engaging more number of users with their tweets. The users having more number of friends and followers on twitter are having larger social media base. These users can also be targeted for any dissemination of information. If any mis-happening is there then these people having high social capital can be engaged to spread the warning or preventive messages as they are having broader coverage on twitter. The popular hash tags should be used to get the trending topics on a particular keyword.

### **Future Work**

This big data framework can be extended to any kind of user generated content and it just finishes the limitations of storing the types and amount of unstructured data. The large amount of data can be handled by increasing the cluster size of HADOOP. This proposed framework is capable of storing the vast amount of unstructured data. The structured data from databases of various organisations can also be stored in this framework.

### **Conclusion**

To conclude this broader research on social media, it can be easily said that analytics plays a remarkable role to get some insights on social media. The selection of appropriate tools in analytics is very essential to dig down this complex chunk of unstructured data. These tools help the analyst to collect this vast amount of data to have a 360° view of the situation.

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**IS MALAYSIAN ISLAMIC HOME FINANCING BAY' BITHAMAN AL-AJINL  
(‘BBA’) COMPATIBLE WITH ISLAMIC LAW? A CRITICAL EXAMINATION ON  
THE ISSUE OF ‘BENEFICIAL OWNERSHIP’**

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**Abstract**

Islamic Banking has been established since 1980s in Malaysia. It was initially commenced with the incorporation of Bank Islam Malaysia Berhad (‘BIMB’) in 1983. Until today, Islamic Banking has robustly developed in Malaysia. Various Islamic Banking products have been introduced and practiced in Malaysia. Among the products are: Bay’ Bithaman al-Ajil (BBA), Musharakah al-Mutanaqisah (MM), Commodity Murabahah and Ijarah. Nonetheless, there are many issues in these products. One of the issues is the issue of beneficial ownership in BBA. It is evident that, the application of BBA is proven to be defective and contains many flaws, if involves pending completion housing development projects. This paper discusses beneficial ownership issue through the sharia doctrinal and qualitative case study research methodologies. The outcome of this paper will help the Islamic banking industry in dealing with issues arising from ‘beneficial ownership’ in transaction involving houses pending completion in Malaysia.

**Keywords:** *Beneficial Ownership of House Pending Completion; Bay’ Bithaman al-Ajil (BBA); Issues; Purchasers’ Grievances, Proposal for Reform.*

**Introduction**

It is a trite practice in Malaysia that those who wish to purchase houses, particularly involving transaction that fall under the purview of Housing Development (Control & Licensing) Act 1966 and its regulations (Act 118), to apply for home financing from Islamic banks. Normally the purchasers will enter into housing contracts with the housing developers purchasing the pending completion houses. Once the relevant documents are signed, the purchasers will then apply to Islamic bank to finance the balance purchase price via any Islamic home financing products, normally BBA (Md Dahlan & Aljunid, 2011; Md Dahlan & Aljunid, 2010).

In BBA, the purchasers are required to sign two (2) agreements *viz* Property Purchase Agreement (PPA) and second Property Sale Agreement (PSA). The first agreement i.e. PPA states that the purchaser agrees to sell the purported house, being the house that the purchaser bought from the vendor developer, to the Islamic Bank. The price must the same price as that used between the purchaser and the vendor developer (Md Dahlan & Aljunid, 2011; Md Dahlan & Aljunid, 2010).

The second agreement is PSA. Under this agreement, the said house purchased by the Islamic Bank will be re-sold back to the purchaser at a marked up price (the price being higher than the purchase price that was used by the purchaser and the vendor developer and between the purchaser and the Islamic Bank effected via PPA). The purchaser is required to repay the whole marked up price to the Islamic bank in installment for certain duration until full settlement. The Islamic banks will get profit between the difference of the price stated in the PPA and the price stated in the PSA (Md Dahlan & Aljunid, 2011; Md Dahlan & Aljunid, 2010).

The above transaction, between the purchaser borrower and the Islamic Bank, is called *Bay’ al-Inah* (Bank Negara Malaysia, 2009). Apart from *Bay’ Inah*, in the opinion of the authors,

BBA also consists of *Murabahah* transaction as it involves selling price at a marked up rate as profit by Islamic banks effected via PSA.

It should be emphasized here that the theory and practice of *Bay' al-Inah* is still subject to debate between the *fiqh* schools of law as the transaction may fall into *riba'* (difference of prices involving duration) or *helah* (trick) to justify *riba'* in transaction (al-Zuhayli, 1988).

Majority of Islamic Jurists reject *Bay' al-Inah* as the transaction is a void transaction. To Abu Hanifah, *Bay' Inah* is permissible if it involves a third party as an intermediary premised on *Istihsan* supported by the story of Zayd bin Arqam (*Arab-Malaysian Finance Berhad v Taman Ihsan Jaya Sdn Bhd & Ors (Koperasi Seri Kota Bukit Cheraka Bhd, third party)* [2008] 5 MLJ 631; al-Zuhayli, 1988).

According to Islamic Jurists, *Bay' Inah* transaction can fall into prohibited business activities based on a hadith of the Prophet Muhammad (PBUH)– ‘there will come a time where people permit *riba'* in business’ (al-Zuhayli, 1988).

In the opinion of *Assohibayn* (Abu Yusuf and Muhammad al-Shaybani), Hanafi, Maliki and Hanbali schools, *Bay' al-Inah* will be avoided if there is a proof that shows an intention to commit sins (*riba*) on the ground of the principle of *sadd zarai'ik*. Secondly, they argued on the story of Zayd bin Arqam where Aishah R.A did not approve a transaction of buying and selling slaves via *bay' al-Inah*. Thirdly, on the reason that there exist payment and ownership in the first transaction. Further, the jurists argued on the basis of a hadith of the Prophet Muhammad (PBUH) which prohibits *Bay' al-Inah* (al-Zuhayli, 1988)

Nonetheless, majority of the jurists such as Shafie and Zohiri schools allow it but detestable/abominable (*makruh*). Abu Hanifah is of the same opinion with Shafie and Zohiri schools on *Bay' al-Inah*, *viz* it is valid as it complies with the contract pillars -- offer and acceptance (*ijab* and *qabul*). These two schools do not emphasize on intention (i.e intention to use trick (*helah*) in order to justify *bay' al-Inah*) as only Allah knows what is the intention of each individual. According to these schools, *Bay al-Inah* is valid if there is no plan to apply time period of excessive price volatility. If otherwise, the application of *Bay' al-Inah* is void. To these schools, the hadith of the Prophet disallowing *Bay al-Inah* is not rejected by Imam Shafie and secondly, Zayd bin Abi Arqam himself did not follow it (al-Zuhayli, 1988; Bank Negara Malaysia, 2009; Bakar. 2009; *Malayan Banking Bhd v Ya'kup bin Oje & Anor* [2007] 6 MLJ 389 (High Court at Kuching); al-Shawkani, 1357H).

Dr. Wahbah al-Zuhayli himself is the same opinion with the majority of the jurists i.e *Bay' al-Inah* is void (al-Zuhayli, 1988).

### Research Methodology

The authors used sharia and legal research methodology to explain the issues, problems and proposal in this academic paper. The sources of research are the al-Quran and al-Hadith. The authors also look into the opinions of the jurists on issues raised in this paper. The legal research is in a form of hybrid in nature. It consists of applied research, academic research, analytical/critical research, descriptive research, library-type and experimental study. The research activities under this heading include the discovery of the principles, rules and case law in order to explain and resolve the identified problems guided by the set objectives (Zahraa, 1998).

The second methodology is the social research methodology using a case study. The authors chose a qualitative case study as they wish to examine in detail issues and discussion in BBA that involved abandoned housing projects. Qualitative methodology is concerned with exploring people's life, histories or everyday behavior that quantitative research is unable to grasp. By using the qualitative method, information gathered will be more and enriching as it involves an in-depth and deeper understanding and study of a particular matter. The sources of data are from the accessible files of KNM Consulting Services, Jalan Medan Tuanku,

Kuala Lumpur ('KNM'). KNM is a private agency set up with a purpose to resolve issues arising from abandoned housing projects and to help aggrieved purchasers. In addition, the authors also interviewed the purchaser involved, sharia advisors of Islamic banks, lawyers and bank officers as a way to achieve triangulation and multiple evidences and thus can ensure reliability and validity of the research undertaken (Silverman, 2000; Yin, 1994; Yin, 2000).

### **The Governing Law of Islamic Banking and Finance In Malaysia**

Islamic banking and finance in Malaysia is governed by the Islamic Financial Services Act 2013 (Act 759) ('IFSA'). The obligation to comply with *sharia* (Islamic Law) in all the activities of the institutions carrying out Islamic banking business is clearly spelt out in section 28 of IFSA (Duty of Institution to Ensure Compliance with *Sharia*). An institution carrying out Islamic banking business is under a responsibility to do certain acts once it found that the business that it carries out has contravened the *sharia* (section 28(3) IFSA).

*Sharia* Advisory Council ('SAC') is a council established by the Bank Negara Malaysia (Central Bank of Malaysia) pursuant to section 51 of the Central Bank of Malaysia Act 2009 (Act 701) (Establishment of *Sharia* Advisory Council) ('CBM'). The SAC shall be the authority for the ascertainment of Islamic Law for the purpose of Islamic financial business (section 51 CBM). It is a duty of the Bank Negara Malaysia and Islamic Financial Institutions to consult the SAC pursuant to sections 55(1) and 55(2) of CBM in respect of Islamic financial business and conducting its affairs. The purpose of consulting, referring and seeking advice from the SAC is to make sure that the Islamic financial business and its affairs are conducted in accordance with the requirements of *Sharia* (section 55(2) CBM). Apart for sections 51 and 55, sections 56(1), 57 and 58 of the CBM also prescribe that the rulings and advice of the SAC shall bind the IFIs, the Bank Negara Malaysia, the *Sharia* Committee, the court of law and the arbitrators on matters pertaining to Islamic financial matters.

Thus, the rulings and advice of the SAC shall bind the IFIs, the court of law, the arbitrator and the *Sharia* committee. In other words, the new provisions inserted in the CBM in relation to the SAC, serve as ouster clauses to oust any jurisdiction and power of the court of law, any other *Shariah* committee of the IFIs and any other persons to challenge the rulings and advice of the SAC in respect of Islamic financial business and affairs (Md. Dahlan & Aljunid, 2010; Md Dahlan & Aljunid, 2011).

Apart from complying with the *sharia* and the SAC, the IFIs carrying out Islamic financial business must follow the standards set out by the Bank Negara Malaysia and the SAC (section 29 IFSA).

Similarly, all persons, including the IFIs, are duty bound to comply with the directions (written circulars, guidelines and notices) of the Bank Negara Malaysia on any *Sharia* matter relating to the Islamic financial business. These directions are made in accordance with the advice of the SAC. Any person who fails to comply with any of these directions, commit an offence and shall, on conviction, be liable to a fine not exceeding three million ringgit (MYR: 3,000,000.000) (USD 750,000.00) (section 59(1)(2)(3) CBM).

In addition to the above, the IFIs must also comply with the advice of its internal *Sharia* Committee (section 30(1) IFSA). IFIs must also establish their own *Sharia* Committee to advise its business, affairs and activities in order to ensure that they comply with the *Sharia* (section 30(1) IFSA). The duties and functions that the *Shariah* Committee carries out must also be consistent with the standards prescribed by the Bank Negara Malaysia (section 32 IFSA).

The superiority and hegemony of the SAC over the court, the IFIs, the arbitrator and the *Sharia* Committee in relation to the Islamic financial business and affairs has been given judicial support and recognition by recent cases namely *Mayban Trustees Bhd v CIMB Bank Bhd and other appeals* [2012] 6 MLJ 354 (Court of Appeal at Putrajaya), *Mayban Trustees*

*Bhd v CIMB Bank Bhd and other appeals* [2012] 2 MLJ 187; [2012] 6 MLJ 354 (Court of Appeal at Putrajaya), *Mohd Alias bin Ibrahim v RHB Bank Bhd & Anor* [2012] 1 ShLR 23; [2011] 3 MLJ 26 (High Court of Malaya at Kuala Lumpur), *Tan Sri Abdul Khalid bin Ibrahim v Bank Islam Malaysia Bhd* [2012] 1 ShLR 1; [2012] 7 MLJ 597 (High Court of Malaya at Kuala Lumpur), *Tan Sri Abdul Khalid bin Ibrahim v Bank Islam Malaysia Bhd* [2013] 3 MLJ 269 (Court of Appeal at Putrajaya), *Tan Sri Abdul Khalid bin Ibrahim v Bank Islam Malaysia Bhd and another suit* [2009] 6 MLJ 416 (High Court of Malaya at Kuala Lumpur), *Kuwait Finance House (M) Bhd lwn Teknogaya Diversified Sdn Bhd dan lain-lain* [2012] 9 MLJ 433 (High Court of Malaya at Kuala Lumpur), *Mayban Trustees Bhd v CIMB Bank Bhd and other appeals* [2012] 6 MLJ 354 (Court of Appeal at Putrajaya), *CIMB Islamic Bank Bhd v LCL Corp Bhd & Anor* [2012] 3 MLJ 869 (High Court of Malaya at Kuala Lumpur), *Bank Muamalat Malaysia Bhd lwn Kong Sun Enterprise Sdn Bhd dan lain-lain* [2012] 10 MLJ 665 (High Court of Malaya at Johor Bahru) and *Bank Islam Malaysia Bhd lwn Rhea Zadani Corp Sdn Bhd etc.* [2012] 10 MLJ 484 (High Court of Malaya at Kuala Lumpur).

case law

There are reported cases that have dealt with BBA in Malaysia. Among the cases are as follows:

- 1) *Bank Islam Malaysia Bhd v Azhar Osman & Other Cases* [2010] 5 CLJ 54 (High Court of Malaya at Kuala Lumpur)(issue involving the demand of the bank for full sale price);
- 2) *Bank Kerjasama Rakyat Malaysia Bhd v. Brampton Holdings Sdn Bhd* [2015] 4 CLJ 635 (High Court of Malaya at Kuala Lumpur)(Issues on the liability of the defendant debtor who failed to make repayment under the BBA facility to the bank financier);
- 3) *Malayan Banking Bhd v. Marilyn Ho Siok Lin* [2006] 3 CLJ 796 (High Court of Sabah & Sarawak, at Kuching)(Issue on the claim of the bank for full sale price from the customer debtor even though the BBA facility was terminated prematurely);
- 4) *Malayan Banking Bhd v. Ya'kup Oje & Anor* [2007] 5 CLJ 311 (High Court of Sabah and Sarawak at Kuching)(Issue on the claim of the bank for full sale price from the customer debtor even though the BBA facility was terminated prematurely); and,
- 5) *Arab-Malaysian Finance Bhd v. Taman Ihsan Jaya Sdn Bhd & Ors; Koperasi Seri Kota Bukit Cheraka Bhd (Third Party) and Other Cases* [2009] 1 CLJ 419 (High Court of Malaya at Kuala Lumpur)(Issue on the rate of profit from BBA transaction may have contravened Islamic Law).

### The Case Study

The case study involves a customer/purchaser by name of Ahmad Ismadi Bin Mat Husin and Ana Marlina Binti Sarian ('purchaser') and Bank Islam Malaysia Berhad ('BIMB'). The purchaser bought a unit of apartment known as parcel No. B-8-10, Block B, Level 8 which is also known as Indah Heights (Service Apartment), Pulau Indah, Klang with a measurement of 733 square feet ('the said property'). The said property has no separate issue document of title. The said property is held under a Title Master No. EMR 7847, Lot No. 5740 and EMR Lot No. 7848, Lot No. 5741, Pulau Indah, Mukim dan District of Klang, Selangor. The land on which the said property is erected is owned by one Mokhtar b. Ahmad dan Siti Mariam bt. Ahmad. The address of the said property is Parcel No. B-8-10, Level 8, Block B, Indah Heights, Pulau Indah, Klang, Selangor. The developer of the project is known as Simpulan Cemerlang Sdn Bhd (No. 355877-P). The said property was sold to the purchaser at the price of RM 98,000.00 (Ringgit Malaysia: Ninety Thousand Only) (USD 24,500.00). The purchaser

paid the deposit. While BIMB finances the balance of RM 88,200.00 (Ringgit Malaysia: Eighty Eight Thousand Two Hundred)(USD 22,050.00) effected through BBA(KNM Consulting Services, n.d).

The said housing development project was terminated and became abandoned. There is no construction activities and constructed building on the said land. Nevertheless, BIMB paid to the vendor developer the progressive payment amounted to RM 26,700.00 (Ringgit Malaysia: Twenty Six Thousand and Seven Hundred)(USD 6,675.00) being payment for work done for stage 2(b) - 'being a work of commencement the work below ground level including piling, pile cape and footing of the said building comprising of the said parcel'. The payment was made by BIMB after they received an architect certificate and a request of the vendor developer. After knowing that the said housing development has become abandoned, the purchaser stopped making installment payment to BIMB. As a consequence, BIMB commenced a legal action against the purchaser for an amount of RM 239,945.72 (Ringgit Malaysia: Twenty Hundred Thirty Nine Thousand Nine Hundred Forty Five and Seventy Two)(USD 59,986.43) being the full sale price stated in the PSA and cost incurred by BIMB. This happened in 2005. Finally, on 22 February 2011, the purchaser settled BIMB demand by making settlement payment of RM 30,000.00 (Ringgit Malaysia: Thirty Thousand)(USD 7,500.00) (KNM Consulting Services, n.d).

### **Analysis**

In the transaction above, the purchaser bought the said property from the developer vide an agreement of sale and purchase (find this agreement). Later the purchaser applied to BIMB for financing the balance purchase price. This was done through BBA. There are three documents involved:

- 1) Sale & Purchase Agreement between the vendor developer and the purchaser dated 9 September 2002 ('S&P');
- 2) PSA dated 1 November 2002 ('PSA');
- 3) PPA dated 1 November 2002 ('PPA'); and,
- 4) Deed of Assignment dated 1 November 2002 ('DoA').

Through these legal documents the purchaser is called the beneficial owner of the property. Beneficial owner is a legal term where specific property rights ("use and title") in equity belong to a person even though legal title of the property belongs to another person (Black's Law Dictionary, 2001). This often relates where the legal title owner has implied trustee duties to the beneficial owner. In practical sense, in respect of the sale and purchase of property in Malaysia is concerned, beneficial owner refers to the purchaser who paid the deposit (normally 10% ) of the purchase price to the vendor, without having paid the total purchase price and that the title to the property is not yet transferred into the name of the purchaser pending full settlement of the purchase price.

In other words, referring to the above case study, the purchaser through the purchase of the said property vide sale & purchase agreement dated 9 September 2002, from the developer, the property of which was still pending completion, becomes the beneficial owner of the said property as the said property has not yet fully bought, the purchase price is still not fully paid and title has not yet registered into the name of the purchaser. His position as the beneficial owner still subsists even when the purchaser entered into the BBA contract vide PPA. This can be seen in the preamble of the PPA dated 1 November 2002 of the case study above. Through PPA also, pursuant to clause 5 (passing of beneficial ownership and/or rights), the beneficial owner of the said property was shifted to BIMB. Later through PSA and Deed of Assignment (DoA) dated 1 November 2002, pursuant to clause 4 (Passing of Beneficial Ownership and/or rights) and clause 1, respectively, the beneficial owner was re-shifted back to the purchaser. Through PSA also and by the fact that the purchaser is again becoming the



beneficial owner, the said property is charged to BIMB through the Deed of Assignment (DoA).

**The issue is this: What is the Islamic law view on beneficial ownership?**

Under Islamic law, a contract is called *al-'aqdu*. *al-'aqdu* is defined as 'the obligation which is the result of an offer given by a party and the acceptance given by the other party, in a way where its legal effect is expressed on the thing contracted upon' (Ibn 'Abidin, 1966).

According to Mejelle, pursuant to article 103, *aqdu* is defined as 'the two parties taking upon themselves and undertaking to do something. It is composed of the combination of an offer (*ijab*) and acceptance (*qabul*)'.

According to Qamus al-Wasit, *al-aqdu* means 'an agreement between two parties with a purpose that the respective parties have to execute their obligations as agreed'.

There are many Quranic verses and Hadith of Prophet Muhammad (PBUH) mentioning on contract. For instances are the followings:

- 1) Surah al-Maidah 5:1: "O ye who believe! fulfill (all) obligations. Lawful unto you (for food) are all four-footed animals, with the exceptions named: But animals of the chase are forbidden while ye are in the sacred precincts or in pilgrim garb: for Allah doth command according to His will and plan."
- 2) Surah al-Baqarah 2:282: "O ye who believe! When ye deal with each other, in transactions involving future obligations in a fixed period of time, reduce them to writing Let a scribe write down faithfully as between the parties: let not the scribe refuse to write: as Allah Has taught him, so let him write. Let him who incurs the liability dictate, but let him fear His Lord Allah, and not diminish aught of what he owes. If they party liable is mentally deficient, or weak, or unable Himself to dictate, Let his guardian dictate faithfully, and get two witnesses, out of your own men, and if there are not two men, then a man and two women, such as ye choose, for witnesses, so that if one of them errs, the other can remind her. The witnesses should not refuse when they are called on (For evidence). Disdain not to reduce to writing (your contract) for a future period, whether it be small or big: it is jester in the sight of Allah, More suitable as evidence, and more convenient to prevent doubts among yourselves but if it be a transaction which ye carry out on the spot among yourselves, there is no blame on you if ye reduce it not to writing. But take witness whenever ye make a commercial contract; and let neither scribe nor witness suffer harm. If ye do (such harm), it would be wickedness in you. So fear Allah. For it is Good that teaches you. And Allah is well acquainted with all things. If ye are on a journey, and cannot find a scribe, a pledge with possession (may serve the purpose). And if one of you deposits a thing on trust with another, let the trustee (faithfully) discharge his trust, and let him Fear his Lord conceal not evidence; for whoever conceals it, - his heart is tainted with sin. And Allah know eth all that ye do".
- 3) Hadith of the Prophet Muhammad (PBUH): "Muslims are bound by their condition" (al-Bukhari, 1934).

Under Islamic law there is no specific topic discussing on 'beneficial ownership'. What is clear is that 'beneficial ownership' denotes not an absolute ownership. The issue is, whether Islam allows beneficial ownership in contract?

First of all, in Islamic law there is a caution by a Hadith of not to involve in non or incomplete ownership and non-possession-ship of subject matter.

For example, al-Tirmizi reported that a man questioned the Prophet Muhammad (PBUH) that a man came to see him and he wanted to buy from him some goods. He had no such goods. He went to the market and purchased the goods and then sold them to the man. The Prophet

Muhammad (PBUH) responded to the question by answering “do not sell what you do not have” (al-Tirmizi, 1937). The report indicates that it is not allowed for a person to sell an object which he does not own or possess.

Imam al-Bukhari also reported a hasan hadith which prohibits of selling the foodstuff which was previously bought without taking into possession (al-Bukhari, 1934).

To Ahmad Hidayat Buang, the above mentioned contract is prohibited because the seller cannot guarantee that he is able to deliver the object of the sale physically and legally. In physical term he cannot guarantee the object will be available in future and in legal term he is not yet the lawful owner of the object (Buang, 2000).

Be that as it may, it is submitted that, Islam provides certain elements of contract. In the event that any of these elements is absent, then the contract can be void. The elements are as follows:

- 1) The subject-matter must exist;
- 2) The subject-matter can be delivered;
- 3) The subject-matter can be ascertained; and,
- 4) Suitability of the subject-matter.

### 1) The Subject-Matter Must Exist

Islamic law emphasizes that the subject matter of a contract must exist at the conclusion of the contract. Thus, if the subject-matter is absence, the contract is void. Due to the absence of the subject-matter, the contract becomes a *gharar* contract (fraudulent/perilous contract), which is a void contract. The authority that requires the existence of the subject matter and prohibition of *gharar* contract is as follows:

Al-Quran:

- a) Chapter IV (Surah An-Nisa'), Verse 29: "O you who have believed, do not consume one another's wealth unjustly but only [in lawful] business by mutual consent. And do not kill yourselves [or one another]. Indeed, Allah is to you ever Merciful".
- b) Through the above Quranic verse, Islam prohibits all categories of wealth acquisition or profit through unlawful ways which it terms batil. Unlawful way includes *gharar* contract (Buang, 2000).
- c) “Muslims are brothers. It is not permissible for a Muslim to sell a thing which contains faulty elements/flaws/defects (aib) to his fellow brother (Muslim) except if he discloses it” (al-Shawkani, 1357H).
- d) It was reported that the Prophet Muhammad PBUH while he was passing a vendor selling foods, and became attracted to the bunch of foods before him. He put his hand into the bunch and found the part below the foods were wet. He asked the seller: What is this? The seller replied: the foods were wet because they were poured with rain water and to prevent public from knowing this fact, he put the wet foods at the bottom part of the bunch. On hearing of this, the Prophet PBUH said: 'He who cheats us, is not from us.' (Imam Muslim, n.d)
- e) The Prophet Muhammad (PBUH) said: "It is not permissible for someone to sell a thing except after he has explained about it, nor is it permissible for a person who knows such a state of condition of a thing, except he explains about it" (al-Shawkani, 1357H).
- f) Yahya related to me from Malik from Abu'r-Rijal Muhammad ibn Abd ar-Rahman ibn Haritha from his mother, Amra binti Abd ar-Rahman that the Prophet (PBUH), forbade selling fruit until it was clear of blight. Malik said: ' Selling fruit before it has begun to ripen is an uncertain transaction (*gharar*).' (Imam Malik, 2016).

The position of Islamic law is clear on contracts involving a non-existent subject-matter. Islamic law lays down a condition that the subject matter must actually exist at the conclusion of the contract. Hence, if the subject matter does not exist, generally, the contract is void even though it could probably exist thereafter, or even if it is established then that it would exist in the future but the existence is still to the detriment of any party to the contract. A contract which involves a non-existent subject matter is prohibited pursuant to a hadith, whereby the Prophet Muhammad (SAW) prohibited a person from selling an animal fetus yet to be born while it is still in the mother's womb, when the mother was not part of the sale (al-Zayla'i, 1393H). Similarly is the selling of milk whilst it is still within the udder of the animal. This sale is void as there is a possibility of the udder being perhaps void of milk, and instead, only containing air (al-Kasani, 1328H). In one hadith, the Prophet Muhammad (PBUH) prohibited the act of stopping the milk of udder of the female goat for a certain duration for the purpose of enticing the public to purchase the female goat on the pretext of it containing a lot of milk (al-Shawkani, 1357H). Prophet Muhammad (PBUH) too prohibited the sale of things which one does not own (Abu Dawud, 2009).

However, Muslim jurists allow the contract of a non-existent subject matter, as one of the exceptions to the above, relating to the sale of agricultural products before they become ripe. However, this is subject to the knowledge that the products have already appeared even before the signs of ripeness are shown. Further, this type of contract is allowed if the purchaser immediately harvests them. The position is the same in respect of the sale of fruits and agricultural products, which yield successively one after another during one harvest as in the case of water melons and egg-plants. In this particular case, Muslim jurists in general have agreed to allow the sale of fruits which have already appeared but will disallow the sale of fruits which are yet to appear (Al-Kasani, 1328H). This contract falls under the category -- 'the subject matter exists in essence, then comes into existence thereafter' (Nawawi, 1999; Al-Sarkhasi, 1384H; Ibn Juzay, 1974; Ibn Qudamah, n.d).

As regards the subject-matter which did not exist at the time of contract and it is established that it also could not exist in the future, Muslim jurists do not accept this kind of contract as this contract contains the element of *gharar* (Nawawi, 1999; Al-Sarkhasi, 1384H; Ibn Juzay, 1974; Ibn Qudamah, n.d). A transaction containing the element of *gharar* is prohibited based on the verses of the Quran above and the hadith of the Prophet Muhammad (PBUH), for instance Ibn Umar to have said that the Prophet (PBUH) prohibits sales involving *gharar* elements (al-Bayhaqi, 1971). Majority of the jurists are also unanimously of the opinion that the contract which its subject matter generally could not be surrendered to the parties at the conclusion of the contract or at the promised date, is a *gharar* contract and thus it is void, not binding and having no legal effect (al-Zuhayli, 1988).

*harar* is forbidden in Islam as its existence would harm the well-being, rights and interests of contractual parties and cannot ensure satisfactory outcomes, justice and fairness in their contractual dealings (Abdul Rahman, 2016). It is also forbidden by the Sharia because this element typically causes enmity, dispute, hardship, injustice and losses to the parties.

Hence, referring to the issue of 'beneficial ownership' in the above case study, it is clear that, the subject matter, i.e. the completed house does not exist as the time the contract was entered into and when the contract was concluded. There seems no possibility, based on the case study, that the subject-matter can be possibly existed at the conclusion of the contract and even today. This is because the vendor developer terminated the construction of the house and abandoned it and there is no plan for rehabilitation altogether to ensure the construction completed, to the detriment of the purchaser. It follows that, the 'beneficial ownership' that the purchaser owned during the subsistence of the agreement of sale with the vendor developer and the subsistence of PPA with BIMB was a defective ownership and cannot be

existed to date. Thus, it is opined, the agreements (agreement of sale and PPA) are void contracts.

**2) The Subject-Matter Can Be Delivered**

Islamic law requires that the subject-matter can be delivered, regardless whether there exist beneficial ownership or legal ownership. What is important, the subject-matter can be delivered to the rightful parties to the contract. Even though the ownership is beneficial, not being absolute, in nature, yet if the parties can ensure the delivery of the subject matter including the ownership, the contract is recognized under Islamic Law and is valid. This is the opinion of the majority of the jurists (al-Zuhayli, 1988).

**3) The Subject-Matter Can Be Ascertained**

It is necessary according to Islamic Law that the subject matter can be ascertained so as to prevent disputes, hardships and losses to the parties. According to Hanafi and Hanbali Schools, knowledge and ascertainment of the subject matter can be made by pointing out the place where the subject-matter is placed, even if it is hidden (al-Kasani, 1982; Ibn Qudamah, n.d). However, according to the Maliki School, there is no valid contract unless parties can see the subject matter visually, except it is impracticable, then in this situation the subject matter must be ascertained by description (al-Hattab, 1992). On the other hand, Shafie School opined that the knowledge of the subject matter can only be attained only by visual sight of the subject matter, whether or not the subject matter is actually present at the meeting of the parties (al-Sharbini, 1370H).

Following the above elaboration, the subject matter of the case study is the pending completion house. Thus, at the time of the contract, it cannot be seen. Neither can it be seen after the conclusion of the contract. There is no term in the sale agreement, PPA, PSA and DoA that require the responsible parties to ensure that the house can be rehabilitated and be brought into existence. What is available are the descriptions of the property (subject matter) which are provided in the sale agreement between the vendor developer and the purchaser, in the PSA, PPA and DoA. For example, the descriptions of the houses are on information regarding the material construction, measurement, land description, duration of construction and right to defect liability period. As the house (subject-matter) does not exist i.e. abandoned, and it cannot be seen visually and further there is no term that require the responsible party to rehabilitate the abandoned house, these facts have rendered the subject matter unascertainable and thus the contract is void.

This is in line with the opinion of Hanafi School which maintained that the subject matter should be determined in a manner which can dispel serious ignorance, thus, the terms of the contract should define the genus, species quality and quantity. In addition to this, to Hanafi School, immaterial lacking of knowledge does not invalidate the contract, because the party has the right of 'option on inspection' (al-Kasani, 1982). Similarly, this is also the opinion of Maliki School, except that Maliki School is of the opinion that contract by description is lawful and it is not necessary to allow 'option on inspection', different from Hanafi School's view (al-Hattab, 1992). Hanbali School if also of a similar view, where they opined that the subject-matter may be determined by description in a way which defines its exact identification. Prior inspection of the subject-matter is sufficient to conclude a contract, provided that it is not a kind which normally changes between the inspection date and the date when the contract is concluded. In other words, the descriptions of the subject-matter must tally with the actual features of the subject-matter upon delivery (Ibn Qudamah, n.d; Ibn Qayyim, 1950).

Hence, referring to the case study above, the subject matter being the incomplete and abandoned house even though it has been fully described in the sale agreement (S&P), PPA,

PSA and DoA, it is still failed to be delivered to the purchaser by the developer and/or the Islamic bank. It follows that, by the failure to deliver the subject matter (duly completed house), the vendor (BIMB) and the developer have breached the descriptions (S&P, PPA, PSA and DoA). The aggrieved purchase is also entitled to right of option on inspection, following Hanafi and Hanbali Schools, and if warranted, he can void the contract.

#### **4) Suitability of The Subject-Matter**

The subject matter must be suitable in commercial value and fit for transaction purpose. This is the opinion of Ibn Abidin, al-Sharbini, al-Dardir and al-Kasani (Ibn Abidin, 1966; al-Sharbini, 1370H.; al-Dardir, 1972; al-Kasani, 1982).

Thus, as the subject matter in the case study was abandoned, cannot be delivered and cannot be occupied by the purchaser, the subject matter, it is submitted is not suitable for commercial value and unfit for transaction and use. Thus, the contract, it is opined, is void.

#### **Conclusion and Recommendations**

It is submitted that the beneficial ownership as illustrated in the above case study and discussion does not guarantee, protect and preserve the interests and rights of the stakeholders for instance the aggrieved purchasers in abandoned housing projects. Thus, the BBA documentations must be provided with additional terms that can provide adequate protection to the rights and interests of the purchasers. The current BBA terms involving beneficial ownership, it is submitted, are inadequate that can lead to gharar and evidently, has failed to fulfill the elements of contract as discussed above. Additional terms should be considered such as terms providing liability and responsibility of the bank and/or housing developer vendor to rehabilitate or compensate the aggrieved parties in the event of abandonment. Alternatively, there should have a special mechanism that can ensure all relevant stakeholders are shielded from any losses and grievances consequential to housing abandonment, for instance the vendor/bank and/or housing developer should possess housing development insurance to cover the situation where housing project is abandoned and specific terms, either in the S&P and BBA documentations, on the liability and responsibility to rehabilitate abandoned housing projects. Further, the system of full build and sell should be practised in Malaysia to avoid the problems of abandoned housing projects and their consequential losses altogether.

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## M-BMT AS A PRODUCT INNOVATION FOR BAITUL MAAL WAT TAMWIL (BMT)

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### Abstract

With subsequent development of societies by technology to make transaction free be quickly and light in weight, necessary product innovation by Islamic microfinance institution (IMFI) like Baitul Maal Wat Tamwil. The one of appropriate innovation with technology development is mobile banking (in this case is M-BMT), generally this product only used by financial institution like banking, with the aims to increase the services and customer satisfaction, because the part of society have a certain view that microfinance institution is financial institution which is support less in information technology field. This paper aims to introduce the product innovation of M-BMT to Islamic microfinance institution like BMT. Finally, this study showed that with M-BMT will increase the revenue for BMT and also will increase the services and customer satisfaction.

**Keywords:** *M-BMT, Islamic microfinance institution, Product innovation.*

### NOMENCLATURE

BMT : Baitul Maal Wat Tamwil  
IMFI : Islamic Microfinance Institution  
M-BMT : Mobile-BMT

### Introduction

Baitul Maal wat Tamwil (BMT) is one of the Islamic microfinance institutions in Indonesia, Arief (2009) mentions that BMT is a microfinance institution that seeks to develop productive enterprises and investment with sharing system (profit sharing) to improve the quality of economy of the small entrepreneurs in the effort to alleviate poverty by applying the principles of sharia<sup>2</sup>.

BMT developments in Indonesia is evolved significantly. With the largest Muslim majority, the growth of BMT has the potential to develop a system of financial services are increasingly promising (Muzdalifah and Titinni, 2015)<sup>3</sup>.

However, with the development of increasingly advanced technology, BMT should be able to fulfill the needs of the community in the transaction quickly and transaction free. It is an opportunity for the development anticipation of BMT, BMT developments which can not be separated from the various obstacles that must be faced. According to Heri Sudarsono (2013) explains that the existence of BMT can be sustained through a strategy of improving human resources (HR) competent, good marketing management, product innovation, improving the quality of services, and in cooperation with the Islamic Banks in terms of capital<sup>4</sup>.

Service quality of BMT becomes the crucial factor in the success of the customer's business. Therefore, is need for improvement of product innovation in accordance with technological

<sup>2</sup> Arief, B., 2009. "Peranan Baitul Mal Wattmwil untuk mencapai kesejahteraan anggotanya (Studi Kasus Pada BMT Darussalam Ciamis Jawa Barat)". Skripsi Universitas Islam Indonesia.

<sup>3</sup> Muzdalifah dan Titinni, 2015. "Peningkatan Layanan KJKS Melalui Inovasi Produk Mobile Banking". Forum Riset Ekonomi Keuangan Syariah. Online, [www.forumriset.com](http://www.forumriset.com) diakses pada November 2015.

<sup>4</sup> Heri Sudarsono. 2003. "Bank dan Lembaga Keuangan Syariah; Deskripsi dan Ilustrasi". Yogyakarta: Ekonosia.



developments. According to Ahmad et al (2013), technology is one of the factors that influence the development of the banking sector in each country. Technology is an electronic device that is an integral to the human activity in the world currently, including the banking sector. Then the corresponding product innovation with the development of technology is mobile banking.

Conventional banking industry first uses Internet technology and Mobile Banking from the Islamic banking industry especially in microfinance institutions. In Indonesia, the existence of Islamic microfinance institutions very much, but the lack of product innovation in accordance with technological developments such as mobile banking. As a financial institution that is managed professionally, BMT cannot be managed with just high motivation alone. Economic and financial management aspects should be employed optimally. BMT Management should be able to follow the development of the technology in the environment, and not outdated that may reduce customer's interest to join. Product innovation should continuously be improved in order to seize the market. Therefore, the aims of this paper is to introduce the product innovation of M-BMT to Islamic microfinance institution like BMT.

## **Material and Methods**

### **1. Software Development Methods**

Development method used to create applications "M-BMT" based mobile using Android Studio starts from the process of analysis and design using the Waterfall method.

In developing this apps, the author is analyzing the application of M-BMT. Application is a program that people use to do something on the computer system. Mobile can be interpreted as an easy transfer from one place to another. System mobile application is an application that can be used even if users move easily from one place to another without termination or interruption of communications.

### **2. Software Application**

Android Studio is an IDEs for Google Android Development introduced at the Google I / O 2013. Android Studio is a development of the Eclipse IDEs, and is based on the popular Java IDEs, IntelliJ IDEA is. Android Studio is the official IDEs for Android application development. As the development of Eclipse, Android Studio has many new features compared to Eclipse IDEs. In contrast to the Eclipse that use the Ant, Gradle as Android Studio using the build environment.

## **References Citations**

### **1. Baitul Maal Wat Tamwil (BMT) Basic Concept**

Baitul Maal Wat Tamwil (BMT) derived from two words Baitul Maal which means the socially-religious oriented financial institution whose main activities are accommodating and distributing community wealth in the form of Zakat, infaq, and shadaqah (ZIS) based on the terms defined in the Qur'an and Sunnah of His Prophet. While Baitul Tamwiil means financial institution whose main activities is to raise public funds in the form of savings and deposits and then channel them back to the community in the form of Sharia financing through a common mechanism in the banking world<sup>5</sup>. Thus the conception of BMT is an institution includes two types of activities: 1) activities to raise funds from various sources such as zakat, as well as other shadaqah infaq and shared/ distributed to the beneficiary in order to overcome poverty, and 2) Productive activities in order to create new value-added to economic growth

<sup>5</sup> Ilmi, Makhmalul SM. 2002. "Theory and Practice: Islamic Micro Financial Institution". Yogyakarta: UII Press. Page 65

and develop human resources<sup>6</sup>.

## 2. Mobile Banking

Mobile Banking is treated as an information system service from the banks of the most important are able to produce financial information covering the check balances, transfer funds, credit card bill information, payment of bills, etc.

Service Quality in Islamic financial institutions should improve the perception of consumers that use of mobile banking should provide convenience for customers. In the journal Ahmad Nurul Huda and Sri Wahyu quoted from the American Society for Quality Control in Lupiyoadi (2001) quality is a whole traits and characteristics of a product and services in terms of its ability to fulfill the needs that have been determined or latent.

Future Foundation in the study (2011) said "85% of those using mobile phone banking think that technology (including online and mobile phone) helps them manage their money more efficiently. While the data from [Republika.co.id](http://Republika.co.id) mention mobile banking users can reach 90%, it can be expected due to growth in transactions using 'mobile banking' in 2014 increased threefold<sup>7</sup>. This is in line with the number of users of mobile phones (cell phones) in Indonesia reached 297 million people (Communications, 2012). Meanwhile, the year 2019 is predicted to mobile banking users reached 1.75 billion (Sarifah. 2014).

## Result and Discussion

### 1. M-BMT

"M-BMT" is a mobile application that allows users to conduct banking transactions. This application is equipped with a variety of features, such as transfers, check balances, pay bills, building, souvenirs, and photographers can be ordered through this application. So this allows the user can conduct online transactions.

Architecture design system application of "M-BMT" users load applications, and also the flow of data on the application. Applications "M-BMT" there are two users, namely clients and admin. Consumers after registering can use various features available in the application. Suppose that consumers want to see balance information, pay bills, make transfers and purchases pulses.

### 2. Use Case

The purpose of the system design is to know everything that is needed by the system. In designing system used the use case to provide an overview of the functions provided by the system. After the identification of actors and users, it can be made use case that is used to describe what is done by the user.

### 3. M-BMT Apps

#### A. System Engineering

This stage begins with searching the needs of the whole to be applied in the form of software. The data collected can include information about income, number of customers and products offered. Where the System Engineering is also connected with an internet connection, making it easier to access other data such as information about BMT, its products and all the information about the contents of the application from Mobile Banking

#### B. Design

<sup>6</sup>Arief, B., 2009. "Peranan Baitul Mal Wattmwil untuk mencapai kesejahteraan anggotanya (Studi Kasus Pada BMT Darussalam Ciamis Jawa Barat)". Skripsi Universitas Islam Indonesia.

<sup>7</sup>Maharani, Esthi. 2015. "Pengguna Mobile Banking Diperkirakan Meningkat Tajam". [www.republika.co.id](http://www.republika.co.id), online, accessed on 10 Oktober 2016.

In the second phase is designing, where designing is done by determining the final outcome of the application to be made, the product application system design, database and other than Mobile Banking. At this stage also made use case design and manufacturing applications such as in the following figure. In addition to Design the designing application also using CorelDRAW or Photoshop to design the look of the application to make it look more perfect and able to be read by the user. And the designing shown in Fig. 1

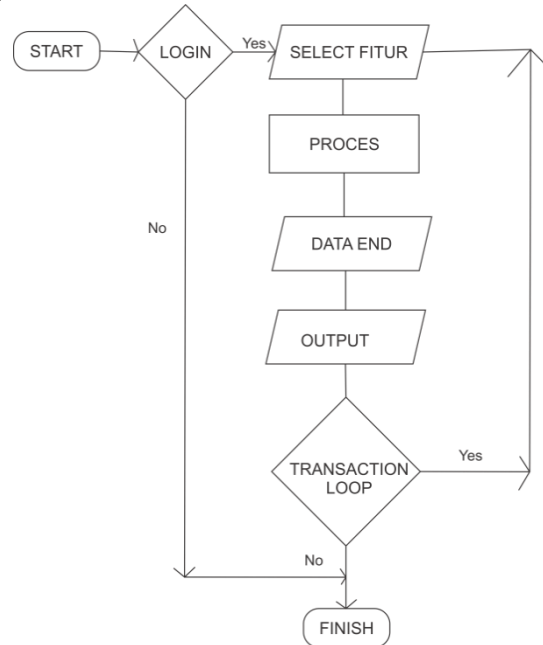


Figure 1. Designing M-BMT Apps

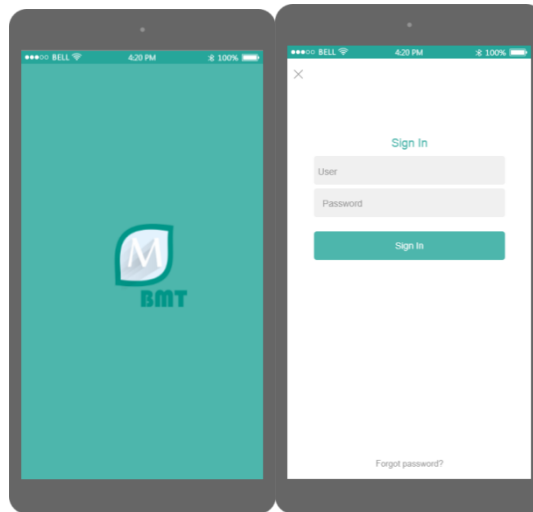
C. Testing

The next step is to try the accuracy of Mobile Banking product before uploaded or posted to the customers so that it can be used in the long term. The test is performed by taking a sample of customers. If the results show a positive and acceptable it will be launching stage, but otherwise it will be tested again to fix the result of the application of this Apps.

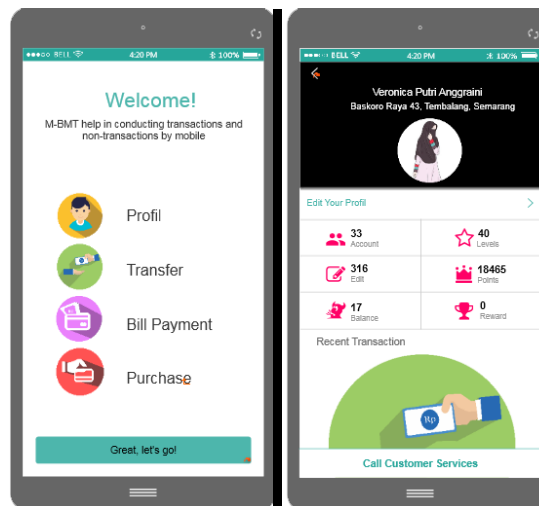
D. Launching

The stage of completion in the manufacturing process of this application is to launch Sharia Mobile Banking Products and dissemination of products to its customers. In this case can be through the services of the Google Play Store or services are similar.

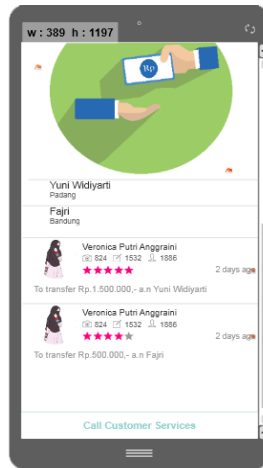
#### 4. Prototype M-BMT



Front display of the M-BMT is start and on About us menu. On the menu of about us BMT contains brief profiles as well as the products it offers, not only that, in this menu are also discussed in detail about the products offered by BMT.



On the main menu there are four sub menus that balance information, transfers, payments and settings. In M-BMT, the main difference when compared to mobile banking is generally used by banks is its easily understood by the public (customers), this is because the fatherly easier for customers to use the product M-BMT.



### Conclusion

With the development of increasingly advanced technology, BMT should be able to fulfill the needs of the community in the transaction quickly and transaction free. It is an opportunity for the development anticipation of BMT, BMT developments which can not be separated from the various obstacles that must be faced. "M-BMT" is a mobile application that allows users to conduct banking transactions. This application is equipped with a variety of features, such as transfers, check balances, pay bills, building, souvenirs, and photographers can be ordered through this application. So this allows the user can conduct online transactions. Finally, this study showed that with M-BMT will increase the revenue for BMT and also will increase the services and customer satisfaction.

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## DEVELOPING AND TESTING MEASUREMENT SCORE OF TRANSACTIVE MEMORY SYSTEM

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### Abstract

In recent years, the importance of studies on transactive memory system (TMS) - a mechanism of individual memory system combined with communication, is increasingly recognized by researchers in organizational behavior. Various empirical studies conducted either experimental or field research with the majority using a measurement scale designed by Lewis (2003). Based on the issue of the validity of the measurement scale with consideration of different contexts (scale was created in the United States and most of the empirical studies conducted in Western cultures), the study was conducted in order to have confidence when using instruments on TMS studies in Indonesia. This study was designed using two stages: the first stage produces six items that were previously not covered by the scale of Lewis (2003). Subsequently, in the second stage, the results of testing the hypothesis not supported allegedly because of variations in the type of work teams and the adequacy of the sample size.

**Keywords:** *Transactive Memory Systems (TMS), Measurement Scale, Work Team*

### Introduction

In line with the conditions on a practical level, study focus on work team process conducted by researchers both conceptual and empirical ones has been developing rapidly (Kozlowski & Bell, 2013; Mathieu et al., 2008). One of them is the construct transactive memory systems (TMS). TMS is defined as "a set of individual memory systems in combination with the communication that takes place between individuals" (Wegner, 1987; Wegner et al., 1985). TMS becomes a mechanism of how the knowledge stored in the individual memory collectively encoding, then storage and retrieval parallel with communication interactions taking place between individuals.

The use of TMS concept evolved from a dyad (e.g, Hollingshead, 2000; Wegner et al., 1991; Wegner, 1987; Wegner et al., 1985) to the group or team level (eg. Peltokorpi, 2014; Mell et al., 2014 ; Huang et al., 2013; Choi et al., 2010; Michinov & Michinov, 2009; Faraz & Sproull, 2000) still have problems related to measurement and levels of analysis (one of criticism from Peltokorpi, 2008). There are three studies conducted by Faraj and Sproull (2000), Lewis (2003) and Austin (2003) that develop instruments to measure the construct of TMS. Ren and Argote (2011) proposed that for knowledge accumulation, researchers need to use a universal measurement. It is important to note that the process in validating the construct is never complete; there is no measurements are fully validated (Bennett & Robinson, 2000). Only studies conducted continuously and supported by strong arguments completed with good evidence (Nunnally, 1978; Schwab, 1980 in Bennett & Robinson, 2000) could create better instruments with high credibility.

The main objective of the study is to develop and examine the content of TMS measurement instruments as a part of the overall research design. This study is expected to increase confidence in the results of research in using TMS instrument for future studies.

### Measurement Scale of Transactive Memory Systems

The study focuses on the development of a measurement scale from Lewis (2003) because the scale has been developed to be used in both field study and experiments. Based on the results

of a literature review, this scale is more widely used than Faraj and Sproull (2000) and Austin (2003). The American Psychological Association (1985) in Hinkin (1995) states that a measurement scale must demonstrate content validity, criterion-related validity, construct validity, and internal consistency so that scale can be used in various research conditions.

Scale developed by Lewis (2003) has a weakness that can lead to inaccuracy of the test results. Kozlowski and Bell (2013) state that the use of this instrument has not directly tested the distributed memory structure while one the other perspective, TMS is categorized in a group of compilational construct (Kozlowski & Chao, 2012). The issue arise are: first, is it true that the dimension used in Lewis (2003) is a manifestation of TMS? Second, whether it is treated unidimensional or multidimensional? Two different approaches are used; (a) combining all dimensions into a single construct or (b) testing every dimension as a separate construct and connect them with each criteria variable. In addition, various empirical studies doing aggregation causing the constructs would be more appropriate if grouped in compositional rather than compilational construct. So that, the construct validity will become a problem in interpreting human behavior using measurements of aggregation approach of Kozlowski and Chao (2012).

### **Research Design**

This study was designed in two stages. The first stage focuses on the development of items for measurement scale by assuming that (a) TMS construct will have multidimensional characteristics in accordance with components suggested by Wegner et al. (1985) and Wegner (1987); and (b) the new measurement items as a result of contextual factors. Then, in the second stage, in the second stage, a scale of measurement derived from the first phase of the study will be tested using samples of work teams to test the consistency of the instrument. Further, at this stage, the connection between TMS with the team's performance using measurement instruments from Conger, Kanungo, and Menon (2000) was tested. Therefore, the hypothesis is: Transactive memory system is positively related to team performance. Each phased of study used different respondents.

### **Result**

#### **1. Study 1**

The first study includes a pre-test and pilot study 1 conducted at the individual level with different respondents. Pre-test was conducted by distributing 180 questionnaires using open questions. The total response rate was 63.3% and there were 92 questionnaires can be used (effective 51.1% response rate). Respondents work in various sectors: banks, government, public accounting firms, universities, textiles, food industry, IT, hotels, publishing, management consultants, and architects. The characteristics of respondents were 59 men (64.2%) and 33 women (35.8%) with 77.2% were in the age ranged from 21-40 years old. A total of 60.6% experienced a process of succession in the membership team for 3-4 times (70.6%). In addition, 67.4% agreed to keep using teamwork in their work.

Then, the answers were selected using criteria of Farh, Zhong, and Organ, 2004: (a) the item must have a clear meaning in Indonesian; and (b) the item must be related to the attitude and behavior of employees: 277 answers received, 15% were not considered in the next screening stage. After that, we identify form of response that shows the attitude or behavior. The answers of the respondents were then grouped into eleven points and then gained six new statements to be tested in the pilot study 1. The items of the statement are:

- a) Planned coordination through meetings, discussions, and written procedures is more helpful for our teamwork.
- b) Each member of the team often takes initiatives one another to coordinate in finishing the job.

- c) Our team always needs the role of the team leader to complete the work.
- d) Each team member can always understand the duties properly.
- e) It is often that the team members want to be more outstanding than the others.
- f) I continuously feel reluctant to ask for information from other team members to complete the work.

The next stage was the pilot study 1 involving respondents with primary criterion was an individual working in the organization and has been involved or is incorporated in our team. At this stage, it was obtained 130 out of 200 targeted respondents with 11% of the unselected fault or negligence questionnaires. While the respondents consisted of 64 males (55.17%) and 52 women (44.83%) and 62.93% are involved in a service organization. From the aspect of age, 83.62% were in the age ranging from 21 to 40 years old with the majority of undergraduate (S1) as many as 73 people (62.93%).

The first phase of data analysis is to use analysis factor of the 21 items TMS resulted from pre-test. Then, an analysis factor was tested three times until it was obtained the most optimum component groups and items to meet the acceptance criteria. The third test provided a firmly confirmation that optimal formation of the four components consisting of nineteen items. At the stage of testing the suitability model using AMOS software, one component was not included because it did not meet the criteria of the number of items for each dimension. Sixteen item questionnaire form three components after the two-stage modification and were able to show that the models tested met the criteria (Table 1). Cronbach's Alpha value of the respondents' answers to 16 TMS statement points is 0.917 indicating that the instruments used was reliable (Nunnally & Bernstein, 1994).

**Table 1. Result Comparison of *Goodness-of-fit* Testing**

	<b>Before modification</b>	<b>Modification 1</b>	<b>Modification 2</b>
• Chi-square: small	241.19	123.64	<b>99.26</b>
• Degrees of freedom	101	94	<b>90</b>
• Probability level > 0.05	0.00	.022	<b>.237</b>
CMIN/DF < 2	2.388	1.315	<b>1.103</b>
GFI > 0.90	.801	.892	<b>.910</b>
AGFI > 0.90	.732	.843	.865
TLI > 0.95	.821	.959	<b>.987</b>
CFI > 0.90	.849	.968	<b>.99</b>
RMSEA < 0.08	.110	.052	<b>.03</b>

## 2. Study 2

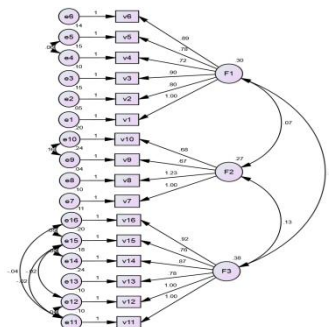
This stage was conducted to ensure the available responses were not too varied between periods of time so that whenever the measurement was made, it can be trusted. Hair et al. (2010) states that it relates to the testing of the internal consistency degree on measurement variables. To determine the team size as the sample, taxonomy of Hollenbeck et al. (2012) was employed; a small team  $n = 2$ , and a large team  $n \geq 5$ . While Colquitt, Lepine and Wesson (2009) states that the teams in the organization was formed having two or more members. Samples are teams (as a unit of analysis) at various work units with criteria (1) the respondents actually were in a work team, and (2) in doing their work, they used more



cognitive element. The number of questionnaires returned and can be processed as many as 34 work teams consisting of 164 respondents. The majority of them were female (68.3%) with 60.9% under the type of service organization. While 74.4% were in the age ranged from 21 to 40 years old with undergraduate (S1) as many as 103 people (62.8%).

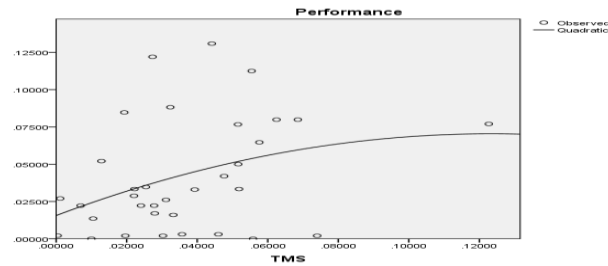
The calculation of Kaiser-Mayer-Olkin measures of sampling adequacy was generated at 0.861 and Bartlett's test of Sphericity which was found to be significant ( $\chi^2 (136) = 1068.097$ ;  $p < 0.01$ ). This means that the data can be used to perform factor analysis. Then, the results were extracted using principal component analysis and varimax rotation towards the answer of 21 items of questions. It showed consistency with the test results in study 1: 16 points of statements for TMS were grouped into three different factors and 5 points of statement on the team's performance. The results of the factor analysis consistently demonstrated that the item statement could represent what to measure. The test results on the fit model showed that the model of 3 factors ( $\chi^2 (93) = 95.7$ ,  $p > 0.05$ , GFI = 0.636, CFI = 0.99, RMSEA = 0.015) can meet the acceptability. The value of Cronbach's Alpha on the respondents' answers for 16 points of TMS statements was 0.896; meanwhile, for the other 5 point statement on the team's performance was 0.750. These results indicated that the instruments used were reliable (Nunnally & Bernstein, 1994).

As a form of construct in the property category of configural unit, Kozlowski & Klein (2000) suggested that they are less focused on the assumption of isomorphism, but rather on complex discontinuity and nonlinear processes. The author uses quadratic regression tests as one of the form of non-linear regression. TMS has a positive correlation but not significant with the team's performance ( $r = 0.352$ ,  $p = 0.129$ ). This suggested that the increased mechanization of TMS has a positive correlation with the increase of the team's performance even though it has slight significant value above standard.



**Figure 1. Model 3**

Before testing the hypothesis, the whole data were checked whether it have outliers data (out-of-range scores). If there were data with the scores more than the threshold value 3 standard deviations above the mean ( $Z > 3.00$ ), so, this data can be categorized as outliers and were not used in the analysis. Based on the criteria, there is one sample (teamwork number 32) has a value of z-scores for 3.522, thus, it was excluded from the analysis. Visually, the scatter plot of relation between TMS and team's performance was illustrated in Figure 1 indicating the distribution of variation using the quadratic form (Value  $f_{stat} = 2.191$ ;  $p = 0.051$ ). The test results demonstrated the hypothesis that memory systems Transactive positively related to team performance was not supported with  $R^2 = 0.124$ . When the result of testing the hypothesis is not supported, the justification was made carefully. Conceptually, it can be explained that there could be possibilities of other factors having a strong/weak impact relationship which can be explained by moderating variables in the future studies.



**Figure 2. Scatter plot with quadratic regression**

In addition to these factors, another weakness of this study was related to the taxonomy of the type of team involved. In this study, the types of teams used were not controlled. The criteria of the teamwork using cognitive factors were simply applied such as: decision-making, producing creative and innovative products, and requires the exchange of knowledge. The other important thing to note for further research is the sample size representative. If the instrument is used for further studies, by total parameters of 21 statements, the rule of thumbs of Hair, Black, & Anderson (2010) can be used mentioning that the ratio of minimum respondents are five times from the number of parameters. So that, the adequate sample size would be a minimum of 105 work team.

## Conclusions

This study has the main objective to develop and test the content of the TMS measurement instruments (Lewis, 2003). The study focuses on the construct transactive memory systems which are still identified as compilational construct, multilevel, and multidimensional. The results showed that different level of knowledge of the team members is a key element of this configurational construct type integrated with the coordination process. Contextual influences were predicted to cause a strong or weak discrepancy relationship between transactive memory system and the performance of the team. This is supported by results of exploration on the study 1 and the reason why the hypothesis is not supported.

Study 1 provided the initial assumption that the forms of media communication can provide different effects on the mechanism of transactive memory system on the team performance. Some of the issues arise at this stage are: a multilevel process, consider the contextual factors, and complex analysis process at the team level. Empirical evidence supports the definition of Wegner, 1987; Wegner et al., 1985 mentioning that TMS as "a set of individual memory systems in combination with the communication that takes place between individuals". Additionally, transactive memory system was supported as a multidimensional construct. Study 2 tested the instruments developed in study 1, and demonstrates the robustness of the instrument to be used in further studies. The limitations of the study is the fulfillment of the adequacy of the sample size and the type of work teams that will be one of the improvements in the future.

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## HOW AUTHENTIC LEADERSHIP IN FAMILY BUSINESS DEFINES THEIR LEADER-MEMBER EXCHANGE RELATIONSHIP

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### Abstract

Discussion of family business is always associated to the founder, the man behinds the gun. Susan (2003) stated that although the founder is most often called an entrepreneur, when this founder spearheads the development of ideas and resources (especially human resources) into reality and success, then the entrepreneur can also be considered a leader. The leadership style of the Leader will influence their follower and the follower will duplicate this style to their follower but the authenticity of the founder will remain authentic. With this background, it is interesting to learn how the founder in a family business develop his style of leadership which will be duplicated by his followers, and define the exchange or relationship quality between leaders and members in the organization to achieve company's goal and establish a sustainable strategy growth.

*Keywords: Family Business, Leadership, Authentic Leadership, Leader-Member Exchange*

### Introduction

Authentic Leadership became an interesting topic and people tried to relate this type of leadership to relationship of follower-leader and performance of the followers, when Gardner and Schermerhorn (2004) published a conceptual piece that explains when authentic leaders actively involve and develop followers, two positive organizational outcomes should result; follower job commitment and high in-role performance. HR practitioner also have a serious discussion on how the employees submit their resignation letter because they don't feel engaged with their leader or they don't feel supported by their leader. Liden, Sparrowe, & Wayne (1997) stated how the prevalence of empirical evidence surrounding the quality of the leader-follower relationship has led researchers to conclude that this relationship is one of the most important an employee has, and potentially one of the most important predictors of workplace outcomes. Simon (2009) convey that to improve employee's trust and attachment to organization influenced by employee perception that written values and vision statement of the leader are corresponding to the behavior of the leader. Therefore, a leader needs to "walk the talk" to prove that he has done what he said. This trust has to be built by the leader to the all organization members through credibility and integrity of his leadership.

Leadership not only found in big organization or in a company with hundreds of employee, but leadership can be found since the founder started his business or when he started to transform his vision into a reality. Susan (2003) underlines that creating and sustaining a successful new business venture demands not only vision and financial capital, but also leading others to transform that vision and financial capital into a successful reality. Although the founder of a new venture is most often called an entrepreneur, when this founder spearheads the development of ideas and resources (especially human resources) into reality and success, then the entrepreneur can also be considered a leader. Researchers also have recognized the role of organizational leaders as pivotal in the study of entrepreneurship, since business founders are responsible for the creation of goods and services and the leveraging of opportunities (Chandler and Hanks, 1994).

With this background, it is interesting to study how a founder of big family business develop his authentic leadership reflected in four authentic leadership dimension; Self Awareness, Relational Transparency, Balanced Processing and Internalized Moral Perspective, and which

occasionally will influence the exchange quality of leader-member relationship among his followers in the organization.

### **Family Business and Family Business Leadership**

To have a similar understanding about family business, we refer to Astrachan and Shanker (2003), using three modes of family involvement, which provide three operational definitions of family firms. Their broad definition uses the criteria of family's retention of voting control over the strategic direction of a firm. In addition to retention of such control by the family, the mid-range definition includes firms with direct family involvement in day-to-day operations. The most stringent of definitions classifies firms as family firms only if the family retains voting control of the business and multiple generations of family members are involved in the day-to-day operations of the firm. Using these definitions, these researchers estimate between 3 to 24.2 million family firms in the United States that provide employment to 27–62% of the workforce, and contribute 29–64% of the national GDP.

PriceWaterhouseCooper (PwC) on November 2014 published a survey report of family business in Indonesia that 95% of companies in Indonesia is categorized as family business. Family business in Indonesia contributes 25% to national GDP, represents of 2% of Indonesia citizen and has total wealth of 134 trillion US\$. In South East Asia, 60% of public owned company in is family business and inheritance of ownership is still major priority of the company. PwC defined a business as family business if the business has the founder or the ownership acquisition (spouse, parents, children or inherited) still has the major “voice”, at least one of family is still involved as representation in management or company executive. For public company (tbk), the owner or the ownership acquisition still has 25% of shares through capital investment and has at least one of the family involved in company board of executives.

According to Bohn & Grafton (2002) Leadership is a way to create a vision for the organization and followers, and encourages followers with self-confidence and trust through coordination and communication. As a key component of organizational culture, leadership has critical influences on organizations (Kotter & Heskett, 1992). Leadership in family business is hold by the Founder, the one who uses and monitors all resources, decides level of specification and integrity, facilitates and coordinates all communication channel, including decision making to choose the leader of the company to inherit his kingdom.

With these high spectrum in controlling the business to achieve the company vision and mission, it is clear that leadership style in family business is related to the founder, inherited by the next generation and adapted by the other members and employees of the organization. Hence it is also clear that the founder will be a genuine leader for the business, or defined by Avolio & Gardner (2005) as the authentic leader who thought to encompass many of the fundamental aspects of each of these forms of leadership. As its name suggests, authenticity is at the core of authentic leadership, and is based upon the ancient Greek maxim “to thine own self be true.” Authentic leaders lead from their convictions, and remain true to their personal values and beliefs, even during times of stress and challenge, when inauthentic leaders may be more likely to compromise their personal convictions (Avolio & Gardner, 2005).

### **Authentic Leadership**

#### **1. Approach**

Being the leader, being the founder, and being the one who built the company, they must be always aware of how they think and act, as their followers will perceive it as the values/moral perspective of the company. They disclose their personal values and motives, and show openness to their followers. Also, they provide positive role modeling of honesty and moral/ethical, future-oriented development of leader-follower relationships. This Authentic

leaders is “deeply aware of how they think and behave and are perceived by others as being aware of their own and others’ values/moral perspectives, knowledge, and strengths: aware of the context in which they operate; and who are confident, hopeful, optimistic, resilient, and of high moral character” (Avolio, Luthans, & Walumbwa, 2004).

Gardner et al., 2005; Shamir & Eliaim (2005) stated that authentic leadership, at its most fundamental level, is the congruence of a leader’s self-concept and his or her actions, and authentic leadership is proposed as the root component of the positive and effective leadership needed to encourage employees’ self-confidence and to create employees’ trust in management and co-workers (Avolio, Gardner, Walumbwa, Luthans, & May, 2004). Furthermore, authentic leadership focuses on building positive psychological capacities and a highly developed organizational context that affect leaders’ and followers’ behaviors (Luthans & Avolio, 2003).

## 2. Theory

Authentic leadership is thought to encompass many of the fundamental aspects of each of these forms of leadership (Avolio & Gardner, 2005). As its name suggests, authenticity is at the core of authentic leadership, and is based upon the ancient Greek maxim “to thine own self be true.” Authentic leaders lead from their convictions, and remain true to their personal values and beliefs, even during times of stress and challenge, when inauthentic leaders may be more likely to compromise their personal convictions (Avolio & Gardner, 2005). Authentic leadership, at its most fundamental level, is the congruence of a leader’s self-concept and his or her actions (Gardner et al., 2005; Shamir & Eliaim, 2005).

Authentic leadership is defined as “a process that draws from both positive psychological capacities and a highly developed organizational context, which results in both greater self-awareness and self-regulated positive behaviors on the part of leaders and associates, fostering positive self-development” (Luthans & Avolio, 2003, p. 243). The four dimensions of authentic leadership that are most commonly used in conceptualizations and measures of the construct are self-awareness, relational transparency, balanced processing, and an internalized moral perspective (Avolio & Gardner, 2005; Gardner, et al., 2005; Neider & Schriesheim, 2011). Authentic leader shows hope, trust, positive emotions, optimism, relational transparency, and a moral and ethical orientation towards the future (Avolio et al., 2004). In 1998, Walumbwa, Avolio, Gardner, Wernsing, and Peterson identified and validated four components to describe authentic leadership:

(1) *self-awareness*, which refers to understanding not only their own strengths and limitations, but how they affect others. As authentic leader with self-awareness, - leaders are aware of their motives, emotions, and values; this awareness is holistic in nature, with authentic leaders being equally able to identify their weaknesses as well as their strengths (Gardner et al., 2005). Self-awareness refers to knowing one’s strengths and weaknesses and to understanding how one makes meaning of the world. This heightened sense of self-awareness is instrumental to a leader’s ability to process information in a balanced manner (Avolio & Gardner, 2005; Michie & Gooty, 2005). Leaders must be able to understand their own motivations and emotions, and how their personal perspective will shape the way in which they react to a given situation. The leader’s self-awareness and self-regulated behaviors positively impact followers. Through confronting issues and retaining a sense of community, authentic leaders are theorized to provide positive leadership (Avolio et al., 2004; Luthans & Avolio, 2003).

(2) *Relational Transparency*, which refers to showing one’s authentic self to others and this behavior promotes building trust between a leader and followers. Relational transparency is believed to entail the leader presenting his or her authentic self to followers. By relating openly to others, the leader’s behavior promotes trust through

open disclosure of thoughts and feelings without inappropriately expressing emotion (Kernis, 2003; Walumbwa et al., 2010). Such disclosures and open sharing of information in an appropriate manner are key aspects of the authentic leader (Walumbwa et al., 2010).

(3) *Balanced Processing* refers to a rational decision-making process that is done based on objective analysis and relevant data (Gardner, Avolio, Luthans, et al., 2005). Balanced processing includes objectively analyzing all information before coming to a decision and includes soliciting views that challenge firmly held positions (Walumbwa et al., 2010, Walumbwa et al., 2008; Kernis, 2003; Gardner et al., 2005). This third dimension enables a leader to make decisions outside of information not immediately within his or her purview.

(4) *Internalized moral perspective* refers to the internalized form of self-regulation (Ryan & Deci, 2003). Thus one's behavior and decision-making are expressed consistently with internalized value (Avolio & Gardner, 2005). Internalized moral perspective is the leader's internal moral standards and values as the basis for decision-making and behavior, rather than allowing group, organizational, or societal pressures to influence him or her (Gardner et al., 2005; Ryan & Deci, 2003; Walumbwa et al., 2010; Walumbwa et al., 2008).

Authentic leaders show to others that they genuinely desire to understand their own leadership to serve others more effectively. They act in accordance with deep personal values and convictions to build credibility and win the respect and trust of followers. By encouraging different viewpoints and building networks of collaborative relationships with followers, they lead in a manner that followers perceive and describe as authentic. (Walumbwa et al., 2008, p. 96). Authentic Leader has been found to statistically predict job satisfaction, job performance, organizational citizenship behavior, organizational commitment, and satisfaction with supervisor (Walumbwa et al. 2008, Walumbwa et al., 2010). In this regards, author has underlined the statement that authentic leader statistically predict to satisfaction with supervisor, which will define the interaction between leader and member in the organization.

## **Leader-Member Exchange**

### **1. Approach**

Interpersonal Definition that Leadership is created by leaders and followers together (Eagly, 2005). Leaders need to obtain "buy in" from followers, Intended outcomes achieved only when followers identify leader's values and Leaders create change when they adapt their message to followers' values. Lewis (2011) conducted an empirical study and found that authenticity was strongly related to leadership effectiveness and Leader-Member Exchange mediated the relationship between authenticity and leadership effectiveness. Leaders who were viewed as authentic and responsible were better able to form positive relationships with their direct reports and, therefore, were viewed as efficient and effective.

### **2. Theory**

Leader-Member Exchange leadership theory has evolved into a dyadic approach to understanding leader-follower relationships (Howell and Hall-Merenda, 1999). According to the vertical dyad linkage approach (Dansereau et al., 1975), leaders and followers develop dyadic relationships and leaders treat individual followers differently, resulting in two groups of followers: an in-group and an out-group. The in-group consists of a number of trusted followers who are derived from expanded and negotiated role responsibilities with the leader. The out-group includes the remaining followers with whom the relationship of the leader remains more formal. A higher quality relationship results when leaders and followers exchange greater physical resources, information and enjoyable tasks (Liden and Maslyn,



1998). This reflects the assumption that leaders have limited time and energy and associated inability to give equal attention to all followers.

Leader-Member Exchange theory suggests that leaders do not use the same style in dealing with all subordinates, but rather develop a different type of relationship or exchange with each subordinate (Dansereau, Graen, & Haga, 1975; Graen & Cashman, 1975; Liden & Graen, 1980; Graen, Novak, & Sommerkamp, 1982; Graen & Scandura, 1987). These relationships range from those that are based strictly on employment contracts (i.e., low Leader-Member Exchange, or "out-group") to those that are characterized by mutual trust, respect, liking and reciprocal influence (i.e., high Leader-Member Exchange or "in-group;" Dansereau, et al., 1975). Theoretical support for the multidimensionality of Leader-Member Exchange derived from role theory and social exchange theory. Leader-member exchange theory (Leader-Member Exchange) focuses on dyadic exchange relationship between manager and employees, and attempts to build sound relationships in the organization [6, 8-12]. This Leader-Member Exchange perspective characterizes the superior-subordinate relationship as a dyadic social exchange process where relationships can be ranged on a continuum from low to high Leader-Member Exchange. It is argued that there is higher exchange between managers and employees in organizations that have a social focus in their daily work, and these relationships may develop stepwise over time.

### **3. Leadership in Family Business of Company-X In Indonesia**

Research of Tyson and Jackson (1992) about leadership model stated that a leader with good leadership style is capable to create a good leader-member relationship which impact to the business. Founder of the family business of company X in one of the interview mentioned that when he selected and prepared his followers to be a leader in his company, then knowledge and skills are not the primary one, but the leadership potential and individual character. The character becomes an important part for the judgment of the founder, because for him, skills and knowledge are something that can be learnt and developed, but character is what makes the person the way he is now. The character will refer to authenticity of the leader, and as its name suggests, authenticity is at the core of authentic leadership, and is based upon the ancient Greek maxim "to thine own self be true." Authentic leaders lead from their convictions, and remain true to their personal values and beliefs, even during times of stress and challenge, when inauthentic leaders may be more likely to compromise their personal convictions (Avolio & Gardner, 2005). Authentic leadership is thought to encompass many of the fundamental aspects of each of these forms of leadership (Avolio & Gardner, 2005). This is in line with Bryman (1992), an authentic leader is capable to bring a major changes to individuals in the organization or to the organization by reinventing characters of the followers.

Consider that an authentic leaders have strong influence and impact to their followers, Avolio and Gardner (2005) suggested that a leader-follower relationship need to have an authentic relationship, as the authentic relationship will promote open and honest communication due to deeply held shared values, thereby promoting the pursuit and attainment of shared goals. Avolio and Gardner (2005) Authentic relationships will also describe the relationships between leaders, followers, and others. The mutually reciprocal relationships allowed for follower and leader self-development, as well as an understanding of the interrelatedness of their professional association.

Furthermore regarding this type of leadership and leader-follower relationship, Lewis (2011) conducted an empirical study and found that authenticity was strongly related to leadership effectiveness and leader-member exchange mediated the relationship between authenticity and leadership effectiveness. Leaders who were viewed as authentic and responsible were better able to form positive relationships with their direct reports and, therefore, were viewed

as efficient and effective. From the business side, Dirks and Ferrin (2002) asserted followers who have a high level of trust in their respective leader tended to have higher levels of job satisfaction, organizational commitment, professional behaviors, and job performance. These positive organizational outcomes are said to contribute to sustainability and overall organizational effectiveness.

From a survey conducted to managerial level of employees of company-X, some interesting fact has revealed to connect between authentic leadership of the founder with leader-member exchange of the other members of company-X. The type of leadership of the founder has inspired the other leaders in the company by duplicating it to their leadership behaviors. The respond here is from their answer of “agree” to “strongly agree” from 6 scales of choices of “strongly disagree to strongly agree”. About 51.9% of the respondent agreed that the founder listens intently to different opinions before making a decision and 46.3% of subordinates stated their direct leader also listens intently to their opinion before making a decision. 63.9% agreed that the founder always makes decision according to his own core values, which then subordinates confirmed that 47.2% of their leaders also do the similar things. 32.4% stated that the founder seeks inputs to increase interactions with other people while 45.4% of subordinates agreed that their leader also asks for input to increase the interaction between them. From a work perspective, 41.7% of the member of company also agreed that the founder accurately describes how others perceive his abilities, and the subordinates saw that 35.2% of their leader also can describes how they perceive his abilities.

How they appreciate the behaviors of their leaders is reflected to the quality of relationship between leader-member in company-X. The questions in authentic relationship survey related to how the employees of company-X respond to questions in leader-member survey. To show how interaction of leader-member relationship has influenced their organizational commitment, professional behaviors, and job performance can be described from the their respond that 44.4% of them agreed that they will work for their manager that goes beyond what is specified in their job description, 59.3% of them stated that they are willing to apply extra efforts, beyond those normally required, to meet their manager’s work goals, and 53.7% of them indicated that they do not mind working their hardest for their manager. The quality of their relationship described impressively from their respond to the survey questions that 39.8% of them stated they like their manager very much as a person, 38.9% of them agreed that their manager is the kind of person they would like to have as a friend and 47.2% of them stated that their manager is a lot of fun to work with. From professional perspective shown that 47.2% of them said that they are impressed with their manager’s knowledge of his job, about 60.2% of them respect their manager’s knowledge of and competence on the job and 48.1% of them admire their manager’s professional skills.

### **Conclusions**

The fact that the founder has influenced the leadership style of the leaders in his organization, which will construct the quality of relationship between leader and member in the organization, to gradually affect the levels of job satisfaction, organizational commitment, professional behaviors, and job performance.

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## **CHALLENGES FACING HUMAN CAPITAL RETURN ON INVESTMENT (HCROI) IN MENA REGION**

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### **Abstract**

The Middle East and North Africa (MENA) region is currently experiencing low level of productivity from its workforce due to behavioral structures that are in place. On the economic front, the low level of human capital productivity in the Middle East and North Africa (MENA) has been attributed to inequality in individual merits and qualifications which could point back to the importance of education in developing of human capital. Socially, factors such as racial, ethnic and gender discrimination issues play an important role in the low level of human capital productivity in the Middle East and North Africa (MENA). According to Weiss (2012), measuring the return on investment on human capital becomes essential when the information gathered is used in strategic decision making and also during the struggling phase of a business as there is need to justify the costs incurred in human capital development. This paper adopt systematic literature review methodology to presents a technical assessment of the benefits that accrues to the companies that makes direct investment in human capital which are the major assets for every business with specific focus on companies located in the MENA region. The current study concluded that those companies which are on the vanguard of efforts in promoting direct investment in their human resource tend to be more profitable and successful financially, strategically and have less employee turnover and generally their employees are more motivated as compared to those companies that are less aggressive in direct investment on human capital. Furthermore, this paper induce Human Resources professionals in the Mena Region to go in depth in that filed and discover more strategies and give more solutions for challenges in developing Human Capital.

**Keywords:** *Developing Human Capital; Enhancing ROI; Investment in People; High Retention, Low Turnover, Grow Business Profitability*

### **Introduction**

Employees' performance is an important factor in leveraging profits for many organizations. Employees who form the human capital in an organization are intangible assets and many organizations are finding the need to determine their relative contribution to the business. According to Fitz-enz (2000), human capital productivity is essential for any organization to generate value from its passive resources. This is basically attributed to the knowledge, skills and innovations that the employees or persons in an organization bring on board. Organizations have realized the need to invest in their human capital as a means of increasing the effectiveness and efficiency of their workforce. However this is usually accompanied by costs that the organization incurs and these may include continuous development costs, training costs as well as career management (Phillips, 2005). The costs incurred in the development of human capital are essential in the determination of the company's profits and justification of human capital development process. This then increases the necessity for organization to develop methods of measuring investments in human capital. Return on investments is one of the methods that have been widely adopted as an approach in determining the economic value of employees' performance. According to Weiss (2012), measuring the return on investment on human capital becomes essential when the information gathered is used in strategic decision making and also during the struggling phase of a business as there is need to justify the costs incurred in human capital development.

Human capital development is affected by several factors that could either be political, economical, or social in nature. In the Middle East and North Africa (MENA) for instance, Cinar (2000) argues that there is a high rate of undeveloped human capital basically due to gender disparities. While gender disparities remains a big issue and factor influencing the rate of human capital return on investment in the Middle East and North Africa (MENA), other factors such as the investment strategies such as education tend to play a big role. According to Behdad (2003), the Middle East and North Africa (MENA) is currently experiencing low level of productivity from its workforce due to behavioral structures that are in place. On the economic front, the low level of human capital productivity in the Middle East and North Africa (MENA) has been attributed to inequality in individual merits and qualifications which could point back to the importance of education in developing of human capital. Socially, factors such as racial, ethnic and gender discrimination issues play an important role in the low level of human capital productivity in the Middle East and North Africa (MENA). Based on the existence of a multitude of factors affecting the development of human capital in the Middle East and North Africa (MENA), it is therefore a necessity for many organizations to focus on human capital development. In order to do this, it is therefore necessary to analyze the returns from human capital investment and more particularly on the impact it has on company performance.

### **Literature Review**

In most economies, the level of education is an important attribute used to evaluate or measure human capital. Investing in education is one way of developing human capital and research has established that a positive relationship exists between economic development and human capital (Mazooz, 2013). According to a World Bank publication, Countries in the Middle East and North Africa (MENA) region have realized an increase in the rates of quality and quantity of human capital and this has been attributed to investment in education over the past decades (World Bank, 2008). The fact that analysis of return of investment to human capital is based mostly on education is based on the argument that this type of investment is the most important part of human capital as argued by Mazooz (2013). One of the major factors determining the level of economic growth based on returns from investment in education in human capital in the Middle East and North Africa (MENA) is gender. Torabi and Abbasi-Shavazi (2015) in their research, argue that there exists a positive correlation between investment in women education and economic development in the Middle East and North Africa (MENA). Increase in share of working age population witnessed in the MENA region is the contributing factor for economic growth according to Bloom, Canning and Sevilla (2001). With the realization that investing in women's education in the Middle East and North Africa (MENA) region contributes in economic development, organizations are increasing efforts to invest in the same with the hopes of obtaining maximum returns. However it is important to note that the huge investment in education by MENA countries as seen through use of public resources has done little in terms of developing the human resource in most of these countries. This is attributed to lack of or existence of incentives to leverage on returns to investment in human capital. Another important argument is based on the fact that countries in these regions educational attainment in the global sense tends to score below average (Salehi-Isfahani & Dhillon, 2008).

Apart from education as a means of developing human capital, there are other methods that countries such as Lebanon, Oman, Qatar and United Arab Emirates have employed and these include labor market initiatives and reforms targeted at improving the skills of the population. Furthermore according to Gonzalez et al (2008), most of these countries have focused on diversification of their human capital in different sectors of the economy but evaluating the success of these reforms still remains a big problem. The high rates of unemployment in

countries belonging to the Middle East and North Africa (MENA) region has been attributed to skills mismatch and limited focus on development of soft skills. According to Barclay (2010), increasing the efficiency of human capital in the Middle East and North Africa (MENA) could be achieved through strengthening of transition systems, focus more on strengthening education through increased spending and laying an emphasis on soft skills development.

Organizations are increasingly concerned with maximizing the benefits of investing in their human capital resources. Al-Ghazawi (2012) provides compelling argument that human resource development activities such as training and employee incentives do have a direct impact on the returns accrued from human capital investment. According to Huang and Lin (2011), evaluation of the return on investment in human capital is one of the ways that human resource management use to obtain data on the value of human resources at their disposal as well as their contribution to the performance of an organization.

Human Capital Return on Investment (HCROI) is an important factor in determining the performance of organization. The facets of the organization that are central to development of human capital include strategic, financial, employee retention as well as motivation. On the strategic front, companies usually rely on the results of ROI in order for the management to make decisions in supporting strategic aims targeted towards achieving cost advantage or differentiation advantage (Kesti, Syväjärvi, Stenvall & Rivera, 2014). Furthermore, an improvement of human competencies by organizations may help these organizations to distinguish themselves from others and underscore the importance of human resource management role in realizing the strategic decisions of the company (Kesti et al, 2014).

The financial performance of organizations is in many ways related to return on investments in human capital. This is because costs are incurred by companies that undertake human capital development protocols. The competitive HCROI levels may be difficult for companies to sustain in economies where salaries are constantly rising (“Key Trend in Human Capital” 2012). The financial performance of organization influences aspect such as investment in human capital development. While it is necessary for any organization to invest in its human capital, this may not be feasible at times because of the costs involved and poor financial performance in certain cases. In other cases, strategic decisions linked to cutting costs after obtaining the results of HCROI may necessitate the need to cut down on human capital development (Law and Kesti, 2014).

A research by Al-Ghazawi (2012) indicates that no direct relationship exists between investment in human resources and turnover rate. In instances where employees are either fired or more are hired, research by Kesti (2011) has established that increased competence in either case is attributable to increased company performance. The research suggests that turnover rate does not impact on the returns on human investment but suggests that staff increase may indicate a decrease in the returns on investment in the initial phases. This, according to Kesti (2011) is based on the fact that costs tend to increase as more staff is hired.

Human capital development and the returns accrued from it are directly influence employees' performance which is dependent of motivation. The returns on human capital development may be an indicator of the motivation levels of employees or personnel with an organization. According to Healthfield (2011), employees are able to develop their personal knowledge and skills and ability through human capital development. Since return on investments indicate the profits derived from investing in human capital development as argued by Mathis et al (2013), a motivated workforce may result in high rates of returns. This motivation is likely to result from the company investment in human capital development as employees derive an intrinsic value in that the company strives to develop them. Human capital return on investments could be one of the indicators of employee performance and hence act as a

strategic decision making tool for human resource management to focus on employee motivation.

### **Methodology**

The research adopted a systematic literature review type of study where a specific search protocol was used in identifying appropriate research articles to be used in the study. Searching for relevant articles involved searching for articles on human capital development and return on investment focusing on the Middle East and North Africa (MENA) region. Research databases JSTOR, Google Scholar and Research gate as well as printed research papers were utilized in identifying the preliminary articles before establishing the inclusion and exclusion criteria. The literature search involved searching for research papers published from 2002.

#### **1. Eligibility Criteria**

The preliminary eligibility criteria in determination of the sources to be used in the literature review involved screening for the relevant titles in determination of their contribution to the study. Key factors in identifying articles with appropriate titles for inclusion involved accessing the relevance of the study in contributing to information related to human capital investment and returns in Middle East and North Africa (MENA) region. The next step in the screening process to determine the eligibility criteria involved reading through the abstracts in order to exclude the research articles that did not contribute much to the research questions of this study.

#### **2. Inclusion and Exclusion Criteria**

The inclusion criteria for the relevant articles took into consideration several factors that included the language used focusing on research articles written in English, German, Spanish and Japanese as well as Arabic. Apart from English, articles that used the other four aforementioned languages were assessed for the availability of their translated English version. The publication type was other criteria used for inclusion and exclusion criteria. The inclusion criteria based on the publication type focused on original peer reviewed research papers while excluding unpublished manuscript, letters, dissertations and conference papers. The study design used in the respective research papers was another important factor in determining the articles to be used in the study whereby those utilizing qualitative and non-systemic literature review were excluded taking into consideration research papers that utilized systematic literature reviews, quantitative studies, Meta analysis studies, cohort studies and case control studies. Following this step, the selected articles full text were obtained followed by data extraction and interpretation using both narrative and statistical analysis technique.

#### **3. Validity and Reliability**

The advantages associated with systematic literature review are that biasness is limited as explicit methods are used by the researcher. Furthermore, according to Gopalakrishnan and Ganeshkumar (2013), this approach is helpful in minimizing research delays and also serves to improve the generalizability and consistency of the results. However several limitations associated with systematic literature review and analytical techniques employed with this method is that the approach may be subject to duplication of information as well as loss of information that could have been important outcome in particular research and could also be subjected to publication bias. With publication bias, it is more likely that studies with positive results are the ones chosen for the study especially in cases where the researcher

inappropriately sifts the studies and may be influenced in one way or another to lean towards studies that portray a positive or significant outcome.

### Results and Discussions

The results obtained from this systematic literature review cover offer insight to the relationship between socio demographic factors and HCROI in the MENA region as well as the relationship between HCROI and company performance in the Middle East. From the analysis, it was evident that despite significant gains in the working age population in the Middle East region, women human capital and labor remains low in most Middle East countries as shown in the graph below.

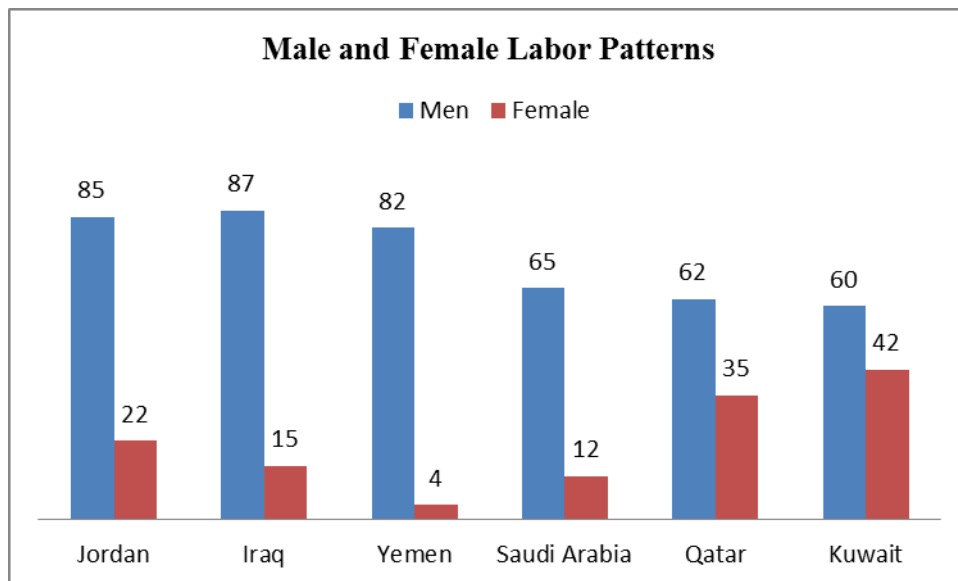


Figure 1. Male and Female Labor force participation in the Middle East region

From the graph above it is evident that women labor force participation in most Middle East countries is low compared to that of male. Since investing in human capital correlates with increase in economic growth, significant gains in terms of increased economic growth are likely to be gained with increased investment in women human capital. In the Middle East, there have been increased efforts targeted towards investing in women's human capital with most strategies linked toward education and reduction of fertility rates. According to research by Karshenas et al (2015), despite the gains realized in these countries in terms of investment in women's human capital, there is little contribution by the women in terms of labor participation and this negatively influences economic growth in most of these countries. Gains made in economic growth can be estimated through HCROI and in countries in the Middle East where socio demographic factors play a major role in determining women's participation in the labor force, it is only natural that economic growth is limited by existing social factors and gender inequality that limit women's participation in the labor force. Since there exists a positive association between women's human capital and economic growth as shown by Torabi and Abbasi-Shavazi (2015), it can be deduced that socio demographic factors that limit women participation in the labor force despite increased investment in women human capital in most Middle East countries are to blame for slow economic progress in these countries.

There exists a special relationship between HCROI and performance of organizations in the Middle East and North Africa (MENA). The literature review was able to highlight some of the positives aspects attributed to investment in human capital in relation to company



performance. Financial institutions in most countries of the Middle East and North Africa (MENA) have benefited financially in terms of profits generated from investment in human capital mainly through education and training. The number of employees is not a factor when accounting for the profitable financial returns since companies with minimum number of employees have reaped high returns on human capital investment through massive investment in their human capital. The research by Al-Ghazawi (2012) indicate that the return on investments could be as high as 92.4 in the case of Jordan banks and the researchers arguments supports the claim that even with a minimum number of employees, higher returns is realizable in companies in the Middle East countries through investing in their human capital.

The investment in human capital in most countries of the Middle East and North Africa (MENA) has been mainly achieved through education. However when the returns obtained from this investment over time tends to diminish in most economies as argued by Montenegro and Patrinos (2014). An important relationship between education investment in human capital and economic performance of Middle East and North Africa (MENA) countries exists where this is negatively correlated. The high investment in human capital through education has contributed little in terms of addressing the high unemployment rates in most Middle East and North Africa (MENA) countries. This high rate of unemployment negatively influences the economic performance of most countries and in turn those of most companies. An important aspect concerning this type of human capital investment as it relates to Middle East and North Africa (MENA) countries is that there is an observable difference in the rate of returns from education when men and women are analyzed differently. The economic performance of Middle East and North Africa (MENA) countries have been boosted by investing in women human capital through education as shown by the research by Psacharopoulos and Patrinos (2002). Investment in human capital through education has received major boost in the Middle East and North Africa (MENA) countries over the last four decades through increased spending by most countries that has seen this spending eclipsed countries in other regions (Iqbal, 2006). The trend observed in most Middle East and North Africa (MENA) countries over the years is as indicated in the graph below;

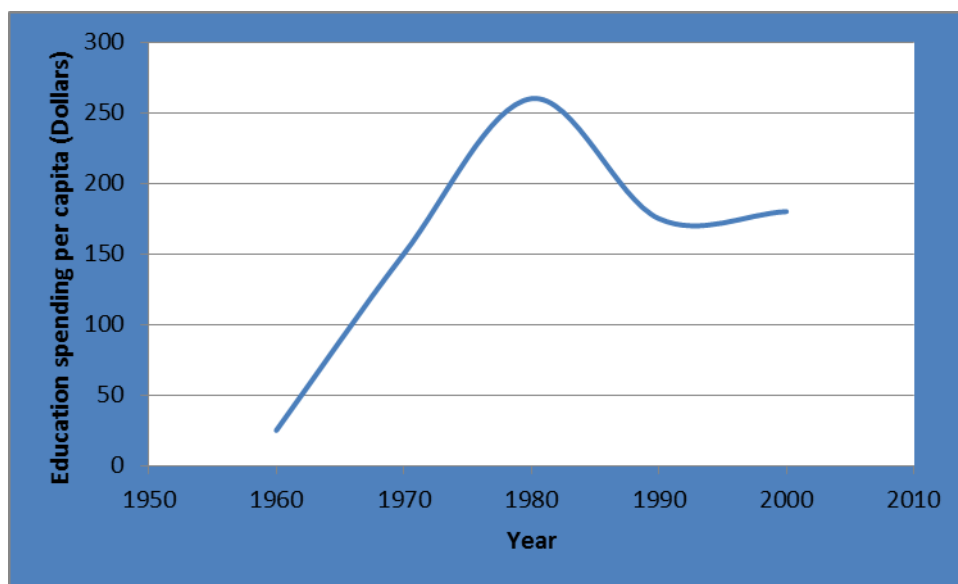


Figure 2. Education spending in the MENA region from 1950 to 2010.

From Figure 2 above it is evident that over the past four decades, human capital educational investment in the MENA region has received a major financial boost from as low as \$

25 per capita to around \$180 per capita. Overall, however the gains made from this investment over time tend to diminish and the observed differences in the rate of returns only point out to the existing social cultural barriers that hamper high returns from human capital investment in the Middle East and North Africa (MENA).

Enhancing employees' motivation and maintaining a low turnover rate within an organization mainly falls under the function of the human resource personnel. Companies in most countries in the MENA region that have instituted measures to improve on employees loyalty especially through increased benefits tend to have higher returns. The results of this literature review indicate that lack of investment in human capital by most organizations in the Middle East and North Africa (MENA) region ranks among one of the important factors contributing to the high turnover rates of in companies in the Middle East and North Africa (MENA). According to research, results obtained from a poll indicated that about 20.3% of employees who have recently left their jobs are inclined to seek further job opportunities that tend to provide them with a chance of enhancing their skills ("Employee Motivation in the Mena", 2013). Skill development in part is related to human capital development and organizations that do not focus on investing in their human capital therefore risk losing out on other companies that have these programs in place. Furthermore, these programs play an important role in enhancing employee motivation and hence improve performance which would then relate to higher rates of return that could be traced back to a company's investment in human capital.

Several challenges related to human capital development and return in the Middle East and North Africa (MENA) region as obtained from the results of the literature review consists of both social and economic factors. Social factors contribute to a larger percentage as far as human capital development in MENA countries is concerned. One particular challenge is that there is a mismatch between investment in human capital and utilization of human capital. The patriarchal nature of most MENA nations hinders women involvement in economic growth. Considering that women form half of the population in most of these countries, there is a shortage of human capital even if massive investment is done. High unemployment rates especially when women are concerned there tends to slow down economic growth since research has established that women human capital is essential in promoting economic growth in the MENA (Torabi & Abbasi-Shavazi, 2015).

Another challenge as far as human capital development and return in the MENA is concerned is that the existing social institutions place major restrictions on utilization of human capital.

### **Recommendations and Conclusions**

This research has attempted to establish the impact of human capital return on investment as a tool of improving company or organization performance. The focus of the study is in Middle East and North Africa (MENA) companies and based on the results of the systematic literature review, conclusions that can be withdrawn from the present study is that the results of human capital return on investments have benefited majority of companies in making important strategic decisions. Furthermore, it has also been established that companies in the Middle East and North Africa (MENA) that have invested in their human capital have seen an increased level of productivity associated with high returns. The impact of investment on human capital in these organizations has been associated with increased employee motivation and low turnover rates. In spite of all the achievements gained by organizations, economic development in the Middle East and North Africa (MENA) remains low because of the under utilization of the existing human capital as well as existing social cultural factors that contributes to this under utilization. Based on this argument, several reforms to address the existing problems would include;

- a) Instituting legal reforms to address the problems of gender inequality since this contributes to the existing under utilization of human capital. According more employment opportunities to women as well as investing in women human capital would go a long way in improving the economies of most countries in the Middle East and North Africa (MENA) thus increased returns to organizations as shown by research (Torabi & Abbasi-Shavazi, 2015).
- b) Secondly there is need for increased utilization of human capital. In order to do this, organizations including those in the private sector should be encouraged to higher more Skilled Professionals and youth as well as focus more on developing human capital provided by these individuals. The private sector should be encouraged to be willing to assist the government in creating more employment opportunities while also taking into consideration the negative impact that laws such as inheritance laws impact not only on the general economy but also on the performance of the organizations as well.

### Limitations and Future Research

The limitations of the current study is that based on the methodology applied, causal conclusions could not be derived. Systematic literature review draws on past researches to come up with conclusions but may not be effective as experimental designs in developing causal conclusions. The implications for future research is that focus should be on establishing ways of minimizing the impact social structures in order to increase utilization of human capital in the Middle East to leverage on the returns.

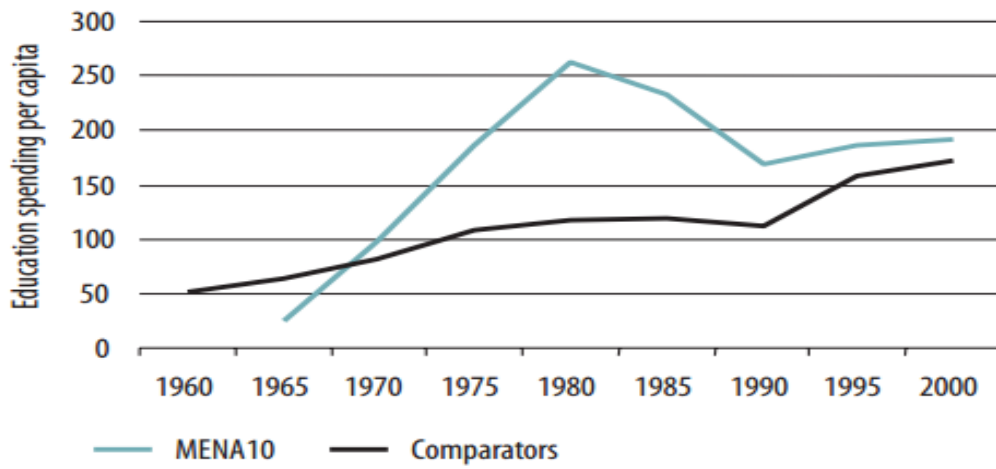
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APPENDIX A

**Trends in Education Spending Per Capita, 1960–2000**



Source: World Bank EdStats, [www.worldbank.org/education/edstats](http://www.worldbank.org/education/edstats).

## THE ROLE OF INFORMAL SECTOR ABSORP LABOR AND INCREASE INCOME (CASE OF STREET VENDOR IN PADANG CITY)

Erni Febrina Harahap, Bung Hatta University, Indonesia

### Abstract

The existence of the informal sector is a lifesaver of labor that help economy of low society face the difficulties of life when they experience the problem of unemployment. In general, the informal sector absorb labor force in agriculture, trade and social services. Street vendors, which is one of the informal sector provides employment opportunities for anyone who wants to be involved in it. However, the wage rate is very varied and depend on the activity of street vendors themselves. This study sampled 225 street vendors in eight traditional markets in the city of Padang. Purpose of this study are to identify the characteristics of the informal sector that use analysis of percentage and to see the factors that affect the income and welfare PKL used multiple linear regression analysis The result of study showed that omzet and capital first and the cost is very influence to income, and income affect the welfare of street vendors which will affect the welfare of the people of Padang City.is.

**Keywords:** *informal sector, employment opportunity, income, revenue, welfare*

### Introduction

The informal sector in Indonesia as an economic activity is often said to be a mass of suburb for a weak economy. Its existence is often seen as a source of problems, especially for local government authorities in charge of cleanliness and order. But the existence of the informal sector is basically a lifesaver of labor even considered as an effective safety valve for the economy of low society face the difficulties of life when they experience the problem of unemployment. Despite being a savior, the informal sector is considered less qualified in the perspective of employment. In general, the informal sector absorb labor force in agriculture, trade and social services.

One of the informal sector that we often encounter are street vendors (PKL) in urban of Indonesia. They trade on pavements, in parks, on the pedestrian bridge, even on the road. The city government has repeatedly disciplined them are suspected to be the cause of a traffic jam or damage the beauty of the city. Such efforts sometimes cause clashes and physical resistance from street vendors. Together with the other components of society, not infrequently the street vendors are also do demonstration to government. PKL problem is mentioned as a form of government's failure to provide jobs for the poor. This shows that workers in the informal sector as street vendors have a high vulnerability due to not having adequate protection both in terms of economic, social and political.

### Theory Background

The term informal sector sourced from an econom in Ghana, Africa, namely Keith Hart, who observed activity of the population in the city of Accra and Nima, and divided them into three categories: formal, informal legitimate and illegitimate informal. These categories are based on the level of income, regularity way of working, the outpouring of time, and legal status. The first topic from informal sector is a marginal that become the main characteristics of this sector.

Furthermore, the second characteristics are conflict to formal sector. The formal sector is used in the sense of a number of jobs that are interconnected, which is part of an interwoven

structure of work and very well organized, the work was officially registered in the economic statistics, and protected by law. Economic activities that do not meet these criteria then included in the term informal sector is generally called entrepreneurship "self-help". This is the kind of employment opportunities that are less organized, hard enumerated, and therefore not registered in the official census, and rarely accessed by the rule of law.

There is also that defines the informal sector as workers who are self and if is helped by family workers that unpaid and does not require skill. It shows the opportunities that exist in the informal sector do not require specific requirements where everyone free entry and exit in this sector.

Based on some of these criterion can be concluded that the informal sector is a term that includes the notion of various business activities that run own business. This is the type of employment less organized as a source of self-employment, but can absorb them particularly in urban areas that the percentage of workers in the informal sector grow bigger

The amount of absorption is a reflection of the inability of the formal sector to absorb the labor force, so that it can be assumed that if people cannot work in the formal sector, and there are no vacancies in the formal sector, then the person find or create employment opportunities in the informal sector, in addition informal sector is easily done by anyone even with low education can go in and get income from the sector, is also able to meet community needs. An approach that emphasizes the individual units to interpret the notion of informal sector as workers who work in sectors that are unprotected sector. The difference of the formal and informal sectors are as follows:

**Table 1. The Difference of the Formal and Informal Sector**

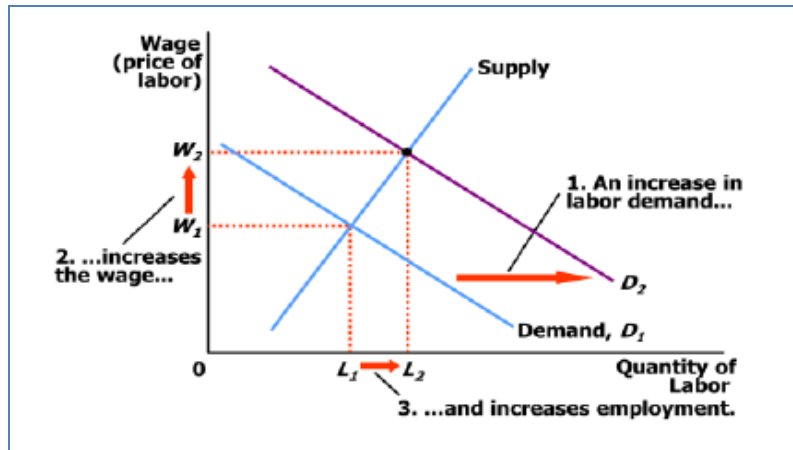
No	Characteristics	Informal	Formal
1	Capital	Little	Middle - big
2	Business Feasible	Fairly	There and Pursued
3	Organization	Family	Bureaucracy
4	Labor Union	Not Role	Role
5	Subsidies	Nothing	Important to Run
6	Inventory	Little and unstable quality	Most and high quality
7	Capital Aid	Illegal institution	Legal Institution
8	Work Relationship	Mutual Trust	Contract Basis
9	Business Planning	By doing	Continue
10	Scale Enterprises	Small and unincorporated	Middle – Big and Corporate
11	Turnover	Slowly	Fast
12	Legal Protection	Unprotected	Protected
13	Business Permit	Illegal	Legal
14	Business Unit	Variable	Fixed
15	Skills	Natural	Educated
16	Business Characteristics	Free Entry	Difficult to entry
17	Place of Business	Narrow and easily switch	Wide and Permanent

Source : Harahap, 2016

### **1. Wages Relationship with Manpower Absorption**

Wages for entrepreneurs can be seen as a burden, because the greater the wages paid to employees, the smaller the proportion of benefits for employers (Simanjuntak, 1985). The rise in the wage rate will increase production costs so will increase the prices per unit of goods produced so that consumers reduce consumption levels. As a result many unsold goods production, and forced producers cut output, this term referred to the effect of production

scale. If the wage rate rises (assuming the price of capital goods others unchanged) then the employer there who prefer to use capital-intensive technology for the production process and replace the need for manpower with the need for capital goods such as machinery called labor substitution effect.

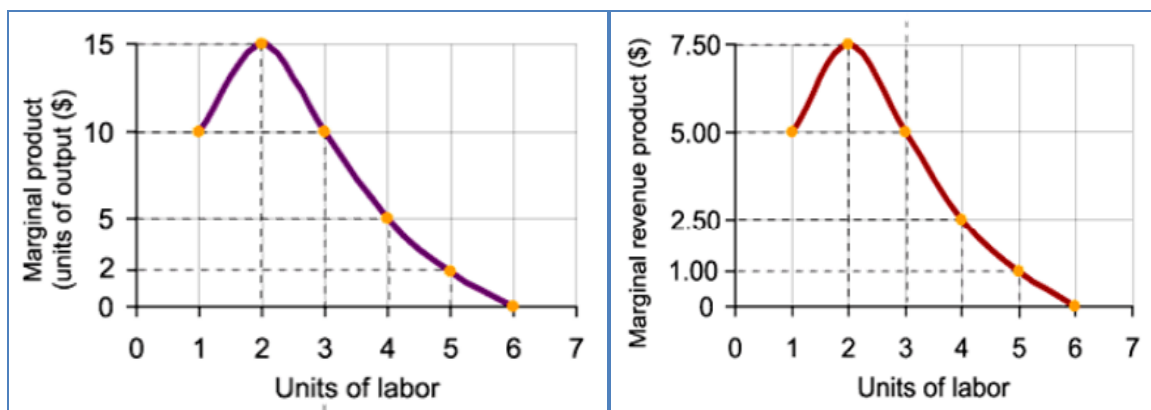


Source: Mankiw, 2003

Figure 1. Changes in Labor Demand and Wage Rate Changes

## 2. Productivity Relationship with Manpower Absorption

According Mankiw (2003), employers demand to labor different with consumer demand for goods and services. Employers hire someone because someone is helping to produce goods or services for sale to the consumer society. Request for an entrepreneur to a factor of production is done not to obtain immediate satisfaction but they expect results from them. Labor productivity can be seen from the value of production. The value of production is the production rate or overall amount of goods that are the end result in the production process of a business unit which would then be sold or until to the consumer.



Source: Mankiw, 2003

Figure 2. Partial Labor Productivity Curve

Increasing and decreasing of market demand for products from the companies concerned affect labor absorption. If the request for production of the company or industry increases, manufacturers are likely to increase its production capacity. For that purpose, the manufacturer will increase the use of its workforce.



**Method**

**1. Regression Analysis**

The regression model used in this research is to analyze multiple linear regression model, because it involves a dummy variable (Gujarati, 2012). Regression analysis was conducted on factors affecting revenue and the role of street vendors or the revenue contribution to the welfare of street vendors. To analyze the factors that affect the income of the street vendors, the regression model is used as follows:

$$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \beta_5 X_{5i} + \beta_6 X_{6i} + \beta_7 X_{7i} + \beta_8 X_{8i} + \beta_9 X_{9i} + \beta_{10} X_{10i} + \beta_{11} D_{1i} + \beta_{12} D_{2i} + \beta_{13} D_{3i} + \beta_{14} D_{4i} + \beta_{15} D_{5i} + e_i$$

Where are:

- $Y_i$  = Income of PKL-i (Rp/month)
- $X_{1i}$  = Omzet PKL-i (Rp/month)
- $X_{2i}$  = Time of work PKL-i (jam/day)
- $X_{3i}$  = Capital early PKL-i (Rp)
- $X_{4i}$  = Place of business PKL-i
- $X_{5i}$  = Capital work PKL-i (Rp/day)
- $X_{6i}$  = Legal Retribution PKL-i (Rp/day)
- $X_{7i}$  = Illegal Retribution PKL-i (Rp/day)
- $X_{8i}$  = Wage PKL-i (Rp/day)
- $X_{9i}$  = Internal Cost PKL-i (Rp/day)
- $X_{10i}$  = Long time of Business-i (years)
- $D_{1i}$  = Kinds of Business PKL-i
- $D_{2i}$  = Location (strategic, no strategic)
- $D_{3i}$  = (Male, Female)
- $D_{4i}$  = (Padang, outside Padang)
- $D_{5i}$  = (Clean, Dirty)
- $e_i$  = error term, standard error, -i

Revenue PKL indirect effect to urban development through the improvement of the welfare of the PKL's family. In this case PKL income will directly affect the welfare of street vendors who reflected on the highest level of education achieved PKL family members, health and consumption. To assess the contribution or the role of street vendors to the economy of the city, the regression model is used as follows:

$$Z_i = \beta_0 + \beta_1 Y_i$$

Where:

$Z_i$  = Welfare PKL (education, health, and consumption respondent-i)

$Y_i$  = Income of PKL -i

**Results and Discussion**

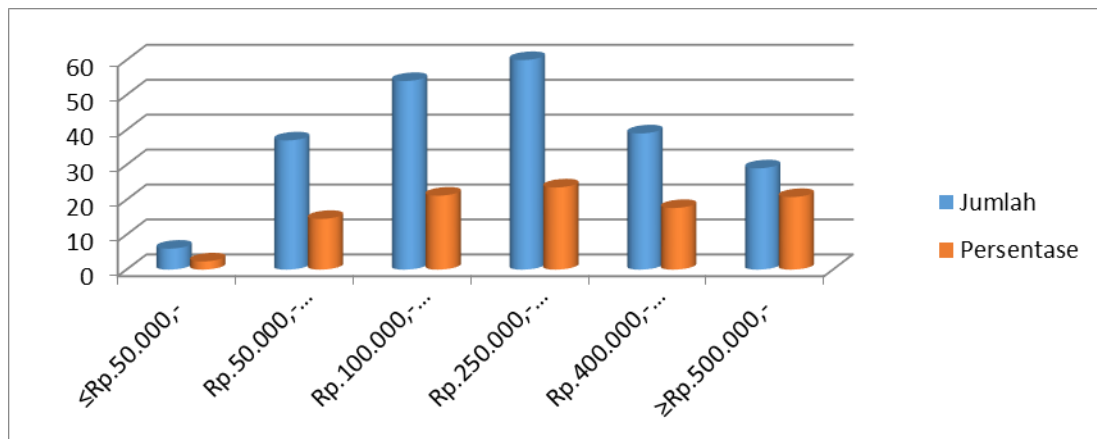
Secondary data that released official market of Padang, the number of street vendors in the city of Padang as many as 2644 people, spread across 8 traditional markets in the city of Padang. Of the total population, the researcher took a sample 225 of people. PKL identification is seen from several aspects, one of which is age of the business is operating (Table 2). It seems clear that the effort PKL running dominant in the long term that is more than ten years, there are even more than 20 years. This shows that the perpetrators of street vendors enjoyed their businesses and are reluctant to switch to other jobs.

**Table 2. Long Time of Running Business PKL in Padang**

Long Time of Running Business	Amount	Percentage
≤ 1 year	2	4.3
1 - 3 Years	3	4.7
3 - 5 Years	25	12.2
5 - 8 Years	17	6.3
8 - 10 Years	31	13.3
≥ 10 Years	147	59.2
<b>Total</b>	<b>225</b>	<b>100</b>

Source: Data 2016

Meanwhile, when seen from PKL revenue (omzet) of these businesses are also deemed sufficient to cover the needs of daily living and to pay of school their family members (Figure 3). There seems to be 20.8 percent of respondents who earn sales turnover exceeding five hundred thousand rupiah per day. Although there was 2.4 percent with turnover of less than Rp. 50,000 / day, while the most dominant of these classifications was 23.5 percent with a turnover of between Rp. 250,000 - Rp. 400,000 per day.



Source: Data 2016

**Figure 3. Revenue (Omzet) PKL per Day in Padang City**

When viewed from the data processing, in the model summary appears that the correlation between the dependent variable (income) with 15 independent variable of 0.669, or 66.9 percent, 44.8 percent determination coefficient, and the coefficient of determination that has been corrected is 40.8 percent, meaning that variations in revenue actors PKL city of Padang can be explained by variations in turnover, start-up capital, working capital daily, the number of stalls, long running of business, cost, hours of work, the value of the location, retribution, legal and illegal, sex, origin PKL, wages, and cleanliness. Meanwhile, when viewed from the ANOVA table then the model is said to be fit or suitable due to the error rate or a probability of 0.000 means comprehensively independent variables are able to explain the change in the dependent variable (income) street vendors.

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate	Durbin-Watson
1	.669 <sup>a</sup>	.448	.408	17.827	1.801

a. Predictors: (Constant), turnover, start-up capital, working capital daily, the number of stalls, long running of business, cost, hours of work, the value of the location, retribution, legal and illegal, sex, origin PKL, wages, and cleanliness

b. Dependent Variable: Revenue

**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	53922.938	15	3594.863	11.312	.000 <sup>b</sup>
Residual	66420.724	209	317.803		
Total	120343.662	224			

a. Dependent Variable: revenue

b. Predictors: (Constant), turnover, start-up capital, working capital daily, the number of stalls, long running of business, cost, hours of work, the value of the location, retribution, legal and illegal, sex, origin PKL, wages, and cleanliness

Analysis of residuals statistics show that the 225 data with some predictions that starts with the predicted value of up centered leverage value based on the minimum, maximum, mean and standard deviation.

The regression results are shown in the coefficients that of the 15 independent variables are used, then very significantly affect revenue PKL is the turnover, working capital and cost all of which were also positive. This means that the higher the turnover received, the greater the daily working capital increased operating costs incurred so will the higher the income received PKL. While wages, levy illegal, and the initial capital does not affect the income of the perpetrators of street vendors. This is because the wages of workers PKL many are not given their owner, and workers is owner in this business so it does not need to receive a daily wage.

Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	18.718	9.885		1.894	.060		
Omzet	.261	.033	.523	7.849	.000	.595	1.681
Jamkj	-.623	.673	-.049	-.926	.356	.929	1.077
Modal1	.018	.023	.044	1.777	.138	.823	1.215
Lapak	-2.598	2.527	-.057	-1.028	.305	.867	1.153
Modalkj	.028	.011	.170	2.664	.008	.646	1.548
Retresmi	-.610	.475	-.070	-1.283	.201	.898	1.113
Ilegal	-.031	.581	-.003	-.053	.957	.869	1.150
Upah	-.006	.021	-.015	-.262	.794	.860	1.163
Biaya	.085	.052	.086	2.635	.004	.957	1.045
L Lama usaha	-.124	.128	-.051	-.967	.335	.941	1.063
Jenis	-.198	.180	-.059	-1.103	.271	.928	1.077
Nilai	5.210	6.674	.042	.781	.436	.925	1.081
Kelamin	3.501	2.548	.076	1.374	.171	.872	1.146
Asal	1.010	2.525	.022	.400	.690	.892	1.121
Kebersihan	-1.264	3.151	-.022	-.401	.689	.889	1.124

a. Dependent Variable: Revenue

Illegal retribution is not significant but negative that meaning to informal charges will reduce the income street vendors but not significant because of the 225 street vendors surveyed are not all charged illegal fees, only a few people. But the official levy imposed on PKL will reduce revenue with 79 percent significance level. The early capital business shows the results of the analysis are not significant at the 95 percent, but significant at 86 percent, which means the greater the initial capital used to start a business informally by actors PKL will increase its revenue, it is seen from the slope of her positive. Meanwhile place of business is negative slop means that more than one shanties that owned is not increase revenue but decrease revenue. This show that profit is not increasing, but the cost is greater. The street vendors have stalls more than one (two) only 6 per cent, while that has one stall is 78 percent, and that does not have a stall was 15 percent. Long running of business in this sector was also no significant effect on the increase in the income of the street vendors. This clearly shows that enterprises in the informal sector do not indicate the need to have special skills to participate in this field. Although the longer engaged in it does not mean that will increase revenue, but it only made the workers survive to survive in meeting the needs of life.

Dummy variables include the type of business, the value of the location, gender, regional origin and hygiene are also not significant in affecting revenue at 95 percent. It is seen that type of business, location and value of location, gender significantly in 73 percent, 56 percent and 83 percent. While the regional origin and cleanliness significance is far from a normal number is used as the standard analysis. Based on analysis of the classical assumption of

normality, multicollinearity, and autocorrelation heterokedastisitas, all the conditions are met, which means this model can be used as an analysis.

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted Square	Std. Error of the Estimate	Durbin-Watson
1	.974 <sup>a</sup>	.948	.948	4.805	1.847

a. Predictors: (Constant), Revenue

b. Dependent Variable: Welfare

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	94241.323	1	94241.323	4082.670	.000 <sup>b</sup>
	Residual	5147.566	223	23.083		
	Total	99388.889	224			

a. Dependent Variable: Welfare

b. Predictors: (Constant), Revenue

Further analysis of the results of study is welfare influenced income that the increase in revenue of PKL can improve people's welfare representing the city of Padang in general. Where the results of this analysis are very significant and positive (see coefficient and a model summary).

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.068	.684		-.100	.921
	Pendapatan	.885	.014	.974	63.896	.000

a. Dependent Variable: Welfare

**Conclusion**

This research can draw the conclusion that the informal sector is represented by 225 samples of PKL can play a role in absorbing labor trouble to finding work in the formal sector. There are several things that can increase revenue of PKL which the most significant is the sales turnover, working capital daily, and costs. However, work of this business in a long time not been shown to increase revenue, meaning that the longer the work in the informal sector does not mean will make the perpetrators skilled and increase revenue. While the dummy variables such as regional origin, gender and type of business that is run do not affect revenue significantly. This means that anyone and any type of business in the informal sector can be followed by anyone (free exit and free entry). When viewed on the analysis for the welfare of informal sector, clearly show that the increase of income of this sector will improve the welfare of them, which means society PKL enjoys his job and can meet their needs. They can fund family members to either increase education or maintain their health.

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## IMPACT OF ECONOMIC STIMULANT FOR THE SMALL SECTOR INDUSTRIES OF FOOD, BEVERAGES AND TOBACCO (FBT) IN NORTH SUMATRA

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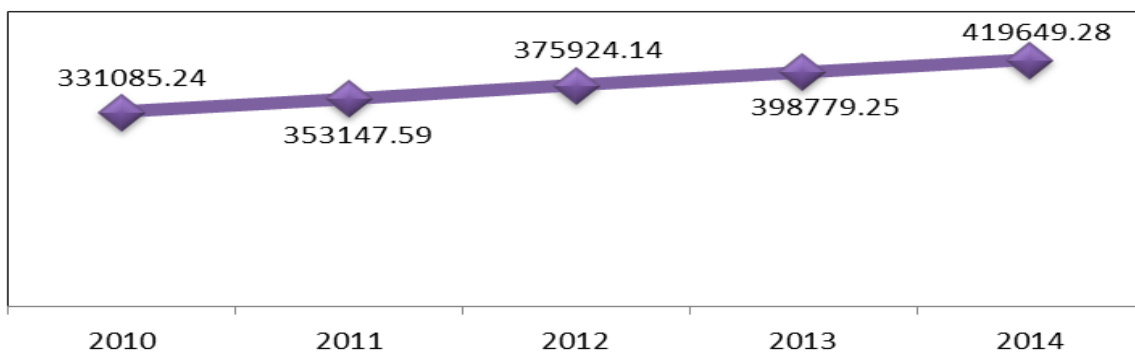
### Abstract

Economic growth performance of North Sumatra Province in last five year is not equal with level of income inequality. The Previous study has identified that the small industries of food, beverages and tobacco (FBT) is an optimal alternative model that can be used as one solution. The objective of this study aims to determine how the impact of economic stimulant FBT sector on economic performance of North Sumatra Province. The analysis result indicates that (1) Small industries sector of FBT is still capital intensive, but its contribution is lower than the Large and Medium sector of FBT, (2) Small industries sector of FBT has contributed to the income households low categories in the city, and (3) Impact of economic stimulant (ie, increased investment into both sectors of FBT) indicated of total output is relatively greater for Small sector of FBT. Similarly, if done equally to both sectors FBT and combined with income redistribution from households top categories in the city to a farm worker households, the results the same thing.

**Key Words:** *Small sector of FBT, Large and Medium sector of FBT, SAM*

### Introduction

The achievement of high economic growth is main target which normally would be pursued in an economy in order to create a fair and prosperous society welfare. The economic growth of North Sumatra Province measured from Gross Regional Domestic Product (GDP) at constant prices in 2000, from 2010 to 2014 experienced a significant increase (in Figure 1).



Source: BPS, 2010-2014

**Figure 1. The Gross Domestic Product (GDP) North Sumatera (billion Rupiah)**

Within five years the economic average growth rate of 6.11%. This indicates that the welfare of the people of North Sumatra has increased. Especially when it comes to the situation of poor people in this area during that period decreased from 11.31% (2010) to 11.39% (2014). Although the number and percentage of poor people from time to time has decreased, but the poverty rate at the end of the observation of 1.4164 million people or 11.39 percent of the poor in North Sumatra still too high. One of the basic problem causes of poverty in Indonesia, especially North Sumatra is the increasing disparities due to the uneven distribution of income

among households groups, so that the gap between the rich class households and poor households widened. One measure in determining the household income inequality is the Gini ratio index.

During the period of 2010-2014 the development of North Sumatra Gini Ratio index has increased (from 0.350 in 2010 to 0.354 in 2014) so that the income inequality between groups of households in North Sumatra trend to increase. Besides that, the amount of the Gini ratio shows that in this period the condition of household income inequality between groups is relatively high. This indicates that the economic growth of the North Sumatra high and the tendency to increase is not fully enjoyed by the whole society, thus leading to the creation of the income gap between groups of households and poverty. Thus the outcome measures of economic development can not only be reflected by high economic growth and the amount of local revenue, but also includes the following among the things related to human development, gap of income, amount of poverty and an employment. Therefore, in designing an economic development strategy that is not only aimed at economic growth, but also need to be followed by improvement in addition to decreasing the number of poor people and reduce unemployment as well as to the distribution of income.

The previous studies (Nugrahadi, 2015) finds that there are six sector is the leading sector, one of which is the Industry Food, Beverages and Tobacco (FBT). So the next study still (Nugrahadi, 2016) identified that a small FBT industry has a better role than medium and large FBT. The research question is needs further analysis to completed information on the role of small sector of FBT. Of Course, This study aims to determine how the impact of economic stimulant from the small sector of FBT to contribute of the economy performance of North Sumatra Province.

### **Empirical and Theoretical Review**

Todaro (2000) stated that the development process should be able to bring humanity beyond the primacy of material and financial aspects of their daily lives. Therefore, the size of the result of economic development can not only be reflected by high economic growth and national income, but also how it can be overcome include income in equality. The problem of income inequality, which is often called the gap, be it between individuals, households, groups, sectors or regions, an issue that is always there in every country, not least in North Sumatra Province, Indonesia. In the Theory of Kuznets Hypothesis said in this hypothesis that in the short term there is a positive correlation between growth in income per capita and income inequality. But in the long term relationship between the two becomes a negative correlation. This means that in the short term increase in revenue will be followed by the increasing income inequality, but in the long term increase in revenue will be followed by a decrease in income inequality. This phenomenon is known by the name of the inverted U curve hypothesis Kuznets (Todaro, 2000).

Since the 1970s era until now many empirical studies that attempted to test this hypothesis Kuznets. Some who accept the hypothesis, and some others rejected. Furthermore, the issue of the pro and contra of the relationship between economic growth and income inequality can also be found in a debate that confirmed the existence of income inequality in the pursuit of economic growth, and some are blaming (Todaro, 2000; Kangas, 2001). The basic argument justifying inequalities in income, is the individual's income and the income group is Necessary condition for saving that enables investment and grow the economy through a mechanism such as the Harrod-Domar model. If the rich people save and invest in a sizable proportion of the income, while the poor spend all of their income on consumer goods, and if the rate of growth of GNP (Gross National Product) is directly related to national savings, it was obvious economy marked with income inequality can save more and grow faster than the economy with a fair distribution of income.



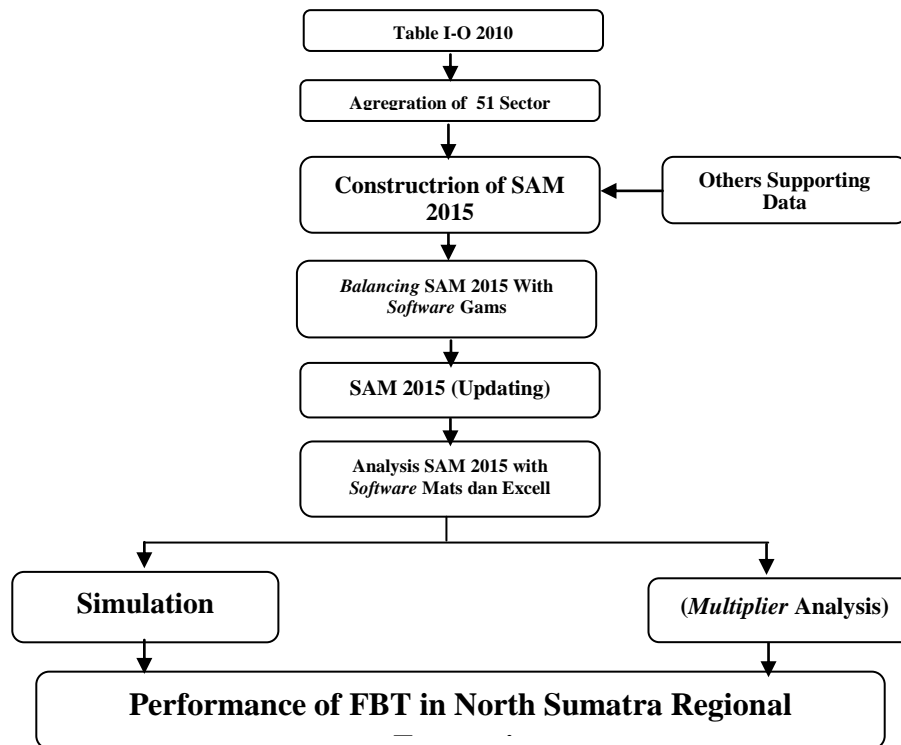
There are a number of ways and technique to measure the degree of inequality in income distribution that can be divided into two groups of approaches, namely the axiomatic approach and stochastic dominance (Tambunan, 2004). But there is also the approach divides into statistical approaches and empirical approach (Esmara, 1996). Besides that generally in any study of income inequality used measuring devices in equally Gini ratio index, which measures inequality based on the Lorenz curve area. For the various types of approaches, household income inequality can be analyzed through the SAM model approach. To understand the role of the economy and its relation to the distribution of income can be done through the analysis tools included in the theory of general equilibrium balance. This Model viewed economics as a system (Dixon et. Al., 1992). There is a general equilibrium models that can be used in the preparation of plans for economic development. Jhingan (2003) states that one of the planning model is a model of Input-Output (IO). Nazara (1997) stated that in addition to IO, other analysis tools developed for economic planning is the Social balanced sheet Matrix (SBM) or called the Social Accounting Matrix (SAM).

Model SAM is an extension of IO models, where the model is potrait of the economy at any given time. The scope of the SAM models much more extensive and detailed than the IO models. IO Model presents only the flow of economic transactions from the production sector to sector of production factors, households, government, and foreign companies, whereas in the model of SAM, these things on the disaggregation in more detail. Similar to IO models, models of SAM also is a square matrix consisting of columns and rows. Column describes the transaction expenses and line describes the transaction receipt. Total transaction value in the column should be equal to the total value of transactions on the line in order to balance the requirements are met (Sadoulet and de Janvry, 1995). There are six types of balance in the model SAM (Thorbecke, 2001), namely the balance sheet: production activities, commodities, production factors (labor and capital), domestic institutions (households, companies and governments), the capital and the rest of the world.

Studies related to sectoral economic development policy and how it impacts in an integrated way in addressing the problem of income inequality between groups of households, poverty and unemployment, particularly in North Sumatra, is relatively small. Several studies conducted among others by Arndt et al (1998), Halder and Thorbecke (1989), Bautista et al (1999), Hafrizianda (2007) and Nugrahadi (2008) even have discussed it, but research conducted elsewhere and analysis only covers the macro aspects have not done micro. Similarly from Nugrahadi studies (2007, 2013 & 2015) still limited associated with sectoral economic policy development and impact on poverty and employment in North Sumatra, as well as the performance of the sector in general FBT.

### **Research Method**

Based on the concepts and empirical research that has been described in the study as well as referring to the Objective of literature research, framework in this study is schematically shown in Figure. 2



**Figure 2. Framework**

SAM Model is extended of I-O model, where the model is portrait the economy at any given time. The scope of the SAM models much more extensive and detailed than the IO models. IO Model presents only flow of economic transactions from the production sector to sector of production factors, households, government, and foreign companies, whereas in the model SAM aggregated these matters in more detail. For example, households may aggregated by income level or a combination of income and settlements and so on.

Besides that, the model of SAM can be inserted several macroeconomic variables, such as taxes, subsidies, capital and so on, so that the model can describe the entire transaction SAM macroeconomic, sectoral and institutions as a whole in a balance sheet. Another advantage of the model is that the model SAM is able to describe the flow of income distribution in the economy. With an analysis based on the model will be known SAM sectoral economic performance. In this case will be found that the sector is the leading sector that impact on the reduction of income inequality. To obtain the answers to the objective of research analysis approach based SAM model. For the purposes of analysis: (1) correlation and (2) multiplier. The second analysis used in this study refers to the concept that has been said Isard et.al. (1998). Furthermore, based on the rank of the sequence of sectors which occupies the top position to the lowest measured from the coefficient multiplier (bruto output, labor and household income) and linkage (direct and indirect) forward and backward then assigned a weighting where the sector is ranked first awarded the highest score and so on until the lowest

ratings given score 1. Then the scores for each sector aggregated by categories (multiplier and linkage) then sorted, where the sector has the highest total score is set as a rank first. Based on the ranking of the performance of the model will be known how the Economic Development sector FBT

## Analysis and Discussion

### 1. Decomposition multiplier

Described on the previous results have identified that the Small FBT an optimal alternative models of economic development policy FBT sector. In connection with that, the multiplier decomposition analysis of the following discussion focuses on the sector of the Small FBT compared to large and medium sector. The results of these five sectors multipliers decomposition presented as shown in Table 1 (for small FBT) and Table 2 (for Large and Medium FBT).

Based on Table 1 it can be argued that the injection of 1 billion rupiah in Small FBT will increase the acceptance of production factors of capital, which amounted to 0.97 billion, which is larger than the workforce. This indicates that the Small FBT is more capital intensive.

**Table 1. Decomposition of FBT Small**

Origin	Injection Impact in other balance	Injection	Transfer	Open Loop	Closed Loop	Total	
Small FBT	Agricultural Workers			0.09	0.04	0.13	
	Industry Workers			0.13	0.05	0.19	
	Other workers			0.02	0.08	0.10	
	Capital			<b>0.59</b>	<b>0.38</b>	<b>0.97</b>	
	Farmer			0.07	0.03	0.10	
	Small land farmer < 1.0 Ha			0.07	0.05	0.12	
	Large land Farmer ≥ 1.0 Ha			0.09	0.06	0.15	
	Low income in villages			0.01	0.01	0.02	
	High income villages			0.03	0.03	0.06	
	Low income in city			0.09	0.06	<b>0.14</b>	
	High income in city			0.07	0.06	0.13	
	Small FBT		1	0.09		0.15	1.24
	Agricultural			0.47		0.18	0.65
	Other			0.11		0.36	0.47
	Total of Production		1	0.72		1.04	2.76

Sources: SAM North Sumatra Province, 2015 (Analyzed)

The increase in capital receipts Small FBT 0.97 billion is a contribution of multiplier impact of cross (open loop) at 0.59 billion and a multiplied effect closed loop of 0.38 billion. In other meaning, an increase in revenues of 1 billion rupiah in FBT Small (e.g., as a result of increased exports) will increase the acceptance of the factors of production capital of 0.59 billion after the impact injection through the whole system block production factors and institutions, and by 0,38 billion after injection through the whole other blocks and return to the original block.

Against the household income, injection of the Small FBT will provide the revenue impact lower class households in the larger villages, namely 0.15 billion, compared with the reception of other household groups. The magnitude of the impact on the acceptance of injection Small FBT lower class household in the village is dominated by the multiplier effects of the cross. That means contributions impact of cross towards increased acceptance of lower class household in the village is greater than the impact of closed loop multiplier.

Against other production sectors, injection Small FBT will provide the revenue impact greater agricultural sector, amounting to 0.65 billion compared to Other sectors, that is equal to 0.50 billion. This indicates that the linkage (linkage) between Small FBT sector with the

agricultural sector is greater than the other sectors. The magnitude of the impact of injection Small FBT sector is dominated by a multiplied effect the transfer.

Based on Table 2 can be argued that the injection of 1 billion rupiah in FBT Large and Medium will increase the acceptance of production factors of capital, i.e., respectively by 1:03 billion, which is larger than the workforce. This indicates that the sector FBT Large and the other are capital intensive (larger than Small FBT). The magnitude of the impact injection FBT Large and Medium sector is dominated by the multiplier effects of the cross. It means contributing to the improvement of cross impact of capital receipts from the sector FBT Large and Medium greater than closed loop multiplier impact.

**Table 2. Decomposition of FBT Large and Medium**

Origin	Injection Impact in other balance	Injection	Transfer	Open Loop	Closed Loop	Total	
Large and Medium FBT	Agricultural Workers			0.31	0.05	0.35	
	Industry Workers			0.01	0.07	0.08	
	Other workers			0.01	0.09	0.11	
	Capital			0.55	0.48	1.03	
	Farmer			0.20	0.04	0.24	
	Small land farmer < 1.0 Ha			0.11	0.06	0.17	
	Large land Farmer ≥ 1.0 Ha			0.09	0.08	0.17	
	Low income in villages			0.02	0.01	0.03	
	High income villages			0.04	0.03	0.07	
	Low income in city			0.05	0.07	0.12	
	High income in city			0.06	0.07	0.13	
	Large and Medium FBT		1	0.03		0.01	1.04
	Agricultural			0.09		0.58	0.67
	Other			0.06		0.45	0.50
	Total of Production		1	0.20		1.31	2.51

Sources: SAM North Sumatra Province, 2015 (Analyzed)

Against the household income, injection of 1 billion rupiah in both Large and Medium FBT sector, will provide the revenue impact class households farmhand greater, respectively amounted to 0.24 billion, compared with the acceptance of other household groups. The magnitude of the injection sector of the Medium and Large FBT the reception class household farm workers are dominated by cross multiplier impact. It means contributing to the increasing impact of cross reception class household farm labor is greater than the impact of closed loop multiplier.

Against other production sectors, Medium and Large FBT injection will provide the revenue impact greater agricultural sector, amounting to 0.67 billion compared to Other sectors, that is equal to 0.50 billion. This indicates that the linkage (linkage) between the Large and Medium FBT sector with the agricultural sector is greater than the other conditions. Where sector is relatively larger than Small FBT. The magnitude of the impact injection FBT Large and Medium sector is dominated by a multiplied effect the transfer.

***FBT Model Simulation***

To get a draft model of economic development policy FBT sector in addressing income inequality analysis simulation model based on SAM as well. As described in the previous chapter simulate the impact of economic stimulus in question in this case is an increase in investment and income of low-income households. Then Small FBT an optimal alternative models of economic development policy FBT sector. In the condition argue, the analysis of the economic stimulus impact on output in the following discussion focuses on the FBT sector. The results of the simulation analysis of the impact of increased investments (both

sectors FBT), low-income household income and the combination of the output in North Sumatra province are shown in Table 3.

**Table 3. Impact Stimulant to Output**

Sektor Produksi	Basic Value (million rupiah)	Change							
		Simulation 1		Simulation 2		Simulation 3		Simulation 4	
		Value (million rupiah)	%	Value (million rupiah)	%	Value (million rupiah)	%	Value (million rupiah)	%
Food crops	28526026.00	276227	0.97	152423	0.53	241952	0.85	319849	1.12
Plantation crops	2895393.00	16957	0.59	1037066	35.82	221082	7.64	17389	0.60
livestock	9370864.00	1078309	11.51	59178	0.63	266876	2.85	117149	1.25
Forestry	395200.00	1271	0.32	1404	0.36	1247	0.32	2663	0.67
Fishery	3547805.00	25299	0.71	19967	0.56	23075	0.65	43111	1.22
Oil and gas mining and quarrying	21356413.00	59390	0.28	68368	0.32	67486	0.32	101752	0.48
Small industries of food, beverages and tobacco (Small FBT)	36918126.00	531742	1.44	196840	0.53	474700	1.29	389650	1.06
Large and medium industries of food, beverages and tobacco (Large and Medium FBT)	157397142.00	124053	0.08	130466	0.08	140126	0.09	234719	0.15
Spinning industry, apparel, leather goods	72603670.00	127725	0.18	128199	0.18	123514	0.17	250775	0.35
Industrial wood, articles of wood, rattan and bamboo	3976677.00	4897	0.12	6137	0.15	5172	0.13	9183	0.23
The paper industry, paper products, printing	11945013.00	22371	0.19	18038	0.15	32778	0.27	31134	0.26
Basic chemical industry, fertilizers, herbal medicine, rubber goods	37134154.00	95951	0.26	148720	0.40	109147	0.29	160897	0.43
Oil refining industry	9805655.00	29117	0.30	30441	0.31	33141	0.34	48962	0.50
Industrial ceramics, glass, metal and nonmetal	6780396.00	2045	0.03	3924	0.06	3319	0.05	2990	0.04
Basic metals, iron and steel	157397142.00	124053	0.08	130466	0.08	140126	0.09	234719	0.15
Other manufacturing industries	5694905.00	8404	0.15	7655	0.13	9116	0.16	14817	0.26
Electricity, Gas and Water	18579354.00	58865	0.32	57090	0.31	66518	0.36	104516	0.56
Building / Construction	22908981.00	7322	0.03	18868	0.08	14394	0.06	8513	0.04
Trade, Hotels and Restaurants	74638462.00	274323	0.37	220067	0.29	441351	0.59	411566	0.55
Transportation and Communications	24526963.00	68602	0.28	66175	0.27	75817	0.31	96248	0.39
services companies	15342293.00	50827	0.33	50453	0.33	68501	0.45	75262	0.49
Banks and other financial institutions	34479424.00	89630	0.26	91561	0.27	298200	0.86	138417	0.40

Source: SAM North Sumatra Province, 2015 (Analyzed)

Based on Table 3 are shown, first, the impact of increased investment of 1 trillion rupiah to each sector FBT (simulation 1 and 2) showed normal results. An increase of 1 trillion rupiah in the sector of Small FBT (simulation 1) will increase the income of the sector itself larger. The same pattern was shown also on the impact of increased investment of 1 trillion rupiah in the sector FBT Large and Medium (simulation 2). Of the two, the simulation results 1 akan grow relatively greater total output, i.e., 0.49 percent. This indicates that the increased investment in one sector, namely Small FBT, can spur economic growth in North Sumatra Province is relatively larger than the output in the coming period.

Second, the impact of increased investment of 1 trillion rupiah were more evenly distributed across the whole sector FBT (simulation 3) shows the output growth sectors Small FBT relatively larger, i.e., 1:29 per cent, compared to growth of output sectors FBT Large and Medium (0.09 percent). Then the total output will grow by 0:45 percent, where the growth rate is relatively smaller than the simulation 1, but is relatively larger than the growth of output generated from the simulation 2. This confirms the previous results shows that Small FBT has contributed to encourage economic growth in the province of North Sumatra is relatively larger than the output side when investments are distributed equally to the two sectors FBT.

Third, the impact of income transfer to the farm worker households amounted to 1 trillion rupiah (simulation 4) showed a relatively different, that foster Small FBT sector output is relatively larger than the Large and Medium FBT sector. Its growth rate is based on the simulation results 7 is relatively larger, i.e. 0.43 per cent, compared with the results of the simulation 2. Then the aggregate output growth is relatively lower compared with the simulation results 1-3. This indicates that the stimulus in the form of transfer payment (an effort to increase household income lower class) are of low quality in order to boost the growth rate higher output in the province of North Sumatra.

### **Conclusions and Recommendations**

Based on the analysis that has been described in previous chapters, it can be drawn some conclusions as follows below:

1. Both FBT sector is capital intensive, but from both sectors FBT Large and Medium weight are greater than Small FBT sector.
2. Sector Small FBT further contribute to lower household income groups in the city, but otherwise FBT Large and Medium sector further contribute to the household income bracket over the city.
3. The impact of increased investment in both sectors FBT (simulation 1 and 2) show the results of simulation 1 (Small FBT investments to the sector) will grow relatively larger total output. Likewise, the results show the same thing when done equally to both sectors FBT and combined with redistribution of income from the upper class household in the city households to farm workers (simulation 3 and 4).

Based on the findings of this study showed that of the second group FBT sectors that showed large role in North Sumatra is the Small FBT sector. Thus the sector is one sector leaders (leading sector). This implies that in spurring economic growth accompanied by income distribution in North Sumatra province next to sector I should be prioritized to small FBT. From some Small FBT is categorized as agro-industry sector. Therefore, the strategy agro-industrialization (agro-industrialization strategy) is an options strategy industrialization policies are applied in order to realize economies of North Sumatra resilient in the future. In line with the results of the study Tambunan (1992), Daryanto (1999), and Benerjee and Siregar (2002) states that the development of agro-industries, namely agriculture-based industries, giving a major role in the economy.

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**THE ROLE OF THE GOVERNMENT READINESS IN ENHANCING  
COMPETITIVENESS SMES, SMES DEALING IN ASEAN ECONOMIC  
COMMUNITY (AEC) (CASE STUDY IN BATAM MSME)**

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**Abstract**

The participation of the government and the readiness of micro, small and medium enterprises (SME) in improving its competitiveness in the face of the ASEAN Economic Community (AEC) in the city of Batam. The purpose of this study were: 1) Determine the role of government and the readiness of SMEs in Batam in improving the competitiveness of SMEs in order to face the AEC; 2) to analyze internal and external factors; and (3) Develop a strategy and prioritize the strategies to improve the competitiveness of SMEs in Batam. By using SWOT analysis method to determine the strengths, weaknesses, opportunities and threats. The analysis showed that in the face of the AEC, the government and SMEs need to improve the quality and standard of products, access to finance, human resources, supported by training and technology.

**Keywords:** *participation, competitiveness, government, SMEs, AEC*

**Introduction**

**1. Background of the study**

In late 2015, the Indonesian government has determined that Indonesia is part of the ASEAN Economic Community, or better known as AEC, in implementation of the ASEAN Economic Community (AEC) will be a challenge for the Indonesian nation with the transformation of ASEAN into a single market and production base, as well make ASEAN a more dynamic and competitive.

Enforcement of AEC can also be interpreted as the expectations of the prospects and opportunities for economic cooperation between the regions in a wider scale, through the regional economic integration of Southeast Asia, which is characterized by the free flow (free flow): goods, services, investment, labor, and capital.

The Government of Indonesia continues to increase its commitment to support the optimization of competitiveness to spur productivity and quality economic growth, it is marked by the issuance of Presidential Decree No. 6 of 2014 on 1 September 2014, on Enhancing National Competitiveness in the framework Facing the ASEAN Economic Community (Association Of Southeast Asian Nations).

Through Presidential Decree, the President instructed the government officials throughout Indonesia, to take the necessary measures in accordance with the duties, functions and authority of each in a coordinated and integrated to improve national competitiveness and preparing for the implementation of AECs.

The instruction is expected through increased competitiveness can be improved, mainly by putting forward some basic strategies contained in 14 principal development in order to increase competitiveness.

One of the 14 principal development in order to increase competitiveness, one containing the second letter number (9) of the Development of Micro, Small and Medium Enterprises which focus on:

- a) Improvement of Competitiveness of Micro, Small and Medium Enterprises Financing from the side;



- b) Competitiveness Development of Micro, Small and Medium Enterprises in the framework of Eligibility and Capability Improved Competitiveness of Micro, Small and Medium Enterprises;
- c) Encouraging Empowerment Real Sector and Competitiveness of Micro, Small and Medium Enterprises;
- d) How to Batam directly adjacent to the member countries of the AEC, strategy what will be done, and what factors can improve the competitiveness of SMEs in the city of Batam in AEC implementation?

Given that Batam is a very strategic area for international trade lanes, in fact is one of the entry gates member AEC products to Indonesia. Batam could act as a transit area of products, as well as the area of product marketing countries AEC, thus there will be a variety of products circulating in the city of Batam, which is certainly not just a product of industrial / large businesses that enter and circulate in Batam, but including small and medium business products, thus will be a challenge for the products of SMEs in Batam.

According to data from the Department of Community Development, Markets, Cooperatives and SMEs Batam in 2014 there were 1,006 SMEs in Batam which are all incorporated in the container cooperatives spread over 12 districts.

**Table 1**  
**Data Actors of Small and Medium per Subdistrict 2014**

No	Districts	Amount UMKM/Cooperation
1	Sekupang	182
2	Batu Aji	108
3	Bulang	19
4	Galang	35
5	Sei Beduk	79
6	Belakang Padang	40
7	Bengkong	72
8	Batu Ampar	61
9	Nongsa	41
10	Sagulung	137
11	Batam Kota	189
12	Lubuk Baja	43
Total		1.006

In 2015, the Batam City Government through the Department of Community Development, Markets, Cooperatives and Small and Medium Enterprises, has implemented and intermediation Financing SME Expo Rp. 119,280,175 or by 82.72% of the existing budget ceiling is Rp. 144,200,000, - funding is very minimal compared to the number of SMEs in the city of Batam.

As the above description, the author felt the need to examine how the competitiveness of SMEs in order to compete in the AEC, in particular SMEs in the city of Batam. The authors are interested in doing research titled "Participation of Government and Readiness of MSMEs in Batam in Improving Competitiveness of SMEs in Facing ASEAN Economic Community (AEC)".

## 2. Scope of the problem

As described above, in general, the authors try to limit the problem to be studied in the form of strengths, weaknesses, opportunities and threats facing SMEs in the era of AEC, in

particular this research is intended to obtain a clear picture of the factors increasing the competitiveness of SMEs.

### **3. Formulation of the problem**

Based on the identification of the above problems, the authors put forward some of the issues to be studied more deeply, namely:

1. How is the government's role in improving the competitiveness of SMEs in AEC enforcement of the moment?
2. How is the readiness of SMEs in the face of competition, especially on products that are similar in terms of human resources, product price, product quality, innovation, and technology?

### **4. Research purposes**

Generally, this study intends to obtain a clear picture of an effective strategy to increase the competitiveness of SMEs. In particular, it is also to know about the basic concept of SMEs, the basic concept of AEC, SMEs SWOT analysis, and strategies undertaken to increase the competitiveness of SMEs in the face of the MEA.

### **5. Benefits of research**

While the benefits of this research are expected to provide an overview for SMEs in order to increase its competitiveness in the current era of AEC. So that SMEs can compete and can survive in the free trade deal with the enforcement of AEC s. Not only to compete in the domestic market but also the international market.

## **Literature Review**

### **1. Understanding Competitiveness**

The definition of competitiveness according to Big Indonesian Dictionary (KBBI) is the ability of living creatures to be able to grow (evolve) normally among other living beings as a competitor in the habitat (in one line of business, etc.); KBBI.

There are two sides posed by competition, namely the success to encourage companies to be more dynamic and competitive in providing products and provide the best service for the market, so competition is regarded as the opportunity to motivate. While the other side was a failure because it will weaken the companies that are static, fear of competition and not able to produce a quality product, so the competition is a threat to the company.

The competitiveness of the operation is a function of operations that are not only oriented to the (internal) but also out (external), which respond to market their business objectives by proactively.

Based on the above understanding, the competitiveness of SMEs in the context of competition in the era of AEC describes the ability of SME products Indonesia (Batam) in facing the challenges of the implementation of AEC s in order to continue to grow and develop normally in various conditions. The higher the competitiveness of MSME products Indonesia (Batam), the more superior products SMEs Indonesia (Batam) in the face of MSME products of ASEAN countries.

### **2. Micro, Small and Medium Enterprises (SMEs)**

As contained in Law No. 20 Year 2008 on Micro, Small and Medium Enterprises, the basis for the issuance of the Act is intended to create a just society prosperous based on Pancasila and the Constitution of 1945, to be realized in the empowerment of Micro, Small and K, should be organized as a whole, optimal and sustainable through the development of a favorable climate, the provision of business opportunities, support, protection, and business

development broadly, so as to improve the position, role and potential of Micro, Small and Medium enterprises in realize economic growth, equity and improvement of people's income, job creation, and poverty alleviation.

Some general rules of the law on micro, small and medium enterprises are as follows:

1. Micro is a productive enterprise belonging to individuals and / or entities that meet the criteria of individual businesses Micro.
2. Small Business is an economic enterprise productive stand-alone, conducted by an individual or business entity that is not a subsidiary or branch of the company is not owned, controlled, or be a part either directly or indirectly from or Medium Enterprises Large Enterprises that meet Small Business criteria.
3. Medium Enterprises is an economic enterprise productive stand-alone, conducted by an individual or business entity that is not subsidiaries or branches of companies owned, controlled, or be a part either directly or indirectly by the Small Business or Large Business with the amount of wealth net or annual sales revenue.

The principles and objectives of the micro, small and medium enterprise are familial, economic democracy, togetherness, efficiency with justice, sustainability, environmental friendliness, independence, balance of progress and national economic unity.

While the purpose of Micro, Small and Medium Enterprises aims to foster and develop the business in order to build a national economy based on fair economic democracy.

### **3. ASEAN Economic Community (AEC)**

AEC is a community of ASEAN (ASEAN Community) in Economics or ASEAN Economic Community (AEC) which was endorsed at the Summit (Summit) ASEAN 9th in Bali in 2003, otherwise known as Bali Concord II. The community building initiated by the Heads of State of ASEAN after the 1997 economic crisis region of Southeast Asia.

AEC is expected to realize the achievement of a region that is stable, prosperous and highly competitive with balanced economic growth and reduced poverty and socio-economic gap. Bali Concord II not only agreed on the establishment of the AEC, but also agreed to establish an ASEAN Community in the field of security politics (ASEAN Political-Security Community) and the Socio-Cultural (ASEAN Socio-Culture Community).

12th ASEAN Summit in Cebu in January 2007, has agreed a "Declaration on the Acceleration of the Establishment of an ASEAN Community by 2015". In this context, the ASEAN Economic Ministers has instructed the ASEAN Secretariat to compile a "Blueprint for the ASEAN Economic Community (AEC)". The AEC Blueprint provides a strategic work plan in the short, medium and long up to 2015 towards the establishment of ASEAN economic integration, namely:

1. Towards a single market and production base (current free trade for the goods, services, investment, skilled labor, and capital);
2. Towards the creation of regional economies with high competitiveness (regional competition policy, IPRs action plan, infrastructure development, ICT, energy cooperation, taxation, and the development of SMEs);
3. Towards a region with equitable economic development (region of equitable economic development) through SME development and programs of the Initiative for ASEAN Integration (IAI); and
4. Towards the full integration of the global economy (a coherent approach in external economic relations and to encourage participation in the global supply network).

### **4. SWOT analysis**

SWOT is an acronym for strength (Strength), weakness (Weakness), opportunities (Opportunities) and threats (Threats) of the company's internal and external environment.

According Jogiyanto (2005), SWOT be used to assess the strengths and weaknesses of the resources of the company and the opportunities for internal and external and the challenges faced.

All organizations have strengths and weaknesses in the functional areas of business. No company is as strong or weak in all business areas. Strengths / weaknesses internal, coupled with the opportunities / threats from external and a clear mission statement, the basis for goal setting and strategy. Goals and strategies set out with the intention of utilizing the internal strengths and overcome weaknesses.

### **5. Strength**

Strength is the resources, skills or forte-forte else related to the company's competitors and the market needs that can be served by companies that are expected to be served. Strength is a special competition which gives the company a competitive advantage in the marketplace.

### **6. Weakness**

Weaknesses are limitations or deficiencies in resources, skills, and capabilities that effectively inhibit the performance of the company. These limitations may include facilities, financial resources, management capabilities and marketing skills can be a source of weakness of the company,

### **7. Opportunities**

Opportunities are important favorable situation in the corporate environment. Important trends are one source of opportunities, such as the change in technology and the growing relationship between the company and the buyer or supplier is a picture of opportunities for the company,

### **8. Threats**

The threat is critical of unfavorable situation in the corporate environment. The threat of a major nuisance for the current or desired position of the company. The existence of government regulations that are new or revised can be a threat to the company's success.

### **9. SMEs in AEC**

Regional cooperation to develop SME policy guided by the ASEAN blueprint for the development of SMEs 2004-2014. Built with a continuous process, ASEAN SME development strategic plan 2010-2015 includes commitment to regional development of SMEs adopted from SMEWG in 2009 and supported by the Senior Officials Meeting of Trade SEOM 2010 to improve the competitiveness and flexibility of the progress of SMEs as a key market and production base in ASEAN.

The work plan includes strategic work program, policy and output indicative implemented by ASEAN SME Working Group (formed by SME organizations from all member countries of ASEAN) with institution / body of SMEs and the private sector. In particular there are 5 main targets SMEs under the umbrella of the AEC Blueprint, namely the development of: (a) a common curriculum for entrepreneurship ASEAN countries Indonesia and Singapore as examples (2008-2009); (b) the overall SME service center with regional and sub-regional relations in countries member, with Thailand and Vietnam as examples of countries (2010-2011); (c) SME financial facilities in each Member State with Malaysia and Brunei Darussalam as an example of state (2010-2011); (d) the scheme, the scheme future regional training for staff exchange and training visits to Myanmar and the Philippines as examples of state (2012-2013); (e) help the development of regional SMEs as a source of funding for SMEs doing business in ASEAN with Laos and Thailand as examples of state (2014-2015).

Funding in SME activities remains a challenge, to date, some results of SMEs agreements have been implemented on the basis of self-help approach (self-help) or mutual aid among members of ASEAN (ASEAN helps) where the member states to mobilize their resources to carry out development projects SMEs or to facilitate the participation of other ASEAN member countries on this project.

In order to strengthen SMEs face Asian Economic Community (AEC) by 2015, some efforts need to be done, including:

1. Improving the quality and standardization of products similar SMEs in the ASEAN region;
2. Expanding and improving access to finance for SMEs;
3. Improving the quality of human resources and entrepreneurship to SMEs;
4. Strengthening and improving access to and transfer of technology for SMEs for the development of innovative SMEs;
5. Facilitating SMEs related to access to information and promotion abroad.

Thus SMEs at the forefront of national economic growth. Ultimately expected to be able to compete in the era of economic integration of ASEAN is a region that is stable and prosperous.

## **10. Previous research**

Research on competitiveness conducted by researchers, among others: Tyas, and Vita (2014), Armi and Kasmirudddin (2014), and Y. Sri Susilo (2011). Ari Anggarani Winadi Prasetyoning Tyas and Safitri (2014) conducted a study entitled Strengthening Sector SMEs as Strategy Facing MEA 2015. Cintya and Kasmiruddin (2014) conducted a study with the title SWOT analysis as Strategies to Increase Competitiveness in Business Enterprises Shoes (Case Shoe Stores Stars Marpoyan Pekanbaru branch), Susilo (2011) conducted a study with the title Strategy Improving the Competitiveness of SMEs role in Facing CAFTA and MEA,

## **Research Methods**

### **1. Types of research**

This research is a descriptive qualitative study of research is descriptive and tend to use the analysis. Processes and meanings (subject's perspective) are highlighted in this study. The theoretical basis used as a guide to focus research in accordance with the facts on the ground. Besides the theoretical basis is also helpful to provide an overview of the background research and as a discussion of research results.

Qualitative data analysis process starts with examining all available data from various sources, i.e. interviews, observations that have been written in the field notes, personal documents, official documents, images and so on. Once reviewed, the next step is the reduction of data, preparation of the unit, categorization and the last is the interpretation of the data.

### **2. Location and Time Research**

This research was conducted in the city of Batam, Cooperatives and SMEs Batam City and SMEs in Batam. The time required to conduct research less than 2 (two) months starting from May 2016 until June, 2016.

### **3. Informant**

In a qualitative study population did not use, because qualitative research departs from particular cases that exist in certain social situations and the study results would not be imposed on the population, but is transferred to another place on the social situation in the

cases studied. Samples in qualitative research is not called the respondent but speakers, participants or informants (Sugiyono, 2012: 216).

#### **4. Type of data**

The type of data in this study is divided into two categories as follows:

1. Primary data, i.e. data obtained directly from the source either in the form of observations, questionnaires or interviews, supported by documentation.
2. Secondary data, i.e. data obtained through intermediaries such as Internet media, Books, Websites and other references that can support the research.

#### **5. Data collection technique**

Sugiyono (2012) qualitative research methods named as the new method. Because of its popularity recently, so named because the method is based on the philosophy post-positivistic post-positivism. This method is also known as an artistic method, because the research process is more art (less patterned), and is referred to as an interpretive method for the data research results more concerning the interpretation of the data found in the field. Qualitative data collection techniques in general there are four kinds:

##### **a. Observation**

Nasution, in Sugiyono (2012) states that, observation is the basis of all science. Scientists can only work based on the data, the facts about the world of reality obtained through observation. Data was collected and often with the help of various tools are very sophisticated, so the objects are very small (protons and electrons) or very much (space objects) can be observed clearly.

##### **b. Interview / interview**

Esterberg, in Sugiyono (2012) defined the interview as follows: "a meeting of two persons to exchange information and ideas through question and responses, the resulting in communication and joint construction of meaning about a particular topic." The interview is a meeting of two people to exchange information and ideas through questions and answers, so it can be constructed meaning in a particular topic.

##### **c. Document**

Sugiyono (2012), expressed his opinion about the document, the document is a record of events that had passed. Documents can be in the form of text, images, or the monumental works of a person.

##### **d. Triangulation**

Sugiyono (2012), Triangulation is defined as data collection techniques that are combining of various data collection techniques and data sources that already exist. When researchers collecting data by triangulation, the actual researchers collected data as well as test the credibility of the data, i.e. checking the credibility of the data with a variety of data collection techniques and data sources.

#### **6. Data analysis technique**

Technical analysis of the data in this study using SWOT analysis, SWOT Analysis is a strategic instrument of planning a classic. By using the framework's strengths and weaknesses and external opportunities and threats, this instrument provides a simple way to estimate how best to implement a strategy. The tool helps planners what can be achieved, and what are the things that need to be considered by them.

According Rangkuti (2006) SWOT Analysis is an analysis that is based on the logic that maximizes strength (strengths) and opportunities (opportunities), but simultaneously can minimize your weaknesses (weaknesses) and threats (threats). Aiming to determine a realistic

effort, according to the company and are therefore more easily achieved any company can use the SWOT analysis techniques.

**7. SWOT matrix**

SWOT matrix is a tool that is used to draw up strategic business factors. This SWOT matrix can clearly describe how external opportunities and threats facing the business and can be tailored to the strengths and weaknesses that are owned by a business that can be applied right competitive strategy.

According to Jatmiko (2003) SWOT Matrix is an important tool that can help managers develop the type of strategy that consists of four possibilities, namely a blend of Strength-Opportunities (SO), the Convergence between Weaknesses-Opportunities (WO), The combination of Strength-Threat (ST), and the combination of Weaknesses-Threats (WT).

**8. Objective of the Analysis Data**

To illustrate the results of the competitive analysis, weaknesses, opportunities and threats the company as a whole which is used as a base or foundation for preparing the objective and strategy of the company in the corporate planning.

**A list of questions**

<b>Participation of Government</b>	<b>SMEs</b>
1. How is the role of government as a facilitator?	1. How to get the capital / financial?
2. How the role of government as a regulator?	2. The availability of raw materials?
3. How is the role of government as a catalyst?	3. Human Resources?
	4. Marketing product?
	5. The technology used?

**Results and Discussion**

**1. General description**

Batam is an island located between the waters of the Straits of Malacca and Singapore Straits. No literature can be a reference to the name of Batam where it was taken, a clear Batam Island is a large island and 329 islands in the city of Batam. The only source that clearly mention the name of Batam and can still be found today is the Treaty of London (1824).

The original inhabitants of Batam estimated are Malays, known as People or People Sea Strait. The residents at least have occupied the area since the time of the kingdom of Temasek (now Singapore) in the end of 1300 or early 14th century. Instead, and other records, the possibility of Batam Island has been inhabited by sea since the year 231 AD that at the time of Singapore called Ujung Island.

In its heyday the Kingdom of Malacca, Batam Island under the authority of Admiral Hang Tuah. After the fall of Malacca, power over Batam Island neighborhood held by Laksamana Hang Nadim domiciled Bentan (now P. Bintan). When Hang Nadim died, the island was under the rule of the Sultan of Johor until the mid-18th century.

**2. Batam City Government**

The formation of the Government of Batam as an executive agency carrying out the wheels of government and community development, a hope to be able to answer any problems or

challenges that arise in accordance with the development of socio-economic, socio-cultural, political and others in the community.

Batam Municipal Government established based on Government Regulation No. 34 of 1983 and was inaugurated on December 24, 1983 which is chaired by the Mayor of the Administrative rank *pari passu* with the regency / municipality level II more. Its existence is under and directly responsible to the Governor of the Province of Riau Islands.

Batam City Government has the vision and mission of "Realization Batam as Bandar Madani. The Competitive World, Developed, Prosperous, and Dignified"

### **3. Office of Community Development, Markets, Cooperatives and SMEs Batam**

As the vision and mission of Batam City Government, Department of Community Development, Market, SMEs Batam has a vision and a mission of its own with the mission of "Improving Capability Institutional, Human Resources Quality and Capital Structure and Financing SMEs to become entrepreneurs strong, healthy, strong and independent" ,

The key task of the Department of Community Development, Markets, Cooperatives and SMEs Batam in accordance with the Regulation of Urban Batam No. 12 of 2007 concerning the composition of the Organization and Work Procedure of the Regional Office of Batam has the tasks of decentralized authorities in the field of Community Development, Markets, Cooperatives and Small and medium.

## **Research result**

### **1. ASEAN Economic Community (AEC)**

Every major pillar has its own purpose. The purpose of the AEC is to improve economic stability in the ASEAN region, with the establishment of the ASEAN economic region is expected to overcome the problems in the economic field between ASEAN countries, and for in Indonesia is not expected to occur again as the 1997 crisis.

There are several factors that affect the economic growth that is the human factor, the factor of natural resources, science and technology factors, cultural factors and power factor capital. Then we can see how these five factors have been optimally managed, in fact there are several countries in the Southeast Asian region is still underdeveloped in the management of some of these factors although we can also see some of the other countries is quite able to manage it well.

The question is, to what extent the government's participation and readiness of SMEs in Indonesia to face the MEA?

### **2. Participation of the Government of Batam**

From the research, either by observation, interviews and documentation in the field, the government's role would be particularly important for SMEs to deliver in order to compete with other businesses in utilizing the AEC. Some of the government's role in efforts to empower SMEs are:

### **3. The role of the Government as Facilitator**

The role of the Office of Community Development, Markets, Cooperatives and SMEs in developing SMEs Batam in Batam by facilitating the development of SMEs in the city of Batam. Assistance provided such assistance in the form of appropriate equipment, industrial synergy HR development program, as well as product distribution facilities. The purpose of this provision of facilities and infrastructures is to develop human resources qualified industry, proportional and high technical capabilities to support an increase in industrial production.



**4. Government's Role as Regulator**

The role of the Office of PMP-SMEs government as a regulator here is to protect the movement / behavior of SMEs. hemonis so intertwined relationship between businessmen and the government as coaching, following government regulations relating to Micro, Small and Medium Enterprises:

**5. Government's Participant as Catalyst**

The government's participant as a catalyst through activities that include the provision of information support of capital for SMEs and organizing SME Product Promotion. In this case the Department of Cooperatives and SMEs have a goal held this program that the managers of SMEs in Batam increasingly Active and selective in presenting its products with the quality, design and price are increasingly competing with products from other regions, and even from state another it both in national and international markets. In these days of credit schemes are well known in the community is the People's Business Credit (KUR), which is specifically designed for SMEs with a decent business category, but do not have sufficient collateral in order to banking requirements. KUR is credit / financing to SMEs and cooperatives that do not currently accept credit / financing from banks and / or who are not currently receiving the Credit Program of the Government at the time of application for credit / financing proposed. The final goal is the KUR program was launched to improve the economy, poverty alleviation and employment.

**6. Readiness of Micro, Small and Medium Enterprises in Batam**

**Table 2. Characteristics of Micro, Small and Medium Enterprises**

<b>Size of business</b>	<b>Characteristic</b>
<b>Micro business</b>	<ul style="list-style-type: none"> <li>- The type of goods / commodities are not always fixed; can be changed at any time.</li> <li>- The business is not always settle; any time can be moved.</li> <li>- Not to perform even simple financial administration.</li> <li>- Do not separate the family finances with business finances.</li> <li>- Human resources (entrepreneurs) do not yet have sufficient entrepreneurial spirit.</li> <li>- The average level of education is relatively low.</li> <li>- Generally not yet access to banks, but some have access to non-bank financial institutions.</li> <li>- Generally do not have a business license or other legal requirements, including TIN.</li> </ul> <p>Example: Trading businesses such as street.</p>
<b>Small business</b>	<ul style="list-style-type: none"> <li>- The type of goods / commodities are cultivated generally already fixed are not easily changed.</li> <li>- Location / place of business generally have settled not moving.</li> <li>- In general, is already doing though still modest financial administration.</li> </ul>

	<ul style="list-style-type: none"> <li>- Financial companies have started separated with the family finances.</li> <li>- It makes the balance of the business.</li> <li>- Already have a business license and other legal requirements, including TIN.</li> <li>- Human resources (entrepreneurs) have experience in business berwira.</li> <li>- Much has access to banking capital purposes</li> <li>- Most have not been able to make such good business management with business planning.</li> </ul> <p>Example: Traders in the wholesale market</p>
<p><b>Medium-sized enterprises</b></p>	<ul style="list-style-type: none"> <li>- Has the management and better organization, with a clear division of tasks, among others, the finance department, marketing department and production department.</li> <li>- Have done by implementing a financial management accounting system by making it easier to regular auditing and assessment or examination included by banks.</li> <li>- Have done any rules or management and labor organizations.</li> <li>- It has legal requirements, among others permission neighbors.</li> <li>- Already have access to the sources of bank funding.</li> <li>- In general, already have human resources trained and educated.</li> </ul> <p>Example: Mining the mountain stone for construction and artificial marble.</p>

Source: <http://www.bi.go.id/>

## 7. Pros and Cons Small and Medium Enterprises

Advantages of Small and Medium Enterprises (SMEs):

As well as SMEs in other cities, SMEs in Batam has several advantages in running their business, which of course, this advantage into force and the capital of SMEs to compete in the ASEAN Economic Community (AEC), while the strength of the SMEs in Batam, as follows:

1. Innovation in technology that can easily occur in product development.
2. Relationship human intimacy of the smaller companies.
3. Flexibility and ability to adapt to changing market conditions quickly compared to large-scale enterprises in general bureaucratic.
4. There is a dynamism of managerial and entrepreneurial roles.

## 8. Weaknesses of the Small and Medium Enterprises (SMEs):

### a. Marketing difficulties

Some SMEs are successfully interviewed, there are similarities answers regarding the difficulty marketing of products produced, there is even SMEs are marketing only through social media such as a page on Facebook, which is certainly in fashion marketing such as this is limited to those that exist in friendship on the page, because most of the resulting product is a product made in the home such as cake products, handicraft (souvenir), which is certainly its

marketing was carried out of the house. While to get a display-display required considerable expense.

#### **b. Financial constraints**

From some of the SMEs interviewed by investigators, in general, that the capital being owned an equity capital / private course very limited, so let's keep up or increase their efforts to survive it is still very difficult, the expectations of capital support from governments of both banking and non-banking time was minimal.

SMEs crafts Capital Menik who were interviewed said that the source of funds / capital is owned their own savings, while aid from the government up to now has not been obtained.

Limitations of capital caused by a lack of information for SMEs in obtaining loans disbursed by the government, as it also still are SMEs that do not have requirements that must be met as a loan recipient, even there are SMEs that have not been registered at the Department of PMP-SMEs as trained partners, so that this is an obstacle in the loan portfolio.

#### **c. Limitations of Human Resources (HR)**

Human Resources SMEs in Batam is still a serious obstacle, many SMEs have only precarious employment or just a part-time worker "part time" as SMEs engaged in convection in Batu Aji Perum Griya Asri, Mr. Convection SMEs owners. Juwair said the convection industries not yet have a permanent workforce, this is due to get a tailor reliable in Batam is very difficult, it can be said that the professional workforce in the field of convection very rare / difficult, because to be a seamstress needed expertise, and that expertise can be obtained with their training, whereas up to now there has been no Batam City Government program as to provide the training.

### **Data analysis**

#### **1. Triangulation Data**

The researchers used as a triangulation technique to check the validity of the data. Where in the sense triangulation is a technique that utilizes data validity checking something else in comparing the results of interviews of the research object.

Triangulation by comparing and checking the source of meaning behind the degree of confidence the information obtained through time and different tools in qualitative research.

As to achieve that trust, then taken the following steps:

1. Comparing the observed data with data from interviews.
2. Compare what people are saying in public what was said in private.
3. Compare what people say about the situation of research in what he says all the time.
4. Comparing the situation and perspective of someone with different opinions and views of people from different classes.
5. Comparing the results of interviews with the contents of the documents related.

#### **2. Data reduction**

The data collected in the field is quite a lot, it is necessary to note carefully and in detail. Data reduction means: summarizing, choose things that are basic, focusing on things that are important, look for themes and patterns and discard unnecessary. Reduced data will provide a clear and facilitate researchers to conduct further data collection, and look for it when necessary.

Reduction of data from the above results, as illustrated in the following table:

**Table 3. Government Participation Source: Interviews and documentation**

<b>Participation of Government</b>	<b>Interview</b>	<b>Documentation</b>
as a facilitator	Doing exhibitions, provide appropriate assistance tools, training	SMEs Expo, support equipment, training in sewing
as Regulator	Ease of business licenses, access to business credit	Rules still tends to weigh on SMEs
as catalyst	People Business Lending, Community Revolving Fund	The information is not conveyed properly to SMEs

**Table 4.8. Readiness of MSMEs Source: Observations and Interviews**

<b>Readiness of SMEs</b>	<b>Observation</b>	<b>Interview</b>
Advantages of SMEs	Innovations in technology, human relations, flexibility and adaptability, dynamism managerial	Technology is still traditional, labor relations with managerial still with familial patterns,
Deficiency	Difficulty sale, financial, material, human resources, technology	Need government support in facilitating all the flaws

## **Discussion**

### **1. SWOT Analysis**

From these results, the following SWOT analysis to identify the internal factors that Strength and Weakness was external factors that Opportunity and Threat SMEs in Batam in the era of AEC as follows:

#### **2. Strength**

- The product price is relatively affordable and stable
- The production quality is maintained
- Having a close relationship between employers and workers

#### **3. Weakness**

- Limited capital
- Promotions are not optimal
- Part-time labor
- The technology used is still traditional
- Trademarks are still owned mostly SMEs
- Raw materials readily available

#### **4. Opportunity**

- The market share is very open
- The public need to be product

- The purchasing power of consumers who tend consumptive
- Free Trade Area (AEC)

### **5. Threat**

- Competitors from home and abroad
- Public perception of the brand abroad
- Lack of government support
- Lack of protection for SME products
- The lack of a workforce training

## **6. SWOT analysis**

### **a. SO strategy**

In the SO strategy (the power-chances) SMEs should take advantage of internal strength to take advantage of opportunities from the external environment, as mentioned in the above table of SMEs in Batam taking advantage of opportunities at the time of enactment of the AEC in order to do the following:

- a. Improve the quality and standard of products
- b. Supply of products that follow the development of consumer tastes
- c. Expand your market share

### **b. WO strategy**

This strategy is based on the utilization of existing opportunities in ways that minimize weaknesses. Sometimes there are opportunities for the external environment, but the company faced internal weaknesses that hinder the company to exploit those opportunities.

- a. Improve access to finance
- b. Promotion optimization of online media
- c. Increase access to and transfer of innovative technologies for SMEs

### **c. ST strategy**

In the box ST strategy, SMEs in this position should use its power to avoid or reduce the impact of external environmental threats. But this does not mean that the company's strong organization should always face the threat of direct external environment, following the results of a SWOT analysis of the ST strategies:

- a. Opening space for promotional information access facilities abroad
- b. Wake up people's perception to love domestic products
- c. Establish a good relationship with the Government

### **d. WT strategy**

In the box WT strategy, SMEs in this position should have a survival strategy that is directly geared to reducing internal weaknesses and avoid external environmental threats. A business organization dealing with a number of external threats and internal weaknesses that make it possible for the company in a precarious position, or critical, following the results of a SWOT analysis of the WT strategies:

- a. Improving the quality of human resources by trainings
- b. Establish a good relationship with the consumer
- c. Registration of a trademark on IPR.

## **Conclusions and Recommendations**

### **1. Conclusion**

#### **a. Improving the Quality and Standard Products**

In order to take advantage of opportunities and market potential in the ASEAN region and the global market, the products produced by SMEs must meet the quality and standards in accordance with the ASEAN agreement and the country of destination. Within that framework, the SMEs should begin facilitated with quality requirements and product standards required by the ASEAN and outside ASEAN. The role of technological support for improving the quality and productivity as well as the introduction of design to the SMEs who want to take advantage of the ASEAN markets is urgently needed.

#### **b. Improving Access of the Finance**

So far, not many SMEs can take advantage of the scheme of financing provided by banks. Some of the problems faced by SMEs in gaining access to finance, among others: (1) there are SMEs that do not have legality, (2) credit schemes prepared by the banks does not correspond to the type of SME, (3) the data of the SMEs, which should be financed, is not presented properly. Hence the need for capacity building for human resources of SMEs, banking, and companion SMEs. On the other hand, should also be given extensive information about the financing schemes owned by banks.

#### **c. Improving Quality of Human Resources**

In general the quality of human resources SMEs in Indonesia is still low. To strengthen the quality and entrepreneurial SMEs in Indonesia especially in Batam, needed education and skills training, management, and other appropriate technical training, in accordance with needs. Entrepreneurship development also needs to be improved.

#### **d. Strengthening and Improving Access and Technology Transfer for SMEs**

Access to and transfer of technology to SMEs is still a challenge faced in Indonesia. There should be cooperation between research institutions, and the cooperation between research institutes and universities and the business world for the transfer of technology should be encouraged. Cooperation or partnerships between large companies, both from home and abroad with SMEs should be encouraged to transfer of technology from large enterprises to SMEs.

#### **e. Facilitating SMEs Regarding Access to Information and Promotion Abroad**

The most important part of the production process is a matter of the market. No matter how good the quality of the products, if the society or the market does not know, then it will be difficult marketed products. In this regard, not only the quality and design of products that must be considered, but also about the quantity and continuity of its products.

### **2. Suggestion**

- a) Eliminate all artificial barriers to growth that are SMEs, for that government policies must be neutral towards any type or scale of business.
- b) There is nothing wrong government implemented a policy of protection against small-scale businesses emerging, but the time period must be clear and not long and this policy should be learning.
- c) Improved performance of the apparatus at all levels and the Regional Center.
- d) SMEs must improve its productivity if it is to compete in the arena of AEC.
- e) Increase the expertise of SMEs with trainings, do not depend on government programs.

- f) Establish cooperation with major companies, and if possible not only with domestic companies but with foreign companies as well.

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## DOES SHEEPSKIN EFFECT MATTER? STUDY CASE ON RETURN TO EDUCATION IN INDONESIA

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### Abstract

This paper explains the return to education in Indonesia by using the data of Indonesia Family Life Survey (IFLS) 2000, 2007, and 2014. We use the full cross section of data. The purpose of this paper is to estimate the rate of returns to education in Indonesia with special concern on sheepskin effect associated with the completion of certain education stages. Mincer specification related to income and education has the form of continuous function which means that marginal of return to education is constant; however sheepskin effect makes the equation discontinuous in the year where there is graduates of education level. This paper is made in three different models; there are: 1) the addition of dummy variable for year of graduates of education level 2) discontinuous spline function and 3) step function. The results of the study provide strong evidence of the presence of the sheepskin effect on return to education.

**Keywords:** *education, return to education, sheepskin effect*

JEL codes: I26, J30

### Introduction

The positive correlation of individual income in labor market with the year of education completion has been widely demonstrated in numerous studies. Generally, this phenomenon is a part of human capital investment in education. This correlation explains that high income reflects high productivity of workers due to an increase in education. Education is an individual investment when people study at school and get the return when they get into work field. The amount of private return obtained by a person from his education investment is generally known as return to education. Research on return to education regarded from human capital perspective develops after Mincer (1974) made the specification of income equation<sup>8</sup>. Economic theory of education provides different explanation of why there is a strong relation between individual who has higher education level and the amount of income earned. The first explanation is based on the human capital theory that emphasizes the role of learning in determining returns to education. Another explanation is obtained from educational screening theory. This theory states that individual with higher education earns higher income because the education works as credential letter (certificate) which is a signal of high productivity (Weiss, 1995).

The testing to differentiate human capital theory and education signal theory is indeed difficult to be formulated. One of the ways to test education signal theory is by looking at the difference in individual income that has certain qualification with counterfactual. Counterfactual is a group of individual where the number of year of education and characteristic is the same but it does not have certain qualification. This is generally what we call as sheepskin effect<sup>9</sup>. Sheepskin effect in return to education has been investigated by the

<sup>8</sup> Mincer Specification is an income equation related to education and working experience.

<sup>9</sup> Sheepskin as a phrase speaks about “an official document occasionally made from animal skin (usually sheep skin)”. This paper deals with certificate of graduate of highest education level achieved.

researchers including (Hungerford and Solon, 1987; Belman and Heywood, 1991; Shabbir, 1991; Jaeger and Page, 1996; Schady, 2001; Pons, 2006; Silles, 2008; Xiu and Gunderson, 2013).

Income specification by Mincer (1974) implies that each additional year of education provides constant additional income. The equation of Mincer specification is drawn continuously for each additional year of education. This interpretation is consistent with human capital theory. While according to screening theory, there is different increase for each education level achieved.

The purpose of writing this paper is to test the hypothesis of sheepskin in return to education in Indonesia. This research is motivated by two things. First, the researcher would like to determine the condition of marginal return in Indonesia, especially in the level of junior high school that is included in 9 years compulsory education program and how the relationship between the compulsory education program and sheepskin effect. Second, there is no research that focuses on hypothesis testing of sheepskin in return to education for the case in Indonesia. Son (2013) supports the sheepskin effect in the number of school enrolment for each level of school in time of shock by using IFLS data wave 2 and 3.

This paper scheme is started from introduction; the next is chapter two that describes education system and labor system in Indonesia. Chapter three discusses the literature review and chapter four discusses empirical strategy. Following is chapter five that describes the data and statistical summary, chapter six describes the result of regression analysis and chapter seven is the conclusion.

## Education System and Labor System in Indonesia

### 1. Education System

Line of education in Indonesia is divided into three main types; there are formal education, informal education, and non-formal education. Formal education is education run at school while informal education and non-formal education are run outside the school. Formal education is divided into three levels; they are primary, secondary and tertiary.

**Table 1 Education Level and Years of Schooling**

Years of schooling	Education Level
6	Elementary School
9	Junior High School
12	Senior High School
14	Diploma Degree
16	Scholar/Master Degree

Primary education consists of elementary school or Madrasah Ibtidaiyah and junior high school or Madrasah Tsanawiyah. Secondary education consists of senior high school, Madrasah Aliyah and vocational school. Based on Law No. 20 year 2003 on Indonesian education system, school duration (school duration in year) of each education level is presented in Table 1.

### 2. Labor System

Labor market in Indonesia according to the definition of Central Bureau of Statistics (Badan Pusat Statistik, BPS) described by National Labor Force Survey (Survei Angkatan Kerja Nasional, SAKERNAS) is divided into 10 business fields; they are food crop, plantation,

fishery, animal husbandry, other agricultures, manufacture industry, trade, service, transportation and others.

There are many workers in Indonesia who have low education. Based on BPS data, the number of worker by education level is presented in Table 2. The number of worker by low education level (Elementary and below) is higher than the number of worker with high education level. For example in 2013, the workers who have elementary education or less are more than 47 percent (total of 54.62 million people).

The condition of workers in Indonesia has increased on the status of employment/ worker. Table 3 shows the Indonesian worker by status of main job. Employment status according to the definition of BPS is divided into seven categories; they are working alone, working alone with the help of temporary worker, working alone with the help of permanent worker, employees, agricultural free worker, non-agricultural free worker and unpaid worker. The increasing employment status of worker/employee is about 3 percent each year.

**Table 2. Worker Age 15 Years and Over Who Work According Attainment Education, 2011-2014 (million people)**

Attainment Education	2011	2012	2013	2014
(1)	(2)	(3)	(4)	(5)
Elementary School and Less	55.12	55.51	54.62	55.31
Junior High School	21.22	20.29	20.29	21.06
Senior High School	16.35	17.20	17.77	18.91
Vocational School	9.73	9.43	10.18	10.91
Diploma I/II/III	3.32	3.12	3.22	3.13
University	5.54	7.25	7.94	8.85
Total	111.28	112.80	114.02	118.17

Source: BPS<sup>10</sup>

<sup>10</sup> [http://www.bps.go.id/brs\\_file/naker](http://www.bps.go.id/brs_file/naker), date 10/9/2016

**Table 3 Workers Age 15 Years and Over Who Worked According Main Employment Status, 2011-2013 (million people)**

Main Employment Status (1)	2011 (2)	2012 (3)	2013 (4)	2014 (5)
Work Alone	21.15	19.54	19.14	20.32
Employer assisted by temporary workers	21.31	20.37	19.38	19.73
Employer assisted by permanent workers	3.59	3.93	4.03	4.15
Labor/employee	34.51	38.13	41.56	43.35
Free Workers in agriculture	5.58	5.36	5.00	4.74
Free Workers in nonagricultural	5.16	5.97	6.42	6.75
Workers family/Unpaid	19.98	19.50	18.49	19.13
Total	111.28	112.80	114.02	118.17

Source: BPS<sup>11</sup>

## Literary Review

### 1. The Reason Why Sheepskin Effect Matter

The relevance of sheepskin effects for understanding the returns to education may possibly be increasing over time. As a greater proportion of the population enrolls in post-junior high school the importance of credential effects is thus likely to rise.

Sheepskin effects are also of research and policy attention because they provide estimates of the value of completing educational programs. If sheepskin effects were unimportant we would place as much emphasis on obtaining an additional year of junior high schooling for someone who would otherwise exit junior high school at the end of grade 9 as for someone who would exit at the end of grade 10. Similarly we would place as much emphasis on obtaining an additional year of senior high school or university education. Nevertheless policies are often directed at program completion that reducing the number of high school dropouts.

Sheepskin effects are also in theory important because they provide information about the way the labor market functions. Certainly, the existence and magnitude of sheepskin effects have been essential to the debate over “human capital” versus “signaling/screening” theories of the role of education in the economy.

Sheepskin effects are also consistent with graduates having learned more in school than non-graduates with the same years of schooling. Such a finding accords with human capital theory if employers observe employees’ skills but researchers do not observe these skills, and with signaling theory if employers do not observe employees’ skills but use graduation as a predictor of skills.

### 2. Previous Research

Hungerford and Solon (1987) began to test the existence of sheepskin effect in return to education. Hungerford and Solon used Current Population Survey (CPS) data to estimate sheepskin effect. Hungerford and Solon used spline function and step function to show discontinuous functions in the year of education where a person usually completed education

<sup>11</sup> [http://www.bps.go.id/brs\\_file/naker](http://www.bps.go.id/brs_file/naker), date 10/9/2016

level. Hungerford and Solon found a positive effect and statistically significant on the 16th year of education for both of the functions.

Further, the research was conducted by Belman and Heywood (1991). Belman and Heywood investigated the existence and the magnitude of sheepskin effect on women and minorities in public sector/private sector and union/non-union. Belman and Heywood model receive the support from Frazis (2002) which confirms sheepskin effect is more possible as signaling model where one does not sure about its productivity and get a signal from the education.

Jaeger and Page (1996) with using CPS data and additional data of certificate ownership showed significant sheepskin effect on graduates of senior high school for some of demographic groups. Return private of year of school became relatively smaller in estimation of sheepskin effect because the existence of graduation data. Jaeger and Page found little evidence of the existence of difference race and gender group on the estimation of sheepskin effect on senior high school graduation and bachelor degree graduation.

Research on sheepskin effect was also developed in the developing countries. Shabbir (1991) had estimated sheepskin effect for the case in Pakistan by using additional dummy, spline function and also step function. Shabbir found the evidence of the existence of sheepskin effect for the three estimation methods. Schady (2001) found the evidence of large difference of private return based on education level. Based on the data of male education in Philippines, Schady used spline method and semi parametric specification in proving the existence of sheepskin effect.

Son (2013) provided the support in the form of evidence about the existence of sheepskin effect seen from the high rate of dropout at school in times of crisis in Indonesia. Son tested whether negative shock influences the number of applicant differently for each education level. Son proved the existence of a fairly strong negative shock influence in junior high school and senior high school graduates; this demonstrated the support of the existence of sheepskin effect in Indonesia.

Pons (2006) found that the evidence of sheepskin effect is only perceived by female worker and it does not apply on male worker in Spain, while in the previous research, Pons and Blanco (2005) found sheepskin effect or graduation effect that can only be perceived in government sector (public) and it cannot be found in private sector.

Silles (2008) used data of age 16 years old in 1974 and 23 years old in 1981 that review sheepskin hypothesis on senior high school level with using test scores for men and women who leave the school in England in early age. He did not find enough evidence to accept the hypothesis of sheepskin effect because there was no additional return on the ownership of formal certificate in senior high school level.

Xiu and Gunderson (2013) used China Household Income Project (CHIP) data in 1995 and 2002 to describe return to education in China by separating graduation effect from the duration of year of school. Xiu and Gunderson obtained evidence of sheepskin effect with using human capital model, credential model and hybrid model.

### 3. Empirical Strategy

Sheepskin hypothesis testing simply ask whether return to education increase discontinuously in the year where there is graduation in education level. Proposing a methodology to determine it is by modifying Mincer specification. Mincer specification is known as income function (generally using natural log) which involves year of school completion, experience in labor market and the square of experience. Mincer income function can be written as follow:

$$\text{Log } w_i = \beta_0 + \beta_1 S_i + \beta_2 E_i + \beta_3 E_i^2 + \varepsilon, (1)$$

where  $W_i$  is income of individual  $i$ .  $S_i$  is the year of school completion of individual  $i$ , and  $E_i$  is working experience of individual  $i$ . The important implication in equation (1) is the level of school return is constant ( $\delta \log w_i / \delta S_i = \beta_1$ ).

When the value rate of return is different for each level of education, it means that the marginal return is also different. This condition causes the equation (1) changes from continuous to discontinuous. To make Mincer equation to be discontinuous can be conducted in three ways, first, adding dummy variable that shows the year of graduation of education level. This makes the value of marginal return will be different in the year of graduation of education level if the dummy variable is significant. Model of additional dummy variable implies marginal return outside year of graduation of education level that is considered the same. Second, modifying model of additional dummy is by adding interaction between dummy variable of year of graduation of education level and the difference between year of school completion and year of graduation of certain education level. Implication of this model results the marginal return after year of graduation of education level experiencing the difference if the interaction variable is significant. Third, modifying Mincer specification by replacing education variable which originally consists of one factor which is year of school completion with dummy variable as many as the year of the highest school completion achieved by the respondent. Then, the researcher conducts test of average difference gradually for year of school completion of  $t$  to  $t-1$ . This condition shows the difference in marginal return for each year of school completion.

Empirically, all three of the ways above are depicted in three models, there are dummy of graduation, discontinuous spline function model and step function model.

### 5. Model I. The use of Dummy variable

This model adds dummy credential (graduation) in Mincer equation. The addition of dummy variable  $D_9$ ,  $D_{12}$ ,  $D_{14}$  and  $D_{16}$  in the human capital function reflects school year in which an individual graduated the education of junior high school, senior high school, diploma and bachelor degree. This first model has a form of

$$\log W_i = \alpha_0 + rS_i + \alpha_1 D_9 + \alpha_2 D_{12} + \alpha_3 D_{14} + \alpha_4 D_{16} + \delta E_i + \gamma E_i^2 + X_i \beta + u_i. \quad (2)$$

$D_9$ ,  $D_{12}$ ,  $D_{14}$  and  $D_{16}$  are dummy variable (0.1) where  $D_9 = 1$  if  $S \geq 9$ ,  $D_{12} = 1$  if  $S \geq 12$ ,  $D_{14} = 1$  if  $S \geq 14$  and  $D_{16} = 1$  if  $S \geq 16$ . If the parameter of  $D_9$ ,  $D_{12}$ ,  $D_{14}$  and  $D_{16}$  in the regression estimation is significant and positive, then the equation indicates the existence of sheepskin effect.  $X_i$  as control variable is a characteristic vector of individual  $i$ .

The equation (2) divided five segments from  $S$  variable which consists of  $0 < S < 9$ ,  $9 < S < 12$ ,  $12 < S < 14$ ,  $14 < S < 16$  and  $16 < S < \infty$ . The rate of marginal return ( $\gamma$ ) in  $S$  area is presented in the following table:

**Table 4 Marginal Rate of Return across the Domain of S for Model 1**

Years of Completed Schooling (S)	Marginal Rate of Return
$S < 9$	$r$
$S = 9$	$r + \alpha_1$
$9 < S < 12$	$r + \alpha_2$
$S = 12$	$r$
$12 < S < 14$	$r + \alpha_3$
$S = 14$	$r$
$14 < S < 16$	$r + \alpha_4$
$S = 16$	$r$
$S > 16$	$r$

### 6. Model II. Discontinuous Spline Function

Model II states that the relationship between income log and school has a form of discontinuous spline function where discontinue occurred in the year of graduation of education level. This model has the equation as follow:

$$\log W_i = \alpha_0 + rS_i + \alpha_1 D9 + \alpha_1'(D9)(S - 9) + \alpha_2 D12 + \alpha_2'(D12)(S - 12) + \alpha_3 D14 + \alpha_3'(D14)(S - 14) + \alpha_4 D16 + \alpha_4'(D16)(S - 16) + \delta E_i + \gamma E_i^2 + X_i \beta + u_i. \quad (3)$$

As in Model I, sheepskin effect in model 2 is implied in the significant and positive coefficient value of dummy variable. The difference of model 1 and model 2 is on the marginal return.

Marginal return in model 2 is made in the form of parameter for the entire of domain S presented in the following table.

Table 5 Marginal Rate of Return across the Domain of S for Model 2

Years of Completed Schooling (S)	Marginal Rate of Return
$S < 9$	$r$
$S = 9$	$r + \alpha_1$
$9 < S < 12$	$r + \alpha_1'$
$S = 12$	$r + \alpha_1' + \alpha_2$
$12 < S < 14$	$r + \alpha_1' + \alpha_2'$
$S = 14$	$r + \alpha_1' + \alpha_2' + \alpha_3$
$14 < S < 16$	$r + \alpha_1' + \alpha_2' + \alpha_3'$
$S = 16$	$r + \alpha_1' + \alpha_2' + \alpha_3' + \alpha_4$
$S > 16$	$r + \alpha_1' + \alpha_2' + \alpha_3' + \alpha_4'$

### 7. Model III. Step Function

Model III is a function to investigate the impact of school completion in the relationship between school and income conducted step by step. This model treats log of individual income as step function on each year of school completion, it has the equation as follow:

$$\log W_i = \alpha_0 + \sum_{j=1}^K \alpha_j S_j + \delta E_i + \gamma E_i^2 + X_i \beta + u_i \quad (4)$$

where K is year of highest school completion,  $S_j$  is dummy variable with the value of 1, if individual i has  $S = j$ . estimation of regression coefficient  $\alpha_i$  can be calculated as step measure

in the form of marginal return rate on the addition of school year. The case of the existence of sheepskin effect can be seen by comparing the measure of step for certain year of graduation and step measure that is appropriate with each year that leads to the graduation year.

### **Data and Statistical Summary**

This paper uses the data of Indonesian Family Life Survey (IFLS) wave 3, 4, and 5. IFLS is a large-scale longitudinal observation of individual level and households to socio-economic and health surveys. Data used has the criteria of worker in the age between 15 years old to 65 years old, has the last education data and not at school.

The researcher does not use hourly income as dependent because there is no direct question that leads to hourly income in IFLS data. The researcher needs to involve some of other questions in IFLS questionnaire to obtain hourly income. If this is performed, the researcher is afraid that it will lead to bias due to measurement error. Therefore, the researcher uses income per year. Income in this paper is the income obtained from working (main and side job). This information is obtained in IFLS questionnaire Book 3A TK section.

Variable income made in real terms in which the year 2000 as the base year. The average income is Rp 5,780,131 with the deviation standard of Rp 7,614,323. The amount of this deviation standard indicates great imbalance in income system in Indonesia.

Education variable is made in two types of measurement; they are measure of duration of individual in completing the school (in year) and measure in the form of dummy of year of school completion. School duration data is in IFLS and in Book 3A DL section. The description of education duration in this research is consistent with the IFLS questionnaire and education rules. The result is presented in Table 6.

The average of school duration is 8.5021 years with the standard deviation of 4.4417 years; this indicates that the average respondents are at junior high school. Respondents who do not graduate elementary are nearly 21.04 percent and the respondents who have higher education level are approaching 19.42 percent. This indicates that the quality of labor seen from education level still lack. The existence of respondents who have the year of the highest school in the year where it is not the year of graduation of education level (below 4 percent) indicates the existence of respondents who are dropouts. This problem must become special concern for the government in making the policy in order to decrease the rate of dropouts.

Experience variable is the number of year from starting to work measured through an approach ( $a - s - s_0$ ), where  $a$  is the age,  $s$  is the school duration and  $s_0$  is early age of school. It is usually call potential experience. The definition of experience in this regard is not only working experience, but also life experience outside the school and in the beginning of school. Almost all the researches in return to education use this approach. Age variable refers to book 3A; school duration is in accordance with education variable, while the early age of school is 7 years according to education age in Indonesian education system. The average of respondent experience is 21.5836 years with the deviation standard of 13.9828 years. This indicates the high variation in respondent working experience.

Control variables are used in this paper includes marital status, dummy of city, gender and dummy of employment status. Employment status is adjusted with the IFLS questionnaire that is divided into 8 types, they are working alone, working alone with the help of temporary worker, working alone with the help of permanent worker, governmental worker, private sector employee, agricultural free worker, non-agricultural free worker and unpaid worker. The researcher measures the outcome in the form of income so that the status of "unpaid worker" is not included as the respondent.



**Table 6 Duration of Schooling**

Educational Attainment	Duration of Schooling (years)
No Schooling	0
Did not Complete/Have not Completed Primary School	1,2,3,4,5
Primary School	6
Packet A	6
Did not Complete/Have not Completed Junior High School	7,8
Junior High School (General)	9
Junior High School (Vocational)	9
Packet B	9
Did not Complete/Have not Completed Senior High School	10,11
Senior High School (General)	12
Senior High School (Vocational)	12
Packet C	12
Diploma I/II	14
Academy/Diploma III	15
University	16
Master/PhD	20

Note: Packet A, B, and C are the informal school

Male respondent is 62.21 percent and 76.7 percent of respondent have marital status. The respondents who live in urban area are 57.09 percent. Employment status mostly had by the respondent is private worker or labor of 40.19 percent. Then, status of working alone (Sta\_1) is 30 percent and status of working with the help of temporary worker (Sta\_2) is 19.56 percent. Status of government worker is 8.29 percent. While the least employment status of respondent is working with the help of permanent worker (Sta\_3), it is only 1.96 percent. This indicates that the interest of legal entrepreneurship of respondent is still low.

In addition, this paper also controls the province of individual residence in the form of dummy province. There are 20 provinces of respondent residence in IFLS 3 and 22 provinces of respondent residence in IFLS 4 and IFLS 5. This number of province is expanded from 13 provinces of respondent residence in the first wave of IFLS. This is due to two things; the first is the existence of province development conducted in 2000. The second is the presence of migration conducted by respondent in previous wave of IFLS. In this case, the researcher only makes 14 dummy provinces and an additional dummy of other province because the number of respondent beyond the 14 provinces is very small. In the regression model, the researcher uses dummy of DKI (Special Capital Region) province as base.

The respondent live in Java Island about 58.94 percent with the details as follow: 14.72 percent live in West Java, 14.04 percent live in East Java, 12.98 percent live in Central Java, 8.02 percent in DKI (Special Capital Region), 5.71 percent in DIY Province (Special Region of Yogyakarta) and 3.47 percent live in Banten province. While the remaining 41.06 percent spread in various provinces. North Sumatera Province is the highest residence province outside Java Island of 6.53 percent, while the residence province of respondent outside the 14 dummy provinces is only 1.76 percent.

**Table 7 Definition of Variable and Statistic Summary**

Variable	Definition of Variable	Mean	Standard Deviation	Min	Max
W	Individual income from work per year (in rupiah)	5,780,131	7,614,323	35,463	92,100,000
Log W	Natural log of individual earnings of work per year	14,8997	1,2515	10,4762	18,3387
<b>Education</b>					
S	Years of Schooling	8.5021	4.4417	0	21
D6	Dichotomous, equals 1 if $S \geq 6$	0.7896	0.4076	0	1
D9	Dichotomous, equals 1 if $S \geq 9$	0.5529	0.4972	0	1
D12	Dichotomous, equals 1 if $S \geq 12$	0.3881	0.4873	0	1
D14	Dichotomous, equals 1 if $S \geq 14$	0.1214	0.3266	0	1
D16	Dichotomous, equals 1 if $S \geq 16$	0.0728	0.2599	0	1
S0	Dummy never school (Yes=1, No=0)	0.0580	0.2338	0	1
S1	Dummy school 1 year (Yes=1, No=0)	0.0262	0.1597	0	1
S2	Dummy school 2 years (Yes=1, No=0)	0.0354	0.1848	0	1
S3	Dummy school 3 years (Yes=1, No=0)	0.0341	0.1815	0	1
S4	Dummy school 4 years (Yes=1, No=0)	0.0346	0.1827	0	1
S5	Dummy school 5 years (Yes=1, No=0)	0.0221	0.1470	0	1
S6		0.2030	0.4022	0	1
S7	Dummy school 6 years (Yes=1, No=0)	0.0187	0.1354	0	1
S8	Dummy school 7 years (Yes=1, No=0)	0.0151	0.1218	0	1
S9	Dummy school 8 years (Yes=1, No=0)	0.1413	0.3484	0	1
S10	Dummy school 9 years (Yes=1, No=0)	0.0128	0.1125	0	1
S11	Dummy school 10 years (Yes=1, No=0)	0.0107	0.1027	0	1
S12	Dummy school 11 years (Yes=1, No=0)	0.2600	0.4386	0	1
S13	Dummy school 12 years (Yes=1, No=0)	0.0067	0.0815	0	1
S14	Dummy school 13 years (Yes=1, No=0)	0.0433	0.2035	0	1
S15	Dummy school 14 years (Yes=1, No=0)	0.0053	0.0725	0	1
S16	Dummy school 15 years (Yes=1, No=0)	0.0726	0.2595	0	1
	Dummy school 16 years (Yes=1, No=0)				
Variable	Definition of Variable	Mean	Standard Deviation	Min	Max
<b>Characteristics of labor</b>					
Exp					
Age	Potential work experience (years)	21.5836	13.9828	0	58
Sex	Age of respondents in survey	37.0738	11.9053	15	65
Marriage	Dummy variables male gender (Yes = 1. No = 0).	0.6221	0.4849	0	1
Islam					
City	Dummy variables marital status married (Yes = 1. No = 0).	0.7670	0.4227	0	1
	Dummy variable religion Islam (Yes = 1. No = 0).	0.8930	0.3091	0	1
	Dummy variable individuals living in urban areas (Yes = 1. No = 0).	0.5709	0.4950	0	1
<b>Employment Status</b>					
Sta_1	Dummy variable is self-employment status	0.3000	0.4582	0	1

Sta_2	(Yes=1. No=0) Dummy variable self-employed with Unpaid family worker/temporary worker (Yes=1, No=0).	0.1956	0.3967	0	1
Sta_3	Dummy variable self-employed with permanent worker (Yes=1, No=0).	0.0196	0.1388	0	1
Sta_4	Dummy variable government worker (Yes=1, No=0).	0.0829	0.2757	0	1
Sta_5	Dummy variable private worker (Yes=1, No=0).	0.4019	0.4903	0	1
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Location of Residence					
North Sumatra	Dummy variables live in the province of North Sumatra (Yes = 1. No = 0)	0.0653	0.2471	0	1
West Sumatra	Dummy variables live in the province of West Sumatra (Yes = 1. No = 0)	0.0482	0.2142	0	1
South Sumatra	Dummy variables live in the province of South Sumatra (Yes = 1. No = 0)	0.0422	0.2011	0	1
Lampung	Dummy variables live in the province of Lampung (Yes = 1. No = 0)	0.0391	0.1937	0	1
Jakarta	Dummy variables live in the province of Jakarta (Yes = 1. No = 0)	0.0802	0.2716	0	1
West java	Dummy variables live in the province of West Java (Yes = 1. No = 0)	0.1472	0.3543	0	1
Banten	Dummy variables live in the province of Banten (Yes = 1. No = 0)	0.0347	0.1831	0	1
Central java	Dummy variables live in the province of Central Java (Yes = 1. No = 0)	0.1298	0.3361	0	1
Yogyakarta	Dummy variables live in the province of Yogyakarta (Yes = 1. No = 0)	0.0571	0.2321	0	1
East java	Dummy variables live in the province of East Java (Yes = 1. No = 0)	0.1404	0.3474	0	1
Bali	Dummy variables live in the province of Bali (Yes = 1. No = 0)	0.0550	0.2280	0	1
West Nuteng	Dummy variables live in the province of West Nusa Tenggara (Yes = 1. No = 0)	0.0600	0.2374	0	1
Kalimantan	Dummy variables live in the province of South Kalimantan (Yes = 1. No = 0)	0.0447	0.2067	0	1
South Sulawesi	Dummy variables live in the province of South Sulawesi (Yes = 1. No = 0)	0.0456	0.2087	0	1
Others	Dummy variables live in other province (Yes = 1. No = 0)	0.0176	0.1314	0	1
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Year					
T0	Survey 2000 as reference	0.2760	0.4470	0	1
T1	Survey 2007	0.3236	0.4678	0	1
T2	Survey 2014	0.4004	0.4900	0	1
N	Number of observation		48,962		

### **Result of Regression Analysis: Dummy of graduation, Discontinuous Spline Function and Step Function**

The result of estimation model of dummy graduation is presented in Table 8. Model of additional dummy graduation provides significant result for all additional dummy graduations except D6. This indicates that marginal rate of return to education is not the same for each additional year of education in the level of junior school above. There is an increase in each the year where an individual graduates education level. For example, a person who has education level of junior high school above obtains the return of 14.2 percent higher than those who do not graduate from junior high school. Marginal return for people who do not graduate senior high school (S=8) are 3.16 percent and those who has graduated above junior high school are 17.36 percent (14.2 + 3.16). while the people who have minimum graduated from Senior High School obtain marginal return of 26.06 percent higher than those who do not graduate Senior High School (S=11) and so on. The impact of graduation in return to education is significant for all education level. Null hypothesis stated that there is no sheepskin effect (to test all five dummies simultaneously equal to zero), it is rejected on the level of 0.01 (F test statistic = 627.15).

Model of discontinuous spline function is presented in Table 9. This model does not only show the surge of return in the year where the people graduated education level, but also the existence of marginal changes for each education level. At the primary school level (D6) no surge in marginal returns and also no change in the slope of marginal return (dummy variables and interactions were not significant). At the education level of junior high school (D9), it is proven that there is a surge compared to education below junior high school (S=8) and an increase of return per year is not different (where the interaction variable is not significant). The high school level has surge return and also there is an increased return per year. The diploma one and two have not surge return but there is a decrease in returns per year. Graduates of university degree above (D16) provides a surge and increase of marginal return compared to those who have year of education of 15 years (S=15). This evidence of discontinuous spline function model supports the existence of sheepskin effect.

Estimation result of step function model is presented in Table 10. This result indicates that year of schooling of one to three years have no different return with those who do not go to school. Beginning in year of education over the 4<sup>th</sup>, the return has positive value and significant at 5 and 1 percent except S5, S7, S8, S10, S11, S13 and S15. The calculation of step size is conducted by making a difference between coefficient  $S_j$  and  $S_{j-1}$ . The error standard is obtained from different test by modifying the equation of Model III. The result shows strong significant on S9, S12, S14 and S16. This shows the existence of a surge in all levels of education. The evidence of estimation model of step also supports sheepskin effect.

**Table 8 Estimation Result of Additional Dummy Model**

	M1	M2
S	0.0847*** (0.0016)	0.0316*** (0.0058)
D6		0.0401 (0.0267)
D9		0.142*** (0.0231)
D12		0.229*** (0.0223)
D14		0.289*** (0.0269)
D16		0.103*** (0.0302)
Exp	0.0385*** (0.0014)	0.0413*** (0.0015)
Exp2	-0.0005*** (0.000)	-0.0006*** (0.000)
constant	13.08*** (0.0371)	13.30*** (0.0390)
Control variable	Yes	Yes
R-Squared	0.287	0.288
N	48,962	48,925

Note: M1: Mincer specification. M2: model of additional dummy. The coefficient value where the sign \*\*\* is significant 1%, \*\* is significant 5% and \* is significant 10% (Robust standard errors in parentheses). Control variable involved in the equation is working experience, gender, dummy of marital status, dummy of religion, dummy of city, dummy of working status, dummy of regional, dummy of year. All the control variables are significant at 1 %.

**Table 9 Estimation Result of Discontinuous Spline Function Model**

	M2	M3
S	0.0316*** (0.0058)	0.0319*** (0.0065)
D6	0.0401 (0.0267)	0.0393 (0.0281)
D6inter		-0.0028 (0.0199)
D9	0.142*** (0.0231)	0.156*** (0.0553)
D9inter		-0.0333 (0.0293)
D12	0.229*** (0.0223)	0.328*** (0.0650)
D12inter		0.108* (0.0626)
D14	0.289*** (0.0269)	0.164 (0.118)
D14inter		-0.224** (0.0925)
D16	0.103*** (0.0302)	0.378*** (0.139)
D16inter		0.248*** (0.0778)
exp	0.0413*** (0.00146)	0.0411*** (0.00147)
exp2	-0.0006*** (0.0000)	-0.0006*** (0.0000)
Constant	13.30*** (0.0390)	13.31*** (0.0395)
control variable	yes	yes
R-squared	0.288	0.289
N	48,925	48,925

Note: M3: discontinuous spline function model with dependent variable of income per year. DJinter=DJ x (S-J), J=9, 12, 14, 16. The coefficient value where the sign \*\*\* is significant 1%, \*\* is significant 5% and \* is significant 10% (Robust standard errors in parentheses). Control variable involved in the equation is working experience, gender, dummy of marital status, dummy of religion, dummy of city, dummy of working status, dummy of regional, dummy of year. All the control variables are significant at 1 %.

**Table 10. Estimation Result of Step Function Model**

	M4	Step Size
S1	-0.0422 (0.0368)	-0.0422 (0.0368)
S2	-0.0325 (0.0335)	0.00974 (0.0397)
S3	-0.0850** (0.0339)	-0.0525 (0.0366)
S4	0.0250 (0.0339)	0.110*** (0.0363)
S5	-0.00324 (0.0401)	-0.0282 (0.0417)
S6	0.0780*** (0.0259)	0.0812** (0.0349)
S7	0.136*** (0.0449)	0.0576 (0.0393)
S8	0.101** (0.0469)	-0.0349 (0.0549)
S9	0.304*** (0.0285)	0.203*** (0.0420)
S10	0.244*** (0.0522)	-0.0596 (0.0472)
S11	0.315*** (0.0542)	0.0707 (0.0658)
S12	0.599*** (0.0282)	0.284*** (0.0486)
S13	0.693*** (0.0635)	0.0936 (0.0583)
S14	0.952*** (0.0358)	0.260*** (0.0619)
S15	0.828*** (0.0736)	-0.124* (0.0716)
S16	1.078*** (0.0339)	0.250*** (0.0703)
exp	0.0403*** (0.0015)	
exp2	-0.0007*** (0.0000)	
_cons	13.48*** (0.0413)	
Control variable	Yes	yes
R-squared	0.282	
N	48,925	

Note: M4: step function model with dependent variable of income per year.  $S_j$  is dummy where  $S=j$ . Control variable involved in the equation is working experience, gender, dummy of marital status, dummy of religion, dummy of city, dummy of working status, dummy of regional, dummy of year. All the control variables are significant at 1 % except Banten of dummy of regional is significant at 10 %.

## **Conclusion**

The evidence of sheepskin effect or graduates effect for five level of education in Indonesia, namely primary school, junior high school, senior high school, diploma, and bachelor degree is more appropriate with the view of screening than the view of human capital in the role of education. The evidence that graduates as a signal of a person in completing the study is an important determinant of a person's income. However, it is not only graduates that has a role because after controlling the years of graduate, coefficient value of education (S) is still significant although it has smaller value than Mincer equation (M1). It is interesting because significant dummy of elementary graduates shows that 9 years compulsory education has not been fully implemented and labor market has not responded it.

The evidence of this research has an implication that in Indonesia, education has important and significant influence on individual income. By the significance of sheepskin effect or graduates effect, so the potency of education as a source of increasing worker productivity is decreased, moreover for higher educational level. So, the allocation of education should be more emphasized on primary and secondary education.

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## PROJECT RISK MANAGEMENT FOR PROFITABILITY

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### Abstract

Project management is the area where managers face the new activities and processes. The knowledge of these processes and activities shall help us to understand and manage them for better productivity or output. In this paper an attempt has been made to classify the risks associated with projects. A structured questionnaire was developed with the consultation of practitioners and literature support. The scale reliability and validity was conducted to find the refined list of risks associated with the real estate project. These include; the social risks, financial risks, technical risks, personnel risks, cultural risks, new product development risks, reputational risks, procedural risks, and structural risks.

**Key words:** *Project Management, Project risk, social risks, financial risks, technical risks, personnel risks, cultural risks, new product development risks, reputational risks, procedural risks, and structural risks.*

### Introduction

Projects turn dream into reality. A project is budget based, time framed, resource constrained and a unique endeavor undertaken to meet customer requirements. It accomplishes short-term and long-term goals of the organization to earn profits by harvesting market opportunities. The success of project is linked with the success of an organization preventing financial losses, maintaining customer goodwill, competitive advantage, and improved market share. However, there is a difference between the expectations and achievements resulting in project risk (Essinger and Rosen, 1991).

Project risk remained the major area of interest for the practitioners and researchers. It is due to the complex, dynamic environment of projects needing a systematic method to identify risks and uncertainty related to project constraints of cost, schedule, and quality (Zhang and Fan, 2014). The traditional definition of project risk focuses on the negative consequences (Ward & Chapman, 2003; Barber, 2004; Leihtiranta, 2014). However, the risk could have both positive as well as negative consequences. These may include opportunities and threat.

Risk management protects resources and mitigate risks (Nickson, 2001, p. 25). It needs technical approach, tactics, operations and compliance, to cope with the potential technical threats that influence the profitability and project success (Elahi, 2013). The organizations need to focus on the internal and external risks involved with projects. These risks may include external environment risks (political, social, market, integration, force majeure and legal), operational (technical), internal-technical (schedules, budgeting and finance) and internal non-technical (issues management, integration, coordination, cross-functional orientation, and team as well as administrative management) (PMI, 2009; Jaaffari, 2001; and Wideman, 1992). The technical risks are the biggest threat to profits and project success (Zhang & Fan, 2014). However, the main focus of risk management is on costs and operations using competitive strategy, tactics, operations and compliance requirements (Elahi, 2013; Hopkin, 2013). The ultimate objective of risk management is better organizational performance for profitability.

The literature survey revealed a low rate of project success. The success rate is 10% in the large software projects (The Standish Group, 2013). It is due to the fact that the software projects are mostly affected by the technical risks, and the way of doing organizational

working, i.e., organizational risks (Sanderson, 2012). The construction projects also fail at a high rate (Krause, 2006). According to Global Construction Owner's Survey, 2015 revealed that in the past three years only 31% of their projects came within 10% of budget, and just 25% within 10% of original deadlines. There is improvement in planning and risk management by project owners. However, more is needed to reduce project failures, and bring projects on time and within budget (KPMG International, 2015).

The organizational working is linked with the people and people are subjected to maximum uncertainty, contributing major risk to run organizations (Thamhain, 2013). These risks (internal and external) influence the project performance in terms of cost, quality and time in the constructive and destructive manner. The internal and external risks may appear because of the dynamic environment, design, logistics, operational, legal, construction, and financial (Akintola *et al.*, 1997). These risks have ignited the spirit of researchers and practitioners to focus on project risk for better organizational performance.

In this paper an attempt has been made to focus on the risk elements of real estate risks and organizational performance. The first section focuses on the literature survey where research gaps were highlighted. In the next section, i.e., research methodology the results were analyzed with the help of suitable tools and techniques. Finally, the future scope was discussed to extend this study.

### **Literature Survey**

The diversity of construction projects lies in the way to address societal problems that run deeper into the construction. The construction projects help to find a solution to a variety of problems resulting the means to classify projects. Gary and Larson (2008) classified eleven engineering projects as compliance, operational, strategic or organizational. The compliance projects (must do) focus on the regulatory requirements. The operational projects (low level of urgency) focus on the improvement of operations for efficiency and effectiveness and strategic projects focus on the achievement of long-term and short-term objectives of the organization. The interaction with project managers revealed projects as small (less than 4 weeks), large (more than 4 weeks), routine, disaster, construction, research and development, government, private, national and international projects. The understanding of projects shall help project managers understand the risks associated with them.

Risk is defined as the effect of uncertainty of an event or happening to the project objectives (ISO, 2009). It has both positive as well as a negative effect on the project performance. The researchers and practitioners view risk from different angles. Many researchers have focused on 'risk factors' which is a situation germinating risk and increasing chances of risk happening, however, it don't cause to miss a schedule, product or resource target (Benaroch *et al.*, 2006), sources of risk or uncertainty factors (Aloini *et al.*, 2007), and critical success factors or risk drivers or risk items (Tiwana and Keil, 2004). The sources of risk may include schedule, resource, quality, cost, scope, material, machinery, equipment, legal, stakeholders and technology. Also, sector wise the risks and factors of risks are stated in different ways.

Tah and Carr (2001), revealed that in construction sector risk factors don't affect risk directly but through the risks. The construction sector uses financial, organizational, and contractual aspects/means to manage risks. The financial aspects focus on the use of bonds, insurance, etc., for financial protection. Organizational aspect executes project strategies through combining the system of program management, portfolio management, and project management (PMI, 2013).

#### **1. Classification of Real Estate Project Related Risks**

Project managers face inevitable risks. These risks may be internal (labor demands, safety issues, quality issues, and financial problems, etc.) and external (natural disaster, policy

change, and uncontrollable issues etc.) associated with the projects (Lee et al., 2009). In this section the following project risks are selected with the help of practitioners and literature:

- A. **The social risks:** These are major obstacles before the proponents and financiers of big projects. Tong and Zhang (2007), defined the social risk as the risk in any field that influences the society as a whole resulting social turbulence and unrest. Social risks are classified into the following categories as per the views of the real estate project practitioners and researchers:
- a. **Stakeholder risk:** Project risk management in the social context, closely focuses on the management of stakeholders including; contractors, employees, community and the public (Aaltonen, 2011; de Bakker et al., 2010). Project managers revealed compensation related issues with the land holders and property dealers. They also pointed; increased product cost, quality, availability of easy and low interest finance, and the timely delivery are the issues associated with the customer. The project employees revealed the problems of long working hours, difficult targets, slow economy, layoffs, job security, shrinking future employment opportunities, reduced order of suppliers and stressful working environment. The investors admitted, real estate is a risky business as the customer base has been reduced and input supply costs are increasing. Also, the trade barriers and acquisition of material inputs pose difficulties. The community members revealed the problems of noise and air pollution, heavy traffic resulting difficulty in commuting, social interference, increased stress and small job opportunities. It was also revealed that people recommended for the job by politicians create a nuisance.
  - b. **Value Risk:** Value risks focus on the value for money using resources efficiently and effectively. Uncertain valuation and lack of communication are the main issues leading to low business value of projects. According to INFOQ (2016), the uncertain valuation results due to: lack of project value, unknown project value, and failures to deliver expected value. They also added that project communication related issues involve-project delivering the wrong value and no involvement of investors in the investment process. Value risk management focuses on how project managers use value engineering to deliver better value to the customers (Michael, 2006). Many project managers revealed focus on the valid scores for assessment of business and technology value, and risk for technology and business value. Project managers calculate risk value as a product of probability of risk and cost of risk.
  - c. **Environmental Risk:** The environmental risks include the risks from the environment and risks from the projects. Project managers revealed, the risks from environment include natural disasters, legal, political, economic and social disturbance. The internal risk may include social disturbance, water level and its pollution, etc. These risks are connected from the source to different project domains (de Bruijn et al., 1999). They may occur simultaneously and are spread over wide areas of the globe. It is difficult to evaluate exactly these risks. They shall be transmitted through society, air, water, soil, and through human contact or interaction. Environmental risks are the result of natural or man-made disasters (Cameron, 2006).
  - d. **Information Risk:** Information risk management focuses on identifying, assessing, and controlling risks related to information systems. Information related risk may include; privacy, records and information management, information security, and e-discovery. High quality information is needed to reduce information risk resulting better organizational efficiency, better customer service and company image (Iron, 2002). Project managers revealed that organizations must provide the quality information to the customers, otherwise, the chances of litigations may be there. Many

researchers revealed the corporate frauds with misleading information resulting overall collapse of the organization (Ranikin, 2003; Michaels, 2002). Troy and Heather (2007), in their information construct focused on individual information management risk factors. They classify them as; records in the organizational structure, staff and training needs, creation and capture, vital records and disaster management, physical storage, disposal, control, maintenance, electronic document management, paper record keeping systems, and electronic record keeping systems. Managers need to focus on the information risk for gaining profits.

- e. **Organizational Risk:** Organizational or business risks appear, if the projects fail to deliver the customer specifications or counter change resistance. Many researchers revealed resistance to change as a major organizational risk (Kim, 2011; Rivard & Lapointe, 2012; Lundy & Morin, 2013). Resistance is a complex phenomenon resulting due to; stress, threats, uncertainty, innate conservatism, and lack of involvement or felt needs (Hirschheim & Newman, 1988; and Marakas & Hornik, 1996). Simon et al. (2015), in their study of software project management collected the sources of resistance from various studies as; lack of top management commitment, past outcomes, perceived threats, organizational politics, directs costs, capability gaps, collective action problems, myopia, conservatism, reactive mindset, incommensurable beliefs, groupthink, speed and complexity, and lack of perceived value.
  - f. **Physical Risks:** Physical risks are linked to tangible components of project completion like raw material, equipment, water and land, etc. The managers need to focus on the factors that shall be affected by climate change such as supplies to a project. They also involve accidents, natural disaster, and death, etc., resulting threat to the project progress (CDC, 2016, p. 7). Physical risks are major risk in the infrastructure projects (Miller & Lessard, 2001).
  - g. **Subcontractor related Risks:** Nowadays, subcontractor risks are quite dominant. It is due to high involvement of the subcontractors in project activities. Many project managers revealed that the economic downturn has impacted many construction projects with strain in the balance sheet of subcontractors and contractors (Bredillet, 2008). Project stakeholders generally overlook these risks (Zavadskas et al., 2010). These risks are critical components of project governance.
- B. **Financial Risks:** These risks are the most fundamental to ensure the project progress. The project managers face with inflation, fluctuating rate of interests and exchange rates, accidents resulting need for insurance, credit availability, rules and regulations demanding project money, etc. (Kolhatkar & Dutta, 2013).
- C. **Technical Risks:** The technical risks are also the biggest threat to the project success (Zhang & Fan, 2014). Project managers revealed that these risks are related to information, technology and constraints that help project managers to grab better market share. Project managers need to develop competency to face the technical risk for rewarding results (Browning, 2006)
- D. **Personnel Risks:** Personnel risks are part of human resource management (HRM) remained the subject of interest in the field of project management (Dey, 2000; Jaafari, 2001). The risk management and HRM are very closely knitted fields. Nickson (2001), quoted, "Risk management is about mitigating risk and protecting resources. What is the most valuable resource of any company? Its people." Ryanes et al. (2002), revealed the core HR areas; management practices (leadership, employee involvement,

motivation, performance management, and HR roles, etc.), general employment practices (performance appraisal, legal issues and employee attitude), training and development, staffing (recruitment, career planning and selection), compensation and benefits (pay structures, compensation strategies and effectiveness). The knowledge of these risks shall help to better manage human issues.

- E. **Cultural Risks:** The knowledge of culture is very important for project managers. Hofstede, (2008, p. 9), defined culture, "the collective programming of the mind which distinguishes the members of one group or category of people from another." Culture risk remained the difficulty area for the project managers (Chan & Raymond, 2003; Fellows, 2010) impacting economic performance of the construction industry (Casson, 1993; Fellows, 2010). It affects the way risk is perceived and resolved in projects (Zwikael and Ahn, 2011). Culture shall be divided into individual, organizational, regional and national (Hu et al., 2011). The sub-cultures of a culture also exist. The individual culture has professional ethics, language differences, recognition between local and outsider (Fellows & Liu, 2013). The sub-cultures unite as the move is there from the individual, to the national culture. Different countries have different attitude, experiences, legal, social, cultural aspects, and patterns of response resulting conflicts among stakeholders working together from the different areas (Liu & Wu, 2008; Hofstede et al., 2010; Hu et al., 2011). The organizational cultures are embedded in the national culture, with elements of organizational culture, procedure and employees' attitude or expectation (Kogut & Singh, 1988). The national cultural differences outweigh the effectiveness and intensity of the risk management process (Zwikael & Ahn, 2011). There is variability of culture from society to society, making, mandatory for project managers assess related risks (Hofstede et al., 2010).
- F. **New Product Development Risks:** New product development (NPD) poses difficulty for project managers in understanding interdependencies between risk involved and stakeholder initiatives to identify risks. The risks in NPD projects shall vary from assignment to assignment. For example, power generation projects face the network implication which differs in voltage and frequency, supply chain transmission reliability to build longevity in the solution. This uncertainty results into delays and cost overrun (Ackerman et al., 2014). NPD is also the biggest challenge for project managers.
- G. **Reputational Risk:** The reputation of a company is strongly associated with future growth or success of ongoing or future projects. Lost reputation shall drastically fail projects. Rebecca et al. (2016), in their green project study in Australia and China show that reputation risk is significant in both countries, however, the ethical risk of assessment experience and fairness is critical in China. The traditional conservative and reactive behavior of stakeholders is a major risk for building green projects (Bullen & Love, 2010). Managers need to understand risk and innovate informed risk management plans to reduce risks (de Bakker et al., 2012).
- H. **Procedural Risk:** This risk appears in case of no accountability and inefficient procedures and steps taken to complete project activities. It shall result in frauds, inefficient performance and conflicts. These risks are quite visible in the infrastructure projects (Harwood & Warburton, 2004).
- I. **Structural Risk:** These risks appear due to faulty structure to handle dangerous inputs, their processing or handling and storing. These risks may appear across

group of projects and potential interdependence components (Aritua et al., 2009). The project managers need to focus on these type of risks (PMI, 2013).

**Research Methodology**

This research is an effort to understand the risks associated with real estate projects. A structured questionnaire was developed in consultation of project professionals and literature support. Later, a pilot survey was conducted by randomly selecting 250 respondents from the real estate sector at the level of managers and above with receipt of 50 (25 project managers, 10 finance managers, 5 Architectures, 5 purchase managers, and 5 marketing managers) responses leading to 20 percent response rate. A 7 point Likert scale was used to rate the responses. The scale was tested for reliability using scale reliability coefficient Cronbach's Alpha greater than 0.07. Also, the item-to-total correlation of greater than 0.5 and inter-item correlation greater than 0.3 was used to retain only valid variables on the scale (Hair et al., 2009). The results obtained after scale reliability and validity were used to calculate response mean. The mean values were again discussed with then project professionals for identification of potential risks in the each category. The results are discussed in the following sections.

**Data Analysis and Interpretation**

The data were digitized on SPSS software and analysis was conducted. The results show the need to understand risks for better project execution. The detailed discussion is as follows:

1. **The social risks:** These are major obstacles before the proponents and financiers of big projects. Social risks highly relate to the social security and stability. The analysis shows the major types of social risk as follow:

1.1.1 **Customer Risks:** The results of customer risks are shown in Table 1 below. These risks include seven risk components. The results show that the product quality, easy loan availability, and increasing product cost are the major threats to the real estate sector. This scale has scale reliability coefficient Cronbach's alpha of 0.893 showing significance to accept this scale (Hair et al., 2009) with mean 35.24 if all seven risks were rated on the 7 point Likert scale shows 71.91 percent construct explained.

**Table 1: Scale statistics for customer risks**

Customer risk	Corrected Item-Total Correlation	Squared Multiple Correlation	Mean	Std. Deviation
1. Increasing product cost (CR1)	.670	.758	5.1600	1.05676
2. Product Quality (CR2)	.781	.906	5.2000	1.04978
3. Loan availability (CR3)	.773	.895	5.2000	1.04978
4. Rate of interest (CR4)	.640	.614	4.8000	1.17803
5. On-time delivery (CR5)	.604	.583	4.6800	1.33156
6. After sale maintenance (CR6)	.711	.900	5.0800	1.17526
7. Employee Behavior (CR8)	.700	.902	5.1200	1.13641
Cronbach's Alfa=0.893, Inter-item-correlation (Mini=0.342, Max=0.554), SD=6.245, Mean=35.24, Variance=39.9, No of variables=7				

1.1.2 **Employee Risks:** The results of employee risks are shown in the Table 2 below. It shows a mean of 36 on the 7 point Likert scale showing 64.3 percent construct explained with

the scale reliability coefficient Cronbach's Alpha of 0.913. The results show the long working hours and difficult targets as the major risks for the employees.

**Table 2: Scale statistics for employee risks**

Employee risk	Corrected Item-Total Correlation	Squared Multiple Correlation	Mean	Std. Deviation
1. Long working hours (ER1)	.682	.958	5.9200	1.67624
2. Difficult targets (ER2)	.749	.947	5.3800	1.49680
3. Slow economy (ER3)	.887	.952	5.1000	1.32865
4. Fear of layoff (ER4)	.898	.886	4.6000	1.16058
5. Job security (ER5)	.846	.728	4.2800	1.12558
6. Stressful environment (ER7)	.583	.747	3.5000	1.23305
7. Dim future employment opportunities (ER8)	.531	.828	3.3800	1.24360
8. Trade barriers (ER9)	.653	.752	3.8400	1.21823
Cronbach's Alfa=0.913, Inter-item-correlation (Mini=0.083, Max=0.864), SD=8.34, Mean=36.0, Variance=69.5, No of variables=8				

1.1.3 **Investor Risks:** The results of investor risks are shown in the Table 3 below. The results show mean of 43.82 on the 7 point Likert scale showing 69.6 percent construct explained with the scale reliability coefficient Cronbach's Alpha of 0.920. The results show the feeling of risky investment, political pressure, reducing customer base and increasing project costs are the major risks for the investors.

**Table 3: Scale statistics for investors' risks**

Investors Risk	Corrected Item-Total Correlation	Squared Multiple Correlation	Mean	Std. Deviation
1. Risky investment (RFE1)	.739	.994	6.520	1.48791
2. Reducing customer base (RFR2)	.894	.992	5.820	1.32002
3. Increasing project costs (RFE3)	.956	.981	5.000	1.27775
4. Stressful investment (RFE4)	.903	.995	4.280	1.35586
5. High competition ( RFE5)	.736	.996	3.560	1.56701
6. Political pressure (RFE6)	.483	.833	6.280	1.84103
7. Politically recommended employee behavior (RFE8)	.560	.548	4.680	1.42055
8. Risk tolerance for stakeholder satisfaction (RFE9)	.772	.839	4.280	1.44335
9. Risky stakeholder turnover for project (RFE10)	.559	.697	3.400	1.56492
Cronbach's Alfa=0.920, Inter-item-correlation (Mini=0.102, Max=0.962), SD=10.417, Mean=43.82, Variance=108.5, No of variables=9				

1. 1.4 **Community Risks:** The results of community risks are shown in the Table 4 below. The results show mean of 20.68 on the 7 point Likert scale showing 59.1 percent construct explained with the scale reliability coefficient Cronbach's Alpha of 0.938. The results show the feeling of noise disturbance, heavy traffic, and stressed life are the major three risks for the community.

**Table 4: Scale statistics for community risks**

Community Risks	Corrected Item-Total Correlation	Squared Multiple Correlation	Mean	Std. Deviation
1. Noise disturbance (RTE1)	.846	.808	4.5600	1.63083
2. Air pollution (RTE2)	.843	.759	3.8800	1.42342
3. Heavy traffic (RTE3)	.874	.817	4.4000	1.52530
4. Social interference(RTE4)	.861	.766	3.6800	1.37678
5. Stressed life (RTE5)	.762	.682	4.1600	1.62078
Cronbach's Alfa=0.938, Inter-item-correlation (Mini=0.629, Max=0.843), SD=6.78, Mean=20.68, Variance=46.22, No of variables=5				

1.2. **Value Risk:** Value risk focuses on the value for money using resources efficiently and effectively. The major value risks are discussed as follow:

1.2.1 **Uncertain valuation Risks:** The results of uncertain valuation risks are shown in the Table 5 below. The results show mean of 16.08 at the 7 point Likert scale showing 76.6 percent construct explained with the scale reliability coefficient Cronbach's Alpha of 0.803. The results show the lack of project value and unknown project value are the major risks for uncertain project valuation.

**Table 5: Scale statistics for uncertain valuation risks**

Uncertain Valuation Risk	Corrected Item-Total Correlation	Squared Multiple Correlation	Mean	Std. Deviation
1. Lack of project value (UV1)	.731	.802	5.6000	1.12486
2. Unknown project value (UV2)	.826	.823	5.4800	1.12920
3. Fail to deliver expected value (UV3)	.432	.242	5.0000	1.14286
Cronbach's Alfa=0.803, Inter-item-correlation (Mini=0.365, Max=0.893), SD=2.877, Mean=16.08, Variance=8.279, No of variables=3				

1.2.2 **Communication related risks:** The results of communication related risks are shown in the Table 6 below. The results show mean of 55.82 at the 7 point Likert scale showing 79.7 percent construct explained with the scale reliability coefficient Cronbach's Alpha of 0.93. The results show the lack of focus on the right frequency, time and point; team involvement; lack of right communication; and lack of community communication are the major risk associated with project communication.



**Table 6: Scale statistics for communication related risks**

Communication risks	Corrected Item-Total Correlation	Squared Multiple Correlation	Mean	Std. Deviation
1. Communicating wrong value (IRR1)	.791	.662	5.560	1.34255
2. Not involving investors (IRR2)	.814	.705	5.540	1.35842
3. Lack of team involvement ( IRR3)	.610	.635	5.740	1.02639
4. Focus on right: frequency, time and point (IRR4)	.927	.931	5.760	.89351
5. Record keeping and authorized circulation (IRR5)	.791	.680	5.580	1.26314
6. Lack of competitive communication (IRR6)	.529	.517	5.480	1.43200
7. Miscommunication results conflicts (IRR7)	.845	.776	5.420	1.65480
8. Not aligning communication with project objectives (IRR8)	.797	.664	5.540	1.41724
9. Lack of community communication (IRR9)	.789	.662	5.580	1.29505
10. Lack of right communication method (IRR10)	.761	.638	5.620	1.19335
Cronbach's Alfa=0.93, Inter-item-correlation (Mini=0.36, Max=0.815), SD=10.46, Mean=55.82, Variance=109.5, No of variables=10				

**1.3 Environmental Risk:** Environmental risks focus on the internal and external environmental components of the risk. The major environmental risks are discussed as follow:

**1.3.1 Risks from the environment:** The results of risk from the environment are shown in the Table 7 below. The results show mean of 31.6 at the 7 point Likert scale of 90.2 percent construct explained with the scale reliability coefficient Cronbach's Alpha of 0.835.

The results show the natural disaster, legal risks of non-compliance, social disturbance and economic fluctuations as the major four risks from the environment.

**Table 7: Scale statistics for risk from the environment**

Risk from the environment	Corrected Item-Total Correlation	Squared Multiple Correlation	Mean	Std. Deviation
1. Natural disaster (ERO1)	.611	.930	6.7200	.90441
2. Legal risks of non-compliance (ERO2)	.741	.944	6.6400	.92051
3. Social disturbance (ERO3)	.608	.435	6.3600	1.17387
4. Economic fluctuation (ERO4)	.698	.532	6.1000	1.51523
5. Political environment (ERO5)	.724	.603	5.8400	1.89909
Cronbach's Alfa=0.835, Inter-item-correlation (Mini=0.328, Max=0.955), SD=5.18, Mean=31.6, Variance=26.92, No of variables=5				

**1.3.2 Risks to the environment:** The results of the risks to the environment are shown in the Table 8 below. The results show mean of 28.24 at the 7 point Likert scale of 80.7 percent

construct explained with the scale reliability coefficient Cronbach's Alpha of 0.977. The results show the transportation hurdles, noise pollution, and social disturbances are the main risks to the environment.

**Table 8: Scale statistics for risk to environment**

Risk to environment	Corrected Item-Total Correlation	Squared Multiple Correlation	Mean	Std. Deviation
1. Social disturbance (ERI1)	.900	.865	5.5800	2.30430
2. Affected water levels (ERI2)	.926	.896	5.4400	2.65852
3. Air pollution (ERI3)	.960	.938	5.4400	2.65852
4. Noise pollution (ERI4)	.975	.979	5.7800	2.19731
5. Transportation hurdles (ERI5)	.968	.972	6.0000	1.81827
Cronbach's Alfa=0.977, Inter-item-correlation (Mini=0.830, Max=0.986), SD=11.23, Mean=28.24, Variance=126.145, No of variables=5				

**1.4 Information Risk:** Information risk management focuses on identifying, assessing, and controlling risks related to information systems. The major information related risks are shown in Table 9. The results show mean of 55.8 for 7 point Likert scale explaining 79.71 percent of the construct with scale reliability coefficient Cronbach's Alpha of 0.939. The major information risks include information management, information security, not maintaining individual records, corporate frauds and no e-discovery focus.

**Table 9: Scale statistics for information related risks**

Information related risks	Corrected Item-Total Correlation	Squared Multiple Correlation	Mean	Std. Deviation
1. No privacy of business opportunities (IRR1)	.791	.662	5.5600	1.34255
2. No updated records (IRR2)	.814	.705	5.5400	1.35842
3. No information management (IRR3)	.610	.635	5.7400	1.02639
4. Lack of information security (IRR4)	.927	.931	5.7600	.89351
5. No e-discovery focus (IRR5)	.791	.680	5.5800	1.26314
6. Not maintaining information quality (IRR6)	.529	.517	5.4800	1.43200
7. Not providing right information to stakeholders (IRR7)	.845	.776	5.4200	1.65480
8. Information dissatisfaction (IRR8)	.797	.664	5.5400	1.41724
9. Corporate frauds (IRR9)	.789	.662	5.5800	1.29505
10. Not maintaining individual records (IRR10)	.761	.638	5.6200	1.19335
Cronbach's Alfa=0.939, Inter-item-correlation (Mini=0.361, Max=0.815), SD=10.5, Mean=55.8, Variance=109.5, No of variables=10				

**1.5 Organizational Risk:** Organization risk also play an important role in the business success. The major organizational risks are shown as follow:

**Table 10: Scale statistics for customer specification related risks**

Customer specification risk	Corrected Item-Total Correlation	Squared Multiple Correlation	Mean	Std. Deviation
1. Failure to deliver as per specification (CS1)	.844	.902	4.4800	2.42639
2. Not involving stakeholders in the specification design and communication (CS2)	.662	.582	4.6600	1.98577
3. Incorrect interpretation of specification (CS3)	.596	.440	4.8400	1.62078
4. Documentation error (CS4)	.428	.312	5.0200	1.39225
5. Selection of wrong method and procedures (CS5)	.949	.972	4.1600	2.33308
6. Lack of integration (CS6)	.710	.541	4.1400	2.53152
7. Lack of coordination & Collaboration (CS7)	.773	.697	3.9000	2.49285
8. Organizational structuring (CS8)	.821	.784	3.9000	2.49285
9. Disruption by merger & acquisition (CS9)	.805	.719	3.9800	2.41162
10. Delay in approval process (CS10)	.898	.912	4.0600	2.35961
11. Lack of control (CS11)	.890	.912	4.1400	2.33876
Cronbach's Alfa=0.947, Inter-item-correlation (Mini=0.283, Max=0.955), SD=19.9, Mean=47.28, Variance=399.78, No of variables=11				

**1.5.1 Customer specifications related risks:** The results of customer specification risks are shown in the Table 10 below. It has mean value of 47.28 rated on a 7 point Likert explains 61.4 percent of the construct with the scale reliability coefficient Cronbach's Alpha of 0.947. The results show the documentation error, incorrect interpretation of specifications, and not involving stakeholders in the specification design and communication are the major risks.

**1.5.2 Resistance to change risks:** The results of resistance to change risks are shown in the Table 11 below. It has mean of 38.8 rated on 7 point Likert scale with 79.18 percent construct explained and the scale reliability coefficient Cronbach's Alpha of 0.895. The results show the resistance to change, innate conservatism and lack of direction and High change cost are the major risks in this construct.

**Table 11: Scale statistics for resistance to change risks**

Resistance to change risks	Corrected Item-Total Correlation	Squared Multiple Correlation	Mean	Std. Deviation
1 Resistance to change (RTC1)	.606	.435	5.8000	1.26168
2. Innate conservatism and lack of direction (RTC2)	.509	.318	5.7800	1.25014
3. High change cost (RTC3)	.682	.494	5.7000	1.26572
4. Reactive mindset, beliefs and groupthink (RTC4)	.669	.484	5.5600	1.34255
5. Past project outcomes (RTC5)	.800	.680	5.4800	1.50156
6. Lack of top management commitment (RTC6)	.882	.809	5.4000	1.69031
7. Organizational politics (RTC7)	.767	.649	5.1600	1.98319
Cronbach's Alfa=0.895, Inter-item-correlation (Mini=0.282, Max=0.807), SD=8.186, Mean=38.8, Variance=67.0, No of variables=7				

**1.6 Physical Risks:** Physical risks are linked with tangible inputs to the projects. The analyses of physical risks are shown in Table 12, with a mean value of 31.44, on 7 point Likert scale explaining 74.86 percent of the construct, with Cronbach's Alpha at 0.851. Risks include accidents, raw material, and machinery and equipment.

**Table 12: Scale statistics for physical risks**

Physical Risks	Corrected Item-Total Correlation	Squared Multiple Correlation	Mean	Std. Deviation
1. Accidents (PHR1)	.632	.533	5.4800	1.47413
2. Raw material (PHR2)	.517	.372	5.3200	1.40611
3. Machinery and equipment (PHR3)	.797	.661	5.3200	1.40611
4. Low water quality (PHR4)	.594	.391	5.1600	1.43371
5. Substandard land quality (PHR5)	.777	.649	5.1600	1.54339
6. Climate and geography (PHR6)	.526	.444	5.0000	1.65369
Cronbach's Alfa=0.851, Inter-item-correlation (Mini=0.219, Max=0.700), SD=6.76, Mean=31.44, Variance=45.76, No of variables=6				

**1.7 Subcontractor related Risks:** Subcontractor risks are due to the dependency on subcontractors to complete projects. The data analysis results of subcontractor related risks are shown in Table 13. It has a mean value of 38.9, rated on 7 point Likert scale explains 61.74 percent of the construct with scale reliability coefficient Cronbach's Alpha of 0.923. The major risks include: bad relations, economic slowdowns, no qualifying criteria, and lack of responsibility.

**Table 13: Scale statistics for subcontractor related risks**

Subcontractor related risks	Corrected Item-Total Correlation	Squared Multiple Correlation	Mean	Std. Deviation
1. Bad relations (SRR1)	.561	.996	4.6000	1.47080
2. Economic slowdown (SRR2)	.686	.996	4.5200	1.35887
3. No qualifying criteria (SRR3)	.815	.804	4.4800	1.28158

4. Lack of responsibility (SRR4)	.799	.801	4.3600	1.25779
5. Improper method of selection (SRR5)	.686	.521	4.2400	1.31801
6. Using improper and undefined work procedures (SRR6)	.770	.718	4.2000	1.44279
7. Not maintaining contingency (SRR7)	.808	.908	4.1600	1.58256
8. No definite and time bound decisions (SRR8)	.715	.733	4.1600	1.48956
9. Lack of collective knowledge of financing agencies, insurer, surety brokers, and joint venture partners (SRR9)	.711	.780	4.1800	1.40973
Cronbach's Alfa=0.923, Inter-item-correlation (Mini=0.225, Max=0.984), SD=9.96, Mean=38.9, Variance=99.15, No of variables=9				

**2. Financial Risks:** These risks are the most fundamental to ensure the project progress. The data analysis results of financial risks are shown in Table 14. It has a mean value of 33.14, rated on 7 point Likert scale explains 67.63 percent of the construct with scale reliability coefficient Cronbach's Alpha of 0.911. The major risks include: inflation, fluctuating rates of interest and exchange rates, accidents resulting need for insurance, and no credit availability.

**Table 14: Scale statistics for financial risks**

Financial risks	Corrected Item-Total Correlation	Squared Multiple Correlation	Mean	Std. Deviation
1. Inflation (FR1)	.566	.645	5.0000	1.69031
2. fluctuating rate of interests and exchange rates (FR2)	.741	.716	4.9400	1.60878
3. Accidents resulting need for insurance (FR3)	.853	.802	4.8800	1.56022
4. No credit availability (FR4)	.928	.874	4.8200	1.54774
5. Not following rules and regulations (FR5)	.623	.485	4.5600	1.59284
6. Inefficient forecasting (FR6)	.728	.685	4.5000	1.76416
7. Resource shortfall (FR7)	.721	.757	4.4400	1.94999
Cronbach's Alfa=0.911, Inter-item-correlation (Mini=0.248, Max=0.870), SD=9.48, Mean=33.14, Variance=89.91, No of variables=7				

**3. Technical Risks:** These risks are the biggest threat to profits and project success. The data analysis results of technical risks are shown in Table 15. It has a mean value of 37.74, rated on 7 point Likert scale explains 59.9 percent of the construct with scale reliability coefficient Cronbach's Alpha of 0.945. The major risks include: lack of technical competency, lack of IT, and Lack of technical infrastructure (tools, machines and equipment).

**Table 15: Scale statistics for technical risks**

Technical risks	Corrected Item-Total Correlation	Squared Multiple Correlation	Mean	Std. Deviation
1. Lack of IT (TR1)	.700	.584	4.3000	1.97174
2. Lack of technical competency (TR2)	.812	.692	4.3400	1.92311
3. Lack of technical infrastructure (tools, machines and equipment)	.800	.729	4.2600	1.87148

(TR3)				
4. Inflexible architecture (TR4)	.788	.814	4.1800	1.85923
5. Infeasible architectures (TR5)	.721	.596	4.1000	1.88712
6. Inflexible designs (TR6)	.802	.676	4.1400	1.94842
7. Infeasible design (TR7)	.762	.722	4.0600	1.99397
8. Non-scalable technology and unreliable components (TR8)	.854	.809	4.1800	1.94506
9. Operational difficulty of adopted technology (TR9)	.827	.800	4.1800	1.88105
Cronbach's Alfa=0.945, Inter-item-correlation (Mini=0.483, Max=0.831), SD=14.39, Mean=37.74, Variance=207.34, No of variables=9				

4. **Personnel Risks:** These risks are part of human resource management. These risks are explained in the following sections.

4.1 **Management practices related risks:** The results of management practices related risks are shown in the Table 16. It has mean value of 23.8 rated on a 7 point Likert explains 68.0 percent of the construct with the scale reliability coefficient Cronbach's Alpha of 0.881. The results show the lack of leadership, lack of employee involvement, and lack of employee motivation are the major risks.

**Table 16: Scale statistics for management practices related risks**

management practices related risks	Corrected Item-Total Correlation	Squared Multiple Correlation	Mean	Std. Deviation
1. Lack of leadership (MP1)	.691	.513	4.9600	1.91620
2. Lack of employee involvement (MP2)	.734	.557	4.8600	1.82958
3. Lack of employee motivation (MP3)	.750	.563	4.7600	1.79068
4. Lack of Performance management system (MP4)	.728	.546	4.6600	1.80261
5. No HR Roles (MP5)	.677	.493	4.5600	1.86438
Cronbach's Alfa=0.881, Inter-item-correlation (Mini=0.498, Max=0.662), SD=7.58, Mean=23.8, Variance=57.47, No of variables=5				

4.2 **General employment related risks:** The results of general employment related risks are shown in the Table 17. It has mean value of 20.56 rated on a 7 point Likert explains 73.42 percent of the construct with the scale reliability coefficient Cronbach's Alpha of 0.886. The results show the destructive employee attitude, lack of training and development, and failure to handle legal issues are the major risks.

**Table 17: Scale statistics for general employment related risks**

employment related risk	Corrected Item-Total Correlation	Squared Multiple Correlation	Mean	Std. Deviation
1. Lack of performance appraisal (GEP1).	.725	.658	5.0600	1.76601
2. Failure in handling legal issues (GEP2).	.671	.623	5.1000	1.76416
3. Destructive employee attitude (GEP3).	.792	.807	5.2600	1.65134
4. Lack of training and development (GEP4).	.680	.769	5.1400	1.73805
Cronbach's Alfa=0.866, Inter-item-correlation (Mini=0.435, Max=0.876), SD=5.58, Mean=20.56, Variance=34.57, No of variables=4				

4.2 **Staffing related risks:** The results of staffing related risks are shown in the Table 18. It has mean value of 19.2, rated on a 7 point Likert explains 91.42 percent of the construct with the scale reliability coefficient Cronbach's Alpha of 0.862. The results show improper recruitment policy and lack of career planning as the major risks.

**Table 18: Scale statistics for staffing related risks**

Staffing risks	Corrected Item-Total Correlation	Squared Multiple Correlation	Mean	Std. Deviation
1. Improper recruitment policy (STR1)	.821	.675	6.6400	1.43939
2. Lack of career planning (STR2)	.722	.571	6.3200	1.81198
3. Undefined selection policy (STR3)	.706	.535	6.2400	1.84678
Cronbach's Alfa=0.862, Inter-item-correlation (Mini=0.611, Max=0.749), SD=4.54, Mean=19.2, Variance=20.62, No of variables=3				

3.3 **Compensation and benefits related risks:** The results of compensation and benefits related risks are shown in the Table 19. It has mean value of 19.2, rated on a 7 point Likert explains 91.42 percent of the construct with the scale reliability coefficient Cronbach's Alpha of 0.862. The results show the lack of well defined pay structures as a major risk.

**Table 19: Scale statistics for compensation and benefits related risks**

Compensation and benefit risk	Corrected Item-Total Correlation	Squared Multiple Correlation	Mean	Std. Deviation
1. Lack of well defined pay structures (CB1)	.721	.520	4.2400	2.11467
2. Lack of compensation strategies and policies (CB2)	.721	.520	3.9000	2.25198
Cronbach's Alfa=0.837, Inter-item-correlation (Mini=0.721, Max=0.721), SD=4.05, Mean=8.14, Variance=16.4, No of variables=2				

5. **Cultural Risks:** The knowledge of culture is very important for project managers. These risks are explained in the following sections.

5.1 **Individual culture related risks:** The results of individual culture related risks are shown in the Table 20. It has mean value of 14.86, rated on a 7 point Likert explains 70.76 percent of the construct with the scale reliability coefficient Cronbach's Alpha of 0.788. The results show that lack of ethics, lack of understanding of language differences, and lack of knowledge recognition local and outsider as the major risks.

**Table 20: Scale statistics for individual culture related risks**

Individual culture risk	Corrected Item-Total Correlation	Squared Multiple Correlation	Mean	Std. Deviation
1. Lack of ethics (ICR1)	.648	.443	4.960	1.47025
2. Lack of understanding of language differences (ICR2)	.678	.471	4.980	1.44970
3. Lack of knowledge recognition local and outsider (ICR3)	.562	.317	4.920	1.41190
Cronbach's Alfa=0.788, Inter-item-correlation (Mini=0.49, Max=0.641), SD=3.63, Mean=14.86, Variance=13.18, No of variables=3				

5.2 **Organizational culture related risks:** The results of organizational culture related risks are shown in the Table 21. It has mean value of 23.4, rated on a 7 point Likert explains 83.57 percent of the construct with the scale reliability coefficient Cronbach's Alpha of 0.888. The results show that lack of understanding of organizational culture, lack of understanding of policies and procedures of the organization, and employee attitude as the major risks.

**Table 21: Scale statistics for organizational culture related risks**

Organizational culture related risks	Corrected Item-Total Correlation	Squared Multiple Correlation	Mean	Std. Deviation
1. Lack of understanding of organizational culture (OCR1)	.741	.557	5.860	1.87366
2. Lack of understanding of policies and procedures of the organization (OCR2)	.797	.635	5.960	1.73746
3. Employee attitude (OCR3)	.748	.564	5.820	1.88105
4. Over expectation of employees (OCR4)	.738	.548	5.780	1.90905
Cronbach's Alfa=0.888, Inter-item-correlation (Mini=0.630, Max=0.700), SD=6.4, Mean=23.4, Variance=41.06, No of variables=4				

5.3 **Regional cultural risks:** The results of regional cultural risks are shown in the Table 22. It has mean value of 23.4, rated on a 7 point Likert explains 83.57 percent of the construct with the scale reliability coefficient Cronbach's Alpha of 0.888. The results show that lack of understanding of regional differences and lack of knowledge of regional motivational means as the major risks.



**Table 22: Scale statistics for regional cultural risks**

Regional cultural risks	Corrected Item-Total Correlation	Squared Multiple Correlation	Mean	Std. Deviation
1. Lack of understanding of regional differences (RCR1)	.458	.257	5.9600	1.26103
2. Lack of knowledge of regional motivational means (RCR2)	.511	.264	5.9000	1.23305
3. Lack of regional ethics and attitude (RCR3)	.446	.242	5.8000	1.24540
4. Lack of understanding regional languages (RCR4)	.632	.402	5.7600	1.33340
Cronbach's Alfa=0.722, Inter-item-correlation (Mini=0.229, Max=0.480), SD=3.74, Mean=23.42, Variance=14.04, No of variables=4				

**5. New Product Development Risks:** New product development poses difficulty for project managers in understanding the risk involved. The results of NPD risks are shown in the Table 23. The mean of 40.2 with rating on 7 point Likert scale explains 82.04 percent construct with Cronbach's Alfa of 0.906. The major risks include lack of inter-firm design sharing, lack of knowledge regarding strategic change, and lack of customer involvement or customer expectation knowledge.

**Table 23: Scale statistics for new product development risks**

New product development risks	Corrected Item-Total Correlation	Squared Multiple Correlation	Mean	Std. Deviation
1. Lack of inter-firm design sharing (NPD1)	.679	.563	5.900	1.31320
2. Lack of knowledge regarding strategic change (NPD2)	.700	.571	5.880	1.30368
3. Lack of customer involvement or customer expectation knowledge (NPD3)	.700	.509	5.780	1.28238
4. Lack of concurrent engineering and collaborative planning and forecasting (NPD4)	.802	.658	5.720	1.34073
5. Issues management (NPD5)	.780	.673	5.640	1.43939
6. Sourcing risks NPD (NPD6)	.725	.649	5.560	1.57998
7. Unavailability of high skill manpower (NPD7)	.666	.461	5.720	1.51240
Cronbach's Alfa=0.906, Inter-item-correlation (Mini=0.431, Max=0.763), SD=7.83, Mean=40.2, Variance=61.347, No of variables=7				

**5. Reputation Risks:** The reputation of a company helps future growth of projects. Lost reputation shall drastically fail projects.. The results of reputation risks analysis are shown in the Table 24. The mean of 62.26 with rating on 7 point Likert scale explains 88.94 percent construct with Cronbach's Alfa of 0.915. The major risks include: lost reputation, unethical risk assessment, lack of experienced manpower, and project failure.

**Table 24: Scale statistics for reputation risks**

Reputation risk	Corrected Item-Total Correlation	Squared Multiple Correlation	Mean	Std. Deviation
1. Lost reputation (ReR1)	.673	.621	6.320	1.09619
2. Unethical risk assessment (ReR2)	.738	.673	6.300	1.09265
3. Lack of experienced manpower (ReR3)	.711	.558	6.260	1.12141
4. Not meeting the commitments (ReR4)	.649	.430	6.220	1.14802
5. Outside organization risk control (ReR5)	.669	.452	6.200	1.19523
6. Lack of understanding of stakeholders (ReR6)	.648	.435	6.160	1.25129
7. Reputation-reealty gap (ReR7)	.638	.483	6.080	1.54972
8. Changing beliefs and expectations (ReR8)	.619	.460	6.220	1.25014
9. Weak internal coordination (ReR9)	.753	.587	6.240	1.20475
10. Project failure (ReR10)	.837	.712	6.260	1.13946
Cronbach's Alfa=0.915, Inter-item-correlation (Mini=0.321, Max=0.719), SD=9.125, Mean=62.26, Variance=83.258, No of variables=10				

6. **Procedural Risks:** These risks appear due to lack of accountability and inefficient procedures to complete project activities. The data analysis results of procedural risks are shown in the Table 25. The mean of 23.28 with rating on 7 point Likert scale explains 66.51 percent construct with Cronbach's Alfa of 0.936. The major risks include lack of accountability, inefficient procedures and steps taken to complete project activities, and inefficient performance.

**Table 25: Scale statistics for procedural risks**

Procedural risk	Corrected Item-Total Correlation	Squared Multiple Correlation	Mean	Std. Deviation
1, Lack of accountability (PrR1)	.705	.805	4.7200	1.27839
2. Inefficient procedures and steps taken to complete project activities (PrR2)	.843	.880	4.7000	1.21638
3.inefficient performance (PrR3)	.854	.966	4.6400	1.19112
4. Frauds (PrR4)	.882	.998	4.6200	1.19335
5. Conflicts (PrR5)	.869	.999	4.6000	1.21218
Cronbach's Alfa=0.936, Inter-item-correlation (Mini=0.558, Max=0.993), SD=5.436, Mean=23.28, Variance=28.55, No of variables=5				

7. **Structural Risks:** These risks appear due to faulty structure resulting project failure. The data analysis results of structural risks are shown in the Table 26. The mean of 24.96 with rating on 7 point Likert scale explains 89.14 percent construct with Cronbach's Alfa of 0.810. The major risks include faulty structures are risky to operate and dangerous inputs to projects are risky.

**Table 26: Scale statistics for structural risks**

Structural Risk	Corrected Item-Total Correlation	Squared Multiple Correlation	Mean	Std. Deviation
1. Faulty structures are risky to operate (SR1)	.513	.305	6.380	1.21033
2. Dangerous inputs to projects are risky (SR2)	.701	.495	6.300	1.19949
3. Inefficient layouts and handling results into accidents (SR3)	.647	.447	6.180	1.25666
4. Lack of authority and responsibility shall result in project risk(SR4)	.657	.476	6.100	1.38873
Cronbach's Alfa=0.810, Inter-item-correlation (Mini=0.390, Max=0.621), SD=4.04, Mean=24.96, Variance=16.32, No of variables=4				

**Implications and Scope for Future Research**

The main limitations of this research is the failure to survey sufficient number of project managers and higher officials. The time and cost constraints were the main hurdles. Despite these hurdles we were able to understand the risks associated with real estate projects. Also, it was needed to extend the area of survey to other parts of the country. However, the effort here is not to statistically validate the results rather to provide insights for the managers to better manage real estate business.

The understanding of real estate risk alone is not sufficient to run the business. Future research is needed to understand the link between real estate risks and organizational performance variable as well as strategies to improve project performance. The structural models shall help to understand the gap between the intensity of risk and the organizational performance as well as strategies to counter risks.

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## **CASH PROFITABILITY AND THE CROSS SECTION OF STOCK RETURN EMPIRICAL EVIDENCE FROM INDONESIA**

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### **Abstract**

This study aims to test the predictive power of cash profitability in predicting the cross section of stock return in Indonesia's Capital market, based on the findings of Ball et al. (2016) that cash profitability outperforms other profitability measures in predicting stock returns in the US. Indonesia is chosen as the sample country because despite the fact that IDX is currently the 12th biggest capital market in Asia and have experienced positive price trend in recent years, the market efficiency is relatively low compared to developed capital markets. Due to different development stage, fewer market participants, fewer availability of information and strict impediments to trading. Thus it is interesting to see whether cash profitability is considered by the market in valuing firm stock prices. Using two pass sixty month rolling window Fama – Macbeth (1973) regression, I found that cash profitability predicts stock returns better than accrual based profitability and accruals.

**Keywords:** *Operating profitability, Cash flows, Accruals, Cross-section of stock returns, Emerging market, Working paper, Student paper.*

There has been many empirical findings that show company profitability are positively related to stock return (E.g, Haugen and Baker, 1996; Cohen, Gompers, Vuolteenaho, 2002; Fama and French, 2006, 2008, 2015) and also predicts cross section of stock returns (e.g, Novy-Marx, 2013; Ball, Gerakos, Linainmaa, and Nikolaev, 2015). This paper will cover the issue regarding how company's stockholders value information regarding profitability in the market, and what they deem as the true measure economic profitability of a company.

One of studies that have attempted to explain this relationship between profitability and returns is Fama and French (2006). They explain this relationship through derivation of the dividend discount model of Modigliani and Miller (1961).

In the dividend discount model, the market value of stock is the present value of expected future dividend.

$$M_t = \sum_{\tau=1}^{\infty} E(D_{t+\tau}) / (1+r)^\tau \quad (1)$$

expected long term return, or more specifically the internal rate of return of expected future dividend.

If firm implement clean surplus accounting, then the Dividend at time t, is profit allocated to equity per share,  $Y_t$  minus change in book equity  $dB_t = B_t - B_{t-1}$ . If both side of equation (1) and (2) is divided by Book equity, then:

$$\frac{M_T}{B_t} = \frac{\sum_{\tau=1}^{\infty} E(Y_{t+\tau} - dB_{t+\tau}) / (1+r)^\tau}{B} \quad (2)$$

It is clear to see that holding everything else constant, the higher the stock price,  $M_t$  the higher the required return will be lower, the higher the expected profitability,  $Y_t$  then the expected return,  $r$  will be higher, and the bigger is the change in book equity the lower the required return. In other words Value firm (low  $M/B$ , high  $B/M$ ) will get higher expected return than

growth firm (high M/B, low B/M). The higher the profitability of a company the higher its expected return, and the bigger is the amount that is invested in equity the lower the return.

Fama and French (2006) stated that if we refer to rational pricing. Then the effect from book-to-market, profitability, and investment is due to the difference of risk: Controlling every other variable, the higher the profitability and the book-to-market ratio of a company, then the higher its risk, and firms that grow faster have less risk. .

Fama and French (2006) found that mixed relation between profitability and returns. Their cross-sectional regression result show that earnings are positively related to returns. But their portfolio sorts show that taking account profitability, does not add to prediction of average returns incremental to the prediction provided by size and book to market ratio.

Ball, Gerakos, Linnainmaa, and Nikolaev (2015) explain this relation between profitability and returns in a different way. They stated that the positive relation between profitability and returns emerge because profitability and returns have a common economic determinants (e.g. risk). If the priced factor is not accounted in the expected return model (such as the CAPM), then the variables will be estimated with errors, and profitability proxy for that error and helps predicts returns.

The economic intuition of Ball, Gerakos, Linnainmaa, and Nikolaev (2015) was explained using this equation:

$$E_t(r_i) = \alpha E_{t-1}(r_i) + \eta_{i,t} = \alpha \left( \frac{\mu_{i,t-1}}{BE_{i,t-1}} - \rho_{i,t-1} \right) + \eta_{i,t} \quad (3)$$

The intuition of equation 3 is as follows. Assume that company I invest shareholder wealth,  $BE_{i,t-1}$  to acquire profit  $\mu_{i,t-1}$  at an average return on equity (ROE),  $\mu_{i,t-1}/BE_{i,t-1}$ . ROE can be decomposed into the firms opportunity cost of equity capital and a quasi-rent component  $\rho_{i,t-1}$ . If we ignore the difference between the firms opportunity cost of capital and investors required return  $E_{t-1}(r_i)$  at the time of the investment due to factors such as taxes on dividend distributions and transaction costs, then  $\mu_{i,t-1}/BE_{i,t-1} = E_{t-1}(r_i) + \rho_{i,t-1}$ . The evolution of expected return over time then can be described by equation (3). Past profitability thus is correlated with expected returns and can also be informative about the error of expected return (Ball et al 2015).

However, the empirical result of studies that investigates the relationship between stock returns and profitability is very sensitive to the choice of profitability proxy and measurement chosen to measure profitability.

For example, Fama and French (2006) found that profitability proxed by net earnings has a weak relation to expected returns. Changing the profitability proxy from net earnings (Fama and French, 2006) to gross profitability, Novy-Marx (2013) shows that profitability significantly predict stock returns. He stated that this happens because although the measurement that Fama and French used to measure profitability measures the economic profitability of a company, it excludes expenses that undoubtedly have a contribution to the company's future profitability, such as marketing and R&D expenses. He posit that gross profitability, is the purest profitability measurement because items lower down in the income statement are polluted.

However, Ball et al. (2015) showed that gross profitability is not the best measurement to proxy profitability. They showed that the reason why gross profit has more power in predicting returns compared to net earnings in Novy-Marx's (2013) research is because is gross profit was deflated by total assets, whereas net earnings by book equity. When the profitability measures is consistently scaled-down by the same deflator, they showed that



gross profit is no better than net earnings in predicting returns. Their main result was that operating profitability that includes research and development expense has more predictive power compared to gross profit and net earnings in predicting returns.

All research findings mentioned above used profitability measurement that still includes accruals. Accruals are adjustment made by accountants to facilitate periodic measurement of firm performance (Dechow, 1994). Revenue and expenses recorded generally differs from the amount of cash received and paid during the period. Accountants accrue firm revenue as the value of goods and services delivered during the period, based on the expected cash receipt of the deliveries. Similarly, they also calculate expenses as the cost of resources consumed in producing the delivered goods and services, based on the expected value of cash payments for the resources used. That is why accounting earnings are defined as accrual based revenue minus accrual based expenses, and earnings represent the accounting estimate of the value added by the firm products and services delivered to customers during the period (Ball et al, 2016).

FASB maintains the superiority of accrual based earnings over cash flows as the measurement to evaluate the expected future cash flow of a company. However the flexibility inherent in the generally accepted accounting principles provide managers with the opportunity to use accruals to manipulate income to suit their own purposes. (Cheng and Schaefer, 1997). As a result, analyst often matches operating cash flow to net earnings to measure the quality of those earnings (Bernstein, 1993).

Despite its reliability questions as the relevance of cash flows from operations limits to its usefulness as indicator of a firm value. Many accruals, ignored in cash flow computations are clearly value relevant. Because it is clearly difficult to argue that the market does not value a dollar of sales that results in a receivable equally to a dollar of sales currently collected in cash. Same arguments can also be made for accounts payable and other accruals (Cheng, and Schaefer, 1997).

Sloan (1996) found a negative relation between accruals and average returns, which is now widely known as the accrual anomaly. They stated that accrual anomaly surfaced because investors did not realized that accruals is not as persistent as cash flows, so that the market price of a company did not reflect its true value. The notion that investors think that accruals is as persistent as cash flow, then they will be negatively surprised when accruals did not persists, which explains the negative relation between accruals and returns. However Ball et al., (2016) observe otherwise, accruals have no explanatory power over cash-based profitability.

Ball et al (2016) motivated by Sloan (1996) and Ball et al (2015) findings, investigates the relationship between stock returns, accruals, accrual-based profitability and cash-based operating profitability. They found that cash profitability outperforms accrual-based profitability and accruals in terms of its explanatory power in explaining stock returns. They found that accruals have no incremental explanatory power when controlling for cash profitability, and in their analysis increase in profitability that is solely due to accruals has no relation with the cross section of returns. They also found that operating profitability component that is orthogonal to cash based operating profitability does not predict returns. In short they have empirically proof that firms with high accruals earn lower future return because they are unprofitable on a cash basis.

In addition, Fama and French (2016) have also found that by replacing their accrual based profitability factors (RMWo) with cash-based profitability factor (RMWc) based on the measurement and findings of Ball et al., (2016) improve the power of the five factor model in explaining stock returns.

In short, past research have shown that the choice of measurement to proxy profitability is non-trivial, and cash based profitability is by far the best measurement to proxy profitability.

Sutrisno and Ekaputra (2016) tested the Fama-French Five factor model (Fama and French, 2015) in Indonesia. Their findings are rather mixed, although they found that Fama and French five factor model can explain stock returns of subset portfolios better than the original three factor model. Their spanning regressions indicate that the value, profitability and investment factor is redundant in Indonesia. It is interesting to see whether constructing the profitability factor with cash based profitability can make the profitability factor perform better in Indonesia. Although interesting, that subject is outside of the scope of this paper. That issue is being addressed in a different research that I currently conduct. Nonetheless this paper can contribute as a good starting point.

This study aims to test the predictive power of cash profitability in predicting the cross section of returns in Indonesia. Indonesia has been an attractive market for quite some time. Indonesia stock exchange (IDX) is currently the 12th biggest stock market in Asia, and in recent years it has also experienced a positive trend in prices. According to IDX statistical report, in the first quarter of 2016, IDX have reached Rp. 5.143.453 Billion in market cap, 305.248 million shares in trading volume, 348.152 billion in trading value and its trading frequency reached 14.455.547 times increased from 13.977.651 times in the first quarter of 2015. (Indonesia Stock Exchange, 2016).

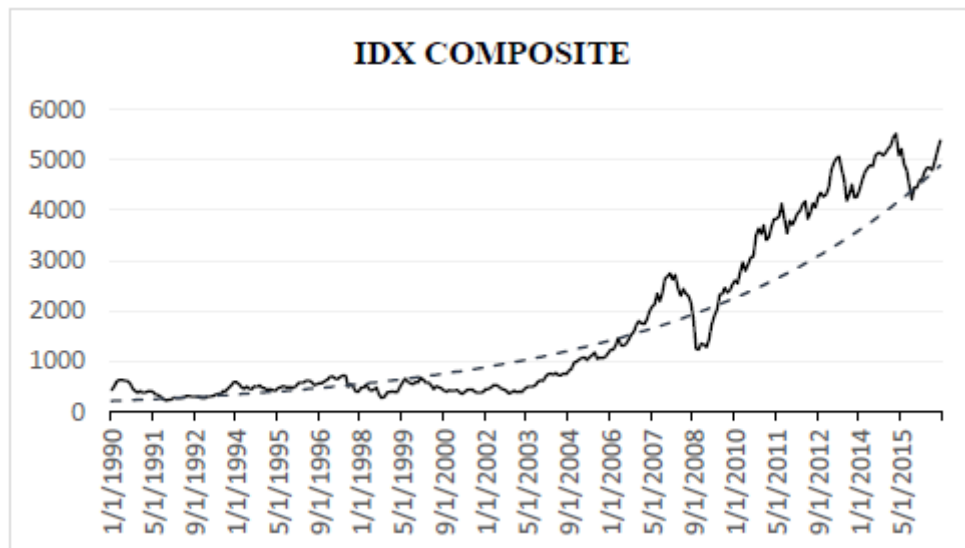


Figure 1. IDX Composite 1990 - 2016

Despite that fact, theoretically the market efficiency of IDX should be significantly lower compared to NYSE, AMEX, and NASDAQ due to its fewer market participants, lower availability of information, and its higher impediments to trading (strict restrictions on short selling) (CFA Institute, 2015). Therefore, it is interesting to see whether Ball et al (2016) findings holds up if it is tested in Indonesia.

This research found that although only statistically significant at 10 percent level and only in all-but microcaps sample, cash based profitability predict cross section of returns better than accrual based

profitability and accruals. This research also show that Book-to-market is positively related to returns and predicts cross section of returns.

However I found an unusual result, size is positively related to returns and mostly significant in most regressions. Whether that this positive relationship is an actual fact in Indonesia capital market or just a misleading and biased inferences caused by the method or the data used in this research which is very volatile and skewed is still unknown. To my knowledge,

there has not been any research in Indonesia that investigates this relationship using cross sectional Fama-Macbeth (1973) regression of all stock returns that rolled forward the estimation period every month, most of the research that I have read use static explanatory variables in their Fama-Macbeth (1973) regression. I intend to investigate this further in my future research using various method. Because due to its crucial and rather unusual nature, determining this relationship is not enough by just using one econometric technique.

**The Data**

The sample used in this study is all listed and delisted companies on IDX from July 2000 to June 2016 excluding companies from financial sectors, with non-missing data and is available in the Thomson Reuters Datastream database. Despite being the 12th biggest capital market in Asia, Indonesia is characterized with thin trading and thus leads to nonsynchronous trading due to the fact that there are many illiquid stocks in the market. Although it is a powerful econometric tool, Fama-Macbeth (1973) regression is very sensitive to the data used in the regressions. Therefore to avoid misleading inferences, I exclude illiquid stocks from the sample. To minimize biases in inferences caused by illiquid stocks and still preserve sample size, I define illiquid stocks as stocks that was not traded in the market for more than 31.96% of the time. To calculate the measurement I observe the number of months that the stock was not traded (NNM), and divide it by the total number of months the stock is outstanding (MSO). 31.96% is obtained from the 89th percentile of the ratio’s distribution of the whole sample. The details of the percentile can be seen in Table 1.

**Table 1. Distribution of NNM/ MSO ratio and the number of illiquid stocks excluded**

Percentile	MAX NNM/ MSO	Excluded illiquid stocks
97TH	57.34%	14
89TH	31.96%	46
79TH	16.49%	99
69TH	8.32%	148
59TH	3.16%	195
49TH	1.03%	237

I take monthly stock returns and annual accounting from Thomson Reuters Datastream terminal of Universitas Indonesia. Monthly returns are matched against the annual accounting data and lag annual accounting information by six months. So this study assumes that the annual accounting from December will be available to the public by the end of the following June.

The sample consists of firms with non-missing market value of equity, book-to-market, gross profit, book value of total assets, current month returns, and returns for the prior one year period. I split firms into All but Microcaps and Microcaps, and trimming all independent variables to the 1st and 99th percentiles, following Ball et al (2016). Microcaps are defined as stocks with a market value of equity below the 20th percentile of IDX market capitalization distribution. After excluding firm with illiquid stocks, missing data, and extreme values of the explanatory variable, the total sample size is 357 firms.

I calculate operating profitability, cash based operating profitability, and accruals by following the computations of Ball et al (2016):

$$\text{Operating Profitability} = \text{Revenue} - \text{Cost of Goods Sold} - (\text{Sales General and administrative expense} - \text{Research and Development Expense}) \tag{4}$$

$$\text{Cash-based operating profitability} = \text{Operating profitability} - \text{Account Receivable} - \text{Inventory} - \text{Prepaid Expense} + \text{Deferred Revenue} + \text{Trade accounts payable} + \text{Accrued expense.} \quad (5)$$

$$\text{Accruals} = \text{Current Assets} - \text{Cash} - [\Delta \text{Current liabilities} - \text{Debt in Current Liabilities} - \text{income tax payables}] - \text{Depreciation.} \quad (6)$$

Size is calculated as number of shares outstanding multiplied by the current market price, Book to market is calculated as shareholder equity minus preferred stock plus deferred tax, divided by market capitalization.

### The Model

In this section, I will show the model that is used in this research and briefly explain how the two pass Fama Macbeth (1973) regression works. In the first pass of Fama Macbeth (1973) regression, the regression will estimate time series slope coefficients, to estimate the time series relationship between the dependent variable and the regressor. Then the estimated time series slope coefficients from the first pass regression will be used as explanatory variables in the second pass cross-sectional regressions, the idea is that if a regressor variable is significantly related to the dependent variable, then the slope coefficients should be statistically significant and on average consistent in the cross sectional regression. The first pass estimation period is then rolled forward by a predetermined interval and the process continues until the end of the sample period.

In Fama and Macbeth (1973) original paper the estimation period is rolled forward by four years due to the lack of computing power available at that time (Brooks, 2014). More recent studies such as Ball et al. (2016) would update the explanatory variable for the second pass cross-sectional regression monthly to facilitate time varying coefficients. Therefore if the number of sample firms is 300, the observation period is 192 months and we choose 60 months as the width of first pass estimation period, assuming that all firms have complete data during all observation period, then the output of the two pass Fama-Macbeth (1973) regressions will be based on approximately 40,033 linear regressions for each model.

The average slope coefficients estimates of Fama Macbeth (1973) regressions can be interpreted as monthly returns on strategies that traded on that part of variation in each regressor that is orthogonal to other regressor in the regression model. Therefore the t-values is proportional to the Sharpe ratios of these strategies (Ball et al., 2016). In comparing the explanatory power of the profitability measures and accruals, I focus on the t-values. Following Ball et al. (2016), I recompute the explanatory variables every month. Due to insufficient observation period and sample companies, I estimate the explanatory variables using 60 month of past data rather than 120 as in Ball et al (2016), and the estimation period is rolled forward by one month. The models used in the first pass Fama-Macbeth (1973) regression are as follows:

$$R_{i,t} = \beta_1 OP_{yr-1} + \beta_2 \text{Log} \left( \frac{BE}{ME} \right)_{yr-1} + \beta_3 \text{Log}(ME)_t + \beta_4 r_{1,1,t} + \beta_5 r_{12,2,t} + e_{i,t} \quad (7)$$

$$R_{i,t} = \beta_1 OP_{yr-1} + \beta_2 \text{Accrual}_{yr-1} + \beta_3 \text{Log} \left( \frac{BE}{ME} \right)_{yr-1} + \beta_4 \text{Log}(ME)_t + \beta_5 r_{1,1} + \beta_6 r_{12,2} + e_{i,t} \quad (8)$$

$$R_{i,t} = \beta_1 OPcb_{yr-1} + \beta_2 \text{Log} \left( \frac{BE}{ME} \right)_{yr-1} + \beta_3 \text{Log}(ME)_t + \beta_4 r_{1,1} + \beta_5 r_{12,2} + e_{i,t} \quad (9)$$

$$R_{i,t} = \beta_1 \text{Accrual}_{yr-1} + \beta_2 OPcb + \beta_3 \text{Log} \left( \frac{BE}{ME} \right)_{yr-1} + \beta_4 \text{Log}(ME)_t + \beta_5 r_{1,1} + \beta_6 r_{12,2} + e_{i,t} \quad (10)$$

$$R_{i,t} = \beta_1 OP_{t-1} + \beta_2 OPcb + \beta_3 \text{Log} \left( \frac{BE}{ME} \right)_{yr-1} + \beta_4 \text{Log}(ME)_t + \beta_5 r_{1,1} + \beta_6 r_{12,2} + e_{i,t} \quad (11)$$

Thus, the model used in the second pass Fama-Macbeth (1973) regression are:

$$R_{i,t} = \gamma_1 \beta_{OP_{yr-1,i,t}} + \gamma_2 \beta_{\text{Log}(\frac{BE}{ME})_{yr-1,i,t}} + \gamma_3 \beta_{\text{Log}(ME)_t} + \gamma_4 \beta_{r_{1,1,i,t}} + \gamma_5 \beta_{r_{12,2,i,t}} + e_{i,t} \quad (12)$$

$$R_{i,t} = \gamma_1 \beta_{OP_{yr-1,i,t}} + \gamma_2 \beta_{\text{Accrual}_{yr-1,i,t}} + \gamma_3 \beta_{\text{Log}(\frac{BE}{ME})_{yr-1,i,t}} + \gamma_4 \beta_{\text{Log}(ME)_t} + \gamma_5 \beta_{r_{1,1,i,t}} + \gamma_6 \beta_{r_{12,2,i,t}} + e_{i,t} \quad (13)$$

$$R_{i,t} = \gamma_1 \beta_{OPcb_{yr-1,i,t}} + \gamma_2 \beta_{\text{Log}(\frac{BE}{ME})_{yr-1,i,t}} + \gamma_3 \beta_{\text{Log}(ME)_t} + \gamma_4 \beta_{r_{1,1,i,t}} + \gamma_5 \beta_{r_{12,2,i,t}} + e_{i,t} \quad (14)$$

$$R_{i,t} = \gamma_1 \beta_{\text{Accrual}_{yr-1,i,t}} + \gamma_2 \beta_{OPcb_{yr-1,i,t}} + \gamma_3 \beta_{\text{Log}(\frac{BE}{ME})_{yr-1,i,t}} + \gamma_4 \beta_{\text{Log}(ME)_t} + \gamma_5 \beta_{r_{1,1,i,t}} + \gamma_6 \beta_{r_{12,2,i,t}} + e_{i,t} \quad (15)$$

$$R_{i,t} = \gamma_1 \beta_{OP_{yr-1,i,t}} + \gamma_2 \beta_{OPcb_{yr-1,i,t}} + \gamma_3 \beta_{\text{Log}(\frac{BE}{ME})_{yr-1,i,t}} + \gamma_4 \beta_{\text{Log}(ME)_t} + \gamma_5 \beta_{r_{1,1,i,t}} + \gamma_6 \beta_{r_{12,2,i,t}} + e_{i,t} \quad (16)$$

Where :

$R_{i,t}$  = current period monthly return.

$OP_{yr-1}$  = Prior one year accrual based operating profit, scaled by total asset of yr – 1.

$\text{Accrual}_{yr-1}$  = prior one year accrual, scaled by total asset of yr – 1.

$OPcb_{yr-1}$  = Prior one year Cash based Operating profit, scaled by total asset of yr – 1..

$\text{Log}(\frac{BE}{ME})_{yr-1}$  = Prior one year natural logarithm of book to market equity.

$\text{Log}(ME)_t$  = Current natural logarithm of market cap.

$r_{1,1}$  = Prior one month return.

$r_{12,2}$  = Prior one year return skipping the last month.

$\gamma_j$  (j: 1,2, ..., n) = Cross sectional slope coefficients.

The time series average of  $\gamma_j$ ,  $\hat{\gamma}_{j,t}$  and the standard deviation of  $\hat{\gamma}_{j,t}$ ,  $\hat{\sigma}_j$  are calculated as:

$$\hat{\gamma}_j = \frac{1}{T_{FMB}} \sum_{t=1}^{T_{FMB}} \hat{\gamma}_{j,t} \quad (17)$$

$$\hat{\sigma}_j = \sqrt{\frac{1}{T_{FMB}} \sum_{t=1}^{T_{FMB}} (\hat{\gamma}_{j,t} - \hat{\gamma}_j)^2} \quad (18)$$

Where  $T_{FMB}$  is the number of cross-sectional regression used in the second pass. So that the t-statistic of  $\hat{\gamma}_j$  is simply calculated as:  $\sqrt{T_{FMB}} \hat{\gamma}_j / \hat{\sigma}_j$  (19)

### Descriptive Statistics

Table 2 shows the descriptive statistics of the data. We can see from Panel B of the table that there are no multicollinearity in the explanatory variables; no two variables has a correlation of more than 0.80 As documented in Ball et al. (2016), Accruals are positively related to accrual based profitability and negatively related to cash based profitability.

Table 2. Descriptive statistics and correlations of the explanatory variables

<b>Panel A: Descriptive Statistics</b>							
	ln(ME)	ln(B/M)	OP	OPcb	ACC	r 1,1	r 12,2
Mean	13.4280	-0.1319	0.1164	0.0840	0.0207	0.0171	0.2013
Median	13.3009	-0.0958	0.1032	0.0836	0.0118	0.0000	0.0000
Maximum	18.8851	7.0671	0.9129	0.9305	0.9467	5.4000	45.0724
Minimum	5.1705	-5.8663	-0.5060	-0.9455	-0.8603	-0.9100	-0.9800
Std. Dev.	1.9879	0.9940	0.1098	0.1641	0.1368	0.1858	1.0025
<b>Panel B: Correlations</b>							
	ln(ME)	ln(B/M)	OP	OPcb	ACC	r 1,1	r 12,2
ln(ME)	1.0000	-0.5323	0.3263	0.2380	-0.0283	0.0349	0.1171
ln(B/M)	-0.5323	1.0000	-0.3091	-0.2113	0.0141	0.0668	-0.0688
OP	0.3263	-0.3091	1.0000	0.6254	0.1146	-0.0109	-0.0033
OPcb	0.2380	-0.2113	0.6254	1.0000	-0.4699	-0.0068	0.0117
ACC	-0.0283	0.0141	0.1146	-0.4699	1.0000	-0.0038	-0.0115
r 1,1	0.0349	0.0668	-0.0109	-0.0068	-0.0038	1.0000	0.0086

r 12,2	0.1171	-0.0688	-0.0033	0.0117	-0.0115	0.0086	1.0000
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It appears that the positive relationship between cash based profitability and accrual based profitability is not as high as documented in the US. Even though the correlation is quite high, it is only 0.62 compared to more than 0.80 in the US. From panel A we can see that although the data has been trimmed for extreme values, the distributions of explanatory variables still exhibit outliers, especially for all but profitability measures.

**Fama-Macbeth Regression**

Table 3 shows the average slope coefficient estimates and their t values from Fama Macbeth (1973) regressions of monthly stock returns on cash based profitability, accrual based profitability and accruals. Following Ball et al (2016) some controls variable are included in the regressions : natural logarithm of market capitalization, natural logarithm of book to market ratio, past returns for the prior month and past retruns for prior one year skipping the last month.

Panel A shows the result for the all-but-microcaps sample, the t-values associated with each regressor is the numbers in a square bracket. Following Ball et al. (2016) I trim all the explanatory variables in the 99th and 1st percentile on a consistent table by table basis so that the regression coefficients is comparable across columns. In addition I also exclude illiquid stocks that is defined as stocks that was not traded in the market for more than 31.96% of the time, to address nonsynchronous trading in Indonesia.

In column 1, 4 and 5 of panel A, we can see that the t values associated with operating profitability is not statistically significant (0.52, -0.58, and 0.62 respectively), thus accrual based profitability measure does not predict stock returns associated with all-but-microcaps firms in Indonesia. Column 3 and 4 also shows that accruals does not predict stock returns (t-values of -0.69 and -0.31 respectively). However we can see from column 2 and 3 that the t-values of cash based profitability are mostly statistically significant in the 10% level and that trading strategy that trades on cash profitability will earn approximately 0.5% and 0.32% a month, showing that cash based profitability component that is orthogonal to accruals and other control variables not including accruals based profitability marginally predicts stock returns associated with all-but-microcaps firms in Indonesia. However when cash based profitability is controlled by accruals based profitability, cash based profitability lose its predictive power, showing that cash based profitability that is orthogonal to accruals based profitability component does not predict stock returns of all-but-microcaps firms.

Meaning that cash profitability still have accrual components in it and help it predict returns. Considering column 3 shows that cash based profitability that is orthogonal to accruals marginally predict returns, at first glance this result will look puzzling. However we can see that the formula (equation (5) and (6)) used to calculate accruals in this research2 calculate the accrual variable and the accrual used in the calculation of cash based profitability differently. Considering that, then perhaps this result is because there are differences in policies between Indonesia accounting principle (Pernyataan Standard Akuntansi Keuangan (PSAK)) and the US GAAP regarding the classification of the accounts that is used in equation (5) and (6). Thus, this result show that although accruals when used by itself in a regression does not predict stock returns, it still have a role in predicting stock returns in Indonesia. Nonetheless, because it is very unlikely (and for some instances improper) that two profitability measures is considered in the same regression model or a trading strategy, the fact that cash profitability alone can marginally predict stock returns better than accrual based profitability and accrual is a useful insight.

Panel B shows the result for the microcaps sample. In all columns we can see that none of the profitability measures or accruals predicts stock returns of microcap stocks, their t-values is not statistically significant even in the 10% level.

**Table 3. Profitability and accruals in Fama-Macbeth Regressions**

<b>Panel A : All but Microcaps</b>					
Explanatory Variable	Regression				
	(1)	(2)	(3)	(4)	(5)
Operating Profitability	0.0006 [0.5261]			-0.0003 [-0.5811]	0.0005 [0.6225]
Accruals			-0.0010 [-0.6979]	-0.0005 [-0.3127]	
Cash Based Operating Profitability		0.0052 [1.688]	0.0032 [1.8329]		0.0016 [1.1159]
Log(BE/ME)	0.1154 [3.1983]	0.1187 [2.9717]	0.1045 [3.2213]	0.0745 [2.4468]	0.0991 [3.1263]
Log(ME)	0.3124 [2.3260]	0.8316 [3.0352]	0.4317 [2.4404]	1.0686 [3.4307]	0.2699 [2.5120]
r 1,1	0.0128 [0.8864]	0.0140 [1.0009]	0.0063 [0.4572]	0.0034 [0.2433]	0.0088 [0.6181]
r 12,2	-0.0666 [-1.3505]	-0.0642 [-1.3083]	-0.0748 [-1.8544]	-2.0273 [-0.0833]	-0.0838 [-1.946]
Adjusted R Squared	9.96%	10.53%	10.16%	10.47%	10.14%
<b>Panel B : Microcaps</b>					
Explanatory Variable	Regression				
	(1)	(2)	(3)	(4)	(5)
Operating Profitability	0.0005 [0.3015]			-0.0007 [-0.753]	0.00002 [0.015]
Accruals			0.0012 0.3125	-0.0025 -0.5400	
Cash Based Operating Profitability		-0.0062 [-0.8562]	0.0014 [0.3561]		-0.0039 [-1.084]
Log(BE/ME)	0.0855 [1.6167]	0.0990 [1.7466]	0.0967 [1.9167]	0.0806 [1.8038]	0.0913 [1.9467]
Log(ME)	0.4539 [1.7522]	0.7421 [1.6449]	0.8006 [2.6319]	0.8846 [2.1316]	0.2766 [1.215]
r 1,1	-0.0182 [-0.8412]	-0.0193 [-0.8936]	-0.0271 [-1.1896]	-0.0277 [-1.3516]	-0.0196 [-0.9278]
r 12,2	-0.0247 [-0.5296]	-0.0146 [-0.3271]	0.0034 [0.0782]	-0.0093 [-0.2307]	-0.0113 [-0.2838]
Adjusted R Squared	9.03%	7.54%	8.63%	8.23%	8.42%

Panel A shows that book-to-market ratio is positively related to returns and consistently predict stock returns of all-but-microcaps firms, we can see that the t-values associated with book-to-market ratio is statistically significant in 1% and 2% level, and trading strategy that trades on book-to-market earn approximately 7.45% to 11.87% a month. However panel A also shows that size is positively related to returns and consistently predict it. The t-values related to size is mostly statistically significant in the 1 percent level, with an average monthly return that is also economically significant.

Panel B also shows that book-to-market ratio is positively related to returns and predict stock returns of microcaps. Despite that fact, it can be seen that this relationship is weaker in microcaps, the t-values associated with book-to-market ratio is only statistically significant in 10% level with average returns ranging from 8% to 9% a month., and is not statistically significant in column 1. As in panel A, Panel B also shows that size is positively related to returns, but like the book-to-market ratio the relationship is weaker in microcaps. The t-values related to size is only statistically significant in the 10% level in column 1, 5% in column 4, 1% in column 3 and not statistically significant in column 2 and 5.

Whether this positive relationship between size and returns is an actual fact that happens in Indonesia capital market or just a misleading and biased inferences caused by the method or the data used in this research which is very volatile and skewed (See table 2) is still unknown. To my knowledge, there has not been any research in Indonesia that investigates this relationship using cross sectional Fama-Macbeth (1973) regression that rolled forward the estimation period every month, most of the research that I have read use static explanatory variables in their Fama-Macbeth (1973) regression. I intend to investigate this relationship further in my future research using various method to make more robust inferences.

### **Conclusion**

There has been many empirical findings that show company profitability are positively related to stock return. However, the empirical result of studies that investigates the relationship between stock returns and profitability is very sensitive to the choice of profitability proxy and measurement chosen to measure profitability.

For example, changing the profitability proxy from net earnings (Fama and French, 2006) to *gross profitability*, Novy-Marx (2013) shows that profitability significantly predict stock returns. However, Ball et al. (2015) showed that gross profitability is not the best measurement to proxy profitability. They showed that the reason why gross profit has more power in predicting returns compared to net earnings in Novy-Marx's (2013) research is because gross profit was deflated by total assets, whereas net earnings by book equity. When the profitability measures is consistently scaled-down by the same deflator, they showed that gross profit is no better than net earnings in predicting returns. Their main result was that operating profitability that includes research and development expense has more predictive power compared to gross profit and net earnings in predicting returns.

Ball et al. (2016) motivated by Sloan (1996) and Ball et al. (2015) findings, investigates the relationship between stock returns, accruals, accrual-based profitability and cash-based operating profitability. They found that cash profitability outperforms accrual-based profitability and accruals in terms of its explanatory power in explaining stock returns. In addition, Fama and French (2016) have also found that by replacing their accrual based profitability factors (RMWO) with cash-based profitability factors (RMWc) based on the measurement and findings of Ball et al (2016) improve the power of the five factor model in explaining stock returns.

In short, past research have shown that the choice of measurement to proxy profitability is non-trivial, and cash based profitability is by far the best measurement to proxy profitability.



Sutrisno and Ekaputra (2016) tested the Fama-French Five factor model (Fama and French, 2015) in Indonesia. Their findings are rather mixed, although they found that Fama and French five factor model can explain stock returns of subset portfolios better than the original three factor model. Their spanning regressions indicate that the value, profitability and investment factor is redundant in Indonesia. It is interesting to see whether constructing the profitability factor with cash based profitability can make the profitability factor perform better in Indonesia. The findings from this research can serve as a good starting point.

This research found that although only statistically significant at 10 percent level and only in all-but microcaps sample, cash based profitability predict cross section of returns better than accrual based profitability and accruals.

Based on regressions on all sample, accrual based profitability measure and accruals does not predict stock returns in Indonesia. Regression on all-but-microcaps sample show cash based profitability component that is orthogonal to accruals and other control variables not including accruals based profitability, marginally predicts stock returns associated with all-but-microcaps firms in Indonesia. However when cash based profitability is controlled by accrual based profitability, cash based profitability lost its predictive power. Implicating that the component of cash based profitability that is orthogonal to accrual based profitability component does not predict stock returns of all-but-microcaps firms. Meaning that cash profitability still have accrual components in it and help it predict returns. At first this result will be puzzling considering column 3 of panel A shows that cash based profitability that is orthogonal to accruals marginally predict returns. However we can see that the formula (equation (5) and (6)) used to calculate accruals in this research calculate the accrual variable and the accrual used in the calculation of cash based profitability differently. Perhaps this result is because there are differences in policies between Indonesia accounting principle (*Pernyataan Standar Akuntansi Keuangan* (PSAK)) and the US GAAP regarding classification of the accounts that is used in equation (2) and (6). Thus, this result show that although accruals when used by itself in a regression does not predict stock returns, it still have a role in predicting stock returns in Indonesia. Nonetheless, because it is very unlikely (and for some instances improper) that two profitability measures is considered in the same regression model or a trading strategy, the fact that cash profitability alone can marginally predict stock returns better than accrual based profitability and accrual is a useful insight.

In regressions on microcaps sample however, none of the profitability measures or accruals predicts stock returns of microcap stocks, their t-values is not statistically significant even in the 10% level.

This research have also shown that book-to-market ratio is positively related to returns and consistently predict returns of all-but-microcaps stocks. The t-values associated with book-to-market ratio is statistically significant in 1% and 2% level. However panel A shows that size is positively related to returns of all-but-microcaps stocks and consistently predict it. The t-values related to size is mostly statistically significant in the 1 percent level.

Regression on microcaps shows that book-to-market ratio is positively related to returns and predict stock returns of microcaps. Despite that fact, it can be seen that this relationship is weaker in microcaps, the t-values associated with book-to-market ratio is only statistically significant in 10% level, and is not statistically significant in column 1. As in the regression on all-but-microcaps, regression on microcaps also shows that size is positively related to returns, but like the book-to-market ratio the relationship is weaker in microcaps. The t-values related to size is only statistically significant in the 10% level in column 1, 5% in column 4, 1% in column 3 and not statistically significant in column 2 and 5.

Whether this positive relationship between size and returns is an actual fact in Indonesia capital market or just a misleading and biased inferences caused by the method or the data used in this research which is very volatile and skewed (See table 2) is still unknown. To my

knowledge, there has not been any research in Indonesia that investigates this relationship using cross sectional Fama-Macbeth (1973) regression of stock returns of all stocks that rolled forward the estimation period every month, most of the research that I have read use static explanatory variables in their Fama-Macbeth (1973) regression.

I intend to investigate this relationship further in my future research using various method to make more robust inferences. The most feasible and robust method that I can think of is perhaps using the five factor model (Fama and French, 2015) in a Fama-Macbeth (1973) regression of all stock or subset portfolio returns and make a correction to the standard error using Shanken correction (Shanken, 1992) to address Errors in Variables (EIV) problem. Any suggestions regarding this issue will be very appreciated.

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## STOCK VALUATION OF HOLCIM INDONESIA COMPARED WITH SEMEN INDONESIA AND INDOCEMENT TUNGGAL PRAKARSA

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### ABSTRACT

Holcim Indonesia is top biggest three cement company in Indonesia. In 2015, Holcim gross profit decrease 23% and net income decrease 68%. Decreasing net income of Holcim is caused by demand of cement decreases and the operational costs in the company increases. The decreasing of company performance caused by the decrease in company stock price into Rp995 in the end 2015. In the middle of the decreasing of company performance. Holcim did expand in Tuban in order to increase the company production capacity. This research has four objectives. First, to know the company's value at the end 2016 by projecting the financial statement; second, to know the stock valuation based on discounted cash flow valuation; third, to give recommendation for the investors regarding stock price of Holcim Company; lastly to give recommendation for management of Holcim based on SWOT analysis.

The result of this research using financial statement projection with company's revenue is projected to increase into Rp13,073,775 and net income is projected to increase into Rp533.750 in 2016.

Stock valuation is using absolute valuation method is the discounted cash flow and free cash flow to Firm (FCFF). While the relative valuation method using price earnings ratio (P/E ratio) and EV / EBITDA. Based on the method that has been used, it is concluded that a target share price SMCB is Rp3.262,9 with a potential upside is 201%.

Based on the analysis result, the recommendation for investor is to buy the stock with target price is Rp3.262,9 . The recommendation for Holcim management is to expansion of new plant, promotion and marketing brand of Holcim and strengthen sales of products to foreign countries.

**Keywords:** *financial statement projection, absolute valuation, relative valuation, SWOT analysis.*

### Introduction

Holcim Indonesia is one of the cement companies in Indonesia, established in 1971. In 2014, Holcim ranks 18th as one of the 25 best companies according to Fortune magazine Indonesia. Holcim is currently competing with state-owned enterprises (BUMN), Semen Indonesia and private companies, Indocement Tunggak Prakarsa. Performance of a company affect the company's share price, this can be seen if the company's share price rising further indicates that the company's performance is good and vice versa.

Holcim stock price movement is sluggish compared to its competitor, Semen Indonesia and Indocement. The value of stock of Holcim is decrease 56% from Rp2,275 in 2013 to Rp995 in 2015 while Semen Indonesia and Indocement stocks are stable. Semen Indonesia stock price is decrease 19% from Rp14,150 in 2013 to Rp11,400 in 2015 although Indocement stock price is increase 11.6% from Rp20,000 in 2013 to Rp22,325 in 2015.

During in 2015, Holcim suffered substantial losses caused by several factors including the high operational costs. The increasing of operational costs include raw materials price is above 30%, labor costs rise into 27%, distribution cost increased about 17% and electricity costs have increased continuously about 22% (Sukirno, 2015). Because of the

substantial losses in 2015, the stock price of Holcim is decreasing and it can be detrimental shareholders of Holcim.

**Business Issue :** Cement industry in 2015 has suffered lost as a result of the decreasing demand of cement. The slowdown of economic growth in Indonesia that affected by global economic has caused the decreasing of cement demand. Holcim is one of the companies that suffer the decreasing sales due to the low level of demand. Holcim financial statement shows Rp668.8 billion net income in 2014 while net income in 2015 is Rp175.2 billion. Beside of the decreasing sales, Holcim operation cost has increased thus lead to low net income.

In the middle of decreasing net income , Holcim decided to do expansion by built factory in Tuban namely Tuban II in order to increase production capacity. The factory development started in 2013 in Tuban II and spent humongous cost which is Rp3,170 trillion. Besides the development cost of the factory, Holcim also has to expended more for cement production machine. Compared with Semen Indonesia and Indocement, Holcim share price was the lowest. Holcim share price has reached Rp900 in 2016 and it is the lowest price since last 6 years while the highest Holcim stock price is Rp3.950 in 2013. This final project will analyze the stock valuation to inform investor about the stock price projection in 2016 and compared the financial performance between Holcim and Semen Indonesia and Indocement.

## Methodology

### 1) Compound Annual Growth

Compound annual growth rate (CAGR) is an average growth rate over a period of several years. The CAGR shows the average year over year growth rate for a given period (Rist, 2014). Compound annual growth rate over a given period is always a better indication than the use of single year's change.

$$CAGR = \left( \frac{\text{Endingvalue}}{\text{Starting value}} \right)^{\frac{1}{\text{number of periods}}} - 1 \quad (3.1)$$

### 2) Valuation

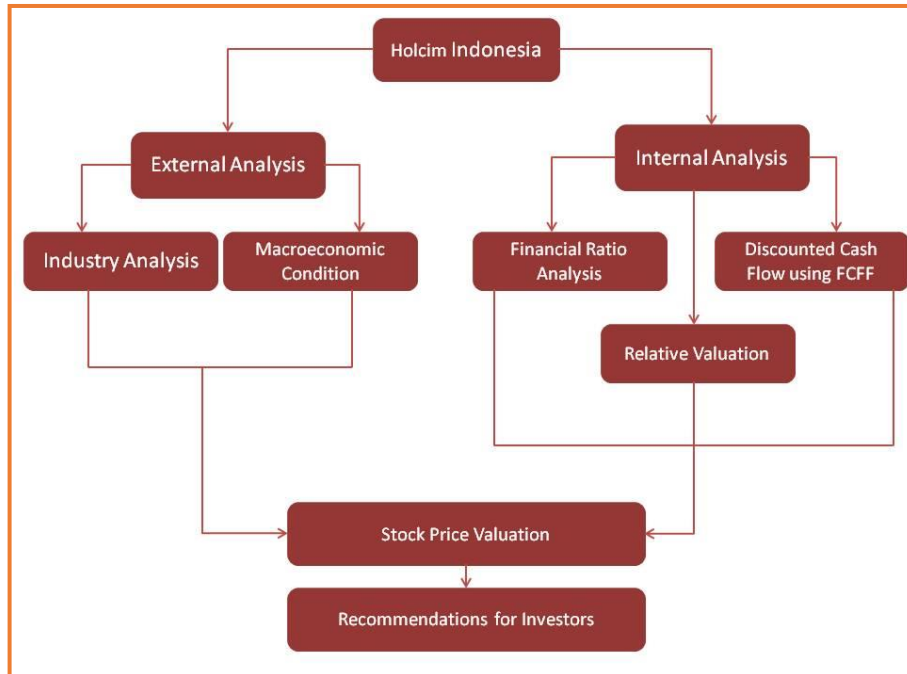
Valuation is an estimation of the value of an asset by using variables and comparisons with other similar assets that are considered to be associated with an investment in the future. Stock valuation begins with a thorough analysis of the subject company's principal business activities. The activity is divided into three parts: operating, investing and financing (Lundholm, 2007). To do a valuation on the company can be done by using three approaches (Damodaran, 2006) as following:

1. Discounted cash flow valuation relates the value of an asset to the present value of expected future cash flows on assets.
2. Relative valuation, estimates the value of an asset by looking at the pricing of comparable assets relative to a common variable like earnings, cash flows, book value or sales.
3. Contingent claim valuation, uses option pricing models to measure the value of assets that share option characteristics

## Business Issue Exploration Conceptual Framework

Conceptual framework is a theoretical structure of assumptions, principles, and rules that holds together the ideas comprising a broad concept (Business Dictionary, 2016). Conceptual framework in figure 1 will identify business issue by using internal and

external analysis. External analysis consist of industry analysis and macroeconomic condition, and SWOT analysis which strength and weakness as internal factor and opportunity and threat as external factor. On internal analysis consist of financial ratio analysis, discounted cash flow and relative valuation. The result from external and internal analysis will be analyzed as a recommendation for investor and Holcim.



## External Analysis

### 1) The Summary of PESTEL

As one of the private companies, Holcim Indonesia should follow the policies issued by the government related to a decrease in the price per sack of cement which is applied to company owned by BUMN as Rp3,000 per sack. By this price reduction, it affected the price company had to lower their price as well in accordance with the cement price that owned by the government.

In economic situation, the failing at global growth on 2015 affected Indonesia's growth only amounted as 4.8 percent which was lower than previous year, 2014, as 5%. The financial ministry estimated in 2016, Indonesia will have economic growth as 5.3% (Worldbank, 2016). Bank of Indonesia lowered the benchmark rate of interest as 25 basis points became 7% from 7.25% in January 2016. Bank of Indonesia will also lowered the deposit interest become 5.23 and interest of debt for facilities as 7.75% which is as 25 basis point. By this reduction, it affected the growth of credit as 10% (Bank Indonesia, 2016).

In social situation, the social segment is concerned with a society's attitude and cultural values. The change of social trends will impact on the demand of corporate products. If the standard of living in the society increases, demand for products will also increase and vice versa.

In technology segment, as the technology system is now growing rapidly, there is also economic growth reflected in cement industry. Cement companies compete to develop the technology in order to promote their company. Some technologies have been successfully developed are Technology Enterprise Resource Planning (ERP), Technology WHRPG (Waste Heat Recovery Power Generator), Technology ICS (Indoor Climate Solution).

Environmental factors closely related to the level of pollution resulting from the production of products, waste recycling considerations and environmental conditions round the factory. The cement industry is currently the biggest polluters in the world.

Legal factors that must be considered by the cement companies, according to the Law of the Republic of Indonesia No.23 of 1997 regarding Environmental Management and according to the Regulation of the Minister of Industry of the Republic of Indonesia Number 82 / M-IND / PER / 9/2015 on The Indonesian National Standard Cement Compulsory.

**2) The Summary of Porter's Five Forces**

ASEAN Economic society is a single market in which ASEAN member countries to sell goods and services easily to other ASEAN member countries in order to make competition between countries will become more stringent. The entry of new players cause a medium threat because foreign companies can easily enter into the Indonesian market. In the cement industry, competition is concentrated in regional level because the competitor are separated in several region depend on production area. Company are prefer to distribute near from the production plant. Competitive rivalry has a low to medium level.

In 2015, the cement industry experienced excess supply of cement due to the declining demand for cement by 3.3 percent and in 2016 predicted the demand will be increase until 4 % - 6% regarding to infrastructure projects in 2016.

Cement is the basic material used for all construction and there is no direct substitute for this product. Therefore, threat of substitute is low.

Since, the basic raw material in the manufacture of cement is limestone, bargaining power of suppliers can be categorized as low as raw materials derived from natural resources.

**Internal Analysis**

**1) Financial ratio analysis**

Author compared the financial ratio of Holcim Indonesia (SMCB), Semen Indonesia (SMGR) and Indocement Tunggal Prakarsa (INTP) to know financial perform of each companies and compared by using ratio of industry.

Based on financial ratio analysis, liquidity ratio of SMCB is the lowest compared with SMGR and INTP. INTP has maintain a highest liquidity ratio which means INTP has greater degree of liquidity and INTP has a strong cash balance to fund the capital expenditures.

The average collection period of SMCB in 2015 rose 5% from 45.34 times in 2014 become 47.79 times. SMCB average collection period is the lowest than SMGR and INTP. INTP has an average collection per day 49,79 times which is have a longer time in collecting the account receivable compared to SMCB has an average collection per day 48,41 times.

Debt analysis ratio shows SMCB average debt ratio is 0.4 times it means that more than one third of its assets financed by debt and the rest is from equity. SMCB's debt to equity ratio is higher than competitor. The average ratio of SMCB is 0.69 times which is higher than average industry is 0.39 times. The value indicates more than a half of its assets financed with debt.

Overall, financial ratio of SMCB decreased due to the economic slowdown that occurred from 2014 to 2015. The economic slowdown affects the company's financial performance led the company decreased performance. The decreases in revenue the company is also experienced by SMGR and INTP. The reduced demand for cement by

3.3 percent effect on the company's financial performance. In the middle of an economic slowdown, SMCB expand by building a factory in Tuban to increase cement production capacity thereby increasing competition among the other competitors.

**Table 1. Financial ratio of SMCB, SMGR and INTP**

<b>Quick Ratio</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Average</b>
SMCB	1,66	1,47	1,40	0,62	0,60	0,65	2,97
SMGR	2,92	2,65	1,71	1,88	2,21	1,60	
INTP	5,55	6,98	6,03	6,15	4,93	4,89	
<b>Current Ratio</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Average</b>
SMCB	1,29	1,13	0,96	0,47	0,43	0,51	2,45
SMGR	2,27	1,93	1,23	1,38	1,68	1,23	
INTP	4,59	6,08	5,42	5,61	4,42	4,32	
<b>Inventory Turnover</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Average</b>
SMCB	7,42	8,17	8,24	12,74	10,67	12,83	5,53
SMGR	4,64	4,30	4,51	5,12	5,47	6,77	
INTP	4,31	5,61	6,14	6,81	6,55	6,50	
<b>Average collection period</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Average</b>
SMCB	39,39	61,88	62,13	38,40	45,34	47,79	
SMGR	44,89	41,54	46,98	43,44	46,43	49,15	
INTP	45,97	50,89	51,82	49,18	48,75	52,18	
<b>Total Asset turnover</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Average</b>
SMCB	0,57	0,69	0,74	0,65	0,55	0,53	0,66
SMGR	0,92	0,84	0,74	0,80	0,79	0,71	
INTP	0,73	0,77	0,76	0,70	0,69	0,64	
<b>Debt Ratio</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Average</b>
SMCB	0,35	0,31	0,31	0,42	0,50	0,51	
SMGR	0,22	0,26	0,32	0,29	0,27	0,28	
INTP	0,15	0,13	0,15	0,14	0,14	0,14	
<b>Times interest earned</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Average</b>
SMCB	3,61	3,26	3,59	3,48	2,82	2,23	
SMGR	4,45	4,50	4,62	4,42	4,67	4,41	
INTP	4,15	4,25	4,23	4,17	4,48	4,38	
<b>Debt to equity ratio</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Average</b>
SMCB	0,53	0,45	0,45	0,71	0,98	1,05	0,39
SMGR	0,28	0,35	0,46	0,41	0,37	0,39	
INTP	0,17	0,15	0,17	0,16	0,17	0,16	
<b>Gross Profit</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Average</b>
SMCB	38%	38%	37%	35%	29%	23%	41%
SMGR	47%	46%	47%	45%	43%	40%	
INTP	50%	46%	48%	46%	45%	44%	
<b>Operating profit</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Average</b>
SMCB	18%	22%	23%	23%	18%	6%	23%
SMGR	31%	30%	32%	29%	27%	27%	
INTP	36%	32%	34%	32%	30%	28%	

Net Profit	2010	2011	2012	2013	2014	2015	Average
SMCB	14%	14%	15%	10%	7%	2%	18%
SMGR	26%	24%	25%	22%	21%	17%	
INTP	29%	26%	28%	28%	26%	24%	
Earning per share	2010	2011	2012	2013	2014	2015	Average
SMCB	108	139	176	124	87	23	693,09
SMGR	613	662	817	905	937	762	
INTP	876	977	1293	1361	1431	1183	
ROA	2010	2011	2012	2013	2014	2015	Average
SMCB	7,94%	9,71%	11,10%	6,39%	3,89%	1,01%	11,90%
SMGR	23,51%	20,17%	18,54%	17,39%	16,23%	11,86%	
INTP	21,01%	19,84%	20,93%	19,61%	17,84%	15,41%	
ROE	2010	2011	2012	2013	2014	2015	Average
SMCB	12,14%	14,13%	16,05%	10,86%	7,64%	2,07%	14,02%
SMGR	30,14%	27,06%	27,12%	24,56%	22,27%	16,49%	
INTP	24,66%	22,89%	24,53%	22,71%	20,79%	17,84%	

Source: Analysis, 2016

## Business Model Analysis

Table 2. Analysis SWOT

Strength	Weakness
<ol style="list-style-type: none"> <li>Product – With different kinds of product, Holcim is more superior than the other competitors.</li> <li>Targeting – Accordance to RAPBN 2016, increasing of infrastructure are the target of cement industry.</li> <li>Strong Promotion - Holcim conduct a vigorous campaign to introduce the brand to the consumer</li> </ol>	<ol style="list-style-type: none"> <li>Price – Holcim product price are relatively more expensive when compared with other companies.</li> <li>Number of factories – Holcim’s factories is fewer than the competitors factories and its slightly affected the production capacity of Holcim.</li> <li>Location of port – Holcim currently has only one port in Lampung. In order to make deliveries of cement by sea, Holcim has to pay extra cost.</li> </ol>
Opportunity	Threat
<ol style="list-style-type: none"> <li>Decreasing of Inflation and interest rate – The decreasing of inflation and interest rate will stimulate economic growth and make company optimistic regarding to demand of cement.</li> <li>The increasing of infrastructure – Government’s plan to develop the infrastructure will increase the demand of cement.</li> <li>Market outside Java Island – Holcim has a chance to dominate market outside of Java Island because just few of cement company has operates outside Java.</li> <li>Export – Bangladesh is one of the country that choose to import cement because Bangladesh just have one factories.</li> </ol>	<ol style="list-style-type: none"> <li>New Entrants – AEC (Asian Economic Society) has been started and Indonesia part of the AEC and causing the competitor becoming strict.</li> <li>Electricity tariff – Increasingly the basic electricity tariff, will be increasing the cost.</li> <li>Competitor – In 2016 the number of players cement industry as many as 19 companies.</li> </ol>

## Finding and Analysis

- 1) Financial Statement Projection



Financial statement projection began with the prediction to industry sales growth affected by macroeconomic factors in cement industry. After applied the sales growth projection, company do cost of good sales estimation, depreciation, and amortization, interest expense, long term loan, and others using assumption related to company condition, government policy, interest rate, and macroeconomic condition. Forecasting of financial statement will be using compound annual growth rate (CAGR) assumption based on data from 2010 until 2015.

**Table 3. Financial Statement Projection**

SMCB	Financial Statement Projection										
	2015	2016 F	2017 F	2018 F	2019 F	2020 F	2021 F	2022 F	2023 F	2024 F	2025 F
Revenue	9.239.022	13.073.775	15.599.458	18.613.070	22.208.873	26.499.338	31.618.664	37.726.978	45.015.338	53.711.714	64.088.117
COGS	7.099.577	10.046.331	11.987.151	14.302.913	17.066.049	20.362.987	24.296.851	28.990.686	34.591.308	41.273.898	49.247.477
Net Income	199.488	533.750	870.603	1.277.594	1.767.932	2.358.418	3.069.165	3.908.417	4.920.711	6.140.502	7.608.996

Source : Analysis, 2016

Revenue - Holcim revenues determine by the sales of product. Revenue of Holcim Indonesia consist of three primary business segment, sales of cement, ready-mixed concrete and aggregate. The first step to do to forecasting the revenue is forecasting for the demand by using CAGR of production capacity. The data of production capacity can be obtained from annual report of Holcim. The next step is forecasting the market share, sales volume, and price of cement. Holcim production capacity increased by 40% in 2015 into 15 million tons. In addition, the author uses the assumption that a market share of 14.2% following the market share in the prior year. Market share is used to determine the company's sales volume.

Cost of Good Sales - Holcim primary business segment is cement, ready mixed concrete and aggregate. In the annual report, Holcim explain the cost for each production process started from raw material, manufacturing cost, work in progress, and finished good. To projection cost of good sold, author using growth from business segment of Holcim.

2) Earning per Share Projection

Earnings per share according to Houston and Brigham (2007) is the company's ability to distribute the income to shareholders. Net income divided by shares outstanding will result in earnings per share. By using net income which has been projected on the three companies, the author will compare the EPS for each company.

**Table 4. Earning per Share of SMCB, SMGR and INTP**

Company	Earning per Share										
	2015	2016 F	2017 F	2018 F	2019 F	2020 F	2021 F	2022 F	2023 F	2024 F	2025 F
SMCB	23	70	114	167	231	308	401	510	642	801	993
SMGR	762	999	1.117	1.250	1.377	1.551	1.749	1.971	2.220	2.447	2.521
INTP	1.183	1.622	1.833	2.089	2.384	2.725	3.118	3.627	4.205	4.860	5.604

Source : Analysis, 2016

SMCB has the lowest value when compared to SMGR and SMCB. The value of each company's EPS is strongly influenced by the company's net income. If the net income of the company increased the EPS will also increase and shows that the company succeeded in running their business.

3) Discounted Cash Flow (DCF) Valuation

Discounted cash flow will estimate the future cash flow on the asset, discounted back at a rate that reflects the riskiness of the cash flows. Discounted cash flow can be done through two approaches (Damodaran, 2006) : (1) For the overall valuation of businesses are started from existing assets and assets that will evolve and called the firm valuation, (2) For the valuation of the company's shares and is called equity valuation.

Formula for Discounted cash flow is :

$$Value\ of\ a\ firm = \sum_{t=1}^{t=n} \frac{Expected\ cash\ flow}{(1+r)^t} + \frac{Terminal\ value_n}{(1+r)^n} \quad (3.2)$$

Table 5. Stock Price Target of SMCB

DCF Valuation of SMCB	
Firm Value	28.806.124,4
Net Cash	(1.802.548,8)
Intrinsic Value (Rp)	25.003.575,7
Number of shares (mn)	7.662.900.000,0
Price Per Share (Rp)	<b>3.262,9</b>

Table 5. Stock Price Target of SMGR

DCF Valuation of SMGR	
Value of firm	68.925.007
Net Cash (Debt)	(11,464.403)
Intrinsic value (Rp)	68.913.612
Number of shares (mn)	5.931.520.000
Price Per Share (Rp)	<b>11.618,2</b>

Table 5. Stock Price Target of INTP

DCF Valuation of INTP	
Value of firm	57.200.845,3
Net Cash (Debt)	(5.749.338,2)
Intrinsic value (Rp)	62.950.183,5
Number of shares (mn)	3.681.231.699,0
Price Per Share (Rp)	<b>17.100,3</b>

4) Price Earning Ration and EV/EBITDA Multiple

There are two components required is to value assets on a relative basis, the price should be standardized, usually by converting prices into multiples of some common variable. The second component is to find similar assets, the which is challenging since no two assets are exactly alike. To forecast Holcim stock price for late 2016, it will begin by compare the price earning ratio (PER) between Semen Indonesia and Indocement as competitor. The objective from compare the PER to obtain the target price of Holcim stok price. Data for calculating target stock price is from annual report both of competitor.

Table 6. Price Earning Ratio

Peers Company	PER						
	2011	2012	2013	2014	2015	2016F	Target Price
SMCB	15,7	17,2	18,3	26,8	38,2	<b>23,3</b>	<b>1.623,6</b>
SMGR	17,1	19,1	15,7	17,2	14,9		
INTP	17,5	17,4	14,7	17,4	19,0		
Average	17,3	18,2	15,2	17,3	17	<b>17</b>	

Premium/Discount	-9,3%	-5,5%	20,4%	54,7%	125,5%	37,1%	
Potential Upside							49,6%

EV/EBITDA ratio is financial ratio which measure enterprise value divided by EBITDA (earnings before interest and tax, depreciation and amortization). The objective of EV/EBITDA ratio is to compare similar company and to know which company that is suitable to buy or acquire by investor.

Table 7. EV/EBITDA Multiple

Peers Company	EV/EBITDA						Target Price
	2011	2012	2013	2014	2015	2016F	
SMCB	7,41	9,05	7,02	8,83	5,53	7,6	523,6
SMGR	12,59	13,04	10,31	11,45	9,31		
INTP	13,1	12,47	10,77	13,71	13,99		
Average	12,85	12,75	10,54	12,58	11,65	12,1	
Premium/Discount	-42,3%	-29,1%	-33,4%	-29,8%	-52,5%	-37,4%	
Potential Up/downside							- 51,7%

Based on PER, the result show the potential upside is 49,6% with the target price is Rp1.623,6 and the recommendation for investor based on PER is buy the stock of SMCB. For EV/EBITDA, the target price is Rp523,6 with the potential upside is 382,6% and the recommendation for investor is buy the stock of SMCB.

## Conclusion

The value of the stock of Holcim is decrease about 56% from 2013 until 2015. Holcim Indonesia as a public companies, has expanded in 2015 to increase production capacity by 40 percent. As a result of expanding company is expected to increase production capacity in order to fulfill market demand. Increasing production capacity give the expectation that it will increasing revenue and profit for Holcim Indonesia.

From the results of forecasting revenue, in 2016 revenue of Holcim increased from Rp9.239 trillion to Rp13.073 trillion in 2016. There are negative and positive sentiment that influence stock price of SMCB. Author using valuation method to obtained the target price in 2016. By using absolute dan relative valuation method. Absolute valuation consist of discounted cash flow valuation and free cash flow to firm (FCFF) valuation. Relative valuation consist of price to earning ratio (P/E ratio) and EV/EBITDA multiple. Target price of SMCB is Rp3.262,9 with potential upside is 201%.

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## THE APPLICATION OF GRAVITY MODEL IN SCENARIO BASED FORECASTING FOR AIRPORT FEASIBILITY STUDY

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### Abstract

Airport Industry is very dynamic. It often appears many new plans from the internal and from the environment. To anticipate the various possibilities outcome that may occur in the future we need scenario-based forecasting for the number of passengers. Here the authors use a gravity model which is implemented in the spatial landscape. To get the best results, the parameters are optimized by compare the result with empirical data through numerical analysis approach. The verification process in the Western part of Java Island showed that this model provide a good result when compared with empirical data. After optimizing the parameters, we may create a scenario-based projections by determine airport capacity and growth rates at specific time. Projections of the number of passengers will affect the business feasibility and future development strategies.

**Keywords:** *Business Dynamics, Strategic Change, Strategic Role of Locations, Scenario-based Forecasting, Spatial Analysis, Gravity Model.*

### Introduction

The western part of Java Island, which consists of the province of West Java, Jakarta and Banten, is the most densely populated areas in Indonesia. In 2014, the area of 45,700 square kilometers is inhabited by 68.15 million people or about 1,491 people per square kilometer (BPS, 2014). After the Asian crisis in 1998, the number of middle class grew significantly and encourages purchasing power (Budiman, Chhor, Razdan, & Sohoni, 2012). The combination of the huge number of population and increased purchasing power creates new challenges, including in the air transportation industries.

In this region, the number of passenger increased very rapidly. It rose from 11.88 million passengers per year (2001) to 61.54 million passengers per year (2014), or an average of 13.99% per year (BPS, 2015). They are only served by three airports, namely Soekarno-Hatta (CGK), Husein Sastranegara (BDO) and Halim Perdanakusuma (HLP). This is very difficult to fulfill the passenger growth. The Indonesian government has been tried to resolve this problem by making a lot of plans that will be run simultaneously. The first plan is to enlarge the existing airport capacity. The second plan is to encourage state-owned enterprises and the private investors to build a new airport, such as Kertajati (XX1) and South Karawang (XX2).

This parallel development plans increase the level of uncertainty for investors. They are faced with a number of questions. What would happen if the rival airports are built? What happens if the rival airport increases its capacity? What happens if the rival airport development delayed for several years? What happens if the development of the rival airport is canceled? To anticipate the various possibilities outcome that may occur in the future we need scenario-based forecasting (Greenwood-Nimmo, Nguyen, & Shin, 2013) for the number of passengers. Projections of the number of passengers will affect the business feasibility and future development strategies. If the number of passengers is below the threshold then the business is not feasible to be implemented. The dynamic of passengers will affect the airport development strategy, for example design capacity at early stage, timing, and design capacity in the next stage and the integration between the early stage and the next stage.

The purpose of this research is to create a scenario based passenger projections. This spatial approach is constructed based on the gravity models that mimic gravitational interaction as

described in Isaac Newton's law of gravity. Gravity models are used in various social sciences, for example the gravity model of international trade (Nello, 2009), trip distribution (Levinson & Kumar, 1995) and gravity model of migration (Rodrigue, Comtois, & Slack, 2009). In this study the parameter of the gravity model is optimized by using numerical analysis on empirical data.

## **Theoretical Foundations**

### **1. GIS for Transportation (GIS-T)**

Geographic information system (GIS) are interconnected hardware, software, data, people, organizations and institutional arrangements for collecting, storing, analyzing and communicating particular types of information about the earth. GIS-T is one of the most important applications of GIS (Miller & Shaw, 2001). GIS-T application covers much of the broad scope of transportation, from infrastructure planning, public transit operation, traffic analysis and control to hazard mitigation. The format of the spatial data storage varied, from vector data (represent features as discrete points, lines, and polygons) to raster data (represent the landscape as a rectangular matrix of square cells) (Peuquet & Marble, 1990).

### **2. Distance**

There are many concepts of distance in mathematics, for examples Euclidean distance, spherical Distance, Manhattan distance, Chessboard distance, Hamming distance and so on. In this study we use spherical distance or the minimum distance between two points on the surface of the spherical object (Rowland, 2016). Euclidean distance or the minimum distance between two points in Euclidean space (Deza & Deza, 2009) is not realistic to describe the distance on the earth's surface. We don't use Manhattan distance or the total distance that connect the segments between two points in space (Barile, 2016) because of data limitations.

### **3. Numerical Analysis**

Numerical analysis is the branch of mathematics which is used to find approximations to difficult problems such as finding the roots of non-linear equations, integration involving complex expressions and solving differential equations for which analytical solutions do not exist (Karris, 2007). There are many mathematical problem cannot be solved by analytic methods. Sometimes we have to use numerical analysis or study of algorithms that use numerical approximation for the problems of mathematical analysis. The invention of the computer also influenced the field of numerical analysis, since now longer and more complicated calculations could be done.

### **4. Gravity Model**

Gravity models that mimic gravitational interaction as described in Isaac Newton's law of gravity are used in various social sciences. This approach is used to measure the interaction between two separate things based on economic mass and spatial distance. The gravity model illustrates the macroscopic relationships between places. The Economic mass increase the interaction between the two regions, while the distance reduces the interaction between the regions. There are many application of gravity model in spatial problem, for example the gravity model of international trade (Nello, 2009), trip distribution (Levinson & Kumar, 1995) and gravity model of migration (Rodrigue, Comtois, & Slack, 2009).

### **5. Related Research**

Tobias Grosche, Franz Rothlauf and Armin Heinzl used gravity models for the estimation of air passenger volume between city-pairs in European countries (Grosche, Rothlauf, & Heinzl, 2007). Their models showed a good fit to the observed data and are statistically tested and

validated. Fengjun Jin, Fahui Wang and Yu Liu also used gravity models for the estimation of air passenger volume between cities in China (Jin, Wang, & Liu, 2004). But unfortunately these two models only explore the interaction between cities or airports, not the relationship between the distributions of the population to the airports.

### Methodology

In this study we tried to examine the relationship between the distributions of the population to the airport. About 68.15 million people in the western part of the island of Java inhabit 7,735 desa (villages) or kelurahan (urban communities). Map of villages or urban communities ( $i$ ) are in polygons format ( $\rho$ ). To be analyzed further, it needs to be transformed ( $T$ ) into a point or centroid ( $p$ ) or geometric center of a plane figure is the arithmetic mean ("average") position of all the points in the shape.

$$T: \rho_i \rightarrow p_i \quad (1)$$

Where:

$$T: \rho_i(x_0^i, y_0^i; x_1^i, y_1^i; \dots; x_{N-1}^i, y_{N-1}^i) \rightarrow p_i(\bar{x}^i, \bar{y}^i) \quad (2)$$

The transformation process assumes that the two-dimensional polygon has a uniform density. Centroid can be calculated by (Worboys & Duckham, 2004):

$$\bar{x}^i = \frac{1}{6L} \sum_{n=0}^{N-1} (x_n^i + x_{n+1}^i) \cdot (x_n^i \cdot y_{n+1}^i - x_{n+1}^i \cdot y_n^i) \quad (3)$$

And

$$\bar{y}^i = \frac{1}{6L} \sum_{n=0}^{N-1} (y_n^i + y_{n+1}^i) \cdot (x_n^i \cdot y_{n+1}^i - x_{n+1}^i \cdot y_n^i) \quad (4)$$

$L$  is the area of the polygon, where:

$$L = \frac{1}{2} \sum_{n=0}^{N-1} (x_n^i \cdot y_{n+1}^i - x_{n+1}^i \cdot y_n^i)$$

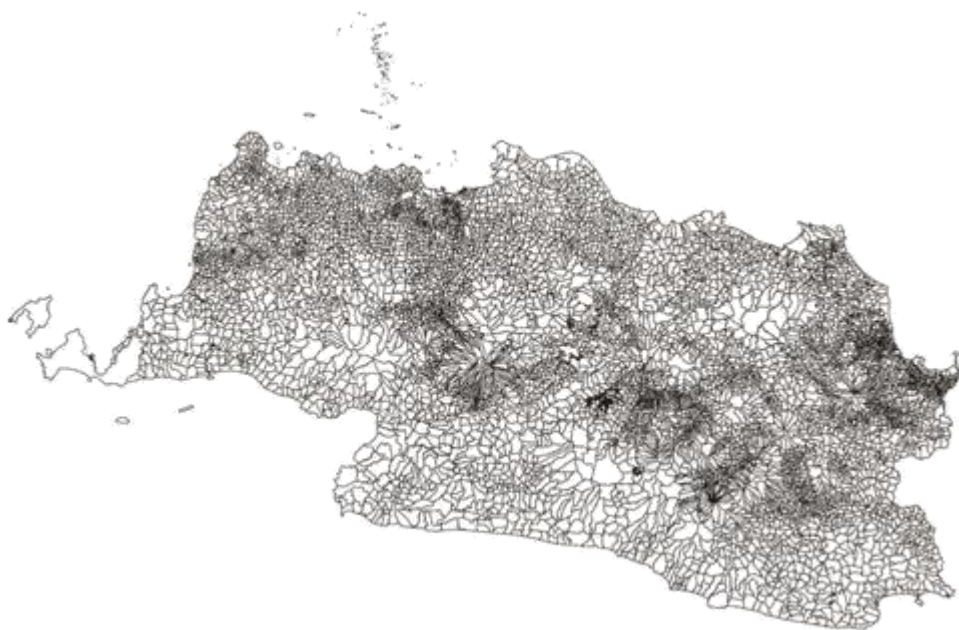


Fig. 1. 7,735 villages or urban communities in the western part of the island.

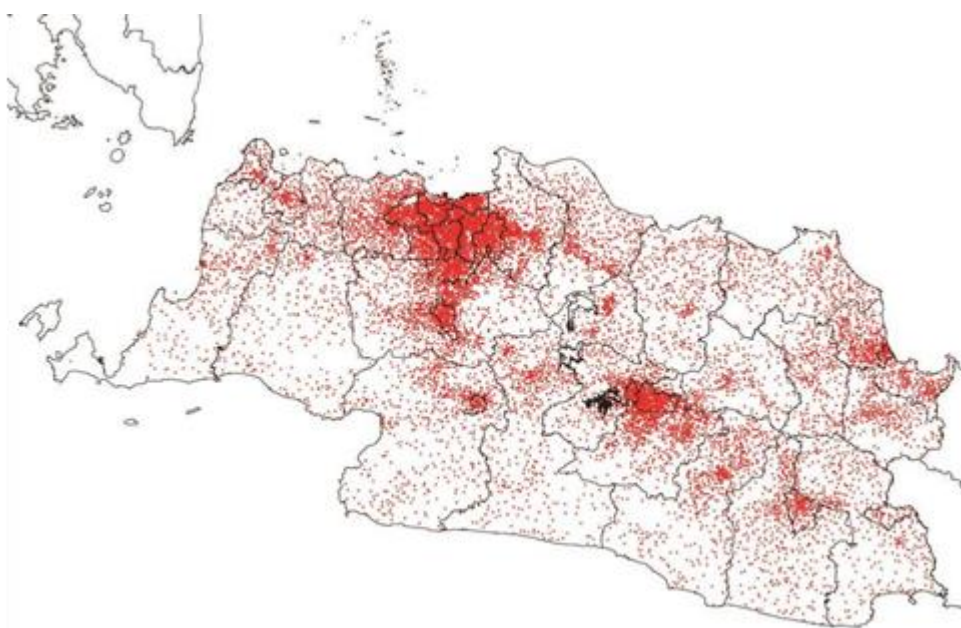


Fig. 2. The spatial distribution of the population in the western part of the island of Java.

Total number of passengers ( $W$ ) at time  $t$  grow at rate  $rt$ .

$$W_t = W_{t-1} \cdot (1 + r_t) \quad (6)$$

We assume the number of passengers ( $w$ ) of a villages or urban communities ( $i$ ) is directly proportional to population ( $q$ ) and income per capita ( $\pi$ ), or:



$$w_{i,t} \sim q_{i,t} \cdot \pi_{i,t} \quad (7)$$

Where

$$W_t = \sum_{\forall i} w_{i,t} \quad (8)$$

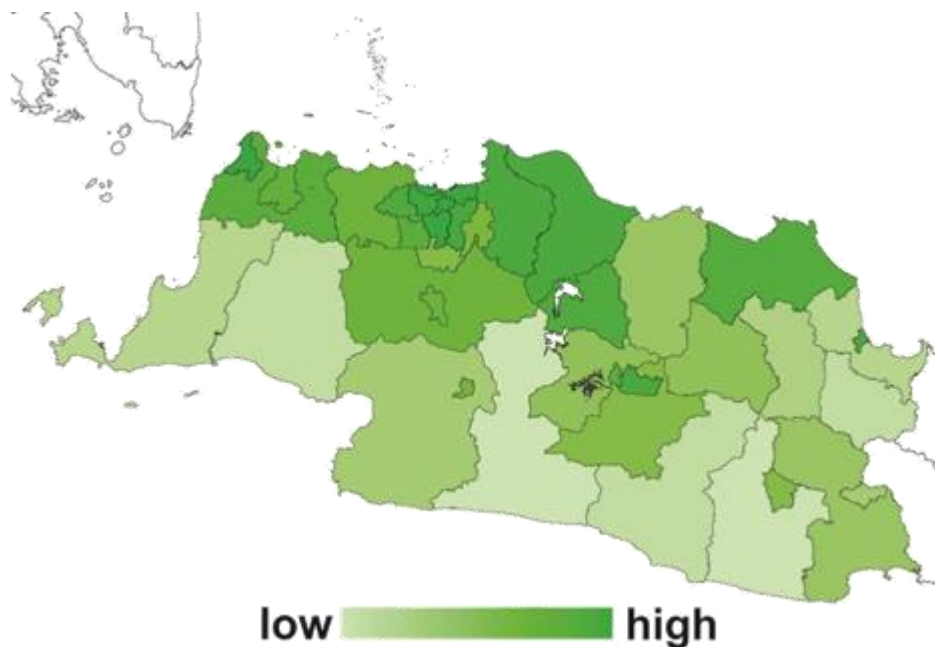


Fig. 3. The spatial distribution of the income per capita in the western part of Java Island.

There are three existing airports, namely Soekarno-Hatta (CGK), Husein Sastranegara (BDO) and Halim Perdanakusuma (HLP). There are also two candidates of new airport, namely Kertajati (XX1) and South Karawang (XX2).

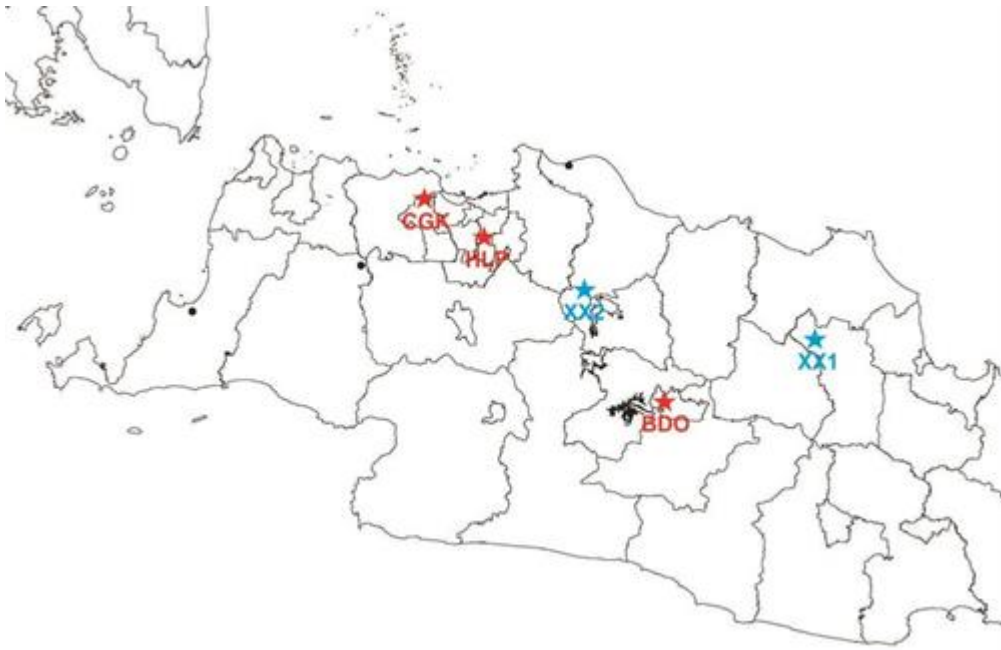


Fig. 4. 3 existing airport and 2 candidates of new airport in the western part of the island of Java.

The interaction force ( $F$ ) between passengers in a villages or urban communities ( $i$ ) and airport ( $j$ ) is calculated through gravity models, which simply:

$$F_{i,j,t} \sim \frac{c_{j,t}}{d_{i,j}^k} \quad (9)$$

Where  $c$  is capacity of the airport,  $d$  is spherical distance between villages or urban communities ( $i$ ) and airport ( $j$ ) and  $k$  is power coefficient of spherical distance. The number of passengers at airports  $j$  at time  $t$  ( $\omega_{j,t}$ ) is calculated using the following pseudo algorithm:

```

For i=1:I
    Search i*,j* where  $F_{i^*,j^*,t} = \max(F_t)$ 
     $\omega_{j^*,t} = \omega_{j^*,t} + w_{i^*,t}$ 
    For j=1:J
         $F_{i^*,j} = 0$ 
    End
    If  $\omega_{j^*,t} > c_{j^*,t}$ 
        For i=1:I
             $F_{i,j^*} = 0$ 
        End
    End
End
End
    
```

There are 2 possible outputs: if  $\sum_{\forall i} c_{i,t} \geq W_t$  then  $\sum_{\forall i} \omega_{i,t} = W_t = \sum_{\forall i} w_{i,t}$  and if  $\sum_{\forall i} c_{i,t} < W_t$  then  $\sum_{\forall j} \omega_{j,t} = c_{j,t} < W_t = \sum_{\forall i} w_{i,t}$ .

The power coefficient of spherical distance ( $k$ ) in gravity model is optimized by using numerical analysis (Karris, 2007) on empirical data. Figure 5 show the mean absolute percentage error of the power coefficient of spherical distance ( $k$ ) compared with empirical data of passengers in 2015. The smallest value of mean absolute percentage error (MAPE) is 4.75% when  $k=2.0$ .

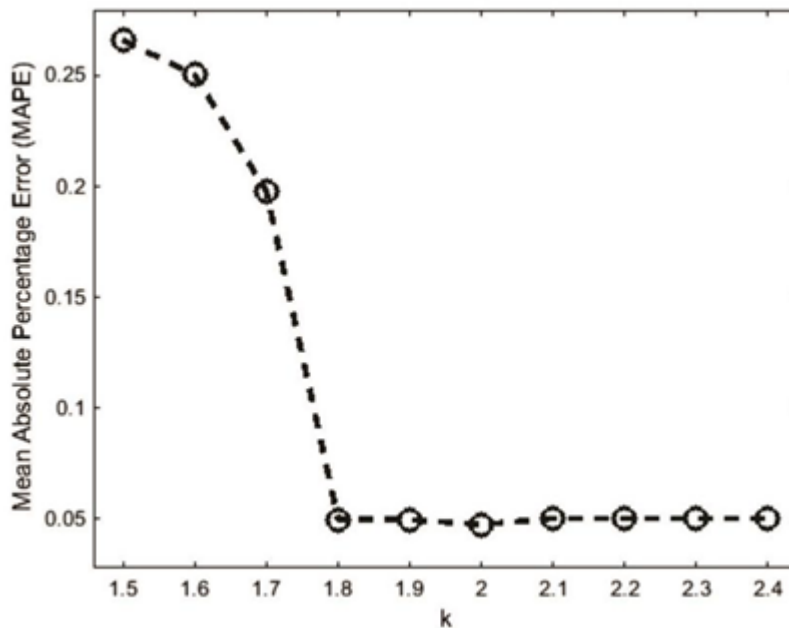


Fig. 5. Mean absolute percentage error of the power coefficient of spherical distance ( $k$ ) compared with empirical data of passengers in 2015.

**Result**

After optimizing the parameters, we can predict the number of passengers at specific airport in certain scenarios by determine airport capacity ( $c_{j,t}$ ) and growth rates ( $rt$ ) at specific time. In this case there are millions possible scenarios. We tried to implement this model in case of planninf new airport in Kertajati (XX1). XX1 was targeted to serve 5 million passengers per year in 2018, 10 million in 2020 and 20 million in 2026.

**Scenario 1:**

The XX1 feasibility study was made in 2013 without information about XX2 airport. CGK's capacity will increase 40% after the operation of a third runway in 2022. HLP will be expanded to reach 11.5 million passengers per year in 2020. They assumed that BDO can be closed in 2020. The economic situation is very bright after a very explosive passenger growth from 2001 to

2012. The number of passengers is expected to increase by 7% per year. This situation is called scenario 1.

### Scenario 2:

In early 2016 there was new plan of XX2 airport that can serve 20 million passengers per year and will be operational in 2023. The operation plan of the third runway at CGK will be accelerated into 2019. No change of plan in HLP. Because of public resistance BDO will not be closed. After economic slowdown in 2012-2015, passenger growth is corrected at only 6% per year. This new situation is called scenario 2.

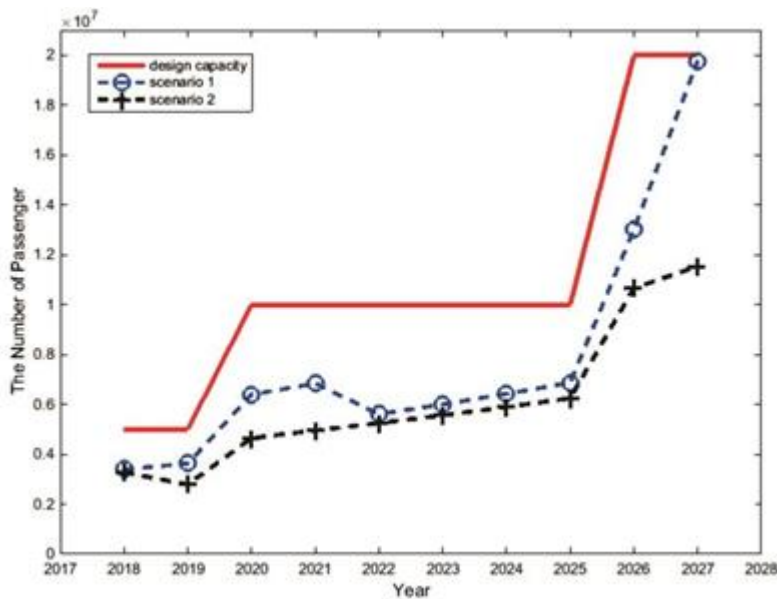


Fig. 6. The calculation results of the number of passenger for scenario 1 and scenario 2 compared to its design capacity.

This model can be used to make scenario-based projections of passengers. Figure 6 show the calculation results of the number of passenger for scenario 1 and scenario 2 compared to its design capacity. Due to limited capacity of the airports in Greater Jakarta, in scenario 1, the number of passengers in XX1 will increase significantly after 2025 However in scenario 2 the significant increase will not appear because the development of XX2. Utilization of installed capacity will be less than 60% in 2027.

Amendment of airport planning by the government will affect the competitive landscape of business. This method will be beneficial for the government and investors to anticipate the new plans through the revision of the old and irrelevant strategic plan.

### Conclusion

Airport industry is very dynamic especially in the long term. It often appears many new plans from the internal and from the environment. The strategic plan that was created before is become irrelevant. We need the forecasting method that can be adapted easily in many possible scenarios. To anticipate the various possibilities outcome that may occur in the future we need scenario-based forecasting for the number of passengers.

Scenario-based forecasting is needed to anticipate the dynamic airport industry situations. Gravity model can be used to make projections of passenger based on scenarios. To get the

best results, the parameters are optimized by compare the result with empirical data through numerical analysis approach. In the case of the western part Java Island, the mean absolute percentage error (MAPE) of this model is only 4.75%, meaning that this model provides a relatively good estimation value.

After optimizing the parameters, we can create a scenario-based projections by determine airport capacity ( $c_j,t$ ) and growth rates ( $rt$ ) at specific time. The result of this projection is very important for the government and investors to construct a new strategic plan.

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## INTEGRATED QUALITY DIRECTING AS DRIVER TO ENCOURAGE PRINCIPALS OF QUALITY MANAGEMENT

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### Abstract

**Purpose:** This research aims to construct a model of integrated quality directing in order to fill the research gap between quality responsibility and production performance. This research model involves a number of other important supporting variables such as technological learning capacity, market dynamic recognizing and production performance

**Design/Methodology/approach:** At the beginning, 245 companies, which produce several printing products in Indonesia, were contacted for the study using a purposive sampling technique. To achieve normality of data distribution, it was 182 respondents selected to be processed using SEM AMOS.

**Finding:** Our research indicated that number of the goodness parameter for the model meets the necessary conditions. Integrated quality directing has an important role for driving quality management practices. To deploy the integrated quality directing requires support from two main quality management activities, technology learning capacity and market dynamic recognizing.

**Research implication:** Manager could coordinate all of company divisions to involve in improvement of production quality. Production department should obtain not only production skill but market trend knowledge also as basis to produce high quality products, which suitable with consumer needs.

**Originally/value:** Integrated quality directing as the novelty of this study contributed towards enhancing the body of theoretical knowledge of the quality management.

**Keywords:** *Integrated quality directing, quality responsibility, technological learning capacity, market dynamic recognizing and production performance*

### Introduction

The quality of the production process is the heart of the company, which operates based on the orders from customers. Companies which are able to meet the quality of the order have major opportunities to expand the business (Ilkay & Aslan, 2012; Solis, Rao, Raghu-Nathan, Chen, & Pan, 1998). Even though, the characteristics of the product hardly depends on the specifications that consumers want, but these attributes of products which meet the quality standards is having guidelines that are standard, relatively. Products of certain industries have uniformity contained in national standards of the industry. Each industry must fulfill those standards if the product wants to be marketed in the area of jurisdiction, in which the national standard applied (Charles W. & James S., 2001).

The qualified products ensure a reasonable business climate and protect consumer interests. Products which meet industry standards are produced through the production process that is accepted by the mill (Kaynak & Hartley, 2005). Each stage is considering the safety and quality fulfillment requiring reasonable production costs. If there is an inappropriate production cost then this condition may be caused by the actions that are not desired by particular production specialists, such as reducing the quality of materials (Trentin, Perin, & Forza, 2012), reducing production intensity (Phan, Abdallah, & Matsui, 2011) or weakness in supervising the final product (Sarah J. Wu, 2015). Qualified products showed

producers' concern to consumers about the comfort and satisfaction. Companies that seek to improve the quality of its products represent the company's attention to the aspects of functionality, safety, comfortable and esthetic.

Achieving quality of production is goal of quality management (Yeung, Cheng, & Kee-hung, 2005). There are many factors which determine practices of quality management related to consumer, staff and leadership (Sarah J. Wu, 2015). The main aspects of quality management influence the production quality are focus to consumer, quality responsibility and process orientation (Samson & Terziovski, 1999). The deployment of quality management requires some complement factors such as technology and knowledge (D. I. Prajogo & Sohal, 2006). Companies need these aspects of quality management to convince all of parts follow the right tract (Zeng, Anh Phan, & Matsui, 2015). Application of quality management must pass some stages that spend time and effort so that manager should oversee and control every step (Sun & Ni, 2012).

The responsibility of companies in producing quality products becomes an important commitment of the company. The qualified product is one of the company's competitive advantages which are achieved through consistency of the production process in a long time, relatively (Sun & Ni, 2012). Creating quality products affect the expectations of the company's success because these efforts can build a reputation in the field of products (Kaynak, 2003). Even though creating quality products is not an easy work to do, but the more difficult step is maintaining the consistency of the production process quality. Maintaining the quality of the process requires the direction from the manager and awareness throughout the company for this significant activity requires cooperation across part of the company. Manager and staff could enact a shared commitment to accomplish each challenge of mission.

The high linkage between the quality responsibility and production performance gains support from both theoretical and practical. Many researchers mention that the experienced production team was able to avoid defective products due to operator error (Kaynak & Hartley, 2005; Prabhu, Appleby, Yarrow, & Mitchell, 2000). Production employees who are able to well-used technology deliver products which meet the required quality standards (Kafetzopoulos, Psomas, & Gotzamani, 2015). Cooperation is among production employees, who understand the standard operating procedure in generating maximum production output. Companies, which often involve employees in a wide range of performance improvement training, are better prepared for the pressures due to the changes in consumer demand (Leonard & McAdam, 2004). Various efforts to internalize the values of quality in the process of socialization of the leadership of the company to its employees obtain a measurable response in the form of improved production results (Sun & Ni, 2012).

There are different opinions regarding the relationship between the quality responsibility and production performance. Companies, which have a complex organizational structure, show the inability of quality responsibility affects production performance (Anderson & Jerman, 1998). This condition is not caused by employees who are a lack of experience or technology used behind but due to weak coordination between sections (Yeung et al., 2005). A company has several employees who have a high-quality responsibility, but this positive situation is not able to deliver tangible benefits for the company's because the policy of companies spread the positive values is not effective. Quality responsibility does not run optimally on companies that have interest conflict between function. In some cases of the quality orientation from the part of the production, which requires prevention costs, is unsuccessfully run. It is caused by the finance department does not financially full support.

The contradiction results of research on the impact of the quality responsibility to production performance are attractive to be studied deeply. Constructive activities are not fully obtaining an optimal response to the employee if the implementation of such activities

are not accepted and supported by all the companies concerned (Solis et al., 1998). Quality commitments, which have been agreed, need to be escorted by the leaders through the implementation of the coordinated cross-section (Zeng et al., 2015). This coordination is sized to organizational, namely the involvement of the parties concerned, to share information, and support activities that involve intensive collaboration between departments. The coordination is devastating when leaders take over in directing the activities actively and immediately take the necessary solution-making action.

This model examines the technological learning capacity as an internal resource which is necessary to encourage internalization process quality. Experts agree that technological learning is a prerequisite of companies to improve processes and organizational output (Mikalef & Pateli, 2017; Sánchez-Rodríguez & Martínez-Lorente, 2011). Moreover, companies, which do not have a good technological learning, do not have the power to create competitive advantage (McGuinness & Morgan, 2005). Technological learning capacity is closely related to the ability of innovation, continuous improvement, and product quality improvement. Companies that are operating on the basis of technological capabilities such as printing industry, telecommunications and chemistry choose to learn capacity as the primary ability to survive.

The consumer-oriented company stresses to all parts of market dynamic recognizing. Even though each section has a different function, but they have the same goal, namely how to achieve a certain level of sales. A common goal drives every part to improve the quality of its work to achieve customer satisfaction (McGuinness & Morgan, 2005). This concept also applies to the operation part in which its main function is to produce products that meet the aspects of productivity and customer preferences. Market dynamic recognizing is an important antecedent variable in constructing internalization quality process readiness.

Printing business in Indonesia has decreased the rate of profit (Tetsu, 2013). The growing of the printing business in the three-year is, indeed, experiencing a significant increase (KPMG, 2015). The numbers of SMEs' that join the business are escalated quickly every year due to the increasing demand. As a result of fierce competition, many companies are lowering prices with consequence as reduced product quality (Herdian, 2014). If this condition is abandoned, there will be consumer dissatisfaction occur that potentially lower sale. This study seeks to provide input to the printing business people so that they pay more attention to the quality of production in order to avoid the fancy defective products. If the product attributes that consumers want to be fulfilled, the company can maintain customer loyalty, increasing sales and improving profits.

There are three main objectives of this study. First, develop a model internalization process quality through testing relationships between important variables such, as recognizing dynamic market, technological learning capability, market responsibility, and integrated quality directing and production performance. Second, testing how important the role of integrated quality directing as the novelty of this study that is mediating influence between quality commitment and production performance. Third, providing recommendations for the development of the printing business that became the subject of research

## **Literature Study**

### **1. Integrated quality directing and Production performance**

An effort to fulfill production quality achievement requires commitment from all parts of the company. Companies need to create mechanism links of production parts and another part so that the involvements of the parts are not regarded as an intervention but as an effort of coordination. In accordance with the value in ISO 9001 that quality fulfillment process is the responsibility of all parts of the organization, companies need to create a job description for each section and determine how far the interaction between parts (Prabhu et al., 2000). It is to



achieve the company's performance (D. Prajogo, Huo, & Han, 2012). Issues of the production part such as the raw material supply sustainability, the completion of the production schedule, and the achievement of product attributes are regarded not merely a burden for production, but it is becoming a communal business plan that requires the support of many parties.

Integrated quality directing defined as information management and sustained participation from every the critical part of the organization, in the process of achieving the attributes that have been a determined production company. Even though the smoothness of production is the responsibility of the production part, but production performance can be achieved optimally if there is cooperation between the production with the essentials such as a division of the company's financial, marketing and human resources (Leonard & McAdam, 2004). Management needs to share production information to other parts so that each part is able to prepare and determine the activities that support the achievement of the production productivity (Lee & Peccei, 2008). In addition, management needs to design the interaction of parts production and other parts so crucial issues that arise in production can be completed simultaneously (Sun & Ni, 2012).

Companies need to manage information sharing within the parts company about the development of production quality achievement. The activities, not only as a form of supervision but also encourage the active participation of all parts of the enterprise (Lee & Peccei, 2008). The Company may hold regular meetings to discuss the progress of the production. If the production process overcomes very complex problems, management can involve other parts of determining solutions together (Yeung et al., 2005). Activities focused on the sharing of production information, such as the progress of production, fulfillment of product quality, and design changes can be supported with information technology so that strategic decisions can be done immediately (Kaynak, 2003). On the projects with high valued, the company can create a task force involving representatives from each section to maximize the completion of the task.

The meeting, which is discussed the increasing excellence attributes in the production process that involves whole companies, needs to be done regularly. The main problem overcome order-based producing manufacture is the delivery of products that suit the customer both in terms of quality assurance, the exact quantity, and timeliness (Phan et al., 2011; Zeng et al., 2015). The regular meetings in addition to evaluating the achievement of the quality the production process also avoid misunderstandings and facilitate cooperation between the parts. Therefore, the evaluation brought together representatives from all parts of the company leader's role in directing objectives and targets are very salient activities (Prabhu et al., 2000). Conflicts of interest in the meeting are possible that technical guidance on achieving quality can be emphasized.

Production performance is the level of achievement of the production process output. Production performance can be seen from how much the achievement of product attributes (Trentin et al., 2012). The production process that complies with industry standards produces a quality product. Production performance can also be measured by how many products can be categorized as a good product (Ilkay & Aslan, 2012). If production only produces the number of defective products is relatively few, the production can be resumed. Conversely, if the production yield the number of defective products exceeds the tolerance then the company should immediately evaluate the problem and find solutions.

The order-based producing company can observe the quality of the production based on the extent to which parts of the production schedule for completing the order. The production quality is not solely be seen from how many products meet the quality, but also how the proper completion of the product (Trentin et al., 2012). If the company can undergo innovation in production, the production system engineering can be done to meet the production schedule. Discussion of performance in full production includes production

capability to produce quality products, lower levels of product damage, and fulfillment of the production schedules that consider the delivery time of goods to consumers.

The company's ability to manage the involvement of parts of the company affects production performance. Production problems are not always due only to suboptimal production employee's work (Sánchez-Rodríguez & Martínez-Lorente, 2011). Often, the solution to the problem can be solved with the support of other parts. The inability of production to produce quality products in accordance with customer expectations can be determined by solutions based on feedback from the marketing department which knows better consumer preferences (D. I. Prajogo & Sohal, 2006). Completion of product orders for the large amounts and having a specification that requires complex coordination amongst the intensive (Solis et al., 1998). Especially in a situation where a very tight construction schedule, a variety of orders can be met if the co-operation between the parts are very solid.

Improved coordination among parts companies reduces the potential for damage to the goods. Damaged goods can be minimized through continuous improvement of production processes (Kaynak & Hartley, 2005; Sánchez-Rodríguez & Martínez-Lorente, 2011). Production errors due to lack of information about support for other parts of the completion of the product can be avoided if there were intensive meetings (Fang, Li, & Lu, 2016). If these efforts require the authority of certain part, then the production department can explain what kind of support is required (Phan et al., 2011; Sarah J. Wu, 2015). Basically, there are three types of support that may be given another part, that support information (Sánchez-Rodríguez & Martínez-Lorente, 2011), employee (Kaynak & Hartley, 2005), or finance (Lee & Peccei, 2008). Through the support of these, companies can take steps in improving the production process of preventive and curative. The argumentative thinking supports the following hypothesis:

H<sub>1</sub>: The increasingly integrated quality directing the greater production performance

## **2. Quality responsibility**

Activities that have an impact on the excellent companies' characteristics achievement can be sustained if the commitment to the quality has become a culture work (Lemmink, 1996). Before employees are doing positive activities, the company leadership has initiated to epitomize (Solis et al., 1998). Various messages in the importance of applying the quality found strategic places on the company to remind the importance of honoring the achieving activity process. Employees who make mistakes or who did not complete the work in accordance with the level of certain work ethic should be willing to accept suggestions for improvements from the leaders or fellow employees with equanimity (Sun & Ni, 2012). The company is willing to benchmark with similar companies on the application of certain work quality to achieve quality standards which are expected by companies.

Quality responsibility is defined as organizational awareness regarding the implementation of activities that encourage achievement of designated companies production attributes. Quality consciousness arises because of the internal impetus for achieving the efficiency and productivity of production. This production system is capable of supporting the achievement of cost leadership through the minimization of production costs (Lee & Peccei, 2008). Quality awareness could also arise because of the force of the desire of consumers who require goods or services they consume to fulfill certain quality (Prabhu et al., 2000). Companies can evaluate the achievement of production attributes to determine the performance of each indicator. If it is necessary, the company may change the standards achieving each attribute in accordance with the requirements of the market needs.

An understanding of the attributes of product excellence is a form of corporate concern about product attributes. There are two words that are important in maintaining the business: adaptation (Leonard & McAdam, 2004) and changing (Sarah J. Wu, 2015) .

Companies are excelling if it able to capture signals shift in consumer preferences and do any form of adjustment. Moreover, companies can learn from the competitors about how far the intensity of such adjustments is made (Yeung et al., 2005). Adjustment understanding of product quality can also be done by the company to respond to the desires of consumers and the development of competition. The production department can request the help of the marketing department to collect such strategic information.

Risks of new technology implementation can be anticipated in the company through the process of socialization. The improper use of technology not only results in damage to companies' facilities, it has also weighed on the cost of production. One of the new technologies is a process of socialization through various training such as the selection of raw materials, controlling production processes, and sorting failed product. Socialization of new technology also reduces the resistance behavior of employees who feel the potential advantages are not able to adjust to the new policies. Various forms of training are not seen as only the company's financial expenditure, but it becomes an investment to anticipate future changes (Lee & Peccei, 2008). Companies can manage the training program on an ongoing basis through the transfer of knowledge of a particular company structure to the structure below.

Companies that have responsibility for the implementation of the quality of production seek to involve the internal parts that are involved in efforts to synchronize the important role of each of those sections. The production quality is a derivative of the quality of the company in general which is usually in the objective strategic level meeting delivered by top-level managers (Solis et al., 1998; Sarah J. Wu, 2015). In spite of each has a derivative management functioned different objectives but at the level of practice, there is a close correlation between parts (Sarah Jinhui Wu, Zhang, & Schroeder, 2011). As a simple example that the purpose of the production department to produce product attributes require financial certainty in sustainability efforts procurement of quality raw materials, in which this issue should be of concern to the financial sector (Lee & Peccei, 2008). Therefore it cannot be denied that awareness of production on achieving quality production requires the intervention of top level managers to involve other parts. This argument is encouraging the following hypothesis:

H<sub>2</sub>: The increasingly quality responsibility the greater integrated quality directing

The production department which has liability in achieving production quality seeks to achieve production performance that already established by companies. Product attributes specified by the customer easier to be achieved if the company has the correct instructions to produce them (Phan et al., 2011; Sun & Ni, 2012). Various damage products can be avoided by monitoring the quality in each stage of production starting from raw material control, strictly monitoring the production process, and final product inspection (Kafetzopoulos et al., 2015). Companies that have a high-quality culture that emphasizes each division in the production process to be responsible independently of the quality of the output produced (Jung, Su, Baeza, & Hong, 2008; Sarah J. Wu, 2015). Each division input avoids flawed, imperfect process, and not optimal quality output (Laszlo, 1999). Theoretical and practical support for supporting the delivery of the following hypothesis:

H<sub>3</sub>: The increasingly quality responsibility the greater production performance

#### **4. Technological learning Capacity**

Companies should implement various smart strategies to get through each stage of the business lifecycle. The life cycle of the company through various stages, the period of introduction, development, maturing and declining. The future introduction is the most challenging time for the company to coordinate internal resources that have not managed neatly to face stiff competition environment (Bolívar-Ramos, García-Morales, & García-

Sánchez, 2012) Companies that are not able to synchronize the main parts of the company will face the risk of failure. Meanwhile, companies are able to collaborate on internal resources are still to be tested for their ability against all threats from environmental companies, such as the pressure of competitors, changes in consumer tastes, limited supply, and overtaken technology. The important thing for the company is not to avoid the appearance of any pressure but how to overcome and deal the pressure at every stage of life.

Companies need to increase the technological capacity to develop self-learning and confront all challenges. Technological learning capacity is the ability of the company to accept, understand, and utilize technology that has never been used before to improve enterprise business processes which are reflected in the main function of management: marketing, production, resources, and finance. Companies that have a solid team and adaptive character have the ability to learn new technologies (D. I. Prajogo & Sohal, 2006). The team was able to predict production technology affect the company's competitive advantage. Companies can rehearse core teams to accelerate the adoption and internalization of new technologies.

Anticipating the demands of the new production technologies application, companies need to learn methods of the production process to be more efficient. Companies are able to achieve production efficiency with the appropriate technology which can achieve cost advantages (Kitapçı & Çelik, 2014). Despite these technologies require an additional investment that cost the company but in general the cost of the product will decrease if the company is able to achieve a certain production capacity. Therefore, corporate leaders need to evaluate the extent current productivity of production systems. In addition, they are always open to the development of technologies that support improved production.

Adoption of new production methods requires technological and organizational readiness. The presence of new technologies that are expected to improve the performance of production cannot be achieved if the company did not immediately implement the technology (McGuinness & Morgan, 2005). The delay is caused by the company did not have a team which is able to operate the new technology. The application of the new method is also often not able to be applied properly because there is a part of a corporate structure that does not accept the technology wholeheartedly. The attitude of the resistance arises because they feel threatened by the presence of new technologies. Companies need to conduct training and the use of a gradual introduction to the parts of the requested management oversees the implementation of new technologies.

Companies are able to master the new technologies that shaped the methods and tools to encourage managers and employees to engage in improving the quality of production (Trentin et al., 2012). The new technology contains the complexity of larger features than the previous technology. The application of new production technologies requires more detailed information for the production process capable of producing the desired output quality (Bolívar-Ramos et al., 2012). To meet the completeness of the information, resources may not be sufficient only be obtained from a single part but from several parts of the company concerned. Through coordination between parts of companies, certain production quality targets can be achieved. Big company that has various divisions such as marketing, human resources, finance, and production division will integrate the production of any role of the division to select and implement appropriate new technologies in order to achieve improvement of the quality of the company's performance. Based on these considerations, the hypothesis that a very relevant are:

H<sub>4</sub>: Increasingly technology learning capacity the greater integrated quality directing

Companies that are able to master a variety of relevant technologies to the business have the awareness to do the improvement of production processes and produce higher quality products. It is perceived new technologies as a medium that has greater advantaging features

than the previous technology. The use of new technologies intended to gain a lot of benefit such as the achievement of better production the quality than the practices of existing production (Perez-arostegui & Barrales-molina, 2015). Skills to use various technologies are realizing the experts that they are able to produce goods with attribute superior products available (D. I. Prajogo & Sohal, 2006). Empirical reality has prompted the following relationship:

H<sub>5</sub>: The increasingly technology capacity the greater quality learning responsibility

### **5. Market dynamic recognizing**

The successful launch of new products is determined how big the attributes of these products meet consumer desires. A product created based on two major considerations, namely the pull of companies' technology and encouragement market needs. In spite of each product is designed by taking into account technological developments and the characteristics of the target consumer, but the production process-oriented consumer needs better ensure the success of new products (Narendra Wankhade & Dabade, 2007). Before the product is made, the manufacturer through the marketing research should find out what customers expect. Information on consumers from the marketing department becomes the input for the production of parts to determine the specifications of the product in accordance with the target market.

Market dynamic recognizing is the company's ability to follow and respond to the development of a business related to changes in the core activities of the environment constituents, such as consumer tastes, supplier policies, and strategies of competitors. Understanding the market dynamics is in the broad sense concerning all constituents business environment that influences company policy (Charles W. & James S., 2001). Companies not only need to understand the development of consumer taste but also follow the movements of competitors who seek to undermine the market share of the company (McGuinness & Morgan, 2005). Understanding the market dynamics also requires that companies understand the behavior of suppliers to ensure the availability of raw material supply. Despite this dynamic market activity recognizing, the order-based business can be focused on the company's ability to understand the desire of consumers that are very specific.

Companies that care about the success of the product sought information about consumer expectations of product quality. Each product should have certain characteristics to reach the quality standards specified by the industry that has been determined by the certified institution (Yeung et al., 2005). While the product is produced according to orders have special specifications, according to customer demand. Companies need to synchronize between industry certification requirements with the needs of consumers for products accepted by the market. Companies need to expand knowledge about the development of product quality requirements associated with making materials, production processes and finishing of products. This information can be obtained directly through intensive communication with the target consumer. Companies can also independently 'dig' this knowledge through exploration in online or offline media accordingly.

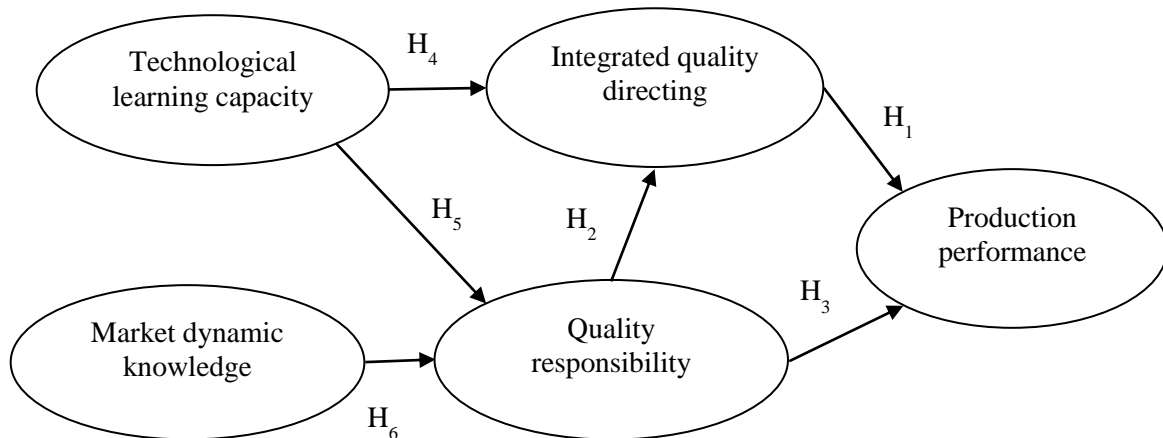
Ability to set priorities desired needs of consumers in production planning greatly affect the success of a product launch. Consumers have the unique preferences of the order of importance attribute (Pavlou, 2004). According to business experience that the company has been dealing with, the production manager should have general instructions regarding the priority level of the various characteristics of the products that consumers want. Attributes of the goods printouts should have certain characteristics such as the quality of the writing, the power of binding, and neatness print size. The quality can be achieved through appropriate procurement of raw materials, strict supervision, and control of the printing process prints carefully.

Companies should respond to the development of consumer desire relatively changed in accordance with the trend of consumer tastes (McGuinness & Morgan, 2005). Businesses that contain elements such as printing technology and art books are very dynamic because of the level of quality characteristics are developed following the advances in technology and changes in consumer tastes. Companies should prepare to adjust all the changes through the increasing skills of employees and the use of new technologies. Speed in responding to market becomes the competitive strength of companies because consumers prefer a company that is more adaptive to new trends. In how many levels of characteristics that the company is able to adjust are also considered by consumers. In the end, consumers prefer companies that are able to respond to all desires quickly.

Companies which are able to understand the development needs of consumers have greater responsibility in producing a quality product (Kafetzopoulos et al., 2015). The company has a customer satisfaction orientation because they are aware of the products produced in the end to satisfy consumer desires (Narendra Wankhade & Dabade, 2007). Production managers strive to produce products in accordance with the specifications provided by customers. Production employees will control the production process so that the product quality in line with expectations. Awareness of the importance of understanding consumer encourages corporate leaders to internalize constructive policy that all parts of the company responsible for producing quality products. This thought became the basis for determining hypothesis as follows:

H<sub>6</sub>: The increasingly market dynamic recognizing the greater quality responsibility

Based on these empirical and theoretical considerations, the research model can be built in their entirety. Relationships between variables were developed based on previous research. The model is built based on the stages of production, namely input, process, and output. Variables that serve as the input are technological learning capacity and market dynamic recognizing. Variable that acts as the process is the quality responsibility and integrated quality directing. While the variable that acts as the output is the production performance. Detailed models can be seen in figure 1.



**Figure 1. Research Model**

## Research Methodology

### 1. Data collecting

Respondents of this research are printing companies located in major cities in Indonesia such as Semarang, Surakarta, and Yogyakarta. The area has many universities so that the development of the printing business that supports the educational needs progress rapidly. Printing business competition is also getting tougher because the barrier to entry is the smaller businesses. Some printing companies are not able to survive because they cannot afford to efficiently operate. A respondent entitled to fill in a questionnaire is a general director or production manager.

Based on data from the Department of industry and commerce (*Dinasperindag*) Central Java and *Yogyakarta*, Indonesia, there are 1.950 scattered printing companies in *Semarang, Solo, Purwokerto* and *Yogyakarta*. Every printing company identity researched on the sustainability of the current business, operations, and media address of contact (telephone, letter or email). At first, the amount of sample is determined at 245 companies by considering the number representative of the population and the ability of the data to be processed by SEM AMOS. Respondents determined by purposive sampling method that considers several criteria, there are at least two divisions in the company (part of the production as one of the divisions of the company) and has been operating for three years.

The initial processing of the 245 respondents indicated their incompleteness and potential abnormalities questionnaire data. There are 15 questionnaires not completely replied, so such data had to be eliminated from subsequent processing. Test screening and trimming which identify inconsistencies and separate answers of 25 respondents is not processed at a later stage. Through early treatment with AMOS some data appear to have normally undistributed is represented by the value of c.r skewness and c.r. kurtosis, at  $< -2.548$  or  $> +2.548$ . Therefore, 23 respondents were eliminated gradually by taking into account the hierarchy of values mahalanobis.

The latest data in total 182 respondents rated, it meets normal distribution of data categorized as value univariate normality and multivariate normality at range required at value c.r.  $-2.548 < \text{normality} < +2.548$  (table 1). The value c.r skewness of these indicators is at intervals of  $-2.504$  up to  $1.104$ . While the value of cr kurtosis in these indicators on a range  $-0.983$  up to  $2.536$ . Even multivariate normality of the overall data showed that c.r  $1.935$

convincing. Some 182 respondents became the final data which can be analyzed with descriptive statistics and inductive statistics.



Table 1. Validity Test of Indicator

Indicators	Min	Max	Skewness	Cr skewness	Kurtosis	Cr kurtosis	Factor Loading	$\alpha$ -Cronbach
Integrated quality directing								0.784
• Quality commitment of all parts of organization	5	9	-0.076	-0.420	0.063	0.172	0.70	
• Information sharing of quality improvement	5	9	-0.122	-0.674	-0.318	-0.875	0.75	
• Relating the development of production process quality with the other parts of companies	5	9	-0.217	-1.193	-0.312	-0.859	0.71	
• Involving all parts of companies in enhancing production process quality	5	9	-0.014	-0.075	-0.357	-0.983	0.71	
Quality responsibility								0.774
• Understanding Product quality	4	10	0.142	0.784	0.921	2.536	0.89	
• Applying the culture of excellent production process quality	4	10	-0.169	-0.932	0.919	2.531	0.82	
• Training of enhancing production process quality	4	10	-0.060	-0.330	0.431	1.186	0.70	
Technological learning capability								0.873
• Learning new technology	4	10	-0.093	-0.515	0.402	1.106	0.89	
• Well-utilizing new method	4	10	-0.177	-0.977	0.844	2.325	0.89	
• Applying new means	4	10	-0.354	-1.950	0.464	1.276	0.86	
Market dynamic recognizing								0.792
• Ascertaining product attribute from customer	4	10	0.060	0.328	0.800	2.202	0.83	
• Determining the priority of product attribute from customer	4	10	0.200	1.104	0.486	1.339	0.75	
• Responding the changing of customer preferences	4	10	0.008	0.041	0.694	1.910	0.87	
Production performance								0.892
• Declining level of broken product	4	9	-0.429	-2.363	0.437	1.204	0.90	
• Suitability of order quantity in production part	4	9	-0.441	-2.427	0.476	1.312	0.88	
• Fulfilling of order quality in production part	4	9	-0.455	-2.504	0.428	1.178	0.84	
Multivariate normality					6.881	1.934		

## 2. Construct validity

Determination of the indicators refers to variables on the basis of a strong theoretical and empirical arguments are irrefutable. Each indicator has been proven statistically that meet the loading factor above 0.7 and generates a cumulative great contribution to the variables that explain by  $\alpha$ -Cronbach above 0.7. Factor loading value obtained by using SEM AMOS. While  $\alpha$ -Cronbach in integrated quality directing has four indicators of quality commitment throughout the company, sharing information on the development of quality, linking the development of production quality and engagement with other sections throughout the company in improving production quality (Leonard & McAdam, 2004; Prabhu et al., 2000; D. Prajogo et al., 2012). The smallest factor loading value of the variable indicator quality integrated directing is 0.71 with  $\alpha$ -Cronbach 0784.

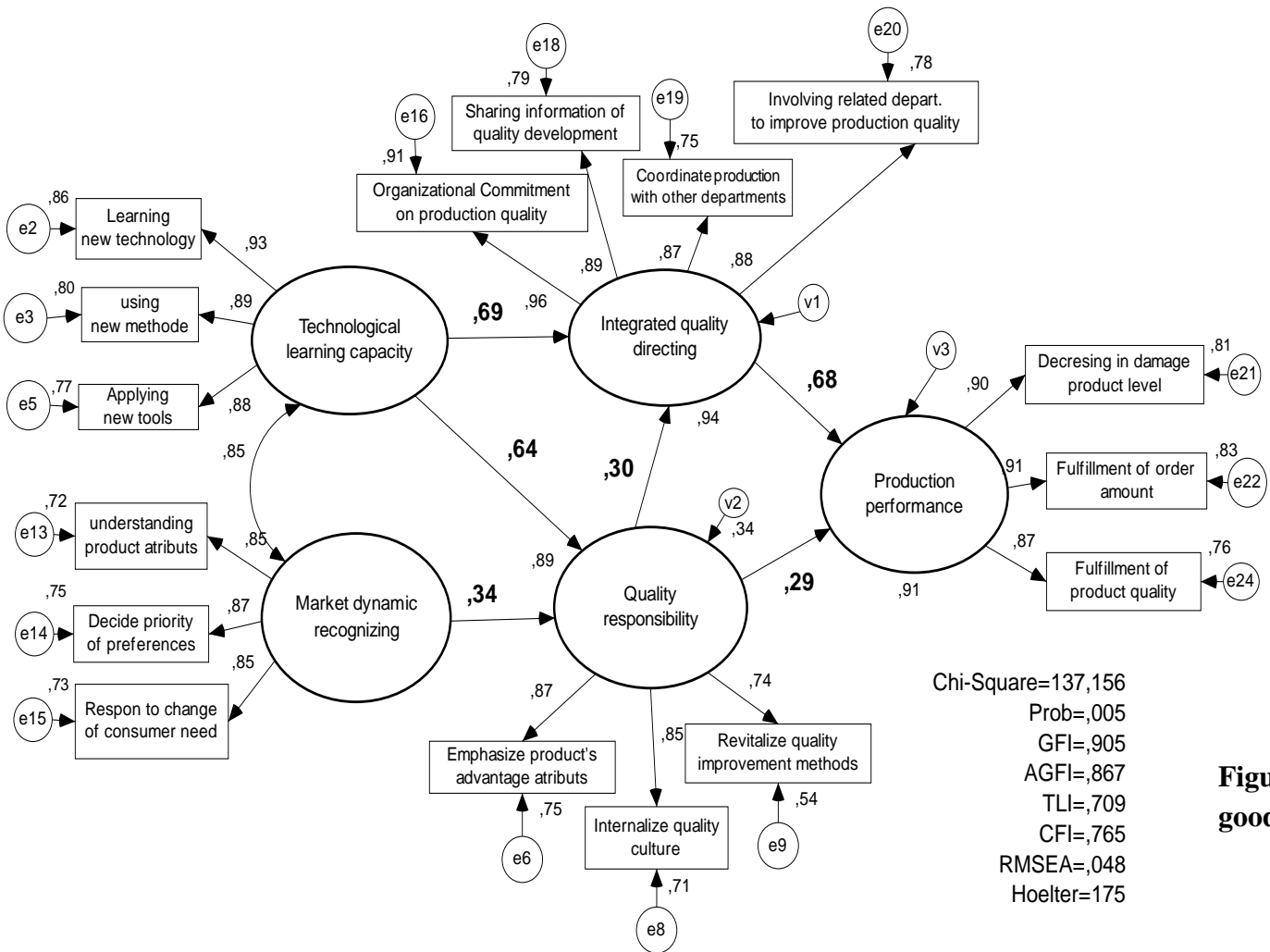
Quality responsibility has three valid indicators; there are the company's understanding of the superior attributes of the product, the implementation of a culture of quality in the production process, and product quality improvement process on an ongoing basis (Phan et al., 2011; Solis et al., 1998; Sun & Ni, 2012). Loading factor value of –indicators of quality responsibility ranged from 0.7 up to 0.8 which shows the ability of the indicator to explain quality responsibility variable. These conditions are supported by  $\alpha$ -Cronbach value for the variable quality responsibility by 0.774.

Technological learning capability is characterized by three indicators: the ability to learn new technologies, using the new method and implement new tools (Perez-arostegui & Barrales-molina, 2015; Trentin et al., 2012). The smallest factor loading value of the indicator of technological learning capacity is 0.86, so that, all indicators have explanatory power with a value of  $\alpha$  -Cronbach 0873. Market dynamic recognizing explained by the relevant indicator are the company's knowledge about product attributes that consumers want, prioritization expected product attribute preferences of consumers, and the level of the company's response to changes in consumer tastes (Narendra Wankhade & Dabade, 2007). Loading factor of indicators in market dynamic recognizing ranged from 0.7 to 0.8 which confirms the high validity.  $\alpha$ -Cronbach value for a variable of market dynamic recognizing is 0792.

There are a number of indicators that mark the production performance, these are a decrease in the level of damage to the product, the suitability of the number of orders and fulfillment of product attributes (Pavlou, 2004; Yeung et al., 2005). Factor loading of production performance indicators is very high, ranging from 0.8 up to 0.9.  $\alpha$ - Cronbach's value production performance variable is very convincing that is equal to 0.892.

## Data Analysis

Parameters of goodness of fit shows that the model is able to describe the phenomenon of the behavior of companies in internalizing the values of quality (figure 2). There are parameters that convince models such as the chi-square value which was relatively low at 137.156, probability = 0.005, GFI = 0.905, AGFI = 0867 (marginal) and RMSEA = 0048. Nevertheless, there is a goodness of fit parameters that do not support such TLI = 0.708, CFI = 0.765 and Hoelter = 175. A perfect model requires TLI and CFI values above the figure of 0.9. While the value of the required Hoelter which should have a number above the number of respondents was 182. The model was accepted as the final model due to the requirement of five parameters of the 8 parameters of the goodness of fit specified are met.



Chi-Square=137,156  
 Prob=,005  
 GFI=,905  
 AGFI=,867  
 TLI=,709  
 CFI=,765  
 RMSEA=,048  
 Hoelter=175

**Figure 2. Parameters of goodness of fit at the model**

Regression coefficient between the integrated quality directing and production performance has a value of 0.679 with  $p = 0.000$  which shows a significant relationship (table 2). This conclusion is in line with the results of previous research. Companies are able to actively involve some relevant company part in helping the production department produces better production performance (Prabhu et al., 2000). The manager is able to push the marketing and human resources to monitor the progress of customer orders achievement. The involvement of marketing in designing quality product can be the forwarding of information concerning the characteristics of competitor products that excel in the face of changing consumer tastes. In addition, resource section development can use the authority in its field in helping to resolve consumer orders such as the approval of the addition of employees, production skills training and additional incentives employee overtime production in pursuit of the delivery deadline. This fact supports the acceptance of hypothesis 1 that there is a close relationship between the integrated quality directing and production performance.

**Table 2 Structural Model**

No	Structural relationship	Regression weight	Cr	p
1	Integrated quality directing → Production performance	0.679	3.543	0.000
2	Quality responsibility → Integrated quality directing	0.298	2.057	0.040
3	Quality responsibility → Production performance	0.286	1.454	0.146
4	Technological learning capacity → Integrated quality directing	0.688	4.626	0.000
5	Technological learning capacity → Quality responsibility	0.641	5.246	0.000
6	Market dynamic recognizing → Quality responsibility	0.335	3.025	0.002

Regression coefficient between quality responsibility and the integrated quality responsibility shows a relatively small number that is equal to 0.335 but the significance value of 0.002, meets the requirements values (below 0.10). This value stresses that hypothesis 2 explaining that the intensity of the activities related to improving quality responsibility attempts to involve the important parts of the company to meet production completion. This is in line with the conclusions of several studies on the internalization of quality that highlights the importance of the leaders' level meeting to oversee the socialization of the implementation process quality (Lee & Peccei, 2008; Solis et al., 1998; Sarah J. Wu, 2015). Companies that have a higher structure in which there is a hierarchy of decision long needed more coordination efforts between departments.

Relationship between quality responsibility and production performance have the smallest value of regression coefficient that is equal to 0.286 at  $p = 0.146$ , the p-value is greater than the required (0.1). This value indicates no significant relationship between the two that the culture of

quality that has become a company's habit is not able to guarantee the fulfillment of the attributes of production (Solis et al., 1998; Zeng et al., 2015). These results differ from previous research that states automatically increase the awareness of the quality of production performance (Kaynak & Hartley, 2005; Prabhu et al., 2000). In the context of the printing industry that demands rapid rhythm of work to meet a number of orders, small and medium scale enterprises may face a difficult situation, such as material supply uncertainties and the limited skills of employees. If the company is not able to overcome these constraints, the work plan cannot be achieved. Therefore, the hypothesis 3 that suggested a link between the quality responsibility and production performance is unacceptable.

Regression coefficient value of technological learning capacity with integrated quality directing showed high at 0.688 significant at  $p = 0.000$ . This condition confirms that the company's ability to learn new technology encourages companies to manage the traffic information and coordination amongst the companies in helping to resolve schedule production orders (Bolívar-Ramos et al., 2012; Trentin et al., 2012). These results are also supported by previous research that companies are adaptive to new technologies are easier to assimilate the perception in the achievement of common objectives, including the fulfillment of the attributes of production excellence. This condition is more pronounced in industries that experienced the development of industrial technologies more quickly, such as the printing industry, from the industry were moderate in the face of technological demands. This condition leads to the conclusion that the hypothesis 4 which states a significant relationship between technological learning capacity and integrated quality directing is acceptable.

Significance relationship was also shown between technological learning capacity and quality responsibility, which both regression coefficient value of 0.641 with  $p = 0.000$ . These results are supported by previous studies which stated that the company is able to master the new technology is more aware of the importance of quality in the production process (McGuinness & Morgan, 2005). The term technology does not always refer to the complex hardware and costly but worth understanding technology in general as knowledge and skills. Companies, which acquire knowledge about the importance of the quality of working, implement activities that maintain the quality of the company's value (Perez-arostegui & Barrales-molina, 2015). It is also in line with the concept of a technological learning curve that the most intense the company to learn the technology, the greater the benefit of the company's capitalization to exploitation. Based on these facts, hypothesis 5, which believe the relationship between technological learning capacity and quality responsibility, can be accepted.

The relationship between the market dynamic recognizing and the quality responsibility to produce relatively high-value levels of significance with a regression coefficient of 0.335 at  $p = 0.002$ . Their relationship is already supported by the results of previous studies that companies that understand the changing tastes of consumers have the awareness to follow the attributes of preference (McGuinness & Morgan, 2005). Despite, following the trend of the market has the consequence that the need for preparedness weight skill of workers and the provision of appropriate production technology, but companies should be aware of the philosophy of change and adaptation (Narendra Wankhade & Dabade, 2007). The Company is able to withstand the competition if it perceives the change as part of the life cycle and adaptability as a consequence of readiness to accept change. This argument confirms the acceptance of hypothesis 6 that there is a close connection between recognizing dynamic market and quality responsibility.

## **Discussion**

The research model has been able to describe the phenomenon of the implementation of quality processes in order-based companies. The application of quality management requires the company's internal capabilities in using technology and understanding of market trends. Companies should have the power to respond to the development of adaptive technology through improved stages of production and use of the latest means of production. Analysis of technologies that have long-term effects needs to be taken to choose the right technology and to encourage improvement of the quality of the production process. The production department should not only master the methods of production, but they need to follow the tastes of the consumer so that the attribute or attributes of products are made to follow the preferences of consumers. They can also discuss actively with marketing on consumer preferences. The spirit that should be emphasized in the production is the creation of product attributes that understand the dynamics of the market.

All proposed hypothesis, almost, in this study, may be accepted. Some 6 hypotheses used to build the model of this research there are five hypotheses are accepted while the last hypothesis was not accepted. Hypothesis 3 is not acceptable to explain the lack of relationship between quality and production responsibility performance. The production department, which is committed to producing goods orders in accordance with the expected quality consumers, is not able to increase the number of qualified goods. This can be understood as printing company studies who often work on orders totaling bulk and must be completed in a short time. Most of the customers of the printing industry are companies that typically have a tight schedule of the launch of specific products or services. They order printed material to support the promotion of products or services. Notwithstanding, production has awareness of the importance of quality printing products, they are not capable of achieving the production plan for the complexity of the issues surrounding the completion of printing goods orders.

Integrated quality directing as the novelty of this study possessed a significant role in triggering the role of quality responsibility. Quality responsibility does not have the power to affect production performance. Despite this position of quality responsibility is very pronounced if the companies enable integrated quality directing role that serves as a full mediation. Companies that seek to achieve production performance should be aware that the awareness of employees about the tasks of the production cannot guarantee to reach production performance. Companies need to coordinate the production with the other parts of the company so that the problems can be fully supported by the production company and production constraints that arise can be resolved quickly.

Integrated quality directing has a strong role in ferrying antecedent variables to achieve production performance. Based on the relationship between variables which is significant, production performance improvement efforts can take three paths. The first path is through technological learning capacity → integrated quality directing → production performance. The second path is technological learning capacity → quality responsibility → integrated quality directing → production performance. The third line is through market dynamic recognizing → quality responsibility → integrated quality directing → production performance. All of the lines must pass integrated quality directing as the only way towards the production performance. Therefore, the company's performance-oriented production should apply activities that represent integrated quality directing.

## **Managerial Implication and future research**

Printing company can do various steps of suppression and improvement to improve production performance. Companies need to be more open to the presence of new printing technology through online media, printed media, or exhibition. Companies may discuss with technology experts to explain how far these new technologies can help improve the quality and productivity of production (Baker & Sinkula, 1999). Companies should equip the production part with knowledge of consumer behavior on an ongoing basis so that they are able to translate the wishes of consumers in the form of corresponding product attributes.

Responding to the rapid development of printing technology, companies need to intensify production skills enhancement through the involvement of employees involved in training or workshops. Companies should be aware that the development of the market, both with regard to suppliers, competitors, and customers, is very dynamic, so companies need to enrich their knowledge about the quality of the production process. Companies can internalize the quality of production through the awards giving to employees who excel. Companies can disseminate a culture of quality production through production quality achievement evaluation.

Companies need to regularly scheduled meetings between important parts of a company: division of marketing, finance, human resources, and of course, its own production division to discuss the development of production and provide troubleshooting to support production. Companies can create a cross-sector task force for the completion of certain orders if the project is very complex and has a critical time. Task force members, who are comprised of various fields, allow every member to communicate the necessary support to the head of both the head of marketing, finance, and resources.

Suggestions for further research can be grasped based on the weakness of the study. Subsequent research can maximize interview method to ensure the comprehensive questionnaires. Hoelter value by 175 is fewer than the number of respondents is 182 inform the limitations of the data. The total amount of data that can be collected at the beginning of the study is actually quite a lot, 245. After going through the stages of data filtering, 67 respondents should be eliminated because of incomplete questionnaires, inconsistent answers or answers that tend to be outliers. Amounts of eliminated data can be avoided if the method of interviews with respondents were done.

Various unexplored variable antecedents in this study can be used to develop a research model. Achievement of the goodness of fit from the model is not optimal because of many ineligible parameters. The next research can involve many other variables with regard theoretical foundation and logic of expertise. Other recommended variables such as production flexibility, information technology, and intra-organization communication.

**Item questioner**

**(Options of question follow a Likert scale, 1-10)**

Integrated quality directing

- Companies keep the commitment of all organizational parts in production process quality achievement
- Companies attempt to pursue information sharing on the development of production process quality
- Companies relate the development of production process quality with the other parts of companies
- Companies involve all parts of companies in enhancing production process quality

Technological learning capability

- Companies are able to learn new technology
- Companies are able to well utilize new method
- Companies are able to apply new means

Market dynamic recognizing

- Companies ascertain product attribute from customer
- Companies determine the priority of product attribute from customer
- Companies respond the changing of customer preferences

Quality responsibility

- Companies always accentuate the important of superior product attributes
- Companies apply the culture of excellent production process quality
- Companies employ any ways to improve production process quality

Production performance

- Declining level of broken product
- Suitability of order quantity in production part
- Fulfilling of order quality in production part



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**QUALITY ASSURANCE PRACTICES OF FOOD MANUFACTURERS: A  
COMPREHENSIVE STUDY BETWEEN SMALL, MEDIUM AND LARGE COMPANIES**

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**Abstract**

The high incident rate reported on the issue of foodborne disease in Malaysia had alerted the society on the importance of food safety. As such, quality assurance (QA) practices or systems were implemented as an alternative in assuring the food product quality. The extensive review identified that there is a lack of investigating food quality assurance through an integrated approach. This study intended to fill the gap by identifying the level of quality assurance practices implemented by the small, medium and large food manufacturing companies in Malaysia. A survey questionnaire was constructed for data collection. Data was then analyzed using SPSS version 22.0 by first, tested with reliability analysis. T-test was conducted by based on the quality assurance practices components and the types of QA practices by comparing between small companies, medium companies, and large companies. Different levels of companies were discovered emphasized on the different quality assurance practices. Statistical differences were found between the small companies with medium companies and small companies with large companies. However, no statistical differences observed between medium companies with large companies. This study carried an important message to food industry where food manufacturers are able to realize the level of QA practices implemented and at the same time, facilitate in benchmarking purpose by further strengthen the quality assurance practices.

**Keywords:** *Quality assurance, Food industries, HACCP, TQM, GMP, GHP.*

**Introduction**

The Centres for Disease Control and Prevention (CDC, 2013) estimated that there were 48 million Americans suffered from the foodborne disease in the United States. The high incident rate of 56.25 reported in the Malaysia Health Facts 2012 indicated that the issue of foodborne disease is a challenging issue in Malaysia (Ministry of Health, 2012). The outbreak of this disease starts to draw public concern about the food safety properties. Nowadays, it is a norm that food safety was considered as the main attribute during food purchasing (Alvarez, 2010). Consequently, quality assurance practices or the quality assurance systems were adopted worldwide to assure for the food quality and food safety (Milios et al., 2013; Kafetzopoulos et al., 2013; Spadoni et al., 2013). Food quality assurance aims at ensuring the food safety and suitability for human consumption (Achilleas & Anastasios, 2008). In conjunction with this purpose, the scope of food quality assurance shall cover the whole food supply chain, starting from the raw materials, in process manufacturing and surfaces in contact with food (Alli, 2004; DSM, 2009a).

The quality assurance system refers to the systematic system implemented to assure, control and monitor the product quality (Manghani, 2011). It can be classified into the obligatory system and voluntary system (Sikora & Strada, 2006). The obligatory system such as Good Manufacturing

Practices (GMP), Good Hygiene Practices (GHP), and Hazard Analysis Critical Control Points (HACCP) emphasized on food safety. On the other hand, the voluntary system focused on food quality. An example of voluntary system is the ISO 9001 system.

Over the years, practitioners and academicians translated the term quality into different meaning (Ng, 2012). The term quality refers to the product features and characteristics, particularly in satisfying the intended requirements (DSM, 2009b). In the context of the food product, quality is categorized into two major categories: (i) the intrinsic quality attributes and (ii) the extrinsic quality attributes (Veale & Quester, 2009; Fandos & Flavian, 2006). The intrinsic attributes refer to the measurable product properties (Veale & Quester, 2009; Fandos & Flavian, 2006). It covers the product safety and reliability, the nutritional properties and wholesomeness, the sensory properties, shelf life and etc (Luning et al., 2002; Krissoff et al., 2002). In contrast, the extrinsic attributes refer to the alterable product properties (Veale & Quester, 2009; Fandos & Flavian, 2006). It is the image variables, the brand name, product price, certification, the country of origin and etc (Veale & Quester, 2009; Fandos & Flavian, 2006). Different quality attributes responsible for the different aspects of a food product. Food safety, as an intrinsic property responsible for the safety of a product. Failure in food safety shall result in the foodborne disease.

The extensive review over quality assurance identified that there are very limited studies in term of food related field and in Malaysia context. Study on quality management practices was conducted with regard to the small, and medium food manufacturing companies in Malaysia. This study was limited to TQM alone and the practices adopted by large companies were still unknown.

In the study demonstrated by Anuar and Yusuff (2011) on the best manufacturing practices of Malaysia small medium enterprises. The large companies were not included and the population was limited to the ISO 9000 certified companies only.

Abusa and Gibson (2013a) studied on the TQM implementation level of the small medium and large Libyan manufacturing companies with varies industrial groups. This included food, minerals, electronics, textiles and furniture and etc. This study, however, does not reveal the Malaysia situation and the implementation level in term of an individual industry were unknown.

Consequently, there is a lack of investigating quality assurance through an integrated approach. Further research is required by focusing on a more specialized sector, such as food manufacturing industry. This is further supported by the high incidence rate of 56.25 reported in the Malaysia Health Facts 2012 (Ministry of Health, 2012). In addition, the quality assurance practices implementation level of the Malaysia small, medium and large companies is still remained in the grey area. The objective of this study is therefore to identify the level of quality assurance practices implemented by the small, medium and large food manufacturing companies in Malaysia.

## **Materials and Method**

### **1. Population and Sample**

This study covered all levels of companies ranging from small companies, medium companies, and large companies. These companies either with or without QA system certified were included where there shall have no significant difference in the end result. This was supported by Prajogo and Brown (2004) who discovered no significant difference between QA system certified companies and non-certified companies. There were 306 companies identified from the business directory of Small Medium Enterprise (SME) Corporation Malaysia and Federation of Malaysian

Manufacturers. The survey questionnaires were sent to 306 companies with targeted respondents to Managing Director, QA/ QC Manager, Operation Manager, and QA/QC Executive.

**2. Survey Questionnaire**

A survey questionnaire was constructed via an extensive literature review. The commonly applied components and items of QA practices were adopted in this study. The questionnaire composed of (i) 11 questions on respondents’ demographic information, and (ii) 72 items on the quality assurance practices components. Respondents were required to answer the questions by indicating the implementation level of QA practices based on a 5 points Likert Scale with scale 1 = very low and scale 5 = very high.

**Table 1. Summarization of quality assurance practices (QAP) components from previous studies**

Types of QAP	Components	Supported Studies
HACCP	Hazard analysis	Manning & Soon (2013a)
ISO 9001	Top management commitment	Jain & Singh Ahuja (2012); Prajogo et al. (2012); Sitki Ilkay & Aslan (2012); Anuar & Yusuff (2011)
	Customer management	Jain & Singh Ahuja (2012); Prajogo et al. (2012); Psomas et al. (2012); Sitki Ilkay & Aslan (2012); Anuar & Yusuff (2011)
	Employee management	Jain & Singh Ahuja (2012); Anuar & Yusuff (2011)
	Supplier management	Jain & Singh Ahuja (2012); Prajogo et al. (2012); Anuar & Yusuff (2011)
	Process management	Jain & Singh Ahuja (2012); Prajogo et al. (2012); Anuar & Yusuff (2011)
	Quality control	Jain & Singh Ahuja (2012); Anuar & Yusuff (2011)
	Continuous improvement	Jain & Singh Ahuja (2012); Psomas et al. (2012); Anuar & Yusuff (2011)
TQM	Leadership	Talib et al. (2014); Abusa & Gibson (2013b); Psomas & Fotopoulos (2010)
	Customer focus	Talib et al. (2014); Abusa & Gibson (2013b); Laohavichien et al. (2011); Psomas & Fotopoulos (2010)
	Human resource management	Talib et al. (2014); Abusa & Gibson (2013b); Laohavichien et al. (2011); Psomas & Fotopoulos (2010); Abdullah (2010)
	Supplier quality management	Talib et al. (2014); Abusa & Gibson (2013b); Laohavichien et al. (2011)
	Process management	Talib et al. (2014); Abusa & Gibson (2013b); Psomas & Fotopoulos (2010)
	Continuous improvement	Abusa & Gibson (2013b)

## Results

### 1. Reliability analysis

Reliability analysis was conducted using Cronbach's Alpha. An overall alpha value of 0.842 was obtained with alpha coefficient ranged from 0.821 to 0.964, indicating for a high reliability.

**Table 2. Reliability analysis**

Variable	No. Of Item	No. of Item Deleted	Cronbach's Alpha
Leadership (LEA)	10	None	0.885
Customer focus (CUS)	8	None	0.837
Employee management (EMP)	10	None	0.938
Supplier management (SUP)	7	None	0.821
Process management (PRO)	14	None	0.964
Quality control (QC)	15	None	0.957
Continuous improvement (CON)	8	None	0.891
<i>Overall reliability</i>	72	<i>None</i>	<i>0.983</i>

### 2. Demographic characteristics

The respondents of this study comprised mainly from the manufacturing of bakery products (34.6%), other food ingredients (30.8%), and manufacturing of cocoa, chocolate and sugar confectionery (26.0%). The remaining composed of the manufacturing of dairy products (5.8%), grain mill products (1.9%), and vegetable and animal oils and fats (1.0%) respectively.

According to the definition guideline published by the SME Corporation Malaysia on the definition of micro, small and medium companies responded companies were categorized into small and medium respectively. For the purpose of this study, a company with a sales turnover of more than RM 50 million or with full-time employee more than 200 people was considered as a large companies as the definition guideline does not define the meaning of large company. This study therefore composed of small companies (41.3%), medium companies (28.8%) and large companies (29.8%).

### 3. T-test analysis based on QA practice components

Comparing between small companies and medium companies, the statistically significant difference observed in the leadership component ( $p < 0.001$ ) and process management component ( $p < 0.05$ ). Customer focus, quality assurance, and continuous improvement indicated significant difference at  $p < 0.01$ . There were no significant different discovered between employee management and supplier management.

Statistical comparison between small and large companies showing a significant difference in leadership component ( $p < 0.001$ ) where the large companies had a higher extent of implementation in leadership component. Customer focus, process management, and quality assurance components were significantly different between small and large companies at  $p < 0.05$ . However, there were no significant differences observed in the employee management, supplier management, and continuous improvement.

No significant different observed between medium and large companies in the implementation extent among all components of the quality assurance practices measured at any significant level.

**Table 3. Independent T-test for QA practices components between small companies and medium companies (NSmall = 43; NMedium = 30)**

Component of QAP	Company scale	Mean	Std. Dev.	t-value	Sig.
LEA***	Small	3.96	0.60	-3.341	0.001
	Medium	4.39	0.45		
CUS*	Small	4.02	0.55	-1.892	0.06
	Medium	4.23	0.29		
EMP	Small	3.72	0.73	-1.042	0.30
	Medium	3.89	0.62		
SUP	Small	3.76	0.66	-1.167	0.25
	Medium	3.93	0.53		
PRO**	Small	4.10	0.68	-2.305	0.02
	Medium	4.43	0.48		
QUA*	Small	4.12	0.58	-1.764	0.08
	Medium	4.37	0.62		
CON*	Small	3.93	0.71	-1.702	0.09
	Medium	4.20	0.62		

Note: \* significant at  $p < 0.1$ , \*\* significant at  $p < 0.05$ , \*\*\* significant at  $p < 0.001$

**Table 4. Independent T-test for QA practices components between small companies and large companies (NSmall = 43; NLarge = 31)**

Component of QAP	Company scale	Mean	Std. Dev.	t-value	Sig.
LEA***	Small	3.96	0.60	-4.84	0.000
	Large	4.55	0.38		
CUS**	Small	4.02	0.55	-2.31	0.02
	Large	4.27	0.31		
EMP	Small	3.72	0.73	-1.43	0.16
	Large	3.94	0.47		
SUP	Small	3.76	0.66	-0.77	0.45
	Large	3.87	0.41		
PRO**	Small	4.10	0.68	-3.01	0.004
	Large	4.53	0.50		
QUA**	Small	4.12	0.58	-2.22	0.03
	Large	4.39	0.44		
CON	Small	3.93	0.71	-1.18	0.24
	Large	4.11	0.49		

Note: \* significant at  $p < 0.1$ , \*\* significant at  $p < 0.05$ , \*\*\* significant at  $p < 0.001$

**Table 5. Independent t-test for QA practices components between medium and large companies (N<sub>Medium</sub> = 30; N<sub>Large</sub> = 31)**

Component of QAP	Company scale	Mean	Std. Dev.	t-value	Sig.
LEA	Medium	4.39	0.45	- 1.48	0.14
	Large	4.55	0.38		
CUS	Medium	4.23	0.29	- 0.59	0.56
	Large	4.27	0.31		
EMP	Medium	3.89	0.62	- 0.30	0.77
	Large	3.94	0.47		
SUP	Medium	3.93	0.53	0.55	0.58
	Large	3.87	0.41		
PRO	Medium	4.43	0.47	- 0.81	0.42
	Large	4.53	0.50		
QUA	Medium	4.37	0.62	- 0.18	0.86
	Large	4.39	0.44		
CON	Medium	4.20	0.62	0.69	0.49
	Large	4.11	0.49		

Note: \* significant at  $p < 0.1$ , \*\* significant at  $p < 0.05$ , \*\*\* significant at  $p < 0.001$

#### 4. T-test analysis based on types of QA practice

Comparing between small and medium companies, the ISO 9001 was observed to have greater implementation level in the medium companies (mean = 4.24) compared to the small companies (mean = 3.97) at  $p < 0.1$ . The same thing is observed in the TQM practices, in which the medium companies (mean = 4.06) seem to be extensively implementing the TQM system compared to the small companies (mean = 3.84) at  $p < 0.1$ .

No significant difference observed in the implementation level of GMP and HACCP between the small companies and medium companies.

**Table 6. Independent T-test for types of QA practices between small companies and medium companies (N<sub>Small</sub> = 43; N<sub>Medium</sub> = 30)**

Types of QA system	Company Scale	Mean	Std. Dev.	t-value	Sig.
GMP	Small	4.08	0.62	0.74	0.39
	Medium	4.37	0.54		
HACCP	Small	4.06	0.64	0.98	0.33
	Medium	4.43	0.54		
ISO 9001*	Small	3.97	0.57	3.47	0.07
	Medium	4.24	0.44		
TQM*	Small	3.84	0.60	3.73	0.06
	Medium	4.06	0.44		

Note: \* significant at  $p < 0.1$ , \*\* significant at  $p < 0.05$ , \*\*\* significant at  $p < 0.001$

A significant difference was shown at the implementation level in term of the ISO 9001 system and the TQM program. Large companies were observed to have higher implementation level in



both ISO 9001 (mean = 4.30) and TQM (mean = 4.10) compared to the small companies (mean for ISO = 3.97, mean for TQM = 3.84) at  $p < 0.05$ . On the other hand, no significant difference observed in term of the implementation level of the GMP and HACCP system.

**Table 7. Independent T-test for types of QA practices between small companies and large companies (NSmall = 43; NLarge = 31)**

Types of QA system	Company Scale	Mean	Std. Dev.	t-value	Sig.
GMP	Small	4.08	0.62	4.14	0.46
	Large	4.36	0.45		
HACCP	Small	4.06	0.64	2.76	0.10
	Large	4.45	0.47		
ISO 9001**	Small	3.97	0.57	8.52	0.005
	Large	4.30	0.35		
TQM**	Small	3.84	0.60	9.31	0.003
	Large	4.10	0.35		

Note: \* significant at  $p < 0.1$ , \*\* significant at  $p < 0.05$ , \*\*\* significant at  $p < 0.001$

Medium companies and large companies showing no statistical difference in all types of quality assurance practices measured at all significant levels. It was observed that the large companies had a slightly greater level of quality assurance practices implementation in term of HACCP, ISO 9001 and TQM compared to the medium companies. An exception was discovered in the GMP practices whereby the medium companies were found to have slightly greater implementation level.

**Table 8. Independent t-test for types of QA practices between medium and large companies (NMedium = 30; NLarge = 31)**

Types of QA system	Company Scale	Mean	Std. Dev.	t-value	Sig.
GMP	Medium	4.38	0.54	1.24	0.30
	Large	4.37	0.45		
HACCP	Medium	4.43	0.54	0.40	0.53
	Large	4.45	0.47		
ISO 9001	Medium	4.24	0.44	0.80	0.38
	Large	4.30	0.35		
TQM	Medium	4.06	0.44	1.07	0.31
	Large	4.10	0.34		

Note: \* significant at  $p < 0.1$ , \*\* significant at  $p < 0.05$ , \*\*\* significant at  $p < 0.001$

### Discussions

Comparing among different sizes of company, large companies achieved an overall mean value which is highest among the medium and small companies. All sizes of companies were revealed the emphasis on different quality assurance practices components. The small companies found to be more focused (the top three highly implemented QA practices component) in the quality control, process management, and customer focus. The medium companies emphasized in

process management, leadership, and quality control; whereas the attention of the large companies was on the leadership components, process management, and quality control. This is supported by Talib and co-workers (2013) reported that SMEs emphasized more in the customer focus and quality assurance. The results were also in line with the study conducted by Islam & Karim (2011) who revealed that the SME companies emphasized more in the product quality compared to the large companies. This is further supported when the large companies were found to have a higher implementation level in the organization's quality policy (Islam & Karim, 2011). In this study, the company quality policy was placed under the leadership component; thus, suggested that large companies emphasized more in the leadership components.

Surprisingly, the implementation level was relatively low in the supplier management across all sizes of company. One item of the supplier management, namely 'Supplier are involved in product development and improvement' was marked low by respondents. The reason might be caused by lack of interest from food manufacturers in revealing the product development and improvement to third parties because of privacy and confidentiality. The same finding was observed in previous studies conducted by Anuar & Yusuff (2011).

In term of the level of implementation based on the types of quality assurance practices, large companies indicated an overall highest level in all types of quality assurance practices, followed by the medium companies. The small companies recorded with the lowest level of implementation. Both the medium and large companies focused more on the HACCP system and GMP practices. On the other hand, small companies emphasized more on the GMP practices.

Significant different was found in the implementation level of quality assurance practices components between the small companies with the medium companies, and the small companies with the large companies. However, no significant observed between the medium companies and large companies. Same findings observed while comparing the implementation level based on the types of quality assurance practices among the small companies, medium companies, and large companies. This suggests that the implementation level was found different in the small companies compared to the medium and large companies; no significant difference in the case of medium and large companies. This is in line with the study conducted by Abusa and Gibson (2013a) in identifying the level of TQM implementation in the Libyan manufacturing companies. They discovered that TQM implementation level showing no significant different between the medium and large companies. The reason might be explained by the experience of the companies involved in the operation. The majority of the respondents (more than 60%) had been in operation line for 20 years and above. Even if the company size is medium, the food quality assurance practices were already well established and implemented.

## **Conclusion**

The implementation level of QA practices components and types of QA practices components were found highest in large companies, followed by medium companies and small companies.

As the focus of this study is in the food manufacturing industries, data collected might not representable to other manufacturing industries. This was because the quality assurance practices identified in this study refers to the quality standard of a food product; thus, might not suit the actual situation of other manufacturing industries.

Further research can be conducted by emphasized on a single specialized subsector. For example, the snack food manufacturing industry. Recommended industries for future research are to the rubber based industry or wood based industry which is of the main interest in the manufacturing sector in Malaysia.

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## TAX MANAGEMENT, COST OF DEBT, AND CORPORATE GOVERNANCE

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### Abstract

This study examines the relationship between tax management and the cost of debt capital. More importantly, the paper probes managerial opportunistic theory on the relationship between the tax management and the cost of debt by evaluating the effects of corporate governance as an element that is expected to have a mitigating impact on the relationship.

This research employs financial and corporate governance data, including ownership structure, from companies in Indonesian Stock Exchange from the year 2008-2012. The result shows that tax management has a positive association with the cost of debt capital. This provide affirmation that tax management is perceived by lenders as having greater information asymmetry which leads to higher information risk, hence higher cost of debt capital. Moreover, this study find evidence that family ownership and corporate governance have a moderating role on the relation between tax management and cost of debt capital.

**Keywords:** *corporate governance, cost of debt, tax management, ownership structure,*

### Introduction

Paying taxes as little as possible is an instinctive act of every taxpayer, be it individual or business entity. Nevertheless, a lot of studies find that tax management behavior, especially in companies, have impacts on the cost of capital that needs to be borne by the companies. Tax management can lower the cost of capital, or on the contrary can cause companies to bear a higher cost of capital (Dhaliwal et al., 2008; Graham & Tucker, 2006; Lim, 2011).

Companies that carry out tax management in the form of tax avoidance face an increasing information risk that must be borne by the shareholders, causing a higher rate of return that is expected of the company shareholders, which result in the higher cost of equity capital for the company (Dhaliwal et al., 2008). Tax management, according to Slemrod (2004) is an action that creatively attempted by companies in order to bear as little as possible tax expenses payable to the state. Such actions, in his opinion, would imply two things: hidden actions and hidden information, which means a lower level of transparency, and an increasing information asymmetry between managers and stakeholders.

On the other hand, tax management apparently can also affect the reduction of the cost of capital through the substitution effect on the use of debt (substitution on the utilization of interest expense as an income tax deduction) as a source of corporate funding, thus can lower the company cost of debt capital (Graham & Tucker, 2006 ; Lim, 2010; Lim, 2011).

Tax management, just like other management decisions, can be efficient for the company – for example the substitution effect on the use of debt through interest expense as an income tax deduction (Lim, 2011; Graham & Tucker, 2006); however, it can also be opportunistic, i.e. with the occurrence of rent diversion by the management. Rent diversion, according to Jensen and Meckling (1976) is a management behavior that seeks personal gain, and therefore need to be attended with caution so it will not interfere with the interests of shareholders and other

stakeholders. Tax management by the managers can incur separate problems, i.e. the decrease of corporate transparency (Desai & Dharmapala 2006; Desai et al., 2007; Desai & Dharmapala, 2009).

Supporting the above arguments of Desai & Dharmapala (2006), previous research has also find that companies committing tax evasion, which means they possess a low degree of corporate transparency, tend to carry out earnings management (Frank et al., 2009) and have low earnings quality (Tang & Firth, 2012). Whilst, earnings quality also has an impact on the degree of cost of debt capital borne by the companies (Francis et al., 2005). Earnings as a specific information for a company's condition can affect the information risk faced by investors and creditors, which have an impact on the degree of the cost of capital charged to the company (Francis et al., 2004; 2005).

The purpose of this study is to examine whether tax management increases the information asymmetry between a company and its loan capital providers, thus increasing the interest expense charged by the lenders to the company. Furthermore, this study aims to examine whether the effect of tax management towards the cost of debt capital occurs directly, or this effect occurs through the effect of tax management on the decrease in earnings quality, which is then responded by the lenders with the increase of the cost of debt capital charged to the company.

The research findings of Lim (2011) and Moore (2012) show that corporate governance has a contribution in controlling actions taken by the company management. Both studies found that institutional ownership structure has a monitoring role on the management, especially when the management decides to carry out tax management. In addition, Desai & Dharmapala (2006) found that a company's corporate governance (CG) plays a role in whether the company take decisions to perform rent diversion or tax management in the form of tax sheltering. CG also reduces the negative effect occurs between tax management and the company value (Wahab & Holland, 2012).

In developing countries, concentrated and pyramidal family ownership structures are more common (Fan & Wong, 2002; LaPorta et al., 1999; Diyanty, 2012); and thus controlling shareholders have exceptionally strong roles, with potentials of expropriation by the controlling shareholders against the non-controlling shareholders. Therefore, this study will also examine the role of the controlling shareholder, both owned by family and not, as well as the second largest controlling shareholder (Attig et al., 2008) in mitigating the effect between tax management and the cost of debt capital. The last purpose of this study is to test the role of corporate governance implementation in affecting the effect of tax management on the cost of debt capital.

## **Literature Review and Hypothesis Development**

### **1. Tax Management Definition**

Tax management is defined by Santoso & Rahayu (2013) as an extensive effort continuously made by a taxpayer so that everything related to taxation affairs can be managed well, economically (tax administration task is obtained with a relatively cheap price), effectively (able to maintain the minimum tax payment when the tax liabilities are checked by the tax authorities) and efficiently (efficiently manage to implement a saving strategy without incurring problems and expenses in the future) by the taxpayer.

In this definition, tax management does not distinguish whether the actions taken by the company are still within the legal bounds allowed by the tax regulations (tax avoidance), or actions that lead to tax crimes and are illegal (tax evasion). Gunadi (1997), as cited in Santoso & Rahayu (2013), suggests that the above-mentioned legal bounds in tax management are actually a

juridical concept whose legality will only be known for certain by the presence of a decision of a judicial authority.

## 2. Tax Management and the Cost of Debt Capital: Previous Studies

One source of corporate funding is debt financing. Elements of tax cause the debt financing to be preferred by companies as compared to equity financing, as this source of funding can reduce the company's tax debts (through interest expense) and hence maximize the company value. Interest expense borne by the company as a consequence of the debt capital is recognized by tax charges, while dividends on equity capital are not included in the income tax deductions.

Many studies that had been conducted to examine the relationship between BTD as a proxy of various forms of tax management – be it tax avoidance, tax evasion or tax sheltering – and the cost of debt (COD) found a substitution effect between the use of debt as sources of funding and savings from tax (Graham & Tucker, 2006; Lim, 2010). Graham and Tucker (2006) found that companies that carry out tax sheltering appear to have lower borrowing costs in comparison to companies that do not perform tax sheltering. Meanwhile, Lim (2010) generalized such findings by mentioning the presence of substitution effect between tax avoidance measures and the use of debt as a source of corporate funding. The research mentioned that companies that take advantage of tax avoidance as a substitution of debt will experience the benefits of the increased quality of corporate debts, the decreased inherent risk, which thus in general lower the degree of company COD.

On the other hand, tax management will reduce corporate transparency and increase information asymmetry; thus increasing the information risk borne by the lenders. The lenders, who perceive that companies receiving loans are quite risky to return their capital, will charge a high cost of capital in the form of interest. Therefore, the lenders' perception of risks they will have to bear for the capital they lend to the company will determine the amount of the cost of loan capital (COD) which must be borne by the company. Bhojraj & Sengupta (2003) mention that information asymmetry and interest rates are the main factors that affect the level of the interest rate. From the above arguments, the first hypothesis is as follows:

***H<sub>1</sub>: Tax management positively affects the company cost of debt capital.***

## 3. The Effect of Tax Management on the Cost of Debt Capital through Earnings Quality

Earnings quality is an important concept in the world of accounting and finance (Dichev et al., 2013). Earnings, according to Dechow et al. (2010) is considered to be of quality if it can provide information about the company financial performance which is relevant to certain decision-making by certain decision-makers.

Earnings quality, according to Dechow et al. (2010) can be categorized into:

1. Income properties, which include earnings persistence measurement, discretionary accruals with its various methods of measurements and quality of accruals.
2. Market perspective, i.e. the ability of reported earnings to reflect the company's true earnings. One of the measures included in this category is value relevance, be it measured by time series or cross sectional.

Previous studies indicate that the difference between accounting profit and taxable profit not only implies the presence of tax management – both those still within legal bounds (tax avoidance) or the ones that are illegal (such as tax evasion) – but also the potential of earnings management behavior (Frank et al., 2009; Tang & Firth, 2011). Frank et al. (2009) find that companies that



were aggressive in their tax affairs apparently also reported their financial position aggressively. Companies that carried out tax management, apparently also carried out earnings management.

Additionally, another study find that companies with a high difference between their accounting profit and taxable profit (especially those that are abnormal – i.e. caused by things other than the difference between the accounting and the tax regulations) also showed a low level of earnings persistence (which means earnings quality) (Tang & Firth, 2012; Blaylock et al., 2010). Investors can therefore assess a company's earnings quality through the difference between its accounting profit and taxable profit (Blaylock et al., 2010).

Earnings quality is further related to the cost of loan capital (Francis et al., 2004; Francis et al., 2005). Low earnings quality causes information risk, i.e. when investors do not have enough information in their decision making process. A study of Francis et al. (2005) found that with the increase of information risk, lenders will experience a lack of certainty on their cash flows in the future. This increase in information risk will raise the cost of capital, including the cost of debt capital (by the lenders).

Previous studies have shown that adequate information, both quantitative and qualitative, could reduce the cost of equity capital (Botosan, 1997) as well as the cost of loan capital (Sengupta, 1998). Good earnings quality will fulfill the lenders' needs of earnings information provided by the company in the financial statements. From these explanations, the second and third hypothesis are as follows:

***H<sub>2</sub>: Tax management negatively affects company earnings quality.***

***H<sub>3</sub>: Earnings quality negatively affects the cost of debt capital.***

#### **4. Corporate Governance, the Cost of Debt Capital and Tax Management**

In general, ownership structures in countries with developing economies and in most developed countries are still focused on several controlling shareholders, which primarily are families. Only in the United States and the United Kingdom alone, which possess very advanced capital markets, have widespread ownership structures (LaPorta et al., 1999).

LaPorta et al. (1999) mention that the concentrated ownership found in many countries is a consequence of the lack of legal protection to minority shareholders in countries with concentrated ownership structures. The said study discovered that in average, the concentrated ownership are mostly found to be held by family or government.

Concentrated ownership may also signify a concentrated control by the company's ultimate owner (UO). In this kind of structure, the agency problem often occurs between the controlling shareholders (UO) and non-controlling shareholders (LaPorta et al., 1999; Attig et al., 2008).

This form of ownership can induce the occurrence of the entrenchment effect, i.e. the ability of the controlling shareholder that holds more control rights than cash flow rights to control the company opportunistically, which thus can harm the minority shareholders' interests (Fan & Wong, 2002). The entrenchment problems against the minority shareholders include expropriation of interests of the minority shareholders rights through related party transactions (Diyanty, 2012), or through the achievements of the objectives that benefit the UO but not the minority shareholders (Fan & Wong, 2002).

With the above potential of entrenchment, concentrated ownership held by controlling shareholder allegedly can encourage a higher degree of information asymmetry that causes a greater positive effect of tax management on the cost of debt capital. Therefore, the next hypothesis is as follows:

***H<sub>4a</sub>: A higher ratio of control rights to cash flow rights held by the company ultimate owner will further strengthen the positive effect of tax management on the cost of debt capital.***

Many studies had been conducted to observe the impact of family ownership on company performance. Companies with family ownership are deemed to have higher financial profitability as compared to other companies, especially if the family owners are actively involved in the company management (Maury, 2006). This is because the owners want to perpetuate the company's glory so it can be inherited to other family members.

Nevertheless, family ownership which is usually accompanied by the pyramidal ownership structure (Claessens & Yutroglu, 2002) can also carry expropriation risk to minority shareholders for the sake of the company controlling shareholder's personal gains. Pyramidal ownership structure can cause a (group of) controlling shareholder(s) to have a greater power control than the number of shares owned, thus allowing the UO to determine the company's financial and operating policies. In Indonesia, ownership structure is also centralized and dominated by family ownership, making it possible for the UO to take part in determining management policies, such as through related party transactions (Diyanty, 2012).

In connection with tax payment, Chen et al. (2010) indicate that family companies in the United States market apparently tend to not be tax aggressive. This trend, in their opinion, is a result of those companies' efforts to avoid the high capital costs they need to bear as a result of the relationship between the family controlling shareholders and other shareholders. In addition, family firms tend to maintain the reputation and relationship with the authorities in order to ensure the survival of the family business in the long term.

The above arguments form the below hypothesis 1b:

***H<sub>4b</sub>: The positive effects of tax management on the cost of debt capital will be different in family-owned companies in comparison with non-family-owned companies.***

Attig et al. (2008) found the role of the second largest shareholder aside from the ultimate owner (SLS) is reducing agency conflicts and information asymmetry between UO and minority shareholders. This monitoring role of SLS in the study of Attig et al. (2008) was significantly found in companies in developing countries as compared to companies in developed countries. This is due to the weak institutional environment (protection of shareholders and law enforcement) in developing countries (Attig et al., 2008).

Although SLS can weaken the agency conflicts between UO and minority shareholders, the presence of SLS may also have an opposite effect. This may happen if the SLS appears to have interests that are in line with the interests of the management (and UO), which are different from the common interests of minority shareholders (Kim et al., 2007); or if the SLS appears to have an agenda of his/her own, apart from the objective to increase shareholder value (Thomsen et al., 2006).

Hypothesis that test the role of SLS in affecting the positive effect of tax management on the cost of debt capital is a two-tailed hypothesis as follows:

***H<sub>5c</sub>: The positive effect of tax management on the cost of debt capital will be different with the presence of the second largest shareholder.***

CG mechanism is deemed as one of the most capable ways of suppressing agency problems, be it the ones occur between management and shareholders, or the expropriation of minority shareholders by controlling shareholders.

Previous studies show that companies with good CG will be able to suppress the management tendency to do rent diversion and tax evasion measures (Desai & Dharmapala, 2006); as well as can also moderate the relationship between the tax planning and the company value (Desai & Dharmapala, 2009). Based on the arguments above, hypothesis 1d was made as follows:

*H<sub>5d</sub>: Stronger CG mechanism in a company will weaken the positive effect of tax management on the cost of debt capital*

## Research Methods

### 1. Sample Selection

The population of this study is all companies listed on the Indonesia Stock Exchange from 2008 up until 2012. From that population, samples were then selected using purposive sampling method with criteria as follows:

1. Have complete data to meet all the components required to be a regression variable of this study.
2. During the observation period, the company did not have negative equity, as companies with negative equity are usually companies facing financial distress.
3. During the observation period, was not involved in any corporate activities such as mergers, acquisitions and divestitures, in order to segregate the company financial data as the pure results of operations and not due to other corporate actions as mentioned above.
4. Companies that are not specifically regulated in the tax regulations:
  - Companies that are not final income taxpayers (Wajib Pajak PPh Final), as regulated in Article 4 Clause (2) of Undang - Undang No. 36 of 2008 (Income Tax Act), i.e. construction service business, real estate and land and/or buildings rental.
  - Companies that are not included in the groups of companies which in the tax provisions are allowed to form and nurture a reserve fund as regulated in Article 9 Clause (1) Letter C of Undang – Undang No. 36 of 2008 (Income Tax Act).

Table 1 outline the sample selection process. The data is obtained from sources such as: Data OSIRIS, Data Stream, Indonesia Capital Market Directory, Lembar Berita Negara and Bloomberg database.

**Table 1: Sample Selection Process**

	2008	2009	2010	2011	2012	Total
Firms listed in the Indonesia Stock Exchange	399	400	422	442	466	2129
Less: firms subjected to specific regulation as per in point 4 above:	101	86	114	104	129	534
Less firms which have no complete data, or have negative equity, or in the process of mergers acquisition or diverstature	146	157	152	162	162	779
Less firms which accounting periods do not end at the 31 <sup>st</sup> of December	1	1	1	1	1	5

Final Sample	<u>151</u>	<u>156</u>	<u>155</u>	<u>175</u>	<u>174</u>	<u>811</u>
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**2. Variable Definition**

**a. The Cost of Debt**

Cost of debt (COD) is calculated with reference to Lim (2011), which is obtained by dividing the company's interest expense by the average corporate debt (short-term debt and long-term debt) for a year. Following Sengupta (1998), COD used in this study is the COD for the year  $t + 1$ .

**b. Earnings Quality**

In this study, the earnings quality is measured by two proxies, i.e. the value of Discretionary Accrual (DA) and the relevance of earnings figures in the market by using Earnings Transparency (ET) figure. Discretionary Accruals (DA) is used as a proxy for earnings quality as it can catch on earnings management carried out by the company (Scott, 2015). The model of determining the DA value of the companies used in this study is the Modified Jones model (Dechow et al., 1995). This model was chosen because it is considered the most suitable for measuring earnings management in companies that carry out tax management (Lim, 2011; Desai & Dharmapala, 2006). The DA figure is obtained from the residual value of following model run separately for each industry in each year.

$$\text{Accruals}_{it}/\text{Assets}_{it-1} = \alpha_{it} (1/\text{Assets}_{it-1}) + \beta_{1it} ((\Delta\text{REV}_{it}-\Delta\text{AR}_{it})/\text{Assets}_{it-1}) + \beta_{2it}(\text{PPE}_{it}/\text{Assets}_{it-1}) + \varepsilon_{it}$$

Accruals : total accruals of firm  $i$  in industry  $j$  in year  $t$ , calculated as income minus the cash flow from operation; Assets: total asset;  $\Delta\text{REV}$ : change in revenue;  $\Delta\text{AR}$ : change in the account receivables; PPE: gross property, plant, and equipment.

Earnings Transparency (ET) is defined as how vary the stock returns change as a result of changes in the earnings figures (Barth et al. 2013). ET is operationalized by the measurements based on the explanatory power (adjusted r-squared) of the relationship between yields and cross-sectional earnings as follows (Barth et al., 2013):

$$\text{TRANS}_{i,t} \equiv \text{TRANSI}_{j,t} + \text{TRANSIN}_{p,t}$$

$\text{TRANS}_{i,t}$  is the total of  $R^2$  for company  $i$  in year  $t$  derived from the sum of  $R^2$  from the regression results of yields and company earnings in industry  $j$  (TRANSI) with  $R^2$  from the regression results of yields and company earnings in portfolio  $p$  (TRANSIN).

The TRANS value of a company  $i$  in year  $t$  comprised of two  $R^2$  value. According to Barth et al. (2013), the first  $R^2$  is used to represent regression of sample companies from the same industry to show similar characteristics of earnings-yields relationship in one industry. The second value of  $R^2$  represents a regression of sample companies without considering the industry, to show the earnings-yields relationship without being influenced by the type of industry (industry-neutral commonalities). Both values of  $R^2$  are derived as follows:

- $\text{TRANSI}$  : is the value of  $R^2$  obtained from the estimation equation below:

$$\text{RET}_{i,j,t} = \alpha_0^1 + \alpha_1^1 E_{1,j,t}/P_{1,j,t-1} + \alpha_2^1 \Delta E_{1,j,t}/P_{1,j,t-1} + \varepsilon_{i,j,t}$$

- TRANSIN: is the value of  $R^2$  obtained from the estimation equation below:

$$RET_{i,p,t} = \alpha_0^{IN} + \alpha_1^{IN} E_{1,p,t}/P_{1,p,t-1} + \alpha_2^{IN} \Delta E_{1,p,t}/P_{1,p,t-1} + \varepsilon_{i,p,t}$$

RET : anual return measured ending three months after the firm's fiscal year end; E/P: earnings before extraordinary items and discontinued operation deflated by beginning of the year price;  $\Delta E$ : change in earnings from year t-1 to year t.

The regression of this model was run for each year of observation and year of industry. With five years of observation and six industries in this study, six groups with the same  $R^2$  for all years of the sample companies as a TRANSI variable will be obtained.

Following Barth et al. (2013), observation samples were then grouped based on each industry-year regression into four portfolios. The portfolio is made based on the magnitude of the yearly regression residuals for the relevant industry. Meanwhile, the clustering of samples based on the portfolio will be done based on the magnitude of the residual value.

From the above two measurements of earnings quality, the confirmatory factor analysis (CFA) is then conducted to determine whether these two measures truly represent the earnings quality variable (Hair et al., 2010), and further can form a new measurement construct of earnings quality variable. By combining both of these measurements, i.e. DA which is the earnings quality based on the accounting data, as well as ET which is the market reflection on company reported earnings, a new construct is then expected to be able to represent both points of view of earnings quality (accounting data and market perception) altogether in one measurement. The new construct is expected to be more suitable to the purpose of this study, one of which is to observe how lenders react (through the cost of capital) towards company earnings quality. In fact, the lenders usually look at company's overall earnings quality, both if there is a presence of earnings management (DA) as well as how well the market is responding to the reported earnings (ET).

Both measurements form a new construct of earnings quality: earnings quality - EQ, i.e. DA and ET, although they are representing the same variable, they have different nature. The higher the DA value, the worse the earnings quality. Conversely, the higher the ET value, the better the company earnings quality. In order to have the same direction for both of the above measurements (DA and ET), the DA value of each company is multiplied by -1. Hence, higher DA and ET value will have the same meaning, i.e. a higher earnings quality, and vice versa.

#### 4. Tax Management

Tax management (TM) is measured with the following measurements, following Tang & Firth (2011)'s abnormal Book-Tax Differences (ABTD). First, BTD was calculated as a whole, by using a tax effect approach instead of an income effect, as follows:

$$BTD = (BI_{it} \times STR_t) - CTE_{it}$$

BI<sub>it</sub>: Pre-tax book income; CTE<sub>it</sub>: current tax expense; STR<sub>t</sub>: statutory tax rate.

ABTD was measured from the regression equation residual value of the forming factors of BTD which are considered normal (which occur as a normal consequence of differences between tax regulations and accounting principles applied by the company). The residual value of the regression model is abnormal BTD (ABTD).

$$BTD_{it} = a_0 + a_1 \Delta INV_{it} + a_2 \Delta REV_{it} + a_3 NOL_{it} + a_4 TLC_{it} + a_5 BTD_{it-1} + \varepsilon_{it}$$

BTD<sub>it</sub>: book-tax differences;  $\Delta INV_{it}$ : the change in investment in gross property, plant and equipment;  $\Delta REV_{it}$ : the change in revenue; NOL<sub>it</sub>: net operating loss; TLC<sub>it</sub>: tax losses carried-forward;  $\varepsilon_{it}$ : error (ABTD)

### 5. Ultimate Owners

The ratio of the degree of CR to CFR UO(*Cash-Flow Leverage -CFL*): Claessens et al. (2002) found that the greater this ratio, the higher the influence the UO has on the corporate decision-making. Such condition will open up the possibility of expropriation by UO against minority shareholders.

Family shareholders: is the firm's UO which is individual, or a group of individuals who constitute a family. Following the study of Diyanty (2012), the identity of UO is determined whether it is an individual or a group of individuals who are still in family ties. UO is dummy variable where 1 if the ultimate controlling shareholder is an individual name within a family or group of families and 0 if otherwise.

In situations where the UO is a firm but has been identified as a SPV (special purposed vehicle) of another company, then the company ownership will be identified as one family with the UO family of the parent company.

6. **The second largest shareholder (SLS):** taking into account the presence of another large group of shareholders, other than the ultimate owner, as a group who has the ability and power to oversee the UO (Laeven & Levine, 2006). The SLS's role will be measured using a dummy value, 1 if the company has a SLS, and 0 if the company does not have a SLS.

### 7. Corporate Governance (CG)

Represents the degree of CG implementation in a company. In this study, a CG index score is calculated with reference to the study of Hermawan (2009) and the ASEAN CG Scorecard ([www.theacmf.org/ACMF/upload/asean\\_cg\\_scorecard.pdf](http://www.theacmf.org/ACMF/upload/asean_cg_scorecard.pdf), accessed on 15 November 2015). These scores measure the effectiveness of a company's Board of Commissioners and Audit Committee (Klein, 2002).

### 8. Control Variables

- Leverage: The higher the outstanding debt of a company, the higher the risk possessed by the company, resulting in the higher the cost of capital need to be borne by the company. Meanwhile, Dechow et al. (1996) found that firms with high leverage tend to manipulate in order to meet debt covenants; thus affecting the quality of reported earnings. Therefore, leverage will tend to be negatively associated with the earnings quality.
- GROWTH: the company's growth rate, which is measured using the company's growth  $i$  in year  $t$  as compared to sales in year  $t-1$ . Companies with a high growth rate are expected to have high discretionary accruals, which are associated with the performance and not with the purpose of manipulation (Siregar, 2005). Hence, the higher the company's growth rate, the higher the discretionary accruals value.
- MTBV: represents the company value at this moment. Companies with high MTBV indicate that the market rates the companies to be higher than the value of the companies itself. The higher rates demonstrates the confidence of the market, which indicate lower degree of company information asymmetry, which means higher earnings

quality presented by these companies as compared to the companies with lower MTBV (Nelson et al., 2002).

- **SIZE:** measured using the natural logarithm of assets. Larger companies have the chance and opportunity to perform maneuvers in order to look better, including in its financial reporting, and therefore are expected to have a positive relation with earnings management (Nelson et al., 2002).
- **Age:** calculated from the number of years the company has been listed on the stock exchange. Companies that have been incorporated for long and listed on the Stock Exchange already have a good reputation in the market and thus tend to be positively associated with earnings quality observed from the market. Reputation is also something that will be maintained by older companies, hence they will avoid poor presentation of earnings quality.
- **ROA:** indicates the profitability of the company. Obtained by dividing the net profit of company *i* in year *t* by its total assets. A high ROA value indicates that the company is profitable. The more profitable a company, the less likely it manipulates its financial data.

The high ROA also gains the company a higher confidence of lenders and investors, hence the association between this variable and the cost of debt capital is negative.

- **CFO:** Cash Flow from operations. Used as a control variable for the profitability of the company. Companies that have high profitability, with a high cash flow from operations, is expected to have a low COD. This is because such companies are more capable to attend to the needs of cash from its own operations, and less in need of loan assistance (Petersen & Rajan, 1994).
- **Intcov:** interest coverage, a measure which can represent how much power a company's earnings can cover the needs of the company in paying the interest expenses of its loans. The higher the value, the higher the degree of trust the lenders has on the company, so the intcov value is expected to be negatively associated with the company's cost of debt capital (Francis et al., 2004).

## 9. Research Model

To test Hypothesis H1 and H3, we use following research model:

$$COD_{it+1} = \gamma_0 + \gamma_1 ABTD_{it} + \gamma_2 EQ_{it} + \gamma_3 Growth_{it} + \gamma_4 Age_{it} + \gamma_5 Lev_{it} + \gamma_6 CFO_{it} + \gamma_7 Size_{it} + \gamma_8 Intcov_{it} + \gamma_9 ROA_{it} + \varepsilon_{it} \quad (1)$$

Whereas hypotheses H1a, H1b, H1c, and H1d are tested using following research model:

$$COD_{it+1} = c_0 + c_1 ABTD_{it} + c_2 EQ_{it} + c_3 Growth_{it} + c_4 Age_{it} + c_5 Lev_{it} + c_6 CFO_{it} + c_7 Size_{it} + c_8 Intcov_{it} + c_9 ROA_{it} + c_{10} Fam_{it} + c_{11} Fam * ABTD_{it} + c_{12} CFL_{it} + c_{13} CFL * ABTD_{it} + c_{14} OWN2_{it} + c_{15} OWN2_{it} * ABTD_{it} + c_{16} CG_{it} + c_{17} CG * ABTD_{it} + \varepsilon_{it} \quad (1A)$$

$COD_{it+1}$ : cost of debt;  $ABTD_{it}$ : abnormal book-tax difference;  $EQ_{it}$ : earnings quality;  $Growth_{it}$ : sales growth rate;  $Age_{it}$ : number of years firm has been listed on the stock exchange;  $Lev_{it}$ : total debt to total equity;  $CFO_{it}$ : cash flow from operation;  $Size_{it}$ : natural logarithm of total assets;  $Intcov_{it}$ : ratio of operating income to interest expense;  $ROA_{it}$ : return on asset;  $FAM_{it}$ : 1 if the firm's UO is an individu or group of individu is family and 0 if otherwise;  $CFL_{it}$ : the ratio of UO's CR to CFR;  $OWN2_{it}$ : 1 if the firm has a SLS, and 0 if otherwise;  $CG_{it}$ : CG score.

To test hypotheses H2, we use following research model:

$$EQ_{it} = \alpha_0 + \alpha_1 ABTD_{it} + \alpha_2 Lev_{it} + \alpha_3 Growth_{it} + \alpha_4 MTBV_{it} + \alpha_5 Size_{it} + \alpha_6 Age_{it} + \alpha_7 ROA_{it} + \varepsilon_{it} \quad (2)$$

$EQ_{it}$ : earnings quality;  $ABTD_{it}$ : abnormal book-tax difference;  $Lev_{it}$ : total debt to total equity;  $GROWTH_{it}$ : sales growth;  $MTBV$ : ratio of market-to book value of the equity;  $SIZE_{it}$ : natural logarithm of total assets;  $AGE_{it}$ : number of years firm has been listed on the stock exchange;  $ROA_{it}$ : return on assets

## Results and Analysis

Table 2 shows the descriptive statistics of all variables used in this study. Moderating variables in this study consist of the ownership variables and company corporate governance that are divided into three major sections:

1. The largest controlling shareholder, comprising of:
  - a. Family ownership (FAM) is a dummy variable. The average of this variable is 0.7, while the median is 1. These numbers indicate that companies included in the study sample are more of family-owned companies than non-family-owned.
  - b. The power of the controlling shareholder (CFL – *cash flow leverage*). The minimum value (maximum) CFL 1 (2.03) shows that there is no company in the sample that has a lower degree of cash flow rights as compared to the control rights. At least, control rights of the companies in the sample are on the same degree with their cash flow rights.
2. The second largest controlling shareholder:

The dummy variable that indicates the presence or absence of the second largest controlling shareholder in the sample companies (OWN2). The average value of 0.7 and the median of 1 indicate that there are more companies in the sample that have the second largest controlling shareholder as compared to those who do not.



**Table 2. Statistics Descriptive**

Variable	N	Mean	SD	Min	Median	Max
COD	811	0.2	0.27	0.0001	0.09	1.03
ABTD	811	-0.013	0.069	-0.30	-0.01	0.75
EQ	811	0.000	0.12	-0.37	0.0003	0.37
GROWTH	811	0.15	0.28	-0.74	0.12	1
LEV	811	0.51	0.62	-0.87	0.3	2.36
SIZE	811	5720	14100	6.4	1250	152000
MTBV	811	1.94	1.8	-1.26	1.28	7.34
ROA	811	0.05	0.08	-0.19	0.04	0.31
CFO	811	0.08	0.12	-0.3	0.07	0.45
INTCOV	811	9.18	28.84	-169.37	2.85	101.7
AGE	811	12.34	7.1	0.08	13.58	32
FAM	811	0.7	0.46	0	1	1
CFL	811	1.16	0.3	1	1	2.03
OWN2	811	0.7	0.46	0	1	1
CG	811	0.69	0.09	0.43	0.7	0.95

COD: the cost of debt; EQ: *Earnings Quality*, confirmatory factor analysis of two measures: *Discretionary Accruals (DA)*; *Earnings Transparency (ET)*; *Growth*: sales growth; Lev: total debt to total equity; *Size*: the natural logarithm of total assets; MTBV: market-to-book value of equity; CFO: Cash Flow from operations; Intcov: ratio of operating income to interest expense; ROA: return on asset; Fam: 1 if the firm's UO is an individu or group of individu is family, and 0 if otherwise; CFL: ratio of UO's CR to CFR; OWN2: 1 if the firm has a SLS and 0 if otherwise; CG: CG score.

**1. The Effect of Tax Management on the Cost of Debt Capital**

Table 3 Panel A and Panel B show the results of the univariate analysis of variables used in this study. Table 3 Panel A presents the correlation between the variables used in the model 1 analysis. Tax management variable positively and significantly correlated with the cost of debt capital variable (COD). This correlation is an early indication that there is a positive effect of tax management on the cost of debt capital.

In Table 3 Panel B, the correlation between the moderating variables and the cost of debt capital variable is presented. All interacting variables between the moderating variables and the tax management variable show a positive correlation with the cost of debt capital variable. The only moderating and interacting variable that does not show a correlation with the cost of debt capital is the family ownership variable. Again, this is an early indication of the existence of correlation between the moderating variables and the cost of debt capital.

**Table 3. The Correlation Matrix - Model 1 and 1A**

<b>Panel A: The Correlation - Model 1</b>										
	<b>COD</b>	<b>ABTD</b>	<b>pEQ</b>	<b>GROWTH</b>	<b>AGE</b>	<b>LEV</b>	<b>CFO</b>	<b>SIZE</b>	<b>INTCOV</b>	<b>ROA</b>
<b>COD</b>	1									
<b>ABTD</b>	0.0728*	1								
<b>pEQ</b>	-0.2034*	-0.5931*	1							
<b>GROWTH</b>	0.0203	0.0746*	-0.3599*	1						
<b>AGE</b>	-0.0630*	-0.0944*	-0.0218	-0.1411*	1					
<b>LEV</b>	-0.4729*	0.056	0.2902*	0.0679*	-0.0594*	1				
<b>CFO</b>	-0.1319*	-0.1506*	-0.1476*	0.1095*	0.1002*	-0.0016	1			
<b>SIZE</b>	-0.2370*	-0.0052	0.1487*	0.1373*	0.1181*	0.2943*	0.2087*	1		
<b>INTCOV</b>	0.0800*	-0.1078*	-0.4182*	0.2030*	0.1785*	-0.3301*	0.4643*	0.1120*	1	
<b>ROA</b>	0.0906*	-0.0038	-0.5973*	0.2288*	0.0996*	-0.2375*	0.4781*	0.1868*	0.7529*	1

<b>Panel B: The Correlation - Model 1A</b>									
	<b>COD</b>	<b>FAM</b>	<b>FAM_TM</b>	<b>CFL</b>	<b>CFL_TM</b>	<b>OWN2</b>	<b>OWN2_TM</b>	<b>CG</b>	<b>CG_TM</b>
<b>COD</b>	1								
<b>FAM</b>	0.1241*	1							
<b>FAM_TM</b>	0.0293	-0.0407	1						
<b>CFL</b>	0.0164	0.3037*	-0.0348	1					
<b>CFL_TM</b>	0.0754*	0.0514	0.8127*	0.0018	1				
<b>OWN2</b>	0.0161	-0.1222*	0.0036	0.1621*	-0.0201	1			
<b>OWN2_TM</b>	0.0800*	0.0501	0.6663*	0.0218	0.8174*	-0.0529	1		
<b>CG</b>	-0.0574	-0.1111*	-0.0508	-0.0561	-0.0576	0.0367	-0.0378	1	
<b>CG_TM</b>	0.0797*	0.0597*	0.7958*	0.0193	0.9911*	-0.0174	0.8144*	-0.0700*	1

The next analysis is a multivariate analysis. In the multivariate analysis, this study used the estimation model of random effect model (Gujarati & Porter, 2009; Nachrowi & Usman, 2006) in order to accommodate the possibility of characteristics differences among the individuals in the sample companies. This estimation model also takes into account that the error can be correlated over time (time series) and cross-sectionally.

The regression results using model 1 and model 1A can be observed in details in Table 4. The following are the analyses for each regression results of both models.

## **2. The Effect of Tax Management on the Cost of Debt Capital without Moderation**

Hypothesis H1 stated that tax management positively affects the company cost of debt capital. The test result with model 1 supports the said hypothesis. Tax management has a positive association with the cost of debt capital. The tax management can lower the corporate transparency, which can result in the occurrence of the opportunistic management behavior as well as diversion of rents (Desai & Dharmapala, 2006; Desai et al., 2007; Wilson, 2009). Tax management can cause agency problems between the management and lenders in the form of information asymmetry and other problems related to moral hazard (Lim, 2011). Therefore, lenders will tend to protect themselves from such risks by charging a high cost of debt to the company.

A significant positive value found in ABTD variable in Table 4 (*no moderation*) indicates that the sample companies undertaking tax management need to incur a higher cost of debt as compared to other companies. This result supports hypothesis 1.

## **3. The Effect of Tax Management on the Cost of Debt Capital with Moderating Variables**

In this section, four factors which allegedly have a role in strengthening or weakening the positive effect of tax management on the cost of debt capital were tested. The four factors, together with the results of the analysis are discussed below:

### **a) The role of the ultimat owners (UO)**

Hypothesis H1a tested in this section is that UO with control rights which are relatively greater than the cash flow rights, or whose CFL – *cash flow leverage* is greater, will tend to have a stronger positive influence between tax management and the cost of debt capital as compared to other companies. The test result in Table 4 shows the result that is inconsistent with the said hypothesis. CFL\*ABTD variable, which is an interacting variable between CFL variable and tax management variable shows an insignificant value.

UO with greater control rights than its cash flow rights actually has an incentive to commit expropriation, i.e. by using its control power to maximize personal gains (Claessens et al., 1999). An insignificant effect on this moderating variable shows that companies with UO that possesses greater control rights turn out to have an indifferent effect of tax management on the cost of debt capital as compared to other companies.

### **b) The role of family ownership**

Family ownership is expected to have an influence, be it positive or negative, on the relationship between tax management and the cost of debt capital (hypothesis H1b). Family that plays a major

role in a company's ownership is expected to have an entrenchment effect on the decisions taken by the company; i.e. the decisions taken by the management will be influenced by the largest controlling shareholder for personal or the family interests alone.

On the other hand, family ownership is also alleged to have a negative influence on the positive relationship between tax management and the cost of debt capital. Chen et al. (2010) mention that family-owned companies will be more cautious and tend to avoid tax management in order to protect their reputation. For family-owned companies, reputation and the company's survival in the long term are very important (Maury, 2006).

The test result in Table 4 shows that family-owned companies undertaking tax management tend to have a lower cost of debt capital as compared to other companies which also carry out tax management (FAM\*ABTD variable, i.e. interacting variable between family ownership variable and tax management variable with significant negative value). Lenders regard the reputation held and maintained by the family-owned companies can ensure the fulfillment of the company debt covenants, even if the companies carry out tax management.

If this test result of hypothesis 1b is combined with the test result of hypothesis 1a, they indicate that ultimate owner in the sample companies do not have any influence on the positive effect of tax management on the cost of debt capital, unless the ownership is held by family. Lenders are only affected by the identity of the ultimate owner, whether it is a family or not. The family's reputation in protecting the company's survival can convince the lenders of the fulfillment of the debt covenants, which means a lower risk faced by the lenders. Meanwhile, the degree of control rights possessed by the ultimate owner is not taken into consideration by the lenders.

This is possibly because the lenders do not have any information regarding the ultimate owner and his degree of control rights.

**c) The role of the second largest controlling shareholder (SLS)**

The test result on the role of SLS shows an insignificant value. The coefficient of OWN2\*ABTD variable, which is an interacting variable between SLS variable and tax management variable is insignificant. This result shows that the presence of SLS does not have any impact on the positive effect of tax management undertaken by companies on their cost of debt capital. In other words, companies undertaking tax management with SLS turn out to bear the cost of debt capital which is indifferent with the companies without SLS.

This does not support hypothesis 1c and is inconsistent with the research findings of Attig et al. (2008) which state that SLS can have a monitoring role on the management and the UO, which can be seen from more efficient tax management measures taken by companies (by a lower cost of debt capital borne by the company). Nevertheless, this finding is actually consistent with the test result of hypothesis 1a on UO, which also does not have an impact on the cost of debt capital borne by the company as a result of tax management. If lenders consider a company's UO to not have an impact on the magnitude of tax management and the motivation to carry out tax management, then the monitoring role of SLS will not have any influence on the lenders' assessment.

Again, this is probably because the lenders do not have information on the ultimate owner structure of the company. Information possessed by investors and lenders is limited to the company ownership structure based on the number of shares owned by each investor (shareholder cash flow rights) and not shareholder control rights.

**Table 4. The Effect of Tax Management on The Cost of Debt**

<p>Model 1: <math>COD_{it+1} = \gamma_0it + \gamma_1ABTD_{it} + \gamma_2EQ_{it} + \gamma_3Growth_{it} + \gamma_4Age_{it} + \gamma_5Levit + \gamma_6CFO_{it} + \gamma_7Size_{it} + \gamma_8Intcov_{it} + \gamma_9ROA_{it} + \epsilon_{it}</math></p> <p>Model 1A: <math>COD_{it+1} = c_0 + c_1ABTD_{it} + c_2EQ_{it} + c_3Growth_{it} + c_4Age_{it} + c_5Levit + c_6CFO_{it} + c_7Size_{it} + c_8Intcov_{it} + c_9ROA_{it} + c_{10}Fam_{it} + c_{11}Fam\_ABTD_{it} + c_{12}CFL_{it} + c_{13}CFL\_ABTD_{it} + c_{14}OWN2_{it} + c_{15}OWN2\_ABTD_{it} + c_{16}CG_{it} + c_{17}CG\_ABTD_{it} + \epsilon_{it}</math></p>							
<p>H<sub>1</sub>: Tax management positively affects the company cost of debt capital.</p> <p>H<sub>1a</sub>: A higher ratio of control rights to cash flow rights held by the company ultimate owner will further strengthen the positive effect of tax management on the cost of debt capital.</p> <p>H<sub>1b</sub>: The positive effects of tax management on the cost of debt capital will be different in family-owned companies in comparison with non-family-owned companies.</p> <p>H<sub>1c</sub>: The positive effect of tax management on the cost of debt capital will be different with the presence of the second largest shareholder.</p> <p>H<sub>1d</sub>: Stronger CG mechanism in a company will weaken the positive effect of tax management on the cost of debt capital</p> <p>H<sub>3</sub>: Earnings quality negatively affects the cost of debt capital.</p>							
Variable	Predicted Sign	Coef.	p-value		Coef.	p-value	
C		0.219	0.000	***	0.434	0.001	***
ABTD	+	2.499	0.001	***	8.515	0.005	***
pEQ	-	4.813	0.003	***	5.143	0.003	***
GROWTH		0.157	0.007	***	0.162	0.007	***
AGE	-	0.002	0.180		0.001	0.372	
LEV	+	-0.158	0.000	***	-0.163	0.000	***
CFO	-	-0.156	0.016	**	-0.157	0.016	**
SIZE	-	-0.03	0.002	***	-0.032	0.001	***
INTCOV	-	0.000	0.457		0.000	0.414	
ROA	-	1.069	0.003	**	1.154	0.002	***
FAM	+/-				0.019	0.470	
FAM*ABTD	+/-				-1.859	0.006	***
CFL	+				-0.159	0.010	**
CFL*ABTD	+				-0.595	0.206	
OWN2	+/-				0.024	0.353	
OWN2*ABTD	+/-				-1.372	0.220	
CG	-				-0.069	0.289	
CG*ABTD	-				-4.298	0.016	**
Adj R-squared		17.50%			17.82%		
Prob F-stat		0			0		
<p>***: significant at 1%; **: significant at 5%; *: significant at 10%</p> <p>COD: the cost of debt; <i>Growth</i>: sales growth; Lev: total debt to total equity; <i>Size</i>: the natural logarithm of total assets; MTBV: market-to book value of equity; CFO: Cash Flow from operations; Intcov: ratio of operating income to interest expense; ROA: return on asset; Fam: 1 if the firm's UO is an individual or group of individuals is family, and 0 if otherwise; CFL: ratio of UO's</p>							

CR to CFR; OWN2: 1 if the firm has a SLS and 0 if otherwise; CG: CG score.
--

#### d) The role of CG

Hypothesis H1d stated that CG has a negative role in the effect of tax management on the cost of debt capital. The result in table 4 shows that this hypothesis is supported. Coefficient of CG\*ABTD variable which is an interacting variable between CG variable and tax management shows a significant negative value. This means that the sample companies undertaking tax management with a better CG score apparently have a lower cost of debt capital as compared to other companies carrying out tax management. The finding support the assertion that the CG score mitigate the positive effect of tax management on the cost of debt capital.

This finding is also consistent with the findings of previous studies. Desai & Dharmapala (2006), for instance suggest that companies that implement a good systematic governance can suppress the occurrence of rent diversion by management when the companies carry out tax management. Companies undertaking tax management with good CG implementation were also found to have better company value as compared to companies with weaker CG scores (Desai & Dharmapala, 2009). CG implementation is considered to represent monitoring mechanism on the management; thus can reduce the occurrence of entrenchment (Lim, 2011).

#### 4. The Effect of Tax Management on Earnings Quality

Tax management is hypothesized to have a negative effect on earnings quality. The greater the tax management behavior, the lower the earnings quality. Prior to the multivariate analysis, univariate analysis was conducted on the variables used in the model 2 equation. The result of this univariate analysis using the Spearman correlation can be seen in Table 5 below:

**Table 5. Correlation - Model 2**

	EQ	ABTD	LEV	GROWTH	MTBV	SIZE	ROA	AGE
EQ	1							
ABTD	-0.1747*	1						
LEV	0.0715*	0.056	1					
GROWTH	-0.0890*	0.0746*	0.0679*	1				
MTBV	0.0146	-0.0241	0.0496	0.1171*	1			
SIZE	0.0365	-0.0052	0.2943*	0.1373*	0.1660*	1		
ROA	-0.1358*	-0.0038	-0.2375*	0.2288*	0.3928*	0.1868*	1	
AGE	-0.0007	-0.0944*	-0.0594*	-0.1411*	-0.1023*	0.1181*	0.0996*	1

From Table 5, it can be seen that ABTD variable has a negative correlation with earnings quality variable (EQ). This univariate analysis becomes an early signal of the presence of negative and significant relationship between tax management and earnings quality, in accordance with the hypothesis which will be tested further with the multivariate analysis.

**Table 6. The Effect of Tax Management on Earnings Quality**

$EQ_{it} = \alpha_0it + \alpha_1ABTD_{it} + \alpha_2Lev_{it} + \alpha_3Growth_{it} + \alpha_4MTBV_{it} + \alpha_5Size_{it} + \alpha_6Age_{it} + \alpha_7ROA_{it} + \epsilon_{it}$ <p><i>H<sub>2</sub>: Tax management negatively affects company earnings quality.</i></p>				
Variable	Pred	Coef.	p-value Sign.	
C		0.006	0.288	
ABTD	-	-0.452	0.000	***
LEV	-	0.007	0.183	
GROWTH	+	-0.032	0.023	**
MTBV	-	0.003	0.110	
SIZE	+	0.004	0.065	*
ROA	-	-0.215	0.000	***
AGE	+	0.000	0.308	
Adj R-squared		8.30%		
Prob F-stat		0.0000		
<p>EQ: <i>Earnings Quality</i>, confirmatory factor analysis of two measures: <i>Discretionary Accruals</i> (DA) and <i>Earnings Transparency</i> (ET); <i>Growth</i>: sales growth; <i>Lev</i>: total debt to total equity; <i>Size</i>: the natural logarithm of total assets; <i>MTBV</i>: market-to book value of equity; <i>CFO</i>: Cash Flow from operations; <i>Intcov</i>: ratio of operating income to interest expense; <i>ROA</i>: return on asset; <i>Fam</i>: 1 if the firm's UO is an individual or group of individuals is family, and 0 if otherwise; <i>CFL</i>: ratio of UO's CR to CFR; <i>OWN2</i>: 1 if the firm has a SLS and 0 if otherwise; <i>CG</i>: CG score.</p>				

### 5. The Effect of Tax Management on Earnings Quality

This test is intended to test hypothesis H<sub>2</sub> which mentions that tax management will negatively affect company earnings quality. The presence of a difference between taxable profit and accounting profit, which is a characteristic of tax management, implies a potential that companies do not report their actual earnings, which could be interpreted as a poor quality of company's reported earnings.

The test result of the effect of tax management on earnings quality as reported in details in Table 6 shows that tax management has a significantly negative effect on earnings quality. Tax management in sample companies is apparently lower the companies' earnings quality. The higher the difference between accounting profit and the profit used as a base for outstanding tax calculation, the lower the company earnings quality, which corresponds with hypothesis 2.

This result is consistent with the research findings of Frank et al. (2009) which found that companies that attempt to manipulate tax (tax aggressive) tend to also carry out earnings management which result in low earnings quality. This study actually extends the findings of Frank et al. (2009) which limited the observation on companies that conducted tax manipulation alone. This study includes all elements of company actions that aim on tax management. Companies that perform tax management apparently also tend to perform earnings management, and as a result lower the company's earnings quality.

Furthermore, Desai & Dharmapala (2006) state that tax management can increase the information asymmetry between managers and shareholders. This condition will cause the occurrence of rent diversion risk perception, that is, managers can do anything according to their interests, which can harm other shareholders. Meanwhile, Barth et al. (2013) found that companies with high degree of information asymmetry usually have a low degree of earnings transparency. The results of this study support the findings of Barth et al. (2013) by adding proof of another source of information asymmetry, which is the tax management carried out by companies, and its relationship with the earnings transparency.

## 6. The Effect of Earnings Quality on the Cost of Debt Capital

The last section of this study analysis is the analysis or the test result of the effect of earnings quality on the cost of debt capital. This effect is included in equation model 1, and the result is reported in details in Table 4 above. The test result in Table 4 does not support the Hypothesis H3. Instead, earnings quality has a positive effect on the cost of debt capital. It appears that the higher the earnings quality, the higher the cost of debt capital needs to be borne by the company. pEQ variable (which is a fitted value of the earnings quality of the equation 2 result) in Table 4 shows a positive and significant value.

Although this result is not consistent with the Hypothesis H3, it supports the findings of Li & Richie (2016). In their study, it was discovered that a high discretionary accruals is actually an indication for the lenders that a company has extra cash, which can be used to pay company loans. The discretionary accruals carried out by companies during the income smoothing allows the investors to predict future earnings more easily. Income smoothing is also useful as an effective tool in disclosing company information. For the lenders, income smoothing will ease the assessment of company's default risk, and in the end lower the cost of debt needs to be borne by the company (Trueman and Titman; 1988). Therefore, according to the above study, the presence of income smoothing (through a high discretionary accruals) will reduce the cost of debt. Trueman & Tritman (1998) further state that income resulting from income smoothing will increase investors' confidence that debt covenants will be met throughout the lending period.

## Sensitivity Analysis

### 1. The use of DTAX measurement as a proxy of tax management

The other tax management measurement is to follow the measurement carried out in the study of Frank et al. (2009). This measurement is used an element of permanent difference of BTM as a base for tax management measurement calculation:

$$\text{PERMDIFF}_{it} = [\text{BI}_{it} - (\text{CTE}_{it}/\text{STR}_{it})] - (\text{DTE}_{it}/\text{STR}_{it})$$

BI<sub>it</sub>: Pre-tax book income; CTE<sub>it</sub> : current tax expense; DTE<sub>it</sub>: deferred tax expense; STR<sub>it</sub>: statutory tax rate

The next step is regressing the value of PERMDIFF towards variables alleged to be the normal permanent difference sources with the following estimation:

$$\text{PERMDIFF}_{it} = a_0 + a_1\text{UNCON}_{it} + a_2\text{MI}_{it} + a_3\text{CSTE}_{it} + a_4\Delta\text{NOL}_{it} + a_5\text{LAGPERM}_{it} + \varepsilon_{it}$$

UNCON<sub>it</sub>: income (loss) reported under equity method; MI<sub>it</sub>: income (loss) attributable to minority interest; CSTE<sub>it</sub>: current state income tax expense; ΔNOL<sub>it</sub>: change in net operating loss carry-forwards; LAGPERM<sub>it</sub>: one-year lagged PERMDIFF.

The residual value (ε) of the regression is a part of permanent difference which resulted from managerial discretion.



The test result of this measurement (untabulated) also find that tax management negatively affects earnings quality and positively affects the cost of debt capital. Moreover, earning quality from the predictive value result of tax management that used this measurement also indicates a positive and significant effect on the cost of debt capital, consistent with the findings of the main testing.

**2. Alternative Measurement for The Second Largest Controlling Shareholder (SLS)**

Following Attig et al. (2008), the role of SLS was also measured using two other measurements: the degree of control rights held by SLS and the ratio of the SLS's control rights to UO's control rights. The test using the two measurements provide quite consistent result with the main analysis on the role of SLS (untabulated).

**3. The use of DA and ET measurement as an individual proxy of earnings quality**

If in the main analysis the earnings quality was measured using one measurement, as a result of confirmatory factor analysis of two measurements of Discretionary Accruals (DA) and Earnings Transparency (ET), in this section, a test against each earnings quality measurement was done separately. The results show that tax management will decrease earnings quality, be it measured using discretionary accruals, or observed from the viewpoint of earnings transparency reported by the company (untabulated).

**Conclusion**

The purpose of this study is to examine the effect of tax management carried out by a company on the cost of capital it must bear. The initial hypothesis of this study is that tax management, which is performed by many companies as it is deemed to encourage tax savings, has a positive effect on the cost of debt capital needs to be borne by the company due to the lower corporate transparency.

The findings show that tax management apparently have an effect in increasing the cost of debt capital borne by a company through the information asymmetry incurred by the tax management behavior. Furthermore, the study also examined whether the increase of the cost of debt capital due to the tax management occurs directly as a result of the tax management behavior, or through the decrease in earnings quality. The findings indeed show that tax management reduces earnings quality. The earnings quality measured in this study is the discretionary accruals and earnings transparency value. Therefore, companies undertaking tax management indeed have a higher value of discretionary accruals, and/or decrease their reported earnings transparency. Nonetheless, this decrease in the earnings quality is attended by the lenders in a different way from the initial hypothesis of this study.

For lenders, a lower earnings quality induces a totally different reaction. Lenders, who usually have a greater financial knowledge (banks and institutional investors) as compared to shareholders, understand the low earnings quality is the result of the increase in discretionary accruals; which means the debt payment and the fulfillment of debt covenants are potentially more guaranteed due to the availability of the company's operational cash flows. Lenders apparently view the companies with low earnings quality to be more reliable and thus charge a lower cost of debt capital.

This study also examine the roles of ownership variables (family, the ultimate owner and the second largest shareholder) as well as CG in impacting the positive effect of tax management on the cost of debt capital. The results on the roles of the four variables are as follows. Of all ownership variables, only the family ownership shows a role in mitigating the effect of tax management. The earnings quality of companies with family ownership undertaking tax management is not as low as other companies. In addition, family-owned companies are performing tax management bear a lower cost of debt capital. Family-owned companies are deemed to carry out tax management not with manipulating purpose or other purposes that will harm lenders. Family-owned companies are reckoned to always maintain their reputation and the company's survival. Other ownership variables (cash flow leverage held by the ultimate owner and the second largest shareholder) do not have any impact on the effects of tax management, both on earnings quality and on the company cost of debt capital. This is probably because the financiers do not have adequate information on the controlling shareholders and the degree of control rights possessed by these shareholder groups.

The test result on the role of CG variable on tax management behavior apparently is capable of changing the lenders' view of the tax management performed by the company. Lenders consider tax management of companies with a good CG system to have less tendency to carry out rent diversion as compared to other companies.

There are several limitations of this study. We have not examined all alternatives measurement for tax management as in Hanlon and Heitzman (2010). We use CG score to measure corporate governance implementation. Future studies may want to focus on specific corporate governance mechanisms that may have more direct effect on tax avoidance, such as audit committee effectiveness.

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## INTELLECTUAL CAPITAL DISCLOSURE PRACTICES: AN EMPIRICAL STUDY ON COMPANIES LISTED ON COLOMBO STOCK EXCHANGE

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### Abstract

Intellectual capital [IC] is regarded as a strategic asset of firms, which is potential of creating value. However, the measurement of intellectual capital is extremely difficult and as a result mere disclosure of IC information in annual reports do not show the impact of value of IC in the financial position of a firm. Main objectives of this study are to develop an IC disclosure (ICD) index to measure the extent and quality of ICD and to examine determinants of ICD practices and their impact on ICD practices based on 50 companies listed on Colombo Stock Exchange (CSE) for the period from 2010 to 2014 by using a content analysis and questionnaire survey. Companies were selected in the order of market capitalization and the data was collected from annual reports. 20 disclosure items representing Internal Capital Disclosure (InCD), External Capital Disclosure (ECD) and Human Capital Disclosure (HCD) are included in the index. Data was analyzed using parametric tests, correlations and panel regression analysis based on pooled regression. Study finds that that there was a common increasing trend for disclosure of IC items and categories. Majority of listed companies disclose IC different forms such as text, sentences, pictures, tables and graphs in line with core discipline of Global Reporting Initiative [GRI] guidelines. ECD was mostly reported in the annual reports followed by HCD and InCD. Theoretical framework of the study takes into account agency theory, stakeholder theory, legitimacy theory and signaling theory. The study offers an insight to the corporate and business level managers, policy makers, potential investors and future researchers regarding ICD practices in terms of extent and quality.

**Keywords:** *Intellectual Capital Disclosures (ICD), Human Capital Disclosure, External Capital Disclosure, Annual Reports, Content Analysis*

### Introduction

The world economy is transiting from an industrial economy to a knowledge based economy [KBE] in order to enhance the value creation. Hence, companies are more concerned about intellectual capital [IC] rather than financial capital in order to gain competitive advantages (Rashid et al. 2012). General source of IC information of companies is the annual report and therefore lots of research studies on Intellectual Capital Disclosure [ICD] have been carried out by using data given in annual reports. On the other hand, it is a legal right of shareholders to have decision useful information including IC in annual reports (Abhayawansa & Guthrie 2010 & 2014, Malwara Arachchi & Kehelwalatenna 2011, Abhayawansa & Azim 2015, Jayasooriya, Gunawardana and Weerakoon Banda, 2015).

Cost of human capital is either immediately expensed or amortized in the financial statement despite the fact that human resources create value at varies degrees. With the remarkable increase in the number of companies relying on ICD practices, it is worthwhile to carry out more in depth study on ICD practices and provide some guidelines for assessing value of IC in firms. Accordingly, it is possible to examine those aspects of ICD through a survey or structured

questionnaire (Bontis, Keow& Richardson 2000). Therefore, current study tries to examine ICD practices and ways of measuring the quality of ICD of listed companies in Sri Lanka.

### **Literature Review**

There are numerous studies on ICD have been undertaken in different countries around the world such as: Canada, Australia, New Zealand, UK, Ireland, Hong Kong and India. In the context of Sri Lankan companies, in terms of ICD, there are limited numbers of research studies have been undertaken to date (Jayasooriya, Gunawardana&Weerakoon Banda 2015). Williams (2001) examined the ICD practices of 100 listed companies in UK over a period of five-years from 1996 to 2000. Major findings of this study revealed that there was a significant improvement for the quantity of ICD by companies during the investigated period. Oliveras and Kasperskaya (2004) examined the financial statements of 14 companies listed in Spain over the period of five-years from 1998 to 2002 based on content analysis. They found that the added value of the companies was decreasing. The general ICD was low but it was increasing year-to-year.

Dimitrios, Zeljko and Charalampos (2009) conducted a study to empirically examine the four basics of IC such as: human capital, customer capital, structural capital and innovation capital and their relationship with business performance in the Athens Stock Exchange. Findings of the study revealed that there was a positive association between human capital and customer capital in both service and non-service industries and structural capital had a positive relationship to business performance in both industry types and in non service industries. According to this study, it is noted that internal capital has a positively correlated to business performance.

Yi and Davey (2010) reported by using content analysis of the annual reports of 49 dual listed companies in mainland of China. Their findings revealed that most ICD elements were included in qualitative terms rather than quantitative terms in the annual reports. According to this study, the ICD quality was not considered as strong. The results of this study further found that the companies had a modest commitment in communicating their ICD in annual reports. Rashid (2010) explored a study to provide an overview of ICD practices of 136 listed companies with Dhaka Stock Exchange in Bangladesh by using the content analysis. Results found that company's disclosure on ICD were relatively low and there was an increasing trend over the years. Mostly reported disclosure item was HCD followed by InCD and HCD.

### **2. Objectives of The Study and Research Methodology**

There are two objectives of this study. They are to to develop an ICD index to measure the extent and quality of ICD by companies and to examine the extent and quality of ICD and its practices in Sri Lanka.

Data was mainly obtained from annual reports for five years from 2010 to 2014 and a questionnaire given to eight corporate managers, four CFOs, four financial analysts, two Chartered Accountants and two lecturers in the field of accounting to identify the weightings of these selected ICD items by using a five-point rating scale (1-5). An ICD index was developed by analyzing the ICD contents in annual reports. Sample consists of 50 companies in order of market capitalization as of 10 August 2015, out of 296 listed companies on CSE. These 50 companies account for more than 75% of market capitalization. ICD information in terms of words, sentences, pages, pictures, tables and graphs of the companies' annual reports from 2010 to 2014 were the unit of analysis of this study. The questionnaire used 5 point Likert scale from unimportant to extremely important options for ICD. 20 ICD items were identified as InCD (7),

ECD (6) and HCD (7) based on previous studies (Malawara Arachchi and Kehelwalatenna, 2011). Once the ICD index was developed, it was used to screen the annual reports of sample companies. Selected ICD items are presented in Table 1 below.

**Table 1: Selected ICD items in the context of Sri Lankan companies**

ICD	Proxies	Description
InCD	Company logos & trademarks	It comprises company logo and trademark.
	Philosophy	Evinced in company vision, mission, business values to reflect how leaders think about
	New products	Information of new products produced and new services offered by the companies.
	Management process	It covers specific processes companies use to alter their resource that is incorporated in their
	Organizational structure	Reporting of hierarchies that flow through the business.
	Systems	It includes information systems and network systems.
	Financial relations	Defined as favorable relationship with financial sources, such as: banks and other financial institutions.
ECD	Customers and their relationship	It includes customers, customer satisfaction and their relationship.
	Brands	Information about brand name and brand image.
	Corporate image	Information of company name and new stake holders.
	Supply chain management	Details of support of suppliers and distribution channels held.
	Company awards	Information relating to awards obtained by the company.
	Business collaborations	Information relating to group of companies (parent, subsidiary and joint venture), mergers and acquisitions, business partnering and licensing and franchising agreements. (continued)
HCD	Number of employees	It refers to number of staff employed.
	Employee equity issues	Information relating to gender (male and female) and age of employees.
	Employee related	Information relating to value added by employees.
	Training and development	It includes training programs, career development plans conducted to employees by companies.
	Employee relations	It refers to union activities, employees being thanked and employee involvement in the
	Entrepreneurial skills	It includes innovations of the employees.
	Employee welfare	It includes employee compensation plans and employee share option plans [ESOP].



To calculate the weighting for a particular IC item, the ratings assigned to the item by the survey respondents were summed and a mean score was calculated. There are few previous studies on ICD incorporating the element of ICD quality into their research (Schneider 2006, Yi 2012). These studies have employed quality criteria with differing scales to assess the quality of ICD in companies' annual reports. The quality criteria with a four-point scale were established for the construction of the ICD index in this study, as they were deemed to be comprehensive and more appropriate. Accordingly, following quality scores were assigned: The score '3' was assigned for both qualitative and quantitative disclosure of IC in the annual report. The score '2' was assigned for quantitative disclosure of IC in the annual report. The score '1' was assigned for qualitative disclosure of IC in the annual report. The score '0' was assigned for no any IC item is disclosed in the annual report (Nurunnabi, Hossain & Hossain, 2011). Once the ICD index was developed, it was used to code the companies' annual reports in order to examine the extent and quality of ICD of selected 50 companies. Words, sentences, pages, pictures, tables and graphs of the companies' annual reports from 2010 to 2014 were screened in terms of InCD, ECD and HCD.

### **3. Hypothesis of the Study**

Hypotheses with regards to the extent of ICD were developed. The first hypothesis (H1a) assumes that an increasing trend of ICD can be seen whilst the second one (H1b) postulates a reduction in the extent of ICD. Accordingly, the hypotheses are expressed as follows.

H<sub>1a</sub>: The ICD of listed companies on CSE significantly increased over the five-years from 2010 to 2014.

H<sub>1b</sub>: The ICD of listed companies on CSE significantly decreased over the five-years from 2010 to 2014.

### **Data Analysis**

20 aspects of ICDs measured for the purpose of developing an index for ICDs assessment were summarized based on the perception scores obtained. The summary of results is given in table 2 below. Accordingly all 20 aspects were recognized by the respondents either as extremely important or very important. However, the quality score given for each aspect varies from 1 to 3. The weights for each aspects ranged from a lowest of 3.5 to a maximum of 5 as per the preferences of respondents. Summary results given in the table 2 indicate that all the respondents have recognized the importance and relevance of ICDs aspects to be considered in determining its level of the quality of disclosures.

The descriptive statistics analysis such as mean, standard deviation, median, Skewness and Kurtosis were also used to analyze data. The summary is given in table 3. Table 3 shows that, the values of Skewness and Kurtosis for some of the variables, accounted beyond the threshold value. InCD ranged from 0.3452 to 0.9323 with a mean of 0.64 and standard deviation of 0.170. ECD ranged from 0.2634 to 1 with a mean of 0.65 and standard deviation of 0.186. HCD ranged from 0.1405 to 1 with a mean of 0.58 and standard deviation of 0.232 and ICD ranged from 0.2940 to 0.9549 with mean of 0.62 and standard deviation of 0.163. The extent and quality of ICD were assessed in terms of three categories, such as: InCD, ECD and HCD. Average scores were calculated with respect to 20 ICD items considered for developing ICD index. Statistics are given in table 4.

**Table 2. ICD index**

Disclosure of IC	Proxies	Weight as per questionnaire survey	Survey respondents' perceptions	Maximum quality score
InCD	Company logo and trademark	4.7	Extremely important	1
	Philosophy	3.7	Very important	1
	New products	3.5	Very important	1
	Management process	4.2	Very important	3
	Organizational structure	5.0	Extremely important	3
	Systems	3.8	Very important	2
	Financial relations	4.0	Very important	3
ECD	Customers and their relationship	4.2	Very important	3
	Brands	4.6	Extremely important	3
	Corporate image	4.6	Extremely important	3
	Supply chain management	4.5	Extremely important	3
	Company awards	5.0	Extremely important	2
	Business collaborations	4.6	Extremely important	2
HCD	Number of employees	5.0	Extremely important	2
	Employee equity issues	4.1	Very important	3
	Employee related measurements	4.7	Extremely important	3
	Training and development	4.6	Extremely important	3
	Employee relation	4.7	Extremely important	1
	Entrepreneurial skills	4.0	Very important	1
	Employee welfare	4.0	Very important	2

Source: *Researchers constructed.*

**Table 3. Descriptive statistics**

	Minimum	Maximum	Mean	SD	Skewness	Kurtosis
InCD	0.3452	0.9323	0.64	0.170	0.229	-1.170
ECD	0.2634	1	0.65	0.186	0.125	-0.912
HCD	0.1405	1	0.58	0.232	0.086	-1.384
ICD	0.2940	0.9549	0.62	0.163	0.179	-1.069

Source: Researchers constructed.

**Table 4. Comparison of overall ICD from 2010 to 2014**

Items	2010	2011	2012	2013	2014
Company logos and trademarks	0.1467	0.1533	0.1533	0.1667	0.1667
Philosophy	0.3333	0.3333	0.3333	0.3333	0.3333
New products	0.3333	0.3333	0.3333	0.3333	0.3333
Management process	0.5333	0.5200	0.2267	0.4667	0.5867
Organizational structure	0.5733	0.7067	0.5600	0.7333	0.9200
Systems	0.4133	0.3667	0.4600	0.4933	0.5067
Financial relations	0.3933	0.3933	0.3733	0.4267	0.4533
Customers and their relationship	0.3067	0.3267	0.4267	0.5200	0.6200
Brands	0.6000	0.6067	0.7467	0.7733	0.7800
Corporate image	0.5533	0.6000	0.6333	0.6733	0.7400
Supply chain management	0.2733	0.4200	0.4533	0.4733	0.6067
Company awards	0.6667	0.6667	0.6667	0.6667	0.6667
Business collaborations	0.4400	0.4400	0.4400	0.5267	0.5800
Number of employees	0.3200	0.4400	0.4533	0.4400	0.4800
Employee equity issues	0.2467	0.2867	0.3533	0.4800	0.4667
Employee related measurements	0.6867	0.7133	0.7400	0.7667	0.8133
Training and development	0.3333	0.3867	0.3733	0.3867	0.4800
Employee relation	0.1733	0.2067	0.2000	0.2400	0.2733
Entrepreneurial skills	0.1333	0.1733	0.2200	0.2400	0.2733
Employee welfare	0.4600	0.4600	0.4733	0.4867	0.5800

Source: Researchers constructed based on the content analysis.

Overall ICD in 2014 was quite good compared to other years with 11 out of 20 ICD items are achieving a score above 0.50. The five most reported items were organizational structure, brands, corporate image, market share and employee related measurements. Intellectual property, philosophy, new products, employee relation and entrepreneurial skills were the five least reported items.

### 1. Quality of Disclosure of IC Categories

As for the disclosure quality of ICD by categories, it can be seen from the following table that in 2014, ECD was the most highly reported category in quality with a mean disclosure score of 0.7022. InCD was the least reported category with a mean score of 0.4714. A summary result is given in table 5.

**Table 5: ICD quality by categories**

Variables	2010	2011	2012	2013	2014
<i>InCD</i>	0.3895	0.4009	0.3486	0.4219	0.4714
<i>ECD</i>	0.4733	0.5100	0.5611	0.6056	0.7022
<i>HCD</i>	0.3362	0.3810	0.4019	0.4343	0.4809
<i>ICD</i>	0.3997	0.4306	0.4372	0.4873	0.5515

*Source:* Researcher constructed.

As shown in the table 5, the average number of InCD items disclosed by a company was 0.7125. The minimum and maximum items disclosed by companies were 0.4095 and 0.9323 respectively, with regard to external ECD, the average items disclosed by a company was 0.7959. The minimum and maximum items disclosed by companies were 0.5720 and 1.0000 respectively. Average items of HCD made by a company was 0.6794. The minimum and maximum items disclosed by companies were 0.3288 and 1.0000 respectively. In regard to ICD, the average items disclosed per company was 0.7293. The minimum and maximum items disclosed by companies were 0.4578 and 0.9549 respectively.

Longitudinal comparison of frequencies of data values for InCD, ECD, HCD and ICD was carried out and the results are shown in table 6 below.

**Table 6: A longitudinal comparison of the frequencies of InCD, ECD, HCD and ICD of the sample companies**

	2010		2011		2012		2013		2014	
	Mean	Max	Mean	Max	Mean	Max	Mean	Max	Mean	Max
<i>InCD</i>	6.28	7	6.24	7	6.36	7	6.4	7	6.44	7
<i>ECD</i>	5.46	6	5.84	6	5.86	6	5.98	6	6	6
<i>HCD</i>	4.22	7	4.9	7	5.12	7	5.38	7	5.78	7
<i>ICD</i>	15.96	20	16.98	20	17.34	20	17.76	20	18.22	20

*Source:* Researchers constructed.

The mean values of InCD, ECD, HCD and ICD in five-years are exhibited in the above table 6. From the table, it can be observed that there was an upward trend for the extent of ICD over the five-year period. With reference to the quality of ICD, it can be observed that ECD was the highest scoring category, achieving an average disclosure score of 0.7959. The highest disclosure score for this category was 1 obtained by six companies. The lowest disclosure score for this category was 0.5720. The second highest scoring category was InCD which achieved a mean disclosure score of 0.7125. The highest disclosure score for this category was 0.9323. The lowest disclosure score for this category was 0.4095. The lowest scoring ICD category was HCD which obtained a mean disclosure score of 0.6794. John Keells Holdings PLC achieved the highest disclosure score of 1 for this category. The lowest disclosure score for this category was 0.3288. Overall average disclosure score for the total IC across all the firms was 0.7293. The highest score was 0.9549 achieved John Keells Holdings PLC. The lowest disclosure score was 0.4578 obtained by Distilleries Company of Sri Lanka PLC. A summary of statistics is given in table 7. Table 7 further shows that there is an increasing trend of InCD, ECD, HCD and ICD over the five-year period.

**Table 7: A longitudinal comparison of ICD quality by sample companies from 2010 to 2014**

	2010	2011	2012	2013	2014
<i>InCD</i>	0.5964	0.5978	0.6337	0.6574	0.7125
<i>ECD</i>	0.5437	0.5944	0.6456	0.6856	0.7959
<i>HCD</i>	0.4811	0.5374	0.5747	0.6116	0.6794
<i>ICD</i>	0.5404	0.5765	0.6180	0.6515	0.7293

*Source:* Researchers constructed.

## 2. ICD Practices

Most of the companies tend to qualitatively disclose the IC information where as some companies disclosed numerical values of some elements of ICDs. Item of trademarks and company logos considered to be extremely important by the survey respondents was under-disclosed. Philosophy, new products and financial relations were under disclosed but the survey respondents deemed them to be very important. Therefore, the disclosures of them do not satisfy the expectation of survey respondents. Approximately 20% of the items of InCD were under disclosed, 10% of the items were moderately disclosed and 5% of the item of InCD was highly disclosed by the sample companies. In terms of ECD, it can be observed that the disclosures of brand and corporate image were very consistent with the survey respondent perceptions. Supply chain management, company awards and business collaborations were moderately disclosed but the survey respondents rated them to be extremely important. The item of customers and their relationship moderately disclosed but the survey respondents rated them to be very important. Approximately 10% of the items were moderately disclosed and 20% of the items were highly disclosed by the sample companies. In terms of HCD, it can be observed that the disclosure of employee related measurement was very consistent with the survey respondent perceptions. Number of employees, training and development and employee relation were under disclosed but the survey respondents rated them to be extremely important. The item of employee equity issues was under disclosed but the survey respondents rated them to be very important. The item of entrepreneurial skills was under disclosed but the survey respondents rated them to be very important. The item of employee welfare was moderately disclosed but the survey respondents rated them to be very important. Approximately 25% of the items of HCD were under disclosed, 5% of the item was moderately disclosed and 5% of the item of HCD was highly disclosed by the sample companies.

It was acknowledged that there were some drawbacks for the sample companies in terms of IC. First of all, except Union Assurance PLC, other companies did not provide the IC report. Though, this should not be criticized because there is no generally accepted framework for ICD in Sri Lanka. Only few companies mentioned the term IC in their annual reports. These drawbacks point out that listed companies in Sri Lanka still have to improve their ICD practices. Sri Lanka is an industrialized economy and a developing country in Asia. Majority of the sectors in CSE have achieved a remarkable growth after the war in Sri Lanka. This very noticeably reveals that stock market growth and economic growth moving together (Dayaratne 2014). There are many driving forces, such as: globalization and increased use of information technology are motivated Sri Lanka towards KBE (John Keels Holdings PLC 2014). Most of the top companies in Sri Lanka have been preparing their annual reports in accordance with GRI guidelines since 2011.

## 3. Changes of ICD practices over the years 2010-2014

One way repeated measure ANOVA and Paired sample t-tests were conducted to determine the significance of the differences in InCD, ECD, HCD and ICD between the years concerned from 2010 to 2014. Output of Maluchly's test of sphericity is given in table 8 below.

**Table 8: Maluchly's test of sphericity**

Epsilon effect	Mauchly's W	Chi <sup>2</sup>	Sig.	Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Effect	0.346	50.272	0.000	0.656	0.697	0.250
ECD	0.312	55.182	0.000	0.708	0.755	0.250
HCD	0.529	30.228	0.000	0.765	0.822	0.250
ICD	0.530	30.066	0.000	0.792	0.853	0.250

*Source:* Researchers constructed.

#### 4. Multivariate Tests

Wilks' Lambda – the  $p < 0.05$ , there is statistically significant effect for year from 2010 to 2014. There was a significant change in InCD, ECD, HCD and ICD across the 5 years. The values in partial  $\eta^2$  given in the multivariate analysis are InCD = 0.521, ECD = 0.778, HCD = 0.502 and ICD = 0.775. This suggests very large effect size. According to Cohen (1988 cited in Boduszek 2009) if partial  $\eta^2$  equals 0.01 then there will be a small effect, if partial  $\eta^2$  equals 0.06 then there will be a medium effect and if partial  $\eta^2$  equals 0.14 then there will be a large effect.

A one-way repeated measures analysis of variance was conducted in order to compare scores of InCD, ECD, HCD and ICD in 2010, 2011, 2012, 2013 and 2014. In terms of InCD, there was a significant effect for time, Wilks' Lambda = 0.000,  $F(4, 46) = 12.503$ ,  $p < 0.05$ , multivariate partial squared = 0.521. The results suggest that InCD significantly increased over time. In terms of ECD, there was a significant effect for time, Wilks' Lambda = 0.000,  $F(4, 46) = 40.374$ ,  $p < 0.05$ , multivariate partial squared = 0.778. The results suggest that ECD significantly increased over time. In terms of HCD, there was a significant effect for time, Wilks' Lambda = 0.000,  $F(4, 46) = 11.601$ ,  $p < 0.05$ , multivariate partial squared = 0.502. The results suggest that HCD significantly increased over time. In terms of ICD, there was a significant effect for time, Wilks' Lambda = 0.000,  $F(4, 46) = 39.682$ ,  $p < 0.05$ , multivariate partial squared = 0.775. The results suggest that ICD significantly increased over time.

#### 5. Pairwise Comparisons

Pair wise comparisons compare each pairs of years and indicate whether the difference between them is significant. As shown in the Appendix XI, each of the difference is significant (less than 0.05). A one-way repeated measure ANOVA was performed to determine whether there was a change in ICD scores in the five-year period. The results in above table shows that there was an increase in the ICD of listed companies on CSE over the five-year period and the increase was statistically significant (p-value of 0.000). Hence, H1a that the ICD of listed companies on CSE increased significantly over the years 2010-2014 is fully supported. It leads us to reject H1b that the ICD of listed companies on CSE decreased significantly over the years 2010-2014. In terms of InCD, ECD and HCD, all these three disclosures increased significantly over the five-year period. Abeysekera (2008) observed a significant increase in the InCD category in Sri Lanka and attributed the increase to the amendment of intellectual property act in Sri Lanka.

## 6. Discussion of the Extent of ICD Practices of the Sample Companies

When it comes to compare with the previous Sri Lankan studies, it can be seen that the results of this study are greatly in line with them as those studies usually observed an increasing level disclosure of IC (Abeysekara & Guthrie 2005, Abeysekara 2007, 2008, 2011a & 2011b, Kehelwalatenna & Gunaratne 2010, Malwara Arachchi & Kehelwalatenna 2011, Jayasooriya, Gunawardana and Weerakoon Banda 2015). Also, the results are consistent with majority of prior studies in the context of abroad that have shown ECD as the most reported category (Brennan 2001, April, Bosma & Deglon 2003, Oliveras & Kasperskaya 2004, Oliveras et al. 2008, Mention 2011, Singh and Kansal 2011). However, these findings were contradicted with those found the dominance of HCD (Branco et al. 2011) and InCD (Yau, Chun & Balarama 2009, Wagiciengo & Belal 2012).

It was found in this study that some companies were very reluctant to disclose some elements of IC in their annual reports, such as: trademark, number of employees, employee equity issues, training and development, employee relation and entrepreneurial skills. Firstly some companies might consider that the preparation of IC information would be a cost for them and consequently they would not like to disclose these elements of IC information. In addition, some disclosure items of IC such as: intellectual property, and the disclosure of them might be speedily imitated by competitors. This will impair the company's interests. Therefore it is not likely for some companies to disclose on such items (Abeysekara 2007 & 2011b, Yi & Davey 2010, Yi 2012). Moreover, the dominant role of the conventional financial reporting and the lack of a generally accepted ICD frameworks might be also factors discouraging some companies from disclosing the IC information in their annual reports (Abeysekara 2007, 2011a & 2011b, Malwara Arachchi & Kehelwalatenna 2011, Yi & Davey 2010).

Many types of corporate reporting have developed from the adoption of a stakeholder orientation. These include ICR (for example, the TBL reporting, CSR reporting, sustainability reporting, GRI index and IR that combines reporting on financial capital, IC and sustainability matters (IIRC 2011)). Some companies have adopted these guidelines to disclose the financial and non-financial information on IAs and IC in their annual reports. Only one company has presented the IC report in its annual report.

## Conclusions

This study examined the ICD practices of the listed companies in CSE. A total of 250 annual reports for 50 top companies based on market capitalization were content analyzed longitudinally in a five-year period (2010-2014). Agency theory, stakeholder theory, legitimacy theory and signaling theory were used to explain the findings. The findings revealed that the ICD of the sample companies increased over time. In terms of the three categories, similar to most prior studies, the ECD was the most widely disclosed category in the five-year period. In terms of InCD, there was an increasing trend from 2010 to 2011 and from 2013 to 2014. In 2010 and 2011, firstly reported category was ECD followed by InCD and HCD. In 2012, 2013 and 2014, firstly reported category was ECD followed by HCD and InCD. The tendency of sample companies to disclose more in ECD could be due to corporate legitimating purposes to address the increased regulatory pressure and the then increased public attention toward the companies. In 2012, 2013 and 2014, firstly reported category was ECD followed by HCD and InCD as a way to influence the society's perception in areas of employment. In addition, changes in the ICD category (i.e. in 2012, 2013 and 2014, firstly reported category was ECD followed by HCD and InCD) could further be attributed to the absence of an ICD guideline.

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## ECONOMIC CONSEQUENCES OF IFRS ADOPTIONS AROUND THE ASEAN COUNTRIES: ROLE OF ANALYST FOLLOWING

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### Abstract

This paper examines the economic consequences of IFRS adoptions in the ASEAN countries. Economic consequences were measured with the amount of the asymmetry of information and cost of capital, while reporting incentives to adopt IFRS proxied by the number of analysts following. The study period is 2 years before and after the adoption of IFRS in each country.

The regression test using all data of ASEAN countries shows that the implementation of IFRS could not reduce levels of information asymmetry but could reduce cost of capital. Reporting incentives (measured by number of analyst following) could not able to reduce the level of information asymmetry and cost of capital. The negative impact of IFRS to the asymmetry of information will be greater with higher reporting incentives as measured by the number of analysts following. But this result only proved at few ASEAN countries. The results of this study indicate that regulators in ASEAN countries should encourage analyst to follow a listed company and listed companies should be more transparent in presenting its financial statements.

**Keyword:** *IFRS, Economic consequences, information asymmetry, bid ask spread, cost of capital, analyst following*

### Background

Integration of world capital markets will have an impact on the growing need for high-quality and comparable financial information. Since the EU set 2005 as the year of adoption of IFRS in full for EU member states, many countries also begin to commit local convergence of accounting standards to IFRS, including ASEAN countries. The implementation of international accounting standards, such as IFRS, is expected to improve the quality and comparability of the financial statements in order to accelerate the realization of an integrated regional integration in global capital markets.

The adoption of IFRS is expected to facilitate the enterprises in ASEAN countries to carry out cross-border transactions, including mergers and acquisitions. However, empirical research on similar issues in developing economies in Asia is lacking due to late adoption of IFRS in the region. From the ASEAN countries, there are recent studies on Malaysia (Yeow and Mahzan, 2013), Vietnam (Phan and Mascitelli, 2014; Phan, 2014) and Indonesia (Wahyuni, 2013).

Convergence towards the adoption of IFRS has advantages and disadvantages (Jeanjean and Stolowy, 2008). These may impact differently on developed and developing countries. The IFRS Foundation has recognized the need to understand the impact of IFRS adoption in different parts of the world, especially in developing or emerging economies. To date little is known about this topic with respect to members of the Association of South East Asian Nations (ASEAN), which includes some of the world's fastest-growing economies. ASEAN was formed in 1967; it is a regional political and economic grouping made up of Brunei Darussalam, Indonesia, Malaysia, the Philippines, Singapore and Thailand, which are the

older members of ASEAN. Vietnam, Laos, Cambodia and Myanmar joined in the late 1990s. ASEAN countries had 600 million people, combined gross domestic product of US\$1.5 trillion and total trade of US\$1.7 trillion. Recent studies indicate that some ASEAN countries have already adopted IFRS to integrate with the world economy (Yapa et al., 2015). The development and global implementation of a single set of standards is a difficult goal.

Convergence of accounting standards is requiring a joint effort from national governments, stock market regulators, financial statement users, standard setters and the accounting profession (Street, 2002). Joshi et al. (2008) claim that nationalism might still present a hurdle to IFRS implementation, as do differences of language and culture (Schipper, 2005) as well as legal orientation in code-law countries like Spain (Navarro- García and Bastida, 2010). As IFRS commonly require the disclosure of more information than domestic GAAP (Wright and Hobbs, 2010), shifting to IFRS involves costs (Taylor, 2009). Rodrigues and Craig (2007) argued that it might be improper to enforce a single set of IFRS for all reporting entities regardless of their size or country of origin.

A study by Alali and Cao (2010) illustrates how public authorities in different countries had hindered the adoption of accounting standards in the European Union, the USA, the UK and China. Nurunnabi (2015) highlights that socio-cultural factors can play a very critical deterrent in the implementation of IFRS in developing countries: in Bangladesh the high levels of corruption and poor execution by the government were found to be discouraging for global policy makers. This is quite in line with research findings of another study by Herbert et al. (2013) on Nigerian accountants and academics. Despite IFRS being implemented in 2012 in Nigeria, the level of awareness was found very low and IFRS training curriculum implantation was considered the most important step for any future success of IFRS. For example, Pelucio-Grecco et al. (2014) find that a transition to complete implementation of IFRS has a “restrictive effect” on the earnings management of non-financial companies of Brazil whereas Zhang et al. (2013) from China find a positive effect of the same on the earnings management. Clearly, the response from within a nation or a region can be variable. So, examine the economic consequence of IFRS adoption in ASEAN country is very interesting.

In practice, implementing new standards is not easy. Many businesses have complained about difficulties in implementing the new standards in the company. Costs for investments in the field of technology and information to support the application of IFRS is high. Furthermore, the costs of IFRS training for employees are also high. In addition, the condition of the legislation that are not necessarily in sync with IFRS.

The impact of IFRS to the company vary depending on the type of industry, transaction, financial reporting elements owned and accounting policy's option. Some changes have to make significance changes to the operating system and the company's business, but the other changes related only to the accounting procedures. Banking companies, for example, are those that have the effect of changes quite a lot. The changes are not only done at the corporate level, but there should also be changes in the regulation of a country.

Implementation of IFRS-based accounting standards have been studied for most of the European countries, which already requires the implementation of IFRS since 2005. Previous research can be grouped into two categories: research that tests the quality of accounting after the implementation of IFRS and research that examine the economic consequences of the application of IFRS. Barth & Lang (2005) Verriest et al. (2010) and Beuselinck et al. (2010) found that quality improved after the implementation of IFRS. However, Hung & Subramanyam (2007), Beuselinck et al. (2008), Garcia-Osma and Pope (2010), Capcun et al. (2010), and Cascino & Gascen (2010) found that the quality of accounting did not increase after the implementation of IFRS. Research Daske et al. (2008), Beuselinck et al. (2010), Florou & Kosi (2010) found that IFRS bring positive economic consequences for the

company, but Clarkson et al. (2009) found the opposite, the adoption of IFRS did not improve the quality of financial reporting. IFRS adoptions that are part of a serious commitment to transparency are likely to reduce information asymmetry, uncertainty and estimation risk, and hence should be rewarded with a lower cost of capital and higher market liquidity (e.g., Leuz and Verrecchia, 2000; Lambert et al., 2007a).

In studying the economic consequences around IFRS adoptions, Daske et al (2013) using three proxies: *price impact*, *bid-ask spread* and *cost of capital*. *Price impact* is the ability of an investor to trade in a stock without moving its price, as the Amihud [2002] illiquidity measure (equal to the absolute stock return divided by the US\$ trading volume). Higher values indicate more illiquid stocks. *Bid-ask spread* is a commonly used proxy for information asymmetry (e.g., Welker [1995], Leuz And Verrecchia [2000], Lang, Lins, And Maffett [2012]).

Companies that just implementing accounting standards IFRS with cosmetic purposes will have a low commitment to transparent financial statements. While the company that is sincerely applying IFRS accounting standards will have a strong commitment to transparent financial statements. Previous research has found higher transparency will reduce the estimation risk that will ultimately reduce the cost of capital (Daske et al., 2013 and Lambert et al., 2007). Daske et al. (2013) examined the economic consequences of the voluntary adoption of IFRS around the world and split the company into two: the label adopters (companies that not sincerely adopt IFRS) and serious adopters (companies that adopt IFRS in full). Daske et al. (2013) found that the impact of IFRS adoption on market liquidity and the cost of capital on a serious adopters significantly more powerful than the companies that belong to the "label adopters". This shows that if the adoption of IFRS is not done in earnest (just cosmetic), then it will not have a significant impact on the level of transparency and does not reduce the asymmetry of information, market liquidity and the cost of capital.

Daske et al. (2013) use three proxies to partition the firms into substantive and cosmetic Adopters: Reporting Incentive, Behavior Incentive, Environment Incentive. The underlying idea is that reporting incentives play a significant role for firms' reporting strategies as well as the choice to voluntarily adopt IAS. Based on this logic, Daske (2013) attempt to identify firms that experience substantial *increases* in their reporting incentives around IAS adoption. These firms are likely to make major improvements to their reporting strategy. In contrast, there could be firms that adopt IAS without material changes or even decreases in reporting incentives. For example, these firms could adopt IAS because managers perceive a general trend to IAS/IFRS and feel pressured to follow, but then are less likely to materially adjust their reporting. Similarly, they could adopt IAS for contracting reasons and hence not be concerned with transparency to equity investors.

This study continues prior research from Daske et al., (2013) in the context of ASEAN countries, but using only two proxy of economic consequence (information asymmetry-measure by value of bid-ask spread and cost of capital) and only one incentive variable (reporting incentive that is measured by number of analyst following). In Daske et al., (2013), company is divided into two groups: "serious adopter" who expect to achieve better financial transparency offered by IFRS, and "label adopter" who do not have the incentive of reporting as it gets little or no benefit at all from the adoption of IFRS. In Daske et al., (2013), *Serious Adopters* denotes a binary classification (1 and 0) that identifies firms with above-median changes in the reporting proxies around the adoption of IFRS. This research do not classified reporting incentive proxy (number of analyst following) to be 1 and 0, but using the real value of the variable. Sample of Daske et al., (2013) are 24 countries around 1998-2004, this research using 5 ASEAN countries.

**1. The objective of this research:**

- a) Are there any economic consequences of the IFRS adoption around the ASEAN countries?
- b) Whether Economic consequences around IFRS adoption in ASEAN Countries are increase by reporting incentive (number of analyst that follow a companies)?

**The Convergence of IFRS in ASEAN**

Five countries are considered to be representative of ASEAN conditions as it is 5 largest countries in the ASEAN. Accounting systems to the 5 countries is considered more advanced than the other member countries such as Brunei, Vietnam, Laos, Cambodia and Burma. Brunei, Laos, Cambodia and Burma have not even had a stock exchange. Five countries have something in common, namely the convergence of IFRS into local standards that previously have been reviewed by the local standard setters.

**1. Indonesia**

In 1994, the Financial Accounting Standards Board used IAS as a reference in setting accounting standards. Nevertheless, there are some standards self-made and also refer to US GAAP, although not many of them ([www.adoptifrs.org](http://www.adoptifrs.org)). There are 28 IAS adopted at that time, 17 refers to US GAAP standards and 11 standards are self-made (Saudagaran and Diga, 2000; Saudagaran, 2004).

Starting in 2007, Indonesia has had a program to perform a gradual convergence of IFRS. The approach taken is to keep using local accounting standards, namely SFAS (Statement of Financial Accounting Standards) and make efforts to make the difference between IAS and IFRS is as few as possible.

In the period of 2007, Indonesia actively revised plenty of its accounting standards, and the peak is when Indonesia formally declare its accounting standards have been fully converged to IFRS and will be effective in 2012. IFRS that used as the base is IFRS that set on January 1, 2009. Only 2 standards which was not adopted, namely IAS 41 on agriculture and IFRS 1 on first-time adoption. Further convergence efforts continue to conduct annual improvement according to the latest revision of IFRS. Capital market authority in Indonesia requires all companies that listed on the capital market to prepare financial statements based on accounting standards.

**2. Malaysia**

Historical development of accounting standards in Malaysia is heavily influenced by the UK. After the establishment of the IASC in 1973, Malaysia is the first country in ASEAN that adopted the IAS to local standards in the mid-1970s (Saudagaran and Diga, 2000). In 1977, Malaysia began publishing local accounting standards based on IAS. There are several IAS that not adopted, for example, inventory accounting, depreciation, inflation, government grants, business combinations, special parties' disclosure, and accounting for financial institutions. Malaysia draw up its own standards for insurance and aquaculture. There is also some standard that refers to Australia, Canada, New Zealand, US and UK (Saudagaran, 2004).

IFRS Convergence conducted by the Malaysian Accounting Standards Board (MASB) through two stages. Starting January 1, 2005, the use of IFRS is permitted. Act was amended so that financial reporting of foreign companies that listed on the Malaysian stock market can apply Malaysian accounting standards issued by the MASB or international accounting standards approved by the MASB. The international accounting standards are the standards

issued by the IASB, USA, UK or Australia. However, this amendment has no impact at all as the company still uses its own standards that issued by MASB. ([www.adoptifrs.org](http://www.adoptifrs.org)).

Furthermore, on August 1, 2008, MASB announced plans to convergence fully to IFRS that issued by the IASB at 1 January 2012. The revised standard is substantially conducted in the period 2009 to 2012. This standard is applicable to public companies and do not include private companies.

### **3. Singapore**

The same as Malaysia, the historical development of accounting standards in Singapore is heavily influenced by the UK. After the establishment of the IASC in 1973, Singapore is a country in ASEAN that first adopted the IAS to local standards in the mid-1970s (Saudagaran and Diga, 2000). In 1977, Singapore local accounting standards referring to IAS began to published. In development, there are several IAS that are not adopted as it was considered not appropriate.

IFRS Convergence done gradually. Since 2003, all companies are required to apply Singapore Financial Reporting Standard (Singapore FRS). Singapore FRS is substantially similar to IFRS. Then, since January 1, 2005, the SFRS are already equivalent to IFRS and since 2005 it resumed its full convergence to IFRS. The year 2012 is the final stage of the process of convergence of IFRS (PWC, 2012).

### **4. Thailand**

In 1997, the accounting standards in Thailand changed the base to IAS ([www.adoptifrs.org](http://www.adoptifrs.org)) after initially referring to US GAAP. Furthermore, at that time there were 17 of 23 accounting standards in Thailand which refers to IAS (Saudagaran and Diga, 2000) and partly refers to US GAAP for the standards that are not regulated in the IAS (Saudagaran, 2004).

IFRS Convergence done gradually since 2006. According to the World Bank report (2006), Thailand is planning to adopt IFRS substantially by the end of 2006. There are 28 locally-based IFRS standards are scheduled to be published in 2007 ([www.adoptifrs.org](http://www.adoptifrs.org)).

In 2011, Thailand announced it would adopt IFRS fully and apply to all companies listed on the capital market of Thailand (SET 50) and in 2013 for SET 100. IFRS adopted version was published in 2009 (Worldbank, 2008).

### **5. Philippine**

At the beginning of its development, accounting standards applicable in the Philippine sourced from US GAAP. Philippine begin drafting local standards in the 1980s where more referring to US GAAP. After the 1990, there are several standards that started to refer to IAS (Saudagaran and Diga, 2000). In 1997, Philippine decided to change the standard reference to IAS ([www.adoptifrs.org](http://www.adoptifrs.org)).

In 2005, Philippine perform full adoption to IFRS that issued by the IASB and revise the previous version of the standard that refers to the IAS. At the beginning of its application, there are still some differences or exceptions, for example, there are some slower standards applicable to insurance companies and mining in 2006 (PWC, 2012).

### **Previous Study on the Impact of the Application of IFRS**

The following section will review a number of relevant studies. Implementation of IFRS-based accounting standards have been studied for most countries in Europe, which already requires the implementation of IFRS since 2005. Previous study can be grouped into two categories: study to test the quality of accounting after the implementation of IFRS and study that examine the economic consequences of the application of IFRS.

Brüggemann (2013) empirical evidence on the economic consequences of mandatory adoption of International Financial Reporting Standards (IFRS) in the European Union (EU) and provides suggestions on how future research can add to our understanding of these effects. Empirical research on the intended consequences generally fails to document an increase in the comparability or transparency of financial statements. In contrast, there is rich and almost unanimous evidence of positive effects on capital markets and at the macroeconomic level. They conclude that both the intended and the unintended consequences deserve further scrutiny to assess the costs and benefits of mandatory IFRS adoption, which may help provide a basis for evaluating the effectiveness of the IAS Regulation.

Barth & Lang (2005) conducted a study of 21 countries that have adopted IFRS, and found that the quality of accounting after IFRS adoption increases in the lower level of earnings management and the recognition of losses is more timely. Verriest et al. (2010) examined the disclosure of financial statements to examine the quality of the disclosure after the adoption of IFRS and found that in the initial adoption of IFRS, financial statement disclosure quality is higher in companies that have strong corporate governance mechanism. Beuselinck et al. (2010) examined the content of the information (public and private) in the accuracy of earnings estimates by analysts at companies that adopt IFRS in Europe the period 2003 - 2007. The results show that the information content of both public and private information increased following the adoption of IFRS.

Research that found no benefit to the quality of the adoption of IFRS accounting done by Hung and Subramanyam (2007), that takes a sample of companies in Germany. Hung and Subramanyam (2007) found that higher variability in the book value and earnings are reported using IFRS compared using German accounting standards. In addition, Hung and Subramanyam (2007) also found lower earnings reported under IFRS is not persistent (transitory) than earnings reported by the German Accounting Standards. These results are consistent with the orientation of the IFRS fair value. On the other hand, Beuselinck et al. (2008) also showed the opposite, that in the first year of implementation of IFRS in the European Union, the changeover to IFRS did not increase the comparability of accounting earnings and accruals.

Garcia-Osma and Pope (2010) which only take a sample of companies in France, found that the accounting ratios was relatively stable during the past transition of IFRS accounting adoption. This result is due to the company utilizing accounting policy choice in the initial adoption of IFRS adjustments to eliminate the effects of the adoption of IFRS on the Balance Sheet. Even this study criticized the weaknesses in IFRS 1, concerning the implementation of the initial adoption of IFRS the company used to eliminate the effects of adjustments, lowering the quality of financial reporting information.

Capcun et al. (2010) examined the quality of financial reporting information that based on the size of accrual earnings management using a sample of companies in the EU on the adoption of IFRS transition period 2004 - 2005. The study found that ROA is significantly higher in the period that use IFRS. They found that the increase in ROA is higher in companies that have a low level in the period ROA in using local standards. These results indicate the occurrence of earnings management in the period after the adoption of IFRS occurs in all countries, especially countries that the rule of law (law enforcement) are weak and the high level of earnings management prior to the period of adoption.

Study on the economic consequences of the adoption of IFRS, among others, performed by Daske et al. (2008). Daske et al. (2008) found an increase in market liquidity (measured by the bid-ask spread and volume of sales) after the adoption of IFRS. This study took a sample of some of the countries in the European Union using monthly data. An important aspect in the study that this result was only found in countries that have a high reporting incentives and high levels of enforcement.



Furthermore, Daske et al. (2009) investigated the effects of the adoption of IFRS on estimating capital cost. The result is that the benefits of adoption of IFRS in lowering the cost of capital occurs only when there is a high incentive for financial reporting. Daske et al. (2009) distinguishes the country into two groups, namely "serious adopter" who expects achieve better financial transparency offered IFRS, and "label adopter" who do not have the incentive of reporting as it gets little or no benefit at all from the adoption of IFRS. Beuselinck et al. (2010) examined whether adoption of IFRS boost the stock price informativeness according to stock return synchronicity criteria, and found that the adoption of IFRS increases the ability of analysts in predicting stock prices and lower private information that is usually used by and benefited the institutional investors. Still on the cost of capital, Florou & Kosi (2010) found that the adoption of IFRS are associated with increased issuance of debt instruments to the public and lower the cost of debt.

Conflicting study results come from Clarkson et al. (2009) that investigated the impact of the adoption of IFRS in Europe and Australia based on the relevance of the book value and profits for equity valuation. The result is that the adoption of IFRS did not improve the quality of financial reporting. When the sample was divided by the structure of state law between common law and code law, it was found that the relevance has diminished value after the adoption of IFRS in common law countries, while the state law code was not found changes in the relevance of the book value and profits for equity valuation.

Inconsistency on improving the quality of financial reporting information after the adoption of IFRS is caused not only by the lack of expertise of the author and auditors, but also because of pseudo adoption as disclosed by Daske et al. (2009). Thus, accounting regulations are not always effective, as it depends on the reporting incentive and enforcement in each country. Reporting incentives could arise from the increase in the need for a standard due to lack of expertise in preparing the local accounting standards and the presence of multinational companies and international auditors. Besides, incentives can also arise from the need to produce high-quality financial reporting due to the potential growth companies and financing needs.

### **Hypothesis development**

Firms' reporting incentives are different and the strength of enforcement differs considerably across countries (e.g., Ball et al., 2003; Leuz et al., 2003; Ball et al., 2005; Lang et al., 2006; Burgstahler et al., 2006). For these reasons, one frequently voiced concern is that some firms may adopt IFRS merely as a label without making material changes in their reporting policies (e.g., Ball, 2001, 2006).

Provided that market participants can differentiate between "label" and "serious" adopters, we should observe differential market reactions and economic consequences. IFRS adoptions that are part of a serious commitment to transparency are likely to reduce information asymmetry, uncertainty and estimation risk, and hence should be rewarded with a lower cost of capital and higher market liquidity (e.g., Leuz and Verrecchia, 2000; Lambert et al., 2007a).

The initial idea of this research is that the underlying motivation of manager to change accounting standards play an important role to look at the economic consequences around the adoption of IFRS. In the process of the adoption of IFRS, there are companies, which adopt IFRS only the name, without making any material change in reporting. But there are also companies that actually make changes because it has an incentive to increase transparency.

In studying the economic consequences around IFRS adoptions, Daske et al (2013) using three proxies: *price impact, bid-ask spread and cost of capital*. *This paper only examine economic consequences from the level of information asymmetry and cost of capital.*

Important antecedents for this paper are studies highlighting the role of firms' reporting incentives in explaining observed accounting properties and actual practices. In this paper, we

emphasize and test the role of *firm-level* incentives in the context of IFRS adoptions. IFRS, like any other set of accounting standards, afford management with substantial discretion as their application involves judgment and the underlying measurements are often based on private information. The way in which firms use this discretion likely depends on managers' reporting incentives, which are shaped by many factors, including countries' institutional frameworks, various market forces, and firm characteristics. Incentive variable that will be examine in this research are reporting incentive that is measured by number of analyst following. Based on these arguments, the proposed hypothesis are:

- H1: Company with high analyst following will decrease the level of information asymmetry
- H2: Company with high analyst following will decrease the cost of capital
- H3: IFRS Adoption will decrease the Level of information asymmetry
- H4: IFRS Adoption will decrease the Level of cost of capital
- H5: Impact of IFRS Adoption to the information asymmetry will be higher for a company with high reporting incentive (analyst following)
- H6: Impact of IFRS Adoption to the cost of capital will be higher for a company with high reporting incentive (analyst following)

### Research Design and Data

Our research design relies on variation in the underlying motives for IFRS adoption.

We estimate the following model 1 to test hypothesis 1 and 3:

$$BAS_{it} = \beta_0_{it} + \beta_1 IFRS_{it} + \beta_2 AF_{it} + \beta_j Controls_{it} + \varepsilon. (1)$$

Model 2 is using to test hypothesis 2 and 4:

$$COC_{it} = \beta_0_{it} + \beta_1 IFRS_{it} + \beta_2 AF_{it} + \beta_j Controls_{it} + \varepsilon. (2)$$

Model 2 is using to test hypothesis 5:

$$BAS_{it} = \beta_0_{it} + \beta_1 IFRS_{it} + \beta_2 AF_{it} + \beta_3 IFRS_{it} * AF_{it} + \beta_j Controls + \varepsilon. (3)$$

Model 2 is using to test hypothesis 6:

$$COC_{it} = \beta_0_{it} + \beta_1 IFRS_{it} + \beta_2 AF_{it} + \beta_3 IFRS_{it} * AF_{it} + \beta_j Controls + \varepsilon. (4)$$

*BAS* is Information asymmetry, proxied by bid ask spread

*COC* is Cost of Capital

*IFRS* is a binary variable coded as 1 for years after a country adopt IFRS, 0 others.

*AF* is number of analyst following of a company

Control variables for model 1 and 3 are:

- *Market Value* is stock price times the number of shares outstanding (in US\$ million).
- *Share Turnover* is annual US\$ trading volume divided by market value of outstanding equity.
- *Return Variability* is the annual standard deviation of monthly stock returns.
- *Inflation* is inflation rate for every country, from Bloomberg

Factors such as unanticipated interest rate changes, productivity declines and excessive in inflationary pressures are likely to influence liquidity indirectly by inducing fund out ows, price declines and volatility increases for the stock market, as well as exacerbating inventory risks (Fujimoto, 2004). Control variables for model 2 and 4 are:

- TA (Total Asset)
- *STO (Share Turnover)* is annual US\$ trading volume divided by market value of outstanding equity.
- *RVAR (Return Variability)* is the annual standard deviation of monthly stock returns.
- *INF (Inflation)* is inflation rate for every country, from Bloomberg

### 1. Economic Consequences

Economic Consequences proxied by information asymmetry and Cost of capital. *Bid ask spread (BAS)* is a commonly used proxy for information asymmetry (e.g., welker [1995], Leuz And Verrecchia [2000], Lang, Lins, And Maffett [2012]). We use the yearly median of the daily quoted spreads, which we compute as the difference between the closing bid and ask prices divided by the midpoint. Cost capital measure by beta x country risk factors from Damodaran

### 2. Reporting Environment (Reporting Incentive)

Lang and Lundholm [1996] show that analyst coverage (following) is related to more transparent reporting. Evidence in Lang, Lins, and Miller [2004] and Yu [2008] suggests a monitoring role of financial analysts, for instance, in curbing earnings management. Daske (2013) compute the *Reporting Environment* variable as the natural log of the number of analysts following the firm (plus one). A nice feature of this variable is that it does not rely on accounting information, and is free of mechanical accounting effects that likely occur around the switch to a new set of accounting standards. Higher values denote more external pressure.

### 3. Sample and Data

This research uses companies that are listed on ASEAN countris. Data collected from the Thomson Reuters Eikon and Annual Report each company. Samples includes only listed companies and excludes financial companies (ie. banks, insurance and investments corporations) because those companies have special financial statements structure so that their earning quality measurement does not equal with the other industries.

The study period is 2 years before and after the adoption of IFRS. The early adopters is Singapore (2003), then the Philippines and Malaysia (2005), and Indonesia (2012) and last Thailand (2013).

**Table 1. Period of Research**

Countries	Before adoption of IFRS "0"	Adoption of IFRS Started	After adoption of IFRS "1"
Indonesia	2010,2011	2012	2012,2013
Malaysia	2003,2004	2005	2005,2006
Singapore	2001,2002	2003	2003,2004
Thailand	2011,2012	2013	2013,2014
Phipina	2003,2004	2005	2005,2006

**Table 2. No of Sample**

	MODEL (BAS)	1	MODEL (COC)	2
Indonesia	512		484	
Malaysia	1548		1316	
Philipines	516		372	
Singapore	712		532	
Thailand	872		800	
Total	4160		3504	

#### 4. Descriptive Statistic

The average bid ask spread for all samples is 0.039 with high variation, this is indicated that the standard deviation is greater than the average value. The average bid ask spread is the highest sample is Singapore and the average bid ask spread is the lowest average is Thailand. All countries have high variation of bid ask except Indonesia. The average of analyst following is small that has value smaller than 1, as most companies (over 50%) have no analyst following. Countries with highest number of average analyst following is Thailand and the lowest is Indonesia. For IFRS variable, the number of years the company prior to the application of IFRS and after IFRS implementation is balanced, respectively 50% before and 50% after the implementation of IFRS for all countries. For the average value of capitalization, the highest rate is the average of a sample of companies in Thailand and the lowest average of a sample of companies in Malaysia. While the average highest return volatility is a sample of the Indonesian company, and the lowest average is sample of Malaysian company.

**Table 3. Descriptive Statistics - Model 1**

	BAS	AF	IFRS	MV	STO	RVAR	INF
Mean	0.039903	0.327664	0.500000	421.3208	88.30930	0.050033	0.025332
Median	0.014590	0.000000	0.500000	45.17000	0.596214	0.039642	0.021840
Maximum	0.834882	3.367296	1.000000	30999.99	75421.89	1.296507	0.065170
Minimum	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-0.008950
Std. Dev.	0.073007	0.784010	0.500060	1783.087	1891.705	0.055753	0.019265
Skewness	4.453986	2.404909	0.000000	9.241995	30.89935	8.485986	0.319320
Jarque-Bera	133750.9	7729.628	693.3333	2043311.	1.83E+08	3887874.	122.6746
Probability	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Observations 4160

- *BAS is Information asymmetry, proxied by bid ask spread*
- *COC is Cost of Capital*
- *IFRS* is a binary variable coded as 1 for years after a country adopt IFRS, 0 others.
- *AF* is number of analyst following of a company
- *MV (Market Value)* is stock price times the number of shares outstanding (in US\$ million).
- *STO (Share Turnover)* is annual US\$ trading volume divided by market value of outstanding equity.

- *RVAR (Return Variability)* is the annual standard deviation of monthly stock returns.
- *INF (Inflation)* is inflation rate for every country, from Bloomberg

**Table 4. Descriptive Statistics - Model 2**

	COC	IFRS	AF	TA	LEV	RETVAR	INF
Mean	0.023034	0.500000	0.404171	1.00E+08	476.4767	0.053012	0.030249
Median	0.018998	0.500000	0.000000	136760.2	150.8286	0.041714	0.029610
Maximum	0.328180	1.000000	3.367296	7.47E+09	144447.7	1.285517	0.065170
Minimum	-1.215000	0.000000	0.000000	0.000000	0.000000	0.000000	-0.003920
Std. Dev.	0.042208	0.500071	0.858587	5.52E+08	3778.020	0.052474	0.018784
Skewness	-10.91016	0.000000	2.056489	8.969910	31.44516	7.830144	0.234448
Jarque-Bera	13167734	584.0000	3711.514	1300498.	1.84E+08	2769303.	159.6657
Probability	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Observations 3504

- *COC* is Cost of Capital
- *IFRS* is a binary variable coded as 1 for years after a country adopt IFRS, 0 others.
- *AF* is number of analyst following of a company
- *TA (Total Aset)* is ice times the number of shares outstanding (in US\$ million).
- *LEV (Share Turnover)* is annual US\$ trading volume divided by market value of outstanding equity.
- *RVAR (Return Variability)* is the annual standard deviation of monthly stock returns.
- *INF (Inflation)* is inflation rate for every country, from Bloomberg

**5. Regression Result**

**Table 5. Regression Result All Data - Model 1**

Variable	Predicted	Coefficient	Prob.		Coefficient	Prob.	
C		0.072508	0.0000		0.040719	0.0000	
AF	-	-0.000860	0.3095		7.89E-05	0.2274	
IFRS	-	0.001115	0.2739		-0.000407	0.0002	***
IFRS*AF	-				-0.000412	0.0000	***
LMV	-	-0.018946	0.0000	***	-0.001633	0.0000	***
LSTO	-	-0.002993	0.0003	***	-0.000747	0.0000	***
LRVAR	-	-0.000899	0.3302		-0.003366	0.0000	***
INF	+	-0.066972	0.1418		-0.080712	0.0000	***
dep var: BAS							
Adjusted R-squared		0.031237			Adjusted R-squared	0.567979	
Prob(F-statistic)		0.000000			Prob(F-statistic)	0.000000	

Table 5 shows that on the whole sample of the ASEAN countries, with variable BAS as the dependent variable, the application of IFRS has not been able to reduce the level of information asymmetry. But, the test results with moderating variables showed that analysts

following reinforces the negative effects of the application of IFRS to the asymmetry of information.

This means, following analyst who monitors the company causing the company to apply IFRS, with earnest, thus reducing information asymmetry. Consistent with previous studies (Daske, 2013) which found that, reporting incentives such as the following analyst could reinforcing the negative effect of IFRSs on information asymmetry

**Table 6. Regression Result All data - Model 2**

Variable		Coefficient	Prob.		Coefficient	Prob.	
C		-0.018190	0.0004	***	-0.018125	0.0005	***
AF	-	0.002042	0.1120		0.002436	0.0768	*
IFRS	-	-0.004095	0.0034	***	-0.003603	0.0104	***
IFRS*AF	-				-0.001189	0.0985	*
LNTA	+	0.002005	0.0000	***	0.001988	0.0000	***
LEV	+	5.59E-07	0.0001	***	5.55E-07	0.0001	***
RETVAR	+	0.022162	0.0130	**	0.021891	0.0140	**
INF	+	0.518272	0.0000	***	0.517948	0.0000	***
dep var: COC							
Adjusted R-squared		0.713066			Adjusted R-squared	0.713140	
Prob(F-statistic)		0.000000			Prob(F-statistic)	0.000000	

Table 6 shows that the application of IFRS can lowering the cost of equity. The negative impact of the application of IFRS to the information asymmetry will be even greater with higher incentive reporting, as measured by the number of analysts following. Consistent with Daske (2013) which found that reporting incentives such as the following analyst could reinforcing the negative effect of IFRSs on information asymmetry.



Table 7 showed regression result for each ASEAN country with the BAS (bid ask spread) as the dependent variable. That table showed consistent results in Thailand and Malaysia where the company with a high reporting incentives (companies with many analysts), reinforcing the negative effect of IFRS on information asymmetry.

Table 8 shows the regression results per each ASEAN country with the COC as the dependent variable. The results show that in the countries of Malaysia, Indonesia and Singapore, analysts following could reduce cost of capital directly, but it does not moderate the effect of IFRS to the cost of capital. This means there is no difference in the impact of IFRS on the cost of capital in countries with low and high analysts following.

### **Conclusion**

This paper examines the economic consequences of IFRS adoptions in the ASEAN countries. Economic consequences were measured with the amount of the asymmetry of information and cost of capital, while incentives to adopt IFRS proxied by the number of analysts following. The more the analyst following number, the more external pressure to adopt IFRS. The study period is 2 years before and after the adoption of IFRS. The early adopters is Singapore (2003), the Philippines and Malaysia (2005), Indonesia (2012) and lastly Thailand (2013).

The regression test using all data of ASEAN countries shows that the implementation of IFRS could not able to reduce levels of information asymmetry (bid ask spread). Reporting incentives (measured by the number of analyst following) have not been proven could to reduce the level of information asymmetry. But, the test results with moderating variables showed that analysts following reinforces the negative effects of the application of IFRS to the asymmetry of information. This means, analyst following who monitors the company causing the company to apply IFRS thus reducing information asymmetry. Consistent with previous studies (Daske, 2013) which found that, reporting incentives such as the following analyst could reinforcing the negative effect of IFRSs on information asymmetry. But regression for each country only proven at Thailand and Malaysia.

Application of IFRS can lowering the cost of equity. The negative impact of the application of IFRS to the information asymmetry will be greater with higher incentive reporting, as measured by the number of analysts following. But regression result for each country only proven in Singapore.

In Thailand and Malaysia, company with high reporting incentives (companies with many analysts), could reinforce the negative effect of IFRS on information asymmetry. In Malaysia, Indonesia and Singapore, analysts following could reduce the cost of capital directly, but it does not moderate the effect of IFRS to information asymmetry. This means there is no difference in the impact of IFRS on the asymmetry of information in countries with low and high analysts following.

No difference in the impact of IFRS on the asymmetry of information of a company with the high or low reporting incentives.

The results of this study indicate that regulators in ASEAN countries should encourage analyst to follow listed company and listed companies should be more transparent in presenting its financial statements.

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**THE EFFECT OF AUDIT PROCEDURES AND AUDITORS' EXPERIENCES ON  
AUDITORS' RESPONSIBILITY IN DETECTING FRAUDS: JAVANESE CULTURE  
AS A MODERATING FACTOR**

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**Abstract**

This study examines the influence of audit procedures and auditors' experience on auditors' responsibility in detecting fraud, and to examine whether Javanese culture moderates such relationship. Using data of 35 auditors working at eight public accounting firms in Semarang, this study found that audit procedures and auditors' experience has significant influences on the auditors' responsibility in detecting fraud. In addition Javanese culture was found to moderate the influence of audit procedures and auditors' experience on the responsibilities of auditors in fraud detection.

**Keywords:** *Audit Procedure, Auditor Experience, Auditor Responsibility, Fraud Detection, Javanese Culture.*

**Introduction**

An auditor has main responsibility for planning and performing audits with practical reassurance of detecting material misstatements in financial reports. But through time, there have been conflicting opinions on the role of auditors with respect to their responsibility in detecting fraud. Though auditors have claimed that fraud detection is an audit objective, since the beginning, the auditor's role has not been well defined, which then resulted in the case of World-Com and Enron, as well as many other accounting scandals (Alleyne & Howard, 2005). Due to that, the auditing and the accounting professions have previously undergone major changes. Following the latest financial calamities, including the collapse of investment banks, the awareness of fraud had increased. Indeed, ACFE (2012) in their worldwide survey has reported that annual fraud costs to overall companies were estimated around 5% of their revenues, which is roughly US\$3.5 trillion annually.

Occupational fraud had been defined by The ACFE (2012, p. 6) as "the use of one's occupation for personal enrichment through the deliberate misuse or misapplication of the employing organizations' resources or assets." The common types of fraud would include expense reimbursement schemes, payroll schemes, skimming, creating fictitious creditors, and bribery. In the study, it was stated that the median loss caused by occupational fraud was US\$140,000 and the cases were reported with a median of 18 months before being detected (ACFE, 2012). Comprising of 87% of the cases reported, undoubtedly the most widespread type of occupational fraud was asset misappropriation schemes. Though financial statement fraud plots made up to just 8% of the cases, with US\$1 million, it caused the utmost median loss. In Asia, the common type of fraud was corruption schemes with the percentage of 51%, whereas financial statement fraud only took up to 9%. Based on the Asia-Pacific Fraud Survey done by Ernst & Young (EY, 2013), in Indonesia, 79% of the survey participants believed that corruption and bribery is common with 36% saying that it is accustomed to use bribes to win long and short term business agreements. It was also noted that the study respondents suspected that when it comes to financial reporting, Indonesia has weak controls. The lack of regulation and allocated resources to fight corruption, bribery, and fraud nationally is mostly to blame.

An example of corruption case in Indonesia would be the massive corruption in the awarding of contracts to build the Hambalang Sports Center in Bogor at the beginning of the year 2013.

The project had a budget of Rp 2.5 trillion, but caused Rp 243 billion in state losses. The most recent case would be the fictitious credits given by Syariah Mandiri Bank in Bogor totaling up to Rp 102 billion, that has a potential to cause Rp 59 billion in state loss.

The recent rise in fraud and the nature of corrupt decision making in organizations resulted in the increase of the public outcry for fraud prevention. In response to the massive frauds and public protest, the Sarbanes-Oxley act of 2002 had been acted out, which generated a focus on fraud prevention. Thus Statement on Auditing Standards (SAS) No. 82 *Consideration of Fraud in a Financial Statement* (Auditing Standards Board 1997), which had provided guidance on how auditors should perform an audit had been superseded by SAS No.99. *Consideration of Fraud in a Financial Statement*, the SAS No. 99 was put into practice to develop procedures in detecting fraud. It was argued by Ramos (2003) that SAS No.99 was considered to have the auditor's deliberation of fraud integrated wholly into the audit process from start to end. This new standard requires auditors to audit financial statements with professional skepticism.

Arens *et al.* (2003) have also stated that financial statements should be audited by experienced, independent individual and involves the collection and reviews of evidence to decide and report on the degree of connection between the information and certain established criteria. But it had been found by ACFE (2012, p. 14) on their survey that fraud which had been detected by external audit only fall up to 3.3%. Alleyne and Howard (2005) argued that due to today's technological age, it is becoming more difficult to detect fraud, particularly if it is conspirative in nature and that top managements were able to conceal it. Other than that, extensive fraud detection will result in higher cost and are not efficient. As a result, auditors have argued that it is not fully their responsibility in detecting fraud.

Due to the high cost, in the survey done by EY (2013), 31% of the Indonesian respondents said that complying anti-bribery/anti-corruption (ABAC) laws using technology, such as monitoring transactions or forensic data analysis are not being applied. Furthermore, when asked about the best way to proactively detect fraud, most of them believed that continuous transaction monitoring and whistle-blowing policy are much more effective than stronger internal audit team or using external auditor to assess fraud risk.

The users of financial statements and management perceptions on auditors' judgment and responsibility to detect fraud are gradually decreasing due to the wide expectation gap. Auditors still feel that it is management's responsibility to detect fraud and that companies have effective audit committees that are better equipped, sound internal controls, internal auditors to deal with prevention and detection (Alleyne and Howard, 2005). However, Moyes and Hasan (1996) had argued that the type of auditor was not reliant to the level of fraud detection, since both internal and external have equal capabilities to detect fraud. Watkins *et al.* (2004) concluded that individual auditor judgment produces the quality of an audit and it is also affected by auditor's individual competence.

An important environmental factor influences accounting practices is culture, whether it's their corporate culture or their cultural heritage. Patel *et al.* (2000, 2002) have argued that auditors' judgments are influenced by their collective and individual values, which are the product of country-specific culture in different countries. The relationship between attitudes towards fraud and cultural heritage has also been examined by Watson (2003). It was found that based on their cultural heritage; there is diversity in how people endorse fraud in general. For example, In Japan, the Japanese host was affronted by US businessmen because they turn down gifts, in fear of bribery. But it has been stated before that in Indonesia, bribery has become very common.

When discussing about culture in Indonesia, the Javanese culture has dominated the way of life of its citizens, including the culture of business, social and political activities (Magnis-Suseno 1997). Magnis has also stated that the foundation of Javanese culture is upholding

social harmony. Thus, reflecting the principles of respect and conflict avoidance. In the Javanese society, it is noted there is no room for individualism in a social relationship, they prefer much on collectivism (Chariri, 2009). They believed that individualism, diversity and conflict may threaten that social harmony (Mulder 1994). Therefore, by detecting fraud, auditors may cause conflicts and disrupt the social harmony or their auditor-client relationships. However, auditing is a profession that requires individualism and should remain independent.

Other than culture, the auditors' sense of responsibility in detecting fraud when performing audits is influenced by the audit procedure itself. Though detecting misstatements, errors, and fraud are already a part of the auditing procedure, according to Alleyne & Howard (2005) in Barbados, auditors obstinate that it was not their responsibility to search for illegal acts. Large businesses already have their own extensive internal controls and internal audits department. But then again the AICPA had stated that, "The SAS No.99 reminds auditors that they must approach every audit with professional skepticism and not assume that management is honest."

There are plenty of researches regarding the competence of auditors conducted worldwide. However, studies about the relationship of culture and accounting practices that were done in Asian countries especially Indonesia are limited. Indeed, studies that had examined the relationship of culture and accounting practices, especially in fraud detection and prevention, had been done in China (Chan *et al.* 2003; Lin *et al.* 2008; Hwang *et al.* 2008). Thus, this research attempts to examine the the relationship among audit procedures, auditors' experience and auditors responsibility in detecting fraud and how Javanese culture may moderated such relationship. This study at least contributes to the fact that local culture especially Javanese culture is important aspect that must be considered when studying auditor responsibility in detecting fraud.

### **Hypothesis Development**

Attribution theory attempts to explain causes of behavior (Heider, 1958). The theory explains how individuals interpret events and how this narrates their judgment and performance. This theory is appropriate to the present study in seeking on how auditors perceive their responsibility in detecting fraud under the influence of culture. According to Heider, an individual has two attributes: (1) internal, with the assumption that a person behave in a specific way because of something about the individual, such as personality, attitude or character; (2) external, the presumption that a person behave in a particular way because of something about the condition that individual is in.

According to Kelley and Michela (1980), the theory analyses how causes are attributed when people interpret behavior. It explains the individual's own behavior ("I did X for reason Y") or provides a casual explanation of the behavior of others ("X happened to him because of Y") (Kaplan & Reckers, 1985; Lin *et al.*, 2003). The link between attributions of responsibility and auditors has been investigated in prior studies (Arrington *et al.*, 1985; Jennings *et al.*, 1993; Anderson *et al.*, 1998).

Jaffar *et al.* (2008) and Haron *et al.* (2011) have adopted the attribution theory to enlighten the effect of the external auditors' skill to assess fraud risk on the ability to sense the probability of fraud. The theory proposes that depending on certain causes to which prior success or failure of a task, the level of future performance of the same task will be expected.

#### **1. Fraud Detection and Audit Procedure**

Fraud takes place in a social setting and is an activity that as severe consequences for the individuals, corporations, and the economy. Hopwood *et al.* (2012) defined fraud as "the result of misleading, intentional actions or inaction (including making misleading statements

and omitting relevant information) to gain an advantage. According to the Auditing Standards (SAS) No. 82 and PSA (*Pernyataan Standar Auditing*) No. 70 (AU 316), fraud is identified into two categories: (1) fraudulent financial reporting, and (2) misappropriation of assets. Auditors need external information when analyzing a financial statement and the information are obtained through applying analytical procedures that are up to standards in their audit plans. Previous studies states that auditors' expectations in encountering fraud develop according to the information they have gathered (Knapp, 2001) and that lack of procedures in collecting quality information affects the analysis of financial statements (Akkerman et al, 2008). According to SAS 99 and ISA 120 audit procedures should include: skepticism, brainstorming, conduct risk assessment, identify and assess the risks of material misstatement due to fraud, respond to the assessed risks of material misstatement due to fraud, and obtain written representations. Consequently, we proposed hypothesis as follows

H1 : The audit procedures positively influence the auditors' responsibility in detecting fraud.

## **2. Auditors' Experience**

A suggestion made by The Public Oversight Board (POB) Panel on Audit Effectiveness in finding the answer to why experienced auditors often fail to detect fraud, is that one factor might be that the auditors do not possess professional skepticism on an appropriate level (POB, 227 & 86). Accounting research have put forward that even more skeptical auditors still fail to detect fraud (Jamal, Johnson, and Berryman, 1995). Hoffman and Patton (1997) suggest that this is because the lack of knowledge that the auditors have that is needed to discover the related risk factors while in the process of carrying out an audit.

However, Carpenter et al. (2002) advocate that while knowledge and skepticism are significant factors in fraud, rather than their experience with auditing financial statements, it is an individual's experience (feedback and practice) with fraud detection that enables them to successfully detect fraud. But they also argued increased skepticism and knowledge acquisition are lead by experience with fraud detection, which then provides depth to professional judgments and increase the skill to detect fraud when it presents.

Experience is found to be a significant aspect of ability and knowledge. Earlier studies have found that the ability to detect fraud may significantly be affected by the auditor's experience (e.g. Benardi, 1994; Moyes and Hasan, 1996; Owusu-Ansah et al., 2002). According to Arens et al. (1999), it is expected that the auditors' knowledge about the level of fraud risk of a particular audit situation influence the external auditor's judgment concerning the existence of fraud in the financial statements of a client. In other words, if the external auditor evaluated the fraud risk as high, then more evidence will be collected and they will have to carry out more extensive audit procedures to make assurance that fraud or any material misstatements are detected. Whereas if the external auditor evaluated the fraud risk as low, their evidence gathering can be less extensive and may lead to less meticulous tests being carried out. Thus, external auditors will become more "relaxed" in their audit work and that there will be a lower possibility that they would be able to detect the probability of fraud than if they had appraised the level of fraud risk as high.

Experienced auditors usually take on more complex cognitive processing and have a more comprehensive knowledge base (Choo and Trotman 1991).

H2 : Auditors' experience and knowledge positively influences the auditors' responsibility in detecting fraud.

### 3. Javanese Culture

Hofstede (1980) defined culture as a way of living that influence ones' interaction with others, share beliefs and values. It is also defined as the mind's collective programming which differentiates the members of one organization from another."

The Javanese culture is a complex and diverse topic to discuss since it can refer to the performing arts, language, ethics, the way of life etc. However, this study focuses more on the way of life of the Indonesian society and how the Javanese culture have influence their perspectives and behavior. Based on the view of Magnis-Suseno, the social relations within the Javanese community are influenced by two principles; (1) conflict avoidance (*rukun*), and (2) respect. This is consistent with the study conducted by Geertz (1961), where it states that the Javanese social life is characterized by two principles that have a significant influence, with the first principle asserts that every Javanese should avoid open confrontations in every situation, and the second principle requires precaution when speaking, and that their behavior in the society should reflect respect.

In social interactions within a community, the Javanese values the maintenance of social harmony (*rukun*) and respect. Individuals should know their place and duty, respecting those of superior positions and responsible for their subordinates. *Rukun* is the obligation to suppress all forms of behavior which could lead to open conflict. Therefore, among the Javanese, in order to achieve *rukun*, any types of conflict in a community should be avoided and that it is characterized by cooperation, mutual acceptance, calmness and unity (Magnis-Suseno, 1997).

Magnis-Suseno (1997) insists that the Javanese tend to act in accordance with the *rukun* principle because each individual is frequently under pressure from his environment that demands from him to act in accordance with its expectations and penalizes individualist conduct. The commandments of *rukun* has been internalized in every Javanese that they both experience both guilt and shame when they offend the *rukun* principle.

Following Geertz, the second important principle in the Javanese society is respect, which is based on the belief that all social relationships are ordered in a hierarchical form. In order to maintain the social order, one should not try to develop ambition or compete against others and should be satisfied with their positions (Magnis-Suseno, 1997). In parallel with *rukun*, it concerns with the right forms of outward behavior and not with inner attitudes.

Due to conflict avoidance having an important role in keeping the social harmony and since it is widely known that the majority of the Javanese people rarely expressed their feelings, how the Javanese people express their disagreements are diverse. For example, they will try to avoid difficulties and keep their silence with one another which sometimes ends up with a formal third party mediator (Geertz, 1961). There is an assumption in the international literature concerning the audit process and culture, that an audit environment is impacted by culture, which then may influence the result of the audit process. Hofstede (2001) claims that auditors' decision making might be affected by the existence of cultural differences.

A lot of practices within an organization such as the internal control systems, accounting system, or employees' behavior can be influenced by culture. Chan et al. (2003) supported this idea when they say culture "is an important environmental factor influencing accounting practices and management control system." It also enlightens as to why the accounting standards are different in various countries (Wingate, 1997) and the diversities in views of accounting problems (Cohen et al, 1995; Arnold & Bernardi, 1997). All these past literatures suggest that implementations may vary even if the audit methodology and auditing standards are the same in different countries.

The Javanese culture is considered as collectivism culture based on their principle of *rukun* and respect. Hofstede (2001) stated that in a collective cultured dimension, employees are

believed to be a part of the “in group” and act in the importance of the group. There is high communal obligation and loyalty, and employment in these cultures may be alike to a family situation. In addition, people are less likely to form or express judgments individually when they are brought up in a collectivist culture.

H3 : The Javanese culture moderates the influence of audit procedures on auditors’ responsibility in detecting fraud.

H4 : The Javanese culture moderates the influence of auditors’ experience on their responsibility in detecting fraud.

### Research Method

This study analyses one dependent variable, two independent variables, and a moderating variable: Auditors’ responsibility in detecting fraud (Y), Audit procedures (X1), Auditors’ knowledge and experience (X2), and Javanese Culture (X3). According to SAS No.122 AU-C sec 240, fraud is defined as: “*An intentional act by one or more individuals among management, those charged with governance, employees, or third parties, involving the use of deception that results in a misstatement in financial statements that are the subject of an audit.*” It is also stated that an auditor conducting audit accordance with Generally Accepted Auditing Standards (GAAS) is responsible for obtaining rational assurance that the complete financial statements are free from material misstatements, whether caused by error or fraud. Martens and McEnroe (2001) strengthen the statement above by saying that the SAS was to clarify the auditors’ responsibilities in the area of fraud detection. This variable is measured by a 4-point Likert scale with four items (Alleyne & Howard, 2005).

Auditors will go through a much comprehensive audit procedures to detect fraud when putting into practice SAS no. 99. The standard aims to have the auditors’ deliberation of fraud impeccably merged into the audit process and is continually updated until its completion. SAS no. 99 provides aspects of a process in which the auditor (1) collects information required to notice the risks of material misstatement caused by fraud, (2) evaluates these risks after taking into account an assessment of the entity’s controls and programs, and (3) act in response to the results. This variable is measured by a 4-point Likert scale with seven items (Alleyne & Howard, 2005).

According to Medin (1978), judgments are presumed to originate solely from accumulated exemplar information, which suggests that prior knowledge of a particular matter influence the judgment of an individual. Thus, knowledge regarding the level of fraud risk of an external auditor in a particular audit situation is expected to influence their judgment concerning the subsistence of fraud in the audit client’s financial statements. The auditors will be asked with 6 statements regarding their experience with fraud and auditing (Moyes 2007; Moyes et. al. 2009). The statements that will be measured are; level of understandings regarding red flags (procedure for fraud detection), the ability to detect fraud by using red flags, how often red flags are used, number of attended course related to fraud in the past 3 years, have attended conferences related to detecting fraud by using red flags, the accounting firm has been offering in-house training related to red flags.

The essence on Javanese culture is the upholding of social harmony. The Java community has a very complicated code of ethics and level of respect. This is reflected in the Javanese language. However, efforts to maintain peace and harmony seem to be the main priority in the social relations in the Javanese society. The questionnaire that is developed the measure the Javanese culture is according to the views of Magnis Suseno, that the social relations in the Javanese society are influenced by two basic principles: (1) conflict avoidance and (2) respect. The Javanese culture is measured by a 4-point Likert scale with 14 statements and a pilot test has been carried out before being distributed to the respondents (Leiwakabessy, 2009).



The population and sample for this study are picked from 11 public accounting firms located in Semarang. This is because Semarang is the capital city of Central Java and it is where most of the economic activities take place and where the Javanese Culture is more prominent. The sampling technique that this study would use is purposive sampling because the information obtained should be from individuals that are related to the phenomenon, hence auditors who works at the accounting firms in Semarang. The data is analysed using multiple linier regression as follow:

$$Y_1 = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 (X_1 X_3) + \beta_5 (X_2 X_3) + \varepsilon$$

Notes:

$\alpha$  = Constant

$Y_1$  = The perception of external auditors on their responsibility in detecting fraud.

$X_1$  = Audit Procedures.

$X_2$  = Auditors' Experience.

$X_3$  = Javanese Culture

$\beta$  = Regression Coefficient.

$\varepsilon$  = Error

### Research Findings And Discussion

The numbers of respondents that are potential subjects related to this study were obtained from 8 public accounting firms among the 11 in Semarang. In the overall study, from the questionnaires sent to 40 auditors, a number of 35 have been received or with the return rate of 87.5%.

**Table 1. Demography of Respondents**

<b>Culture Origin</b>		
Culture	Frequency	Percentage
Javanese	30	85.7%
Others	5	14.3%
Total	35	100%
<b>Educational Level</b>		
Education	Frequency	Percentage
Diploma	6	17.1%
Bachelor	27	77.1%
Master's/PhD	2	5.7%
Certification	-	-
Total	35	100%
<b>Position in Accounting Firm</b>		
Position	Frequency	Percentage
Junior/staff	6	17.1%
Senior	27	77.1%
Manager	2	5.7%
Partner	-	-
Total	35	100%
<b>Professional Certificate Ownership</b>		
Certificate	Frequency	Percentage
CPA	2	5.7%

CIA	-	-
CMA	-	-
CFE	-	-
Others/Not Certified	33	94.3%
Total	35	100%

From the 35 respondents the majority are of Javanese origin with a percentage of 85.7%. The majority of the auditors' highest educations are Bachelor's Degree with the percentage of 77.1% followed by Diploma with the percentage of 17.1%. We can also see that the majority of the respondents do not own a professional accounting certificate having the percentage of 94.3%.

**Table 2. Descriptive Statistics**

Variable	Theoretical		Actual		
	Range	Mean	Range	Mean	SD
Responsibility detecting fraud	4 – 16	10.00	9 – 16	12.03	1.96
Audit Procedures	7 – 28	17.50	16 – 26	21.37	2.20
Auditors' Experience & Knowledge	10 – 40	25.00	14 – 28	24.60	5.20
Javanese Culture	14 – 56	35.00	35 – 50	43.49	5.19

Based on the comparisons between the theoretical and actual results it can be seen that there is a relatively high sense of responsibility in detecting fraud among the auditors, the audit firms are implementing relatively good audit procedures, and that the auditors still have a relatively little experience. The result also shows that the auditors' perception of the Javanese Culture is particularly high. The results of multiple linear regression analysis can be seen on Table 3, 4 and 5

**Table 3. Results of Multiple Linear Regression Model I**

Coefficients <sup>a</sup>		Unstandardized		Standardized	t	Sig.
Model		Coefficients		Coefficients		
		B	Std. Error	Beta		
1	(Constant)	-2.573	3.595		-.716	.480
	Audit Procedures Auditors' Experience	.489	.119	.547	4.122	.000
	Javanese Culture	.135	.053	.357	2.537	.016
		.019	.053	.051	.367	.716

a. Dependent Variable: Auditors' responsibility in detecting fraud

**Table 4. Results of Multiple Linear Regression Model II**

Coefficients <sup>a</sup>		Unstandardized		Standardized	t	Sig.
Model		Coefficients		Coefficients		
		B	Std. Error	Beta		
1	(Constant)	107.366	39.061		2.749	.010
	X1	-4.412-	1.828	-4.940-	-2.413-	.022
	X3	-2.265-	.826	-5.992-	-2.742-	.010
	Moderat1	.105	.039	8.440	2.713	.011

a. Dependent Variable: Y

**Table 5. Results of Multiple Linear Regression Model III**

Coefficients <sup>a</sup>		Unstandardized		Standardized	t	Sig.
Model		Coefficients		Coefficients		
		B	Std. Error	Beta		
1	(Constant)	50.577	13.310		3.800	.001
	X2	-1.605-	.505	-3.806-	-3.177-	.003
	X3	-.973-	.293	-2.574-	-3.317-	.002
	Moderat2	.041	.011	4.053	3.617	.001

a. Dependent Variable: Y

The results for the effect of audit procedures on the auditors' responsibility in detecting fraud are T-Value = 4.122 with 0.000 significance ( $p < 0.05$ ). Seeing that the significance value is smaller than 0.05 and that it has a positive coefficient, then it can be said that audit procedures significantly and positively affect the auditors' responsibility in detecting fraud. This finding corroborates with the attribution theory that a person behave a specific way because of a factor about the state of affairs that the individual is in. The findings of this study upholds the idea of attribution theory stating that auditors' awareness of their responsibility in detecting fraud is attributed to the audit procedures their accounting firm practice. This finding is linear to the findings of Alleyne & Howard (2005) where the auditors in Barbados have a strong consensus to these procedures as well.

The results for the relation of auditors' experience and the auditors' responsibility in detecting fraud are T-Value = 2.537 with significance value of 0.016. With the significance value smaller than 0.05 and a positive coefficient, then it can be said that the auditors' experience has a significant positive effect on their responsibility in detecting fraud. The finding upholds the assumption of the attribution theory that an individual behaves a particular way because of a certain factor about the person. The findings of this study maintain the idea of attribution theory that auditors' awareness of their responsibility in detecting fraud is attributed to their knowledge and experience with fraud. This is linear to prior studies which state that auditors' experience significantly influences their aptitude in fraud detection (Moyes & Hasan, 1996; Owusu-Ansah et al., 2002) and that their judgment on the presence of fraud in a financial statement is influenced by knowledge relating to fraud risk in an audit situation (Arens et. al, 1999).

The test result of the Javanese Culture moderating the influence of audit procedure on the auditors' responsibility in detecting fraud which is obtained from the variable test of X1X3, shows that the T-Value = 2.713 and a significance value of 0.011 ( $p < 0.05$ ). Seeing that the significance value is smaller than 0.05, therefore Javanese Culture moderates the effect of audit procedures on the auditors' responsibility in detecting fraud. This finding supports the assumption of the old institutional theory that normative pressures, sometimes arising from external social environment influence how an organization runs their tasks.

The test result of Javanese culture moderating the influence of auditors' experience on their responsibility in detecting fraud which is obtained from the variable test of X2X3, shows that the T-Value = 3.617 with 0.001 significance. Seeing that the significance value is lower than 0.05, hence Javanese culture moderates the effect of auditors' experience and knowledge on their responsibility in detecting fraud. This finding supports the old institutional theory assumption which states that beliefs or cultural systems provide a set of meanings that always mediate social actions which frequently have the effect of driving the attention away from task performance.

The auditors in Semarang have shown that they have a high perception and influence of the Javanese Culture. Therefore, despite the accounting firm have audit procedures that follow the standards of auditing, implementation and practice are still mediated by culture and the social environment as exposing fraud can cause conflict. This then prevents them from gaining more experience and knowledge in fraud detection which can lead to the decrease of awareness of their responsibility. This is in line with prior studies, that dynamics in personalized network of influence (the relationship individuals cultivate with other individuals), fear of retaliation and media coverage may discourage whistle-blowing (Hwang et. al., 2008). Hofstede (2001) also state that people that are brought up in collective culture have high commitment and allegiance, and that they are less likely to express or form judgments individually.

## **Conclusion**

This study aims to investigate the relationship of audit procedures, auditors' experience and auditors responsibility in detecting frauds and how Javanese culture may moderate such relationship. Based on the results, the study found that audit procedures significantly affect the auditors' responsibility in detecting fraud, indicating that the better the audit procedures that are applied, the better the auditors' responsibility in detecting fraud. In addition, the auditors' experience significantly influence their responsibility in detecting fraud, and indicates that the more experience that an auditor have the better their responsibility in detecting fraud. In regard to Javanese Culture, this study found that Javanese culture moderated the influence of audit procedure and auditors' experience on the auditors' responsibility in detecting fraud. This findings implies that we need to consider local culture in studying the behavior of auditor especially their role in detecting frauds.

Despite its contributions, this study suffered from weaknesses. The first one is that the questionnaires that were distributed directly to several accounting firms in Semarang were mostly filled by the junior accountants. The research scope to analyze the respondents' answers from senior auditors, and managers are a few in this study. The researcher also did not obtain much response from the firm partners; hence the results are less generalized. The second one is that the study has limitations inherent to the data obtained from the questionnaires, where there may be differences in perception between the researcher and the respondents because both could not clarify the questions. Although it has been attempted to be minimized, the limitations will remain on the research that uses primary data. Thus future research may consider auditors of larger public accounting firms. Finally, to deeply understand how culture influence auditors behavior, further studies may involve indepth interview.

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## AUDIT COMMITTEE CHARACTERISTICS AND INTERNAL AUDIT BUDGET: MALAYSIAN EVIDENCE

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### Abstract

An audit committee is viewed as an essential self-regulatory internal governance instrument that is expected to provide an overseeing role over the entire process of financial reporting. An internal audit is also one of the corporate governance cornerstones that is essential for the effective monitoring of the operating performance of internal control. To ensure its effectiveness, the audit committee monitors the resources available to the internal audit, and internal control functions should be directly reported to the audit committee. This study is set out to explore the effect of audit committee characteristics on internal audit budget in Malaysia, where data on internal audit budget is available and how well audit committee monitors the internal audit function is questionable. Our study also opens the door to an unanswered question, that is, whether an audit committee index is related to internal audit budget. Data of 96 companies listed on Bursa Malaysia for a three-year period, 2012-2014, was utilized to achieve this end. The regression result shows that audit committee meeting and index are significantly and positively associated with internal audit budget. They also indicate that audit committee tenure has a significant and negative impact on internal audit budget. On one extreme, the findings of the study support the recent policy initiatives in relation to audit committee and internal audit. On the other extreme, the result serves as a wake-up call to policy makers in requiring more committed, competent and skilled members on the audit committee.

**Keywords:** *Audit Committee Characteristics; Internal Audit Budget; Internal Audit Function; Bursa Malaysia*

### Introduction

Following recent accounting scandals, deliberate manipulations and fraudulent activities of some corporations such as Enron, Worldcom and Satyam that lead to accounting failure, internal auditing has increasingly become relevant as an important corporate governance mechanism (Carcello, Hermanson and Raghunandan, 2005; Coram, Ferguson and Moroney, 2008; Sarens and Abdolmohammadi, 2011). In response to these accounting failures, the Congress of United States passed into law the Sarbanes Oxley Act of 2002 (SOX, 2002). This significantly changed several issues related to corporate governance and corporate financial reporting. Particularly, it pushed for more focus on internal controls and internal auditing. Hence, it is likely that a number of companies have shifted their concentration towards internal auditing during this period. In addition, the Public Accounting Oversight Board (PCAOB) asserts that an outstanding benefit of its standard on auditing an internal control is encouraging companies to invest in competent and objective internal audit function (PCAOB, 2004). Moreover, statistics show that internal audit budgets and number of internal audit staff grew by over 10 percent between 2001 and 2002 in the US (Carcello et al., 2005).

In a same token, internal auditing has become a very crucial component of global businesses. It is very important for companies as it offers services to the firm management such as monitoring compliance with government regulation and company policy, evaluating risk management, testing internal control as well as preventing fraud (Anderson, Christ, Johnstone



and Rittenberg, 2012). In a survey done by the Malaysian Institute of Corporate Governance (MICG), the Institute of Internal Auditors Malaysia (IIAM) and Ernst and Young, internal auditors are found to be in the best position to comprehend and articulate the business practices of the company and they serve as consultants to lessen risk. By evaluating governance, control and risk management, internal audit can help an organization to fulfil its goal to improve the firm performance (Carcello et al. 2005).

Owing to the severe financial crises of the year 2008, the need for sound governance system has been felt strongly (Bedard and Gendron, 2010). The agency theory suggests internal and external corporate governance mechanisms that alleviate the conflicts between managers and shareholders and reduce the agency costs (Jensen and Meckling, 1976). One of the corporate governance mechanisms is the audit committee. The audit committee is viewed as an essential self-regulatory internal governance instrument and is expected to provide an overseeing role over the entire process of financial reporting, particularly the working of the internal control system and the work of the auditors (Blue Ribbon Committee (BRC), 1999; Hermanson and Rittenberg, 2003). The Blue Robin Committee (1999) considers the following characteristics expected from members of audit committee to be more active and diligent in overseeing financial reporting process and internal control: independence, financially educate, and meet regularly (BRC, 1999).

Based on agency theory and resources dependency theory, the presence of members who are independent in an audit committee improves the audit committee effectiveness in performing oversight duties. Independent audit committee directors are viewed by the market as professional members who are willing to facilitate advice and counsel (Sori, Ramadili, and Karbhari, 2009). Researchers argue that the independency of audit committee members increases the reliability and accuracy of financial reports of a firm (Abbott, Parker, and Peters, 2004; Dechow, Sloan, and Sweeney, 1995; McMullen and Raghunandan, 1996). Audit committee members with accounting background are more likely to understand accounting numbers and enhance the ability of audit committee in curbing management involvement in earnings management activities to cover self-interest behaviour (Chang and Sun, 2010). Furthermore, the BRC (1999) suggests an audit committee to meet frequently to effectively perform its oversight responsibilities. The number of meetings held by the audit committee is perceived to lead to transparent accounting information (Kent and Stewart, 2008). Finally, audit committee members with shorter tenure are more likely to perform oversight role effectively (Sharma and Iselin, 2006) as they are expected to challenge management decision (Barua, Rama, and Sharma, 2010; Boker and Goodstein, 1993).

In a move to guaranteeing the quality of financial reporting, the role of effective audit committee and internal audit system in enhancing the corporate governance and financial reporting outlook of the firm has been highlighted by academic researchers (e.g. Puri, Trehan, and Kakar, 2010; Soh and Martinov-Bennie, 2011; Zain and Subramaniam, 2007). An effective internal audit system aids the audit committee with: assertions concerning control; independent assessment of accounting procedures and practices; risk and fraud analysis (Hermanson and Rittenberg, 2003). Internal auditing also serves as a prized asset for the audit committee to meet its financial reporting obligation (Bishop, Hermanson, Lapides, and Rittenberg, 2000). On the other hand, the audit committee is responsible for reviewing the internal audit plan and making sure the scope of the internal audit activity is adequate. (Zain, Subramaniam, and Stewart, 2006). Moreover, Carcello et al. (2005) argue that an audit committee must exact some sort of control over the internal audit function to ensure whether the internal audit system plays effective monitoring role and provides assistance to the audit committee. This may be done by exercising control over the organization's resources set aside for internal audit.

Therefore, the aim of our study is to explore the potential effect audit committee characteristics (e.g. independence, expertise, diligence, tenure and audit committee index) on internal audit budget [1]. From complementary-side perspective, we conjecture that an audit committee would effectively monitor the resources invested in internal audit department to make sure the department works towards enhancing financial reporting process. As such, a positive relationship between audit committee and internal audit budget is expected. Alternatively, from substitution-side perspective, the existence of effective audit committee within a firm may decrease the need for a detailed assurance service from internal auditors. This may lead to a negative association between audit committee and internal audit budget. Generally, our results are broadly in tandem with the view that firms with effective audit committee may invest more in internal auditing to boost the confidence of investors concerning the quality of accounting information. However, since the study's results are somewhat exploratory in nature, they should be interpreted with caution.

Malaysian setting is well-suited to investigate in details the relationship between audit characteristics and investment in internal audit because of several reasons. First, in Malaysia, there are rising incidents of company mismanagement and failures, which indicates that there is immediate need of effective internal auditing in both public and private sectors (Ali, Saidin, Sahden, Rasit, Rahim and Gloeck, 2012). Examples include Transmile group Berhad, Genting Malaysian Berhad, and Tai Kwong Yokohama. Nevertheless, Ali, Chen and Radhakrishnan (2007) highlight the serious deficiencies and shortcomings of internal auditing of Malaysian companies. They argue that public and private institutions lack efficient internal audit personnel, internal audit competence and that the Malaysian government fails to provide adequate support and assistance for internal audit functions. Second, most audit committee members in Malaysian companies are appointed by controlling managers who run the business (Abdullah, Yusof, and Nor, 2010; Sori et al., 2009). This places a lot of doubt on the ability of audit committee to challenge the management decision.

Additionally, academic researchers argue that many Malaysian audit committees only act as a 'rubber stamp' and are only formed to comply with the requirement of Bursa Malaysia, as the Bursa Malaysia makes it compulsory for all public listed companies to have an audit committee (Abdullah et al., 2010; Zulkarnain and Shamsher, 2007). Third, according to the Revised Malaysian Code on Corporate Governance (Revised MCCG 2007), Malaysian firms are compulsorily obliged to consist of audit committee members with a mix of 2/3 independent directors and at least one of this mix should be an active member of an accounting association or body. Moreover, Bursa Malaysia, to boost the effectiveness of board and audit committee, requires the tenure of independent directors of Malaysian public companies should not exceed a period of nine years (Revised MCCG 2012). Finally, in 2009, Malaysian firms are required to disclose information on internal audit budget. This would enable the researchers to collect secondary data on internal audit budget as well as audit committee variables after the new requirements to test the hypothesized relations in the study.

Prior studies have looked at the role of audit committee characteristics in relation to audit fees (e.g. Abbott, Parker, Peters and Raghunandan, 2003; Carcello, Hermanson, Neal, and Riley, 2002, Collier and Gregory, 1996), earnings management (Saleh, Iskandar and Rahman, 2007), audit report lag (Hashim and Rahman, 2011; Sultana, Singh, der Zahn and Mitchell 2015), audit risks (Bliss, Muniandy, and Majid, 2007; Muniandy, 2007) and timeliness of corporate financial reports (Abdullah, 2006). Our paper enriches the prior studies by exploring the influence of audit committee characteristics on internal audit budget. Moreover, a number of previous studies on internal audit have examined the relationship between audit committee characteristics and internal audit function characteristics other than resources available to internal audit department (Abbott, Parker, and Peters, 2010; Zain et al., 2006).

We contribute to the above studies by relating audit committee characteristics to internal audit budget. Finally, our research bears some similarities to the existing work of Barua et al. (2010) who link audit committee characteristics to internal audit budget. This study differs from theirs as it introduces a composite variable capturing several audit committee characteristics used by the researchers (i.e. independency, expertise, diligence, as well as tenure) in the form of an index and examines the index relationship with internal audit budget along with the other audit committee variables.

The other parts of the paper are structured as follows. The next section reviews prior literature and develops the hypotheses. Section 3 describes research methodology and Section 4 presents and discusses the main results. Additional analysis and sensitivity tests are summarized in Section 5, while the conclusion is presented in Section 6.

## Literature Review and Hypothesis Development

### 1. Audit Committee Independence and Investment in Internal Auditing

The independency of audit committee members is a crucial factor that influences the efficiency of the committee in overseeing the process of financial reporting. According to Sharma and Iselin (2006) and Al-Mamun, Yasser, Rahman, Wickramasinghe, and Nathan (2014), audit committee should be composed of multiple independent directors because they care about their reputation and prestige. Based on the MCCG (Revised Code, 2007), the audit committee has to be structured fully by non-executive directors, with most of them being truly independent. Moreover, Ye, Carson, and Simnett (2011) argue that independent audit committee members are keystone for financial reporting process as they enhance the quality of financial statements of the firm. A review of literature indicates that the independency of audit committee improves the financial information quality through mitigating earnings management activities (e.g. Amar, 2014; Bradbury, Mak, and Tan, 2006; Saleh et al., 2007; Salleh and Haat, 2014; Siagian and Tresnaningsih, 2011).

However, there are two competing views concerning the potential association between audit committee independence and internal audit budget. Proponents of complementary hypothesis argue that independent audit committee directors may demand greater assurance for financial reporting process as they are more concerned about their reputation and litigation risk (Barua et al., 2010). Therefore, a positive relationship between the independency of audit committee and internal audit budget is expected. Audit fees literature suggests firms with effect audit committees demand a higher audit quality to effectively monitor financial reporting process (e.g. Abbott et al. 2003; Carcello et al., 2002; Vafeas and Waagelein, 2007).

On the other hand, opponents of complementary hypothesis consider audit committee with independent directors as effective governance system that can monitor internal controls and financial reporting process. Therefore, there would be less demand for additional assurance from internal auditor (Sarens, Abdolmohammadi, and Lenz, 2012) and an adverse association between the independency of audit committee and internal audit is expected. Because of these two competing arguments, the following non-directional hypothesis is stated:

*H1: There is relationship between Audit Committee Independence and investment in internal auditing.*

### 2. Audit Committee Expertise and Investment in Internal Auditing

In addition to audit committee independence, expertise is generally regarded as a critical characteristic for an audit committee's effective operation (Baxter and Cotter, 2009). Researchers argue that investors are attracted towards firms which comprise of higher number of financial and accounting experts in the audit committee. This is due to audit committee directors with such expertise have capability to analyze financial statements as well as to

recognize and understand the using of accepted standards of accounting (Carcello, Hermanson, and Ye, 2011). Schmidt and Wilkins (2012) posit that financial experts in audit committee provide significant value to customers by eliminating deceitful activities from the organization. The Sarbanes Oxely Act (2002) makes it mandatory for US listed companies to include at least one financial expert in audit committee. Moreover, the MCCG (2012) requires Malaysian companies to have an audit committee with at least one member who should be a member of Malaysian Institute of Accounting (MIA).

Persons (2009) asserts that independent members of an audit committee with financial or accounting expertise are more likely to detect any financial misstatements or improper business transactions because they would need to comply with their own professional codes of ethics to maintain their reputation. Extant literature document that audit committee financial expertise enhance earnings quality (e.g. Baxter and Cotter 2009; Dhaliwal, Naiker, and Navissi, 2006) and attenuate earning management activities (e.g. Badolato, Donelson, and Ege, 2014; Bédard, Chtourou, and Courteau, 2004; Salleh and Haat, 2014). These results are in tandem with the agency theory argument that the presence of an audit committee member with accounting expertise reduces the likelihood of agency-principal conflicts and enhance the quality of financial reports.

However, there are two competing arguments on how an audit committee with accounting and financial experts may influence the resources available to internal audit department. Proponents of complementary hypothesis argue that audit committees with accounting and financial experts, in order to protect their reputation, are more vigilant in safeguarding and keeping watch of financial reporting process (Persons, 2009). Since audit committee directors with accounting expertise are more likely to understand accounting figures and uncover management fraud, the presence of such members in the audit committee may result in more work for internal audit function (Barua et al., 2010). Extant studies provide evidence of firms which comprise of an audit committee with accounting expertise to demand a higher audit quality and, thus, pay higher audit fees (Vafeas and Waagelein, 2007; Abbott et al., 2003; Goodwin-Stewart and Kent, 2006). Therefore, a positive association between audit committee expertise and internal audit budget is expected.

Advocators of substitution hypothesis argue that accounting expert members in an audit committee improves the effectiveness of internal control and financial reporting quality. Therefore, the presence of such members in the audit committee may minimize the need for more assurance provided by internal auditors. Zhang, Zhou and Zhou (2007) and Hoitash, Hoitash and bedard (2009) assert that situations where there exists members with expertise in accounting working in the audit committee, there is bound to be fewer cases of internal control problems, suggesting that investment in the internal audit function might not be necessary. Moreover, Barua et al. (2010) provide empirical evidence that internal audit budget decreases as the number of audit expertise directors in audit committee increases. Given these two competing viewpoints, our study states the following non-directional hypothesis:

*H2: There is relationship between Audit committee expertise and investment in internal auditing.*

### 3. **Audit Committee Meeting and Investment in Internal Auditing**

Theoretically, the agency theory posits that the agency conflicts between shareholders and managers can be addressed through increased activity by the audit committee (Kent and Stewart, 2008; Li, Mangena and Pike, 2012). The greater frequency of audit committee meeting allows for better communication between audit committee and external auditors, thereby making the audit committee to be more effective (BRC, 1999; Zaman, Hudaib, and Haniffa, 2011). Moreover, when the meetings are held frequently, more issues such as risk

management, internal accounting controls and financial reporting process can be discussed in detail (Abbott et al., 2003; Saleh et al., 2007). Prior studies found that such organisations with frequent audit committee meetings to indulge less in earnings management activities. They also pointed out that meeting frequently by the audit committee reduces the possibility of receiving a qualified audit opinion (e.g. Farinha and Viana 2009; Pucheta-Martinez and Fuentes, 2009; Xie, Davidson, and DaDalt, 2003).

However, there are two contradicting arguments on the association between audit committee meeting and the investment in internal audit function. Proponents of complementary hypothesis argue that a diligent audit committee (i.e the committee that meets frequently) is anticipated to support the internal audit activities as it is more focussed on the internal control procedures in place and the process of financial reporting (Barua et al., 2010; Raghunandan and Rama, 2007). Barua et al. (2010) and Anderson et al. (2012) suggest that an audit committee with frequent meetings will be able to control the tendency of financial misreporting and as such will demand more in internal audit budget. Moreover, Raghunandan, Read and Rama (2001) and Sarens (2009) argue that an active audit committee could consider the internal audit function as a necessary source of information to carry out its monitoring responsibilities, thus the audit committee may push for better staffed internal audit function. As such, audit committee meeting is projected to have a positive impact on internal audit budget.

On the other hand, advocates of substitution hypothesis allege that an audit committee that meets often is perceived to effectively cater for internal control problems and issues with financial report (Sarens et al., 2012). Therefore, the need for internal auditors to provide more assurance about financial reporting quality is minimized. Because of these competing arguments, the following non-directional hypothesis is stated:

*H3: There is relationship between Audit committee meeting and investment in internal auditing.*

#### 4. **Audit Committee Tenure and Investment in Internal Auditing**

There are two contradictory arguments with respect of the effect of audit committee tenure on investment in internal audit function. The first argument is that a longer tenure will enable audit committee members to accumulate more knowledge about the firm they work with which may facilitate the members ability to effectively manage the risks facing the company (Kor and Mahoney, 2000) and ensure voluntary ethics disclosure (Othman, Ishak, Arif, and Aris, 2014). A long-term relationship with client is crucial for the audit committee to understand specific knowledge about the client's accounting system, internal control, operations as well as the client's industry features (Boone, Khurana, and Raman, 2008). A review of literature indicates that firms with longer audit committee tenure are more likely to receive a clean audit report (e.g. Deis and Giroux, 1992; Copley and Doucet, 1993; Shaife, Hussin, Yusof, and Hussain, 2009) and report higher financial reporting quality (e.g. Dhaliwal, Naiker, and Navissi, 2010; Yang and Krishnan, 2005). Given that the presence of directors with longer tenure may enhance the monitoring duties of the audit committee, the need for internal auditing to attain effective internal controls and address financial reporting issues would be less likely. Chan, Liu, and Sun (2013) conclude that firms with audit committee members who have served for a elongated period have a lower need for audit effort and, therefore, pay lower audit fees. Moreover, Barua et al. (2010) provide evidence that there is an inverse relationship between average audit committee tenure and investment in internal audit.

A counter-argument is that too long a service on the audit committee may lead to audit committee members becoming less vigilant or more permissive of management self-interest

actions (Rickling, 2014). Sharma and Isselin (2012) document a significant positive association between the tenure of the independent audit committee members and financial misstatements suggesting that directors with longer tenure may not exercise independent judgment. Because of these contradictory arguments, our study states the following non-directional hypothesis:

*H4: There is relationship between Audit committee tenure and investment in internal auditing.*

#### 5. **Audit Committee Index and Investment in Internal Auditing**

Academic scholars argue that traditional measures of audit committee effectiveness (e.g. audit committee independence, expertise, meeting and tenure) do not guarantee an effective audit committee as these mechanisms complement each other and taking one variable and ignoring the other will render the audit committee ineffective (Connelly, Limpaphyom, and Nagarjan, 2012; Lara, Osma, and Penalva, 2007). An empirical study concludes that the independency of audit committee alone could not deter earnings management activities conducted by Malaysian firms, unless the audit committee meets frequently (Saleh et al., 2007). Moreover, a number of studies on audit fees have been motivated to use a composite index to assess the effectiveness of audit committee (Lisic, 2014; Zaman et al., 2011). The common conclusion from the studies is that the composite index can capture the effectiveness of audit committee to monitor financial reporting process and reduce audit fees.

This study adopts four characteristics (i.e. independency, expertise, vigilance, and tenure) to represent the effectiveness of audit committee. An audit committee with such characteristics would be expected to provide more effective monitoring role over internal controls and financial reporting issues. This may lead to place a greater demand on internal auditing to mitigate control and financial risk that may encounter the firm. However, based on the substitution hypothesis, the presence of audit committee with independent, expert, vigilant and less tenure may reduce the need for assurance provided by internal auditors. Hence, given these two competing viewpoints, the following non-directional hypothesis is stated:

*H5: There is relationship between audit committee index and investment in internal auditing.*

### **Data Collection and Model Estimation**

#### 1. **Data Collection**

The initial sample of the study consists of top 100 companies listed on Bursa Malaysia based on the 2014 market capitalization. Our study observes the firms over a three-year period (i.e. from 2012 to 2014). These firms were selected because they are more likely to have complete internal audit and audit committee data. The reason for commencing with year 2012 was because it is considered as a recent year after Malaysian companies, in year 2009, are required to disclose information on internal audit function. Moreover, Malaysian Code of Corporate Governance has introduced new recommendations for audit committee in 2012. The reason for concluding with year 2014 is because it was the last year with available data as at time this research was conducted. Firms with missing financial and internal audit data for sample period are excluded. Table 1 summarizes the sample selection procedure. On one hand, data pertaining to audit committee and internal audit variables were hand collected from respective annual reports of sample firms. On the other hand, financial data were extracted from financial database "DataStream". We deliberately did not exclude financial data to avoid dealing with small sample size data. Moreover, prior academic works have included financial firms as they found the firms to have internal audit function (Carcello et al., 2005; Sarens et al., 2012). However, our study controls for financial companies to ensure the study results are

not driven by the companies. Table 2 presents the distribution of the sample firms according to Bursa Malaysia classification.

**Table 1. Derivation of Sample**

Criteria	No. of firms
Top100 companies based on market capitalization for 2014	100
Less:	
companies with incomplete data on firm size	(1)
Companies with incomplete data on internal audit function	(1)
companies with incomplete data on inventory year * 3	(2) 3
Final Observations	288

**Table 2. Bursa Malaysia Sector Representation of the Sample Firms**

Industry	No. of firms	No. of firm-years	Percentage (%)
Consumer product	13	39	14
IPC	1	3	1
Construction	1	3	1
Trading/services	31	93	32
Properties	5	15	5
Plantation	14	42	15
Reits	7	21	7
Hotels	1	3	1
Finical	13	39	14
Industrial products	10	30	10
Total	96	288	100

## 2. Model Estimation

Our study models internal audit budget as a function of audit committee and a set of control variables as follows:

$$IAFNV = \beta_0 + \beta_1 ACIND_{it} + \beta_2 ACEXP_{it} + \beta_3 ACMEET_{it} + \beta_4 ACTEN_{it} + \beta_5 ACINDX_{it} + \beta_6 ACSIZE_{it} + \beta_7 LEVG_{it} + \beta_8 INVT_{it} + \beta_9 OPCF_{it} + \beta_{10} FSIZE_{it} + \beta_{11} IAFSOU_{it} + \beta_{12} INDS_{it} + \beta_{13} YER_{it} + \varepsilon_{it}$$

IAFNV equals the natural log of the const born by the Internal Audit Function (IAF). ACIND equals the proportion of independent audit committee members to the total number of audit committee members. ACEXP equals the proportion of audit committee members who have accounting or auditing qualification to the total number of audit committee members. ACMEET equals the natural log of the number of audit committee meetings. ACTEN equals the average tenure of audit committee members. We develop an audit committee index (ACINDX) through aggregating the scores of audit committee mechanisms tested in this paper. This is because we want to explore whether the index can better capture the ability of the audit committee mechanisms to control and monitor the fund assigned to internal audit function. Table 3 shows the incorporated mechanisms and scores attached to them. The index

ranges from zero to four. A higher index score indicates audit committee effectiveness, with an ACINDX of four being the highest.

**Table 3. Audit committee Index (ACINDX) components**

Items	Score
ACIND	1 for firms with above sample median ACIND for the year and 0 otherwise
ACMEET	1 for firms with above sample median ACMEETING for the year and 0 otherwise
ACEXP	1 for firms with above sample median ACEXP for the year and 0 otherwise
ACTEN	1 for firms with below sample median ACTEN for the year and 0 otherwise

We include a set of control variables that have been investigated in prior literature (Barua et al., 2010; Carcello et al., 2005). Following the literature, we include FSIZE in our regression models to control for firm size. Our study measures FSIZE by the log of a firm's total assets. Highly leveraged firms report financial information of low quality as managers of these firms manipulate earnings to hide the true performance of the firms (Sweeney, 1994). Academic literature provides evidence that an increased proportion of debt may lead to higher investment in internal audit function (Carcello et al., 2005). As such, we include LEVG (i.e. leverage measured by total debt to total assets) to control for information risk. Moreover, it has been argued that the need for better monitoring by an effective internal audit increases with a firm complexity (Ramamoorti, 2003). Therefore, we include INVT (i.e. inventory proxied by total inventory to total asset) to reflect complexity of firm operations. A higher level of operating cash flow may raise agency problem as managers of higher cash flow firms are expected to squander the cash in projects that only serve the managers' self-interest and secure their control over the firm resources (Jensen, 1986). As such, an audit committee of firm with higher cash flows is more likely to encourage and support the monitoring role of internal audit over the firm cash. Our study measures operating cash flow (OPCF) by cash from operations to total assets. Barr and Chang (1993) highlight the advantages of outside internal audit providers that include greater perceived independence, flexibility, cost savings and improved quality. Therefore, it is expected that firms with outsiders performing internal audit services to invest less in internal audit. We measure internal auditing source arrangement (IAFSOU) by the dummy variable, which takes the value of 1 if the IAF is outsourced and 0 otherwise. We finally include ACSIZE (i.e. audit committee size represented by the natural log of the number of audit committee members) to control for audit committee effectiveness.

We employ OLS estimations in our study. We use the Variance Inflation Factor (VIF) and correlation matrices to assess the multicollinearity problem [2]. Both tests indicate that the multicollinearity problem is not a major concern. We also utilize Cook-Weisberg and Wooldridge test to assess the potential of the existence of heteroscedasticity and autocorrelation problem respectively. Both tests indicate that the heteroscedasticity and autocorrelation problem are not a major concern of this study [3]. Finally, we winsorize ACEXP, ACTEN, LEV, INVEN and OCF at 5% and 95% to mitigate the potential normality problem that caused by outliers [4].



**Table 4. Descriptive Statistics of Variables**

Variable	Min	Max	Mean	Sd	P75	Median	P25
IAFNV(R M'000)	15	65000	3985.917	7969.947	3029	1145.5	399
ACIND	0.5	1	0.859	0.152	1	1	0.75
ACMET	3	18	5.840	2.473	6	5	4
ACEXP	0	0.8	0.332	0.188	.4	.33	0.25
ACTEN	1.25	28.333	8.178	4.506	10.75	7.667	4.667
ACINDX	0	4	2.337	0.945	3	2	2
ACSIZE	3	6	3.667	0.783	4	3	3
LEV (%)	0	78.65	20.759	16.515	30.635	19.825	6.74
SIZE (RM'000)	345507	639398006	29935886.8	93213864.3	14908202.8	52533478	2407680
INVEN	0	0.545	0.069	0.090	.1115543	0.035	.0003
OCF	- 1.672	1.757	0.109	0.201	0.141	0.754	0.383
IAFSOU			N(mean)				
			0	1			
			240(83)	48(17)			

Notes: IAFNV: the cost born by internal audit function, ACIND: the percentage of independent audit committee members, ACMEET: the number of audit committee meetings, ACEXP: the percentage of audit committee members with an accounting or auditing qualification, ACTEN: the average tenure of audit committee member, ACINDX: audit committee index, ACSIZE: total number of audit committee directors, IAFSOU: 1 if internal audit function is outsourced and 0 otherwise, LEV: total debt to total assets, SIZE: total assets, INVEN: total inventory to total assets, OCF: operation cash flow to total assets

## Empirical Evidence

### 1. Descriptive Statistics

Table 4 presents the descriptive statistics for all variables tested. The table shows the mean internal audit budget (IAFNV) is Ringgit Malaysian (RM) 3,985,917. The minimum (maximum) values of audit committee independence (ACIND) are 50% (100%) with an average value of 86%. The figures show that still some Malaysian firms are not following the Bursa Malaysia requirements of having an audit committee that should consist of at least 2/3 independent directors. While the average number of audit committee meetings (ACMET) is 6, the mean audit committee size (ACSIZE) of sample firms is 4. The mean value of audit committee expertise (ACEXP) is 33% with a minimum (maximum) of 0 (80%). The mean (median) tenure of audit committee directors (ACTEN) is 8.18 (7.67).

**Table 5. Correlation Matrix**

	IAFNV	ACIND	ACMEET	ACEXP	ACTEN	ACINDX	ACSIZE	IAFSOU	LEV	SIZE	INVEN	OCF
IAFNV	1	-0.103	0.327	-0.078	-0.158	0.000	0.352	-0.436	0.056	0.588	-0.149	0.032
ACIND	-0.106	1	0.086	0.010	0.335	0.460	-0.201	0.124	0.210	-0.099	0.160	-0.056
ACMEET	0.432	0.057	1	-0.011	-0.163	0.450	0.150	-0.059	-0.015	0.282	-0.189	-0.075
ACEXP	-0.098	0.084	-0.061	1	0.107	0.414	-0.253	-0.062	-0.019	-0.089	0.049	0.051
ACTEN	-0.181	0.327	-0.189	0.1082	1	-0.227	-0.149	-0.086	0.232	-0.069	0.059	-0.100
ACINDX	-0.002	0.468	0.327	0.340	-0.236	1	-0.303	0.123	0.006	-0.021	0.047	0.034
AC SIZE	0.365	-0.249	0.188	-0.174	-0.169	-0.301	1	-0.170	-0.060	0.141	-0.038	-0.019
IAFSOU	-0.433	0.130	-0.105	-0.072	-0.094	0.117	-0.170	1	-0.024	-0.261	0.048	-0.077
LEV	0.018	0.202	-0.031	0.006	0.262	-0.012	-0.093	-0.039	1	0.252	0.027	-0.258
SIZE	0.562	-0.073	0.419	-0.132	-0.059	-0.044	0.151	-0.222	0.199	1	-0.216	-0.427
INVEN	-0.097	0.142	-0.195	0.129	0.003	0.094	-0.093	0.048	-0.055	-0.254	1	0.129
OCF	0.099	-0.080	-0.035	0.040	-0.097	0.011	0.011	-0.098	-0.269	-0.404	0.043	1

Notes: the upper diagonal of the matrix shows Spearman correlations and the lower diagonal demonstrates Person correlations. Bolds indicate significance at the 5 percent level or better. Please see Table 4 for variable definitions.

2. **Regression Results**

The results of the OLS regressions are presented in Table 6 below. Evidently, the adjusted R<sup>2</sup> are 65% and 64% in the model 1 and 2, respectively. The F ratio is significant (P<0.00001) across the two models. The results indicate that the independent and control variables could explain about 65% of changes in internal audit budget. From Model 1 of the table, on one hand, the finding shows that there is a positive and significant relationship between ACMEET and investment in internal auditing ( $\beta = 2.07, P<0.05$ ). This finding suggests that firms with frequent audit committee meeting invest more in internal audit function. It also consistent with the argument that an effective audit committee (an audit committee that meets frequently) increases the demand for more assurance required from the internal audit. The result also is in conformity with Barua et al. (2010) who find that an effective audit committee may demand a higher internal audit budget. On the other hand, ACTEN is significantly and negatively related to investment in internal auditing ( $\beta = -2.50, P<0.05$ ).

**Table 6. Results of Regression Analysis**

Variable	Model 1				Model 2			
	Dependent variable: IAFNV				Dependent variable: IAFNV			
	Coefficient	t-Statistic	P-Val	VIF	Coefficient	t-Statistic	P-Val	VIF
ACIND	0.228	0.54	0.590	1.36				
ACMEET	0.416	2.07	0.039	1.48				
ACEXP	-0.145	-0.44	0.657	1.17				
ACTEN	-0.039	-2.50	0.013	1.35				
ACINDEX					0.158	2.51	0.013	1.16
ACSIZE	1.488	4.91	0.000	1.22	1.886	6.23	0.000	1.20
IAFSOU	-0.907	-5.54	0.000	1.24	-0.837	-5.19	0.000	1.18
LEV	0.006	1.35	0.178	1.43	0.003	0.70	0.486	1.27
SIZE	0.560	10.86	0.000	1.48	0.617	12.91	0.000	1.56
INVEN	3.143	3.41	0.001	1.60	3.073	3.38	0.001	1.54
OCF	4.443	6.58	0.000	1.50	4.744	7.07	0.000	1.46
INDSTRY	Controlled	Controlled	Controlled		Controlled	Controlled	Controlled	
YEAR	Controlled	Controlled	Controlled		Controlled	Controlled	Controlled	
Number of obs				288				288
F( 17, 270)				31.70				37.45
Prob > F				0.000				0.000
Adjusted R-squared				0.645				0.640

Note: IAFNV: the natural log of cost born by internal audit department; ACMEET: the natural log of audit committee meetings; ACSIZE; the natural log of total number of audit committee directors, SIZE: the natural log of total assets, YEAR: is the year 2013 and 2014. Only five industry sectors are included into regression analysis. These sectors are consumer product, trading and services, finance, plantation and industrial product. The study excludes the remaining sectors reprehensive of the sample firms to avoid the dummy variable trap. Other variables are previously defined.

This result suggests that audit committee members with increased firm-specific knowledge reduce the need for having greater assurance from internal audit function. The finding is in line with Barua et al. (2010) who conclude that audit committee tenure is associated with lower internal audit budget. As appeared in Model 2 of the table, ACINDEX has a positive and significant impact on internal audit budget ( $\beta = 2.51, P<0.05$ ). The result suggests that firms with effective audit committee invest more in internal audit. An effective audit

committee, to manage financial misreporting risk, may demand for obtaining greater assurance from internal audit budget.

However, other audit committee characteristics including ACIND and ACEXP do not appear to have a significant impact on internal audit budget. The results suggest that audit committee independence and expertise have no monitoring role over resources available to IAF, which is in contradiction to the authors' expectations. However, these findings are in line with Barua et al. (2010) who find that audit committee independence and accounting expertise are not significantly related to internal audit budget. A possible explanation for the insignificant association between audit committee independence and internal audit budget may be due to independent directors of audit committee are nominated and elected by the firm management. As such, the directors might not take deceive action against the management. Ismail, Dunstan, and Van Zijl (2009) argue that audit committee independence is not effective governance mechanisms in Malaysia because family members involvement in the appointment of audit committee directors. Moreover, Chen and Nowland (2010) assert that outside directors in Asian family-owned firms are not truly independent monitor because the involvement of family group in the selection of outside directors.

Another plausible reason of insignificant results may be due that most public firms in Malaysia tend to comply with Bursa Malaysia's requirements only with the intention to avoid any punishment by the regulators who favour independent members. Abdullah et al. (2010) argue that audit committees of Malaysian firms lack rigidity as the establishment of the audit committee is simply to comply with Bursa Malaysia's requirements. Therefore, an audit committee with such characteristics is less expected to effectively work together with internal audit department so as to provide assurance about internal controls and monitor financial reporting process.

As for audit committee expertise, the possible explanation for insignificant finding may be the dominance of audit committee members without accounting and audit qualification. In this paper, the majority of cases have only one or two audit committee member who is certified accountant or a member of a professional accounting body. This is evident by Table 4 which reports that only 33 percent of audit committee members have accounting and audit qualification. Audit committee members who do not understand financial reporting details may not be helpful in detecting financial misstatement and effectively communicating with external as well as internal auditors to enhance the quality of financial reports.

Evidently, most of control variables have a significant impact on internal audit budget across the two models with the expected sign. For example, ACSIZE is positively and significantly associated with internal audit budget. This result supports the argument that large audit committees have a better link with environment, more capabilities, more experience and expertise which may increase the effective of the committees (Anderson et al., 2012). Such audit committees may demand greater assurance from internal audit. Furthermore, SIZE has a significant and positive effect on internal audit budget. The result suggests that large firm invest more in internal audit. IAFSOU is negatively and significantly related to internal audit budget. The result implies that firms with outside internal audit providers invest less in IAF. INVEN and OCF have a positive and significant relation to internal audit budget. The results suggest that firms with higher level of inventory and operating cash flow are considered complex and, thus, demand greater monitoring by internal audit. LEV is the only control variable that has no significant effect on internal audit budget, although it has the expected direction.

### **3. Robustness Checks**

Tow tests are conducted in this research to ensure the sensitivity and robustness of the main results reported earlier. The first test re-runs Models 1 and 2 using an alternative measurement

for audit committee independence, operationized by the dummy variable taking the value of 1 if audit committee 100% independence and 0 otherwise. It also re-estimates the models with different measurement for audit committee expertise, represented by the dummy variable assigned the value of 1 if audit committee has at least one member of accounting or auditing expertise and 0 otherwise. Table 7 demonstrates the results of the re-estimated models.

Evidently, the results reported in the table lend further support to those shown in the main analysis. For example, ACTEN has a negative and significant influence on internal audit budget, whereas ACMEET and ACINDEX are positively and significantly related to internal audit budget. As for ACIND and ACEXP, the two variables still have no significant impact on internal audit budget, indicating that the study results are robust and not sensitive to using of the new measurement of ACIND and ACEXP.

Secondly, in the main analysis, the natural logarithm of audit committee meeting and size was utilized to mitigate the normality problem. As a test of sensitivity, Models 1 and 2 were re-estimated with winsorizing ACMEET as well as ACSIZE at 5% and 95% to ensure that the study's findings are not driven by the type of transformation. The results of the re-estimated models are reported on Table 8. The table shows findings that are approximately the same as those from using the natural logarithm of ACMEET and ACSIZE. The results presented in the table also are in line with the study conclusion that ACTEN and (ACINDEX) are negatively (positively) associated with internal audit budget. Other variables still have equivalent significant level as the one reported in the main analysis.

**Table 7. Results of Regression Analysis using alternative measurement of audit committee independence and expertise**

Variable	Model 1			Model 2		
	Dependent variable: IAFNV			Dependent variable: IAFNV		
	Coefficient	t-Statistic	P-Val	Coefficient	t-Statistic	P-Val
ACIND	0.048	0.37	0.711	-	-	-
ACMEET	0.455	2.25	0.025	-	-	-
ACEXP	- 0.216	- 1.14	0.256	-	-	-
ACTEN	- 0.036	- 2.28	0.023	-	-	-
ACINDEX	-	-	-	0.141	2.09	0.037
ACSIZE	1.539	5.01	0.000	1.687	5.79	0.000
IAFSOU	- 0.918	- 5.62	0.000	- 0.828	- 5.12	0.000
LEV	0.006	1.37	0.173	0.003	0.67	0.501
SIZE	0.557	10.87	0.000	0.607	12.58	0.000
INVEN	3.190	3.53	0.000	3.183	3.51	0.001
OCF	4.417	6.57	0.000	4.675	6.92	0.000
INDSTRY	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
YEAR	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Number of obs		288			288	
F( 17, 270)		31.89			37.06	
Prob > F		0.0000			0.0000	
Adjusted R-squared		0.647			0.638	

Note: IAFNV: the natural log of cost born by internal audit department; ACMEET: the natural log of audit committee meetings; ACSIZE: the natural log of total number of audit committee directors, SIZE: the natural log of total assets, ACIND: 1 if audit committee is 100% independent and 0 otherwise; ACEXP: 1 if audit committee has at least one accounting or audit expert and 0 otherwise; YEAR: is the year 2013 and 2014. Only five industry sectors are included into regression analysis. These sectors are consumer product, trading and services, finance, plantation and industrial product. The study excludes the remaining sectors reprehensive of the sample firms to avoid the dummy variable trap. Other variables are previously defined.

**Table 8. Results of Regression Analysis using winsorization of audit committee meeting and size**

Variable	MODEL 1			MODEL 2		
	Dependent variable: IAFNV			Dependent variable: IAFNV		
	Coefficient	t-Statistic	P-Val	Coefficient	t-Statistic	P-Val
ACIND	0.277	0.66	0.508	-	-	-
ACMEET	0.066	1.90	0.058	-	-	-
ACEXP	- 0.143	- 0.44	0.663	-	-	-
ACTEN	- 0.039	- 2.48	0.014	-	-	-
ACINDEX	-	-	-	0.154	2.45	0.015
ACSIZE	0.427	5.13	0.000	0.521	6.24	0.000
IAFSOU	- 0.899	- 5.48	0.000	- 0.837	- 5.19	0.000
LEV	0.006	1.36	0.176	0.003	0.75	0.455
SIZE	0.565	11.00	0.000	0.619	12.96	0.000
INVEN	3.177	3.45	0.001	3.103	3.42	0.001
OCF	4.492	6.65	0.000	4.796	7.14	0.000
INDSTRY	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
YEAR	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Number of obs		288			288	
F( 17, 270)		31.67			37.46	
Prob > F		0.0000			0.0000	
R-squared		0.6660			0.6576	
Adjusted R-squared		0.6450			0.6401	

Note: IAFNV: the natural log of cost born by internal audit department; ACMEET: audit committee meetings; ACSIZE; the total number of audit committee directors, SIZE: the natural log of total assets; YEAR: is the year 2013 and 2014. Only five industry sectors are included into regression analysis. These sectors are consumer product, trading and services, finance, plantation and industrial product. The study excludes the remaining sectors comprehensive of the sample firms to avoid the dummy variable trap. Other variables are previously defined.

### Summary and Conclusions

Extant research empirically documents that audit committee characteristics monitor resources available to internal audit department (Barua et al., 2010). Here, the study went one step further by exploring the association between audit committee index and the investment in internal auditing. It also extends prior literature that emphasizes solely audit committee characteristics in East Asian countries to an internal audit context. The findings of our study have some interesting practical implications. First, audit committee meeting and audit committee index were found to increase the internal audit budget. Second, resources available to internal audit department decrease as the average tenure of audit committee members increases. Third, audit committee expertise and independence have no significant impact on the investment in internal auditing. The results serve as alarm to regulators in Malaysia for requiring more independent and qualified audit committee members. Nevertheless, the overall results support the recent Malaysian requirements on internal audit and audit committee.

Like every other studies, this research has inevitable limitations. First, the study revolves around only the top 100 companies in Malaysia. As such, the results found in the study may not be generalized to small companies. Future research can include larger sample size to

allow for generalizable conclusions. Second, this study only emphasizes the role of audit committee over the resources available to internal audit function due to Malaysian companies are only required to disclose information pertaining to the cost of and sourcing arrangement of internal audit in their annual report. There are other factors that may affect the function of an internal audit which may, in turn, be linked to the effectiveness of audit committee. These factors that the audit committee can monitor include size of internal audit department, qualification of internal audit staff, availability of internal audit staff, internal audit organizational independence and internal audit department meetings. Perhaps, future studies may explore the possible relationship between audit committee characteristics tested in our paper and the factors using primary data. Third, this study only observes Malaysian companies due to data availability. It has been argued that relative to countries where establishing an internal audit function is not required by law, companies invest more extensive budgets for their internal audit function in countries where establishing internal audit function is required by the law (Sarens and Abdolmohammadi, 2011). As such, future studies may investigate the association between audit committee characteristics and internal audit budget in different settings, where (where not) internal audit function is required by the law.

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### Notes

1. The terminologies of internal audit budget and investment in internal audit are used interchangeably in our study as both of them refer to the resources available to internal audit department.
2. Multicollinearity is considered present when the VIF value is higher than 10.
3. The Cook-Weisberg test accepts the null hypothesis that the variance of the error terms is homogeneous and free of the heteroskedasticity problem ( $X=0.01$ ,  $p$ -value= 0.936 in Model 1 and  $X=0.02$ ,  $p$ -value= 0.887 in Model 2). Moreover, the Wooldridge test accepts the null hypothesis that the error terms are not correlated and free of autocorrelation problem ( $X=0.840$ ,  $p$ -value= 0.362 in Model 1 and  $X=1.004$ ,  $p$ -value= 0.319 in Model 2)
4. Our study also winsorizes the variables at 1% and 99% and we found the same results.

## PERSISTENCE OF TAX AVOIDANCE AND ITS EFFECT ON PERSISTENCE OF EARNINGS

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### Abstract

This paper suggests new measure of one aspect of tax avoidance in time series perspective and investigates its effect to earning persistence as a measure of earning quality in same perspective. We argue that tax avoidance has persistence attribute and this attribute has negative slope, we also predict that positive relation with earning persistence. We derive an empirical measure for persistence of tax avoidance using present value revision (PVR) of coefficients from firm-specific auto regressive regressions of effective tax rate. Consistent with our conjecture, we documented that there is persistence of tax avoidance and this persistence has negative trend. Finally, we show that our measure of persistence of tax avoidance has positive relation with earnings persistence.

**Keywords:** tax avoidance, persistence of tax avoidance, earning persistence.

Data availability: data are available from commercial databases.

### Introduction

This paper suggests new measure of one aspect of tax avoidance in time series perspective and investigates the effect of persistence of tax avoidance to persistence of earning in same perspective. For our suggested new measure, we investigate whether tax avoidance in certain period would affect tax avoidance in following periods. We extend our research by looking at the effect of persistence of tax avoidance to persistence of earning. Using data from five South-East Asian countries, we estimate persistence of tax avoidance period from 2001 to 2013, our final sample consist of 910 companies and reduced to 580 in extended investigation.

Motivational background for this research are coming from theoretical and practical background. Allingham and Sandmo (1979) who set tax avoidance theory for individual known as *taxpayer as gambler*, conclude that one is continuously avoiding tax as long as he isn't detected. Cowell et al. (2002) who pragmatically explain firm economical model for tax avoidance state that in term of tax avoidance behavior, firm and individual are identical. In the strand of long term tax avoidance research, first theoretical research of persistence of tax avoidance was conducted by Crocker and Slemrod (2005) which conclude the existency if persistence of tax avoidance. Dyreng et al (2008) and Lee and Swanson (2012) describe in long term span of research data that there are some companies who continuously doing effort in tax avoidance. But they are not specifically investigating tendency of companies in committing tax avoidance. We are the first to investigate persistence of tax avoidance in the long run time series. We extend our research to know the effect of persistence of tax avoidance to persistence of earning.

To provide evidence for our first hypothesis, we estimate each firm's effective tax rate (ETR) time series regression. Fortunately, e-views have feature that helping us simultaneously run in approximately a hundred firms in a time auto regressive OLS. We find that some companies

has persistent behavior in avoiding tax and this could be tracked up to 5 years back in common. After 5 years some firms' lag losing its significancies in its regression. We found that persistences have between 0 and 1 coefficient and not around 1, which mean they have negative slopes.

Our contribution is new measure of tax avoidance which is Present Value Revision (PVR) of Effective Tax Rate which is calculated from each coefficient of persistence o tax avoidance from the model that we investigate to answer our first hypothesis. This PVR following same procedure in Kormendi and Lipe (1997) which measure PVR of earning.

Our second hypothesis concerning the relation between persistence of tax avoidance to persistence of earning. In this phase, we run regression of our PVR of ETR to PVR of earning and include control variables suggested by Lev (1983) and Ismail dan Choi (1996) in eastimating earning quality. This cross-sectional regression includes 524 firms which were reduced due to incomplete data and normality procedures.

We find the existency of persistence of tax avoidance in 25.27% of samples. They are distributed comparatively different in each countries and each industrial categories leaving us opportunities to seek answer why these persistence of tax avoidance has different level in each country and industrial category. We find that our research show range of coefficient spreads between 0 and 1 and not around 1, meaning persistences of tax avoidance are in negative slope. We found that our measure is robust supported by our sensitivity analysis in 3 and 4 lags (untabulated). Our further investigation shows that this persistence of tax avoidance has positive relation with persistence of earning persistence.

The paper proceeds as follows: Section 2 review extant literature and hypotheses developments, section 3 contains research methods including data and research samples, research models, variables measures and method of data analysis. Section 4 explores empirical test results, discussion, and final section concludes the paper.

## **Literature Review and Hypotheses Development**

### **1. Agency Theory**

Jensen and Meckling (1976) explain the agency theory which describes emerging conflicts between principals and agents when ownership and controlling functions are separated. Those conflicts occur when both principals and agents possess rational behavior attempting to maximize their personal interest. This is likely to happen because of information asymmetries in which managers as agents have more information that principals do not.

In relation to taxation, Slemrod (2004) says that shareholders will ask managers to act on their behalf in an attempt to reduce their tax liabilities. Slemrod (2004) believes there is no agency conflict between agents and principals in tax avoidance since managers will also increase earnings through tax avoidance, which eventually leads to their increased prosperity. But there is still a good chance that managers will act opportunistically, due to confidential information the managers are aware of but the shareholders are not. Desai and Darmapala (2009) implement theoretical basics implying that managers will act according to shareholders' interest, in examining relations between firm's tax avoidance and firm's value. In firms which refer to ETR as a performance benchmark, placing a tax department as the center for earnings and determining compensation for managers' performance, managers will act in line with what shareholders want in terms of tax avoidance. Desai and Darmapala (2009) discover that the influence of tax avoidance on firm's values is one of corporate governance functions within the framework of agent-principal relationships in firm's tax avoidance. This means that the agency theory remains the basis of research on firm's tax avoidance.

## 2. Tax Avoidance

### A. Tax Avoidance Theory and Persistence of Tax Avoidance

Tax research has a long history of being conducted, but theoretical models of individual tax avoidance were formulated by Alingham and Sandmo (1972). Since then, the model they formulated which was widely known as Taxpayer as Gambler has become the basis of tax avoidance theory. Alingham and Sandmo (1972) who analyze individual decisions in making tax avoidance decisions say that someone will keep avoiding tax until he/she gets detected doing so.

Cowell et al. (2002) say that "Taxpayer as Gambler" model is based on four simple propositions, namely; i) if rate of return of tax avoidance is positive, then everybody will avoid tax; ii) individuals with high risk-aversion levels tend to evade tax avoidance; iii) individuals with higher earnings tend to do tax avoidance more often; and iv) the rise in parameter levels of tax enforcement (likely to get detected, penalty and tariff) will lower tax avoidance levels. Out of these four propositions, Cowell et al. (2002) say that two of them (1 and 3) have the potential to be criticized as they are less compatible with general logics (common sense) stating that every individual will avoid tax. These four propositions indicate that tax avoidance will always be done by taxpayers. Each of these propositions demonstrates that tax avoidance will continue to exist, albeit in varied amount.

In addition to individual tax avoidance models, there are corporate tax avoidance models which, from public research perspective, are no different from individual tax avoidance models. Cowell et al. (2002) pragmatically explain that a differentiation carried out for corporate economic models is aimed at examining the influence of tax avoidance overall distortion. Behavior of corporate taxpayers is not significantly different from that of individual taxpayers. In corporate levels, a manager's decision will depend on the firm owner's desire. At the point of tax avoidance, managers will act according to firm owner's request (Slemrod 2004).

Cowell et al. (2002) mention three different features between corporate and individual tax avoidance models, which are i) the nature of taxpayers; ii) assumption of risk preferences<sup>12</sup>; and iii) determinants of responses to economic incentives. Firms are established based on economic incentives, which may change depending on economic conditions, including tax system and enforcement. On the other hand, from risk preferences, more researches assume that firms tend to be risk-neutral rather than risk-aversion. As for responses to incentives, there are four influential factors, namely i) nature of products, ii) firm's size and organizational structure, iii) reputation, and iv) industry concentration levels. Out of these three features, the second explains that corporate taxpayers are more inclined to tax avoidance than individual taxpayers are.

Furthermore, Slemrod (2004) investigates economic perspectives of corporate tax disobedience, stating that the risk-aversion assumption prevails among individual taxpayers when larger penalty than saving for tax avoidance will effectively restrict tax avoidance. This finding is only prevalent in small firms which are predominantly controlled (closely held) by the owners. In firms predominantly controlled by owners (closely held), the interest of firm's management is relatively similar to that of the owners. Because managements generally consist of people with great proximity to the owners, relatively identical tax avoidance decisions will be made. However, the situation will be different for firms with dispersed

<sup>12</sup> There are two types of taxpayer behavioral preferences over risks: *risk aversion* and *risk neutral*. *Risk aversion* is risk avoiders, in which case taxpayers will tend to evade tax avoidance due to penalties imposed, while *risk neutral* is taxpayers who tend to avoid tax although they face potential penalties if detected.

ownership, Slemrod (2004) says that firms must be assumed to be risk neutral even if the shareholders themselves are not neutral since the shareholders have a lot of portfolios which protect them against risks. As such, it is assumed that tax avoidance among corporate taxpayers in this research is risk neutral. This research assumes that firm's risk preference is risk-neutral.

Allingham and Sandmo (1972) explain that taxpayers tend to ignore morality aspects by being immoral, so that people choose to commit tax avoidance in an effort to maximize their personal profit. A 30-year theoretical research by Crocker and Slemrod (2005) indicates that tax avoidance is constantly done for as long as it remains unknown. This shows an indication of persistence of tax avoidance.

Tax avoidance is not only committed by individual taxpayers but by corporate taxpayers as well. Cowell et al. (2002) say that there is basically no difference between individual and corporate tax avoidance. Corporate tax avoidance decisions are still made by an individual or interactions among individuals in a firm. Yet corporate tax avoidance is committed in a more sophisticated way and using a method that requires a certain expertise. Research on tax avoidance has produced numerous literary works on corporate tax avoidance.

In various tax research literatures, a number of methods are found and such methods can be applied to identify corporate tax avoidance, one of which being the use of ETR (Stickney, 1979; Plesko, 2003; Hanlon and Heitzman, 2010). Stickney (1979) says that ETR trends can be analyzed through ETR of the previous period and can be used to better examine cash flows and future earnings. A research by Dyreng et al. (2008) provides evidence of persistence of tax avoidance indicating that annual cash ETR has different persistence of ETR when ETR cash samples are partitioned into High and Low ETR, with the research results showing that Low ETR is more persistent than High ETR. This goes on to show that firms with high tax avoidance levels tend to maintain their tax avoidance levels at a relatively equal level.

Lee and Swenson (2012) who investigate the influence of statutory tax rate and tax system on tax avoidance provide an explanation on relatively constant decline of ETR that took place worldwide during the period of 1990-2007 using a research sample that covers 86 countries. But the said research does not proceed with a further examination of this phenomenon.

The presence of immoral behavior apart from insatiable human behavior makes human being tend to strive to augment their personal satisfaction. Increased prosperity in this case is gained through tax avoidance which is measured by comparing achievements from previous periods. At first, someone/a firm might try to increase their prosperity via tax avoidance using a method in compliance with regulations, next, tax avoidance will tend to continue, although it goes against regulations as long as it goes undetected. That is why even though tax is set forth by rules and regulations, tax avoidance will still be done as long as opportunities are available (Allingham and Sandmo, 1972). The initial evidence of ETR decline in a research by Lee and Swanson (2012) indicates that tax avoidance is perpetually being done by corporate taxpayers in several countries. This explanation leads us to our first hypothesis as follows:

H<sub>1</sub>:                   there is persistence of tax avoidance.

## **B. Tax Avoidance and Earning Quality**

There are a variety of definitions of earnings quality, Dechow et al. (2010) mention that which definitions to use is contingent on contexts of decisions to make. Dechow et al. (2010) explain properties of earnings quality as follows: persistence, accruals, smoothness, punctuality, loss recognition, investor responses, and external indicators such as restatement, and release of SEC enforcement. Property of earnings quality by Dechow et al. (2010) as discussed in this paper is earnings persistence. Selection of earnings quality components is based on the nature of earnings persistence data which are most suitably used in the relations of persistence of tax avoidance and earnings quality.



Hanlon and Heitzman (2010) provide evidence that tax avoidance information indicated by Book-Tax Differences (BTD) contains earnings quality information. Phillips et al. (2003) say that tax avoidance as reflected in tentative Book-Tax Differences (BTD) reveals the presence of discretion in pre-tax earnings management. Book-Tax Differences arise because of differences in booking regulations and tax regulations. These differences may arise when what is acknowledged by accounting is not acknowledged by tax, or vice versa. For instance, cost of penalty or loss reserve that is acknowledged by accounting but not acknowledged by tax. Differences originating from accruals-based accounting records involve management discretion that lowers objectivity levels of determining firm earnings, so that tax avoidance leads to downward earnings quality.

Regarding the relationship between tax avoidance and earnings persistence, Hanlon (2005) and Blaylock et al. (2011) notice this connection by separating firm samples based on BTD compositions, i.e. firms with a large BTD will have a low persistence. Frank and Rego (2006) also provide evidence of a relation between tax avoidance and earnings management and use of loss reserve, consistent with Phillips et al. (2003). Corporate tax avoidance activities will affect earnings quality, either earnings persistence or accruals quality.

Hanlon (2005) and Blaylock et al. (2011) say that there is a relation between tax avoidance information and earnings persistence. Hanlon (2005) investigates the relation between tax avoidance using Book-Tax Differences (BTD) and earnings persistence, accruals levels, and cash flows in subsequent years. This investigation finds that firms with Large Book-Tax Differences/LBTD have less persistent earnings compared to firms with Small Book-Tax Differences. Hanlon (2005) shows that firms with LBTD experience a high rise in earnings and then a decline the following year. At the same time, LBTD also shows a high rise in accruals and a decline the following year.

Persistence of tax avoidance is a continued effort to increase tax avoidance or to decrease tax cost in subsequent periods, or to enlarge BTD in subsequent periods. Because tax avoiders with large BTD have less persistent earnings, persistence of tax avoidance which enlarges BTD will reduce earnings persistence even more. Therefore, persistence of tax avoidance will have a negative effect on earnings persistence. Atwood et al. (2010) who investigate the relationship between book tax conformity and earnings persistence find that higher conformity is linked to lower earnings persistence and vice versa.

H<sub>2a</sub> : Persistence of corporate tax avoidance has a negative effect on persistence of earnings.

## **Research Method**

### **1. Data and Sample Selection**

Data in this research collected from five south-east Asian countries: Indonesia, Philippine, Singapore, Thailand and Malaysia. Main consideration for selecting these countries is availability of the data which are publicly available from their capital market, where these capital markets are more advanced than other countries capital market in south-east Asian countries. These capital market are Indonesia stock Exchange, Singapore Exchange, Bursa Malaysia, Philippine Stock Exchange and Stock Exchange of Thailand. Methods of sample selection is purposive sampling with criteria of the companies are having complete data from 2001 to 2013 and having no extreme rate of effective ax rate. All industry groups will be used in the both stage, either in discussing the persistency level of tax avoidance and also in the investigation of the effect of persistence of tax avoidance to earning quality.

**Table 1. Samples Selection**

	Indo	Phill	Singa	Thai	Malay	Total
Listed companies	495	246	750	666	926	3083
Incomplete data 1	284	129	454	387	466	1720
	211	117	296	279	460	1363
Extreme ETR	70	31	81	119	152	439
Samples Phase 1	141	86	215	160	308	910
Incomplete data 2	46	66	51	99	68	330
Outliers						
Sample Phase 2	95	20	164	61	240	580

Indo = Indonesia  
 Phill = Phillipine  
 Singa = Singapore  
 Thai = Thailand  
 Malay = Malaysia

## 2. Research Model

This study employs two main models consist of models of persistence of tax avoidance and the effects of persistence of tax avoidance on persistence of earning.

## 3. Model of Tax Avoidance Persistence

This model is the first to answer the problem formulation, as well as test the hypothesis H1, existence of persistence of tax avoidance. The model was built based on the persistence of tax avoidance autoregressive pattern. By using the ETR as a proxy of tax avoidance, this research model is as follows:

$$\frac{ETR_t}{STR_t} = \beta_0 + \beta_1 \frac{ETR_{t-1}}{STR_{t-1}} + \beta_2 \frac{ETR_{t-2}}{STR_{t-2}} + \dots + \beta_p \frac{ETR_{t-p}}{STR_{t-p}} + e_t \quad (1)$$

ETR is the effective tax rate which is obtained by dividing the tax expenses on earning before interest and taxes. STR is the statutory tax rate, government regulated tax rates. ETR is scaled to STR to anticipate changes in tax rates in each country. The period of estimation is for 12 years from 2001 to 2013.

H1 can not be rejected if the coefficient  $\beta_1$  significant positive value, so the expectation sign model coefficients (1) above is  $0 < \beta_1 < 1$ .

Measurement revision of persistence is using the present value of the expected future earnings (PVR) model (1) follows Kormendi and Lippe (1997). PVR is a revision of the present value of persistence models with two or more variable lag significant autoregressive models. PVR is a function of a time series of  $\beta$  from the model of persistence and the interest rate  $\delta$ . In this study  $\delta$  using the medium-term government bond yields, the risk free rate. With the level of risk free rate which may vary between countries, the estimated value of  $\delta$  will use different in each country.

$$PVR\_TAP_j = \frac{1}{(1-\delta)(1-\sum_{i=1}^N \delta^i \beta_i)} - 1 \quad (2)$$

Where

PVR\_TAPj = measure of tax avoidance persistence  
 $\delta$  = risk free rate, which is the medium-term government bond yields.  
 $\beta_i$  = beta coefficient with lag i in model (4.1.1).

#### 4. Model of Effect of Tax Avoidance Persistence to Earning Quality

The model is to answer the problem formulation as second hypothesis H2. This study using earning persistence as measured of earning quality which is the best measure associated to persistence of tax avoidance.

Hanlon (2005) in view of the persistence of earnings, using autoregressive model with one lag following:

$$PTBI_{t+1} = \gamma_0 + \gamma_1 PTBI_t + \vartheta_t \quad (3)$$

With the same application with the persistence of tax avoidance in model (1), lag variables that may affect more than one year, the basic model became the persistence of earnings:

$$PTBI_t = \gamma_0 + \gamma_1 PTBI_{t-1} + \gamma_2 PTBI_{t-2} + \dots + \gamma_p PTBI_{t-p} + \epsilon_t \quad (4)$$

Following the same procedure with the persistence of tax avoidance which follows Kormendi and Lipe (1987), the size of the persistence of earnings revisions are also using the present value of the expected future earnings (PVR), in this case of the model 4.2.3.2. With PVR result of calculation of a model of coherent waktuy persistency and interest rate  $\delta$  and this study also uses risk free rate  $\delta$ , then the size of the persistence of earnings calculated using the following formula:

$$PVR_{Xj} = \frac{1}{(1-\delta)(1-\sum_{i=1}^N \delta^i \gamma_i)} - 1 \quad (5)$$

Where

$PVR_{Xj}$  = measure of the persistence of earnings

$\delta$  = risk free rate, which is the government bond yield.

$\gamma_i$  = beta coefficient with lag y model (4.2.3.2).

So that the model used to test the hypothesis H2 is:

$$PVR_{Xj} = \beta_0 + \beta_1 PVR\_TAP_j + \beta_2 Control + \vartheta_t \quad (6)$$

Dimana :

$PVR_{Xj}$  = Earnings persistence, the proxy will be used, PVR of future profits expected from the model (4)

$PVR\_TAP_j$  = The persistence of tax avoidance. With the proxy to be used, PVR of ETR expected future model (1).

Control = The control variables comprising:

$Size_j$  = Log on average of total assets

$\sigma(Invlnt)_j$  = The standard deviation of the ratio of inventories to total assets

$\sigma(Caplnt)_j$  = The standard deviation of the ratio of depreciation to sales.

$BTE_j$  = Barrier to entry, log the average number of companies in the industry

Hypothesis in statistical format is as follows:

$H_{3a}: \beta_1 > 0$

While expectations for the control variable:

$\beta_2 > 0, \beta_3 < 0, \beta_4 < 0, \text{ dan } \beta_5 > 0$

#### 5. Variable Measure

Tax avoidance in this study followed the general definition made by Hanlon and Heitzman (2010) which summarizes the range of tax avoidance from being compromised with the accounting rules to the offense. Then the most appropriate measure is ETR:

$$ETR = \frac{\text{Tax Expense}}{\text{Pre Tax Book Income}} \quad (7)$$

To control the tax rate (Statutory Tax Rate) Different and tariff changes in a different year, estimation will be conducted with ETR scaled to the STR.

The persistence of tax avoidance (PVR\_TAP) is using a revised present value (PVR) on ETR of the model (1) which is reflecting the persistence rate of tax on each company and persistence of earning (PVR\_X) is using a revised present value (PVR) on earning of the model (4). PVR is computed using the formula Kormendi and Lippe (1987) follows:

$$PVR = \frac{1}{(1-\delta)(1-\sum_{i=1}^N \delta^i \beta_i)} - 1 \quad (8)$$

Where  $\beta$  is the coefficient on the model (1),  $\delta$  is the rate of interest,  $i$  is the number of years and  $N$  the number of years used.

Earnings persistence Variable is the coefficient  $\beta_1$  model (3), which shows the relationship of the time series of earnings.

$$PTBI_{t+1} = \beta_0 + \beta_1 PTBI_t + \vartheta_t \quad (3)$$

## 6. Control Variables

Lev (1983) and Ismail and Choi (1996) mentions the variables that influence the persistence of earnings is firm size (Size), the intensity of supplies (InvInt), capital intensity (PPE) and barriers to entry industry (BTE).

**Size**, company size measured by the Log Total Assets.

**InvInt**, Inventory Intensity is measured by the ratio of inventories to total assets lag

**CapInt**, capital intensity, measured by the ratio of PPE to lag gross total assets and

**BTE**, Barrier to Entry, barriers to entry the industry measured by the log of the number of companies in the industry. Where more number of companies means more easily and positively associated with persistence of earnings.

Data will be analyzed using ordinary least squares and autoregressive regression in first model and cross-sectional ordinary least square in the second model. Ordinary least squares and autoregressive regressions are made on testing the persistence of tax avoidances and persistence of earnings. While the cross-sectional ordinary regressions are conducted on the effect of persistence of tax avoidance to the persistence of earnings.

Classical assumptions OLS regression which is the condition will be met which include data normality, multicollinearity test, the data heteroscedasticity test and autocorrelation test. Except on auto regression both on the persistence of tax avoidance and persistence of earnings that do not require the classical assumption (Gujarati, 2009)

Normality of the data will be calculated using the Jarque-Berra residual test, and normal curve. Normalization of data will be done by removing the extreme values both positive and negative. Multicollinearity test data using Spearman correlation test. Test heteroscedasticity are using White-hetero. In testing the persistence of tax avoidance, time series analysis test will be done considering persistence is the relationship between time on the same variable.

## Result

### 1. Persistence of tax avoidance

The result of the following regression equation is shown in Table 2.

$$\frac{ETR_t}{STR_t} = \beta_0 + \beta_1 \frac{ETR_{t-1}}{STR_{t-1}} + \beta_2 \frac{ETR_{t-2}}{STR_{t-2}} + \dots + \beta_p \frac{ETR_{p-1}}{STR_{p-1}} + e_t \quad (1)$$

The estimation of the above equation is done with autoregressive ordinary least squares with the help of E-views, which can perform individual regression of each sample simultaneously. This is the estimation that can produce different  $\beta_n$  coefficient for each firm. The estimation is

performed for each company in each country. The regression results for each country can be found in appendix. The estimation result for each significant sample shows result as expected, with a value between 0 and 1 and is not close to 1. A persistence test which is significant generally happens up until lag-5; in the test for up until lag-6, there is a lag which no longer significantly affects its dependent variable. The following are the descriptive statistics of coefficients from the results of the above model for estimation with 1 lag.

**Table 2. Result for Significant estimations from model (1)**

	All	Indonesia	Philippines	Singapore	Thailand	Malaysia
Significant at 1%	101	17	17	12	29	26
Significant at 5%	72	10	8	16	13	25
Significant at 10%	57	10	5	12	9	21
Total Significant Results	230	37	30	40	51	72
Percentage Significant at 1%	11.10%	12.06%	19.77%	5.58%	18.13%	8.44%
Percentage Significant at 5%	7.91%	7.09%	9.30%	7.44%	8.13%	8.12%
Percentage Significant at 10%	6.26%	7.09%	5.81%	5.58%	5.63%	6.82%
Percentage Total Significant Results	25.27%	26.24%	34.88%	18.60%	31.88%	23.38%

As seen from the above description table, 25.27 % of total sample shows significance on the estimated model of tax avoidance persistence with the details of 11.1% at 1% level; 7.91 % and 6.26% at 10% level. Comparing to the average of total sample, it can be seen that the results of Indonesia, Philippines and Thailand indicate more companies with significant persistence level of tax avoidance with persistence level of 26.24 %, 34.88 % and 31.88 %, respectively; while Singapore and Malaysia have lower-than-average persistence level of tax avoidance, with persistence level of 18.60 % and 23.38 %, respectively. The country with the highest persistence level is Philippines while the lowest one is Singapore.

Meanwhile, according to the industry, the significance distribution of companies persistently carrying out tax avoidance is described in Table 3. The industry categories used in this study are categories classified by Thomson Reuters. With the significance average of 25.27%, it can be seen that several industry categories have significance level that is far above average, i.e. Banks, Electricity, Food and Drug Retailing, Mining, Mobile Telecommunications as well as Oil and Gas Producers. Categories of companies with value which is far below average include Forestry and Paper Products, Gas, Water and Multi-utilities, Personal Goods, Software and Computer Services as well as Support Services. Meanwhile, other companies are circa the average.

**Table 3. Number of significant estimations from model (1) in industries.**

Industry	Populasi	Sampel	Sig.	Percent	Mark
Automobiles and Parts	49	19	4	21.05%	
Aerospace and Defense	6	2	0		
Banks	81	36	17	<b>47.22%</b>	↑
Beverages	29	13	3	23.08%	
Chemicals	111	29	6	20.69%	
Construction and Materials	255	81	21	25.93%	
Electricity	29	9	5	<b>55.56%</b>	↑
Electronic and Electrical Equipment	122	41	11	26.83%	

Equity Investment Instruments	4	0	0		
Financial Services (Sector)	139	30	9	30.00%	
Fixed Line Telecommunications	8	3	1	33.33%	
Food and Drug Retailers	21	6	3	<b>50.00%</b>	↑
Food Producers	218	81	23	28.40%	
Forestry and Paper	25	6	1	16.67%	↓
Gas, Water and Multiutilities	24	8	1	12.50%	↓
General Industrials	66	23	6	26.09%	
General Retailers	103	33	7	21.21%	
Health Care Equipment and Services	52	16	5	31.25%	
Household Goods and Home Construction	91	29	8	27.59%	
Industrial Engineering	152	34	7	20.59%	
Industrial Metals and Mining	105	30	7	23.33%	
Industrial Transportation	103	29	6	20.69%	
Leisure Goods	19	5	1	20.00%	
Life Insurance	4	0	0		
Media	70	17	4	23.53%	
Mining	60	9	5	<b>55.56%</b>	↑
Mobile Telecommunications	27	9	4	<b>44.44%</b>	↑
Non-Equity Investment Instruments	49	0	0		
Nonlife Insurance	39	15	1	6.67%	
Oil and Gas Producers	44	7	3	<b>42.86%</b>	↑
Oil Equipment and Services	54	8	3	<b>37.50%</b>	↑
Personal Goods	110	34	6	17.65%	↓
Pharmaceuticals and Biotechnology	26	15	4	26.67%	
Real Estate Investment and Services	256	86	20	23.26%	
Real Estate Investment Trusts	117	1	0	0.00%	
Software and Computer Services	100	10	1	10.00%	↓
Support Services	101	19	3	15.79%	↓
Technology Hardware and Equipment	96	20	4	20.00%	
Tobacco	6	3	0		
Travel and Leisure	136	48	10	20.83%	
#N/A	101	46	10	21.74%	
	3208	910	230	25.27%	

## 2. The Effect of Tax Avoidance Persistence on Earnings Persistence

For the effect of tax avoidance persistence on earnings persistence, the estimation process is done with the following equation model:

$$PVR\_X_j = \beta_0 + \beta_1 PVR\_TAP_j + \beta_2 Control + \vartheta_t \quad (6)$$

The estimation is performed for each PVR with 2 lags until 4 lags, with control variables of the average log of total assets, inventory intensity, capital intensity and barrier to entry (BTE) in addition to dummy variable of country.

**3. Descriptive Statistics**

The descriptive statistics for variables used in the estimation with 2 lags are described in TableX below. The average value of PVR\_X is 0.065493 with a minimum value of -0.004563 and a maximum value of 0.233856, while the average value of PVR\_TAP is 0.051383 with a minimum value of -0.01524 and a maximum value of 0.0205429. After elimination, no value of PVR\_X and PVR\_TAP which are too extreme; likewise with the values of control variables, be it LogAvgTA, SD(Invlnt), SD(Caplnt) or BTE. The residual value shows the Jarque-Bera test score of 5.781489 with Prob score of 0.055535, which indicate the residual model has a normal curve and fulfill the requirement of data normality for OLS. The normal curve is presented in Figure 1.

**Table 4. Descriptive Statistic**

	Mean	Median	Max	Min	StdDev.	JarqBera	Prob.
PVR_X <sub>j</sub>	0.06549 3	0.05596 4	0.233856	- 0.00456 3	0.03925 8	562.173 9	0
PVR_TAP <sub>j</sub>	0.05138 3	0.04450 1	0.205429	-0.01524	0.03087 1	657.542	0
LogAvgTA <sub>j</sub>	5.98989 1	5.73379 7	10.89943	0.47712 1	1.53002	130.867 4	0
SD(Invlnt) <sub>j</sub>	0.05043 9	0.03744 3	0.386072	0	0.04971 4	1805.30 8	0
SD(Caplnt) <sub>j</sub>	0.02742 1	0.01303	3.13437	0	0.14124 6	4386295	0
BTE <sub>j</sub>	1.49468 4	1.51851 4	2.033424	0	0.34796 2	115.429 6	0
Residual	8.51E-18	- 0.00127	0.060777	-0.06668	0.02370 9	5.78148 9	0.055535

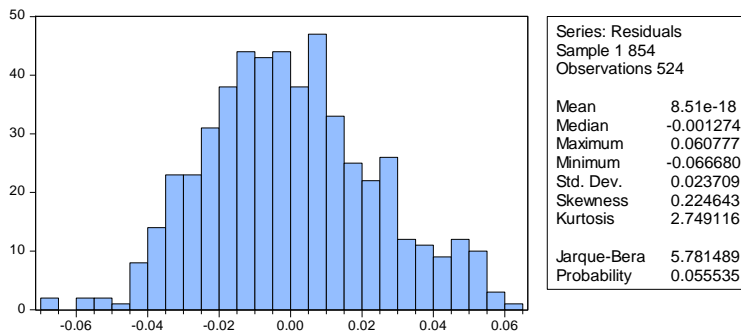
PVR\_X<sub>j</sub> = Persistences of earnings, which are PVR of coefficient from model (4)  
PVR\_TAP<sub>j</sub> = Persistences of tax avoidances. which are PVR of coefficient from model (1).  
LogAvgTA<sub>j</sub> = Log on average of total assets  
SD(Invlnt)<sub>j</sub> = The standard deviation of the ratio of inventories to total assets  
SD(Caplnt)<sub>j</sub> = The standard deviation of the ratio of depreciation to sales.  
BTE<sub>j</sub> = *Barrier to entry*, log of number of companies in the industry  
N = 524

**4. Correlations Analysis**

The correlations among PVR\_X, PVR\_TAP, LOGAVGTA, SD(Invlnt), SD(Caplnt) and BTE are described in Table 5 below. The correlation table shows that in the individual relationship, PVR\_TAP, LOGAVGTA, SD(Invlnt), and BTE indicate a significant relationship with PVR\_X variable, with positive signs for both variables of PVR\_TAP as well as LogAvgTA, and negative relationship with SD(Invlnt) variable, except for SD(Caplnt) which does not have a significant relationship with PVR\_X. In the relationship among independent variables, PVR\_TAP has a significant correlation with LogAvgTA and BTE, but still within the safe bound of multicollinearity with correlation of 0.50838 with LogAvgTA and -0.17392 with BTE.

**Table 5. Correlation Matrix**

	PVR_X <sub>j</sub>	PVR_TAP <sub>j</sub>	LogAvgTA	SD(Caplnt)	SD(InvInt) <sub>jj</sub>	BTE <sub>j</sub>
PVR_X <sub>j</sub>	1					
PVR_TAP <sub>j</sub>	0.753369**	1				
LogAvgTA	0.600815**		1			
SDINVT	*	0.50838***		1		
SDCAPIN	-0.10322**	-0.0456	0.12046***		1	
T <sub>j</sub>	-0.04819	0.016004	-0.02532	*		1
BTE <sub>j</sub>	0.15834***	0.17392***	0.21396***	0.16528***	0.027177	1



**Figure 1. Normal Residual**

### 5. Regression Result

Hypothesis 2 is tested using model (6), whose result is shown in Table 6. PVR\_X<sub>j</sub> variable is the earnings persistence obtained from the revised Present Value of model (4), calculated using equation (5). PVR\_TAP<sub>j</sub> variable is the tax avoidance persistence obtained from the present value reason? of model (1), calculated using equation (2); this method is similar with the calculation of PVR\_X<sub>j</sub> variable. The test is performed using model (1) and (4) with 2 Lags, 3 Lags dan 4 Lags. As the results are quite similar, discussion is focused on the equation with 2 lags, considering the model explanatory power weakens along with the addition of lag – which is shown by the value of Adjusted R Square that decreases in lag 3 and lag 4. The test results with 3 Lags and 4 Lags can be found in appendix.

The result demonstrates that PVR\_TAP has a positive and significant relationship with PVR\_X, denoting that hypothesis 2 is accepted, which means tax avoidance persistence positively affects earnings persistence. This result has been controlled by LogAvgTA, SD(InvInt), SD(Caplnt) and BTE variables; whereby LogAvgTA indicates a positive and significant result as initially expected, SD(Caplnt) shows a negative and significant result as expected, while SD(InvInt) shows an insignificant result with negative sign and BTE signifies an insignificant result with positive sign. In the second test with the addition of dummy variable of country, it can be observed that the results are consistent with the test without the control of country dummy variable, which indicates different country characteristics does not change the effect of tax avoidance persistence on earnings persistence. In this test, a better result is shown by a control variable of SD(InvInt) which signifies a negative and significant result as expected.



**Table 6. Test results for effect of persistency of tax avoidance to persistence of earnings**

Model 6. $PVR\_X_j = \beta_0 + \beta_1 PVR\_TAP_j + \beta_2 Control + \vartheta_t$						
Variables	Coef	Sig.		Coef	Sig.	
C	-0.01985	0.014	**	0.032236	0.002	***
PVR_TAP	0.773041	0	***	0.296385	0	***
LogAvgTA	0.007442	0	***	0.002395	0.0479	**
SD(InvInt)	-0.0269	0.2331		-0.03359	0.0406	**
SD(CapInt)	-0.0122	0	***	-0.00645	0.0388	**
BTE	1.83E-03	0.586		0.003516	0.2116	
Indo				0.065177	0	***
Phil				0.000844	0.9101	
Singa				-0.01924	0	***
Thai				-0.00434	0.1676	
AR	0.631765			0.734205		
Prob(F-stat)	0			0		
AIC	-4.40701			-4.74468		
Sample	524			524		

- PVR\_X<sub>j</sub> = Persistences of earnings, which are PVR of coefficient from model (4)
- PVR\_TAP<sub>j</sub> = Persistences of tax avoidances, which are PVR of coefficient from model (1).
- LogAvgTA<sub>j</sub> = Log on average of total assets
- SD(InvInt)<sub>j</sub> = The standard deviation of the ratio of inventories to total assets
- SD(CapInt)<sub>j</sub> = The standard deviation of the ratio of depreciation to sales.
- BTE<sub>j</sub> = *Barrier to entry*, log of number of companies in the industry

### Discussions and Implications

On a theoretical level, previous study on long-run persistence has been conducted by Crocker and Slemrod (2005). Dyreng et al (2008) examine long-run tax avoidance measure with Cash ETR but do not observe corporate tendency in tax avoidance. Another study that observes long-run tax avoidance is Lee and Swanson (2012), which descriptively sees an increasing tax avoidance behavior through presentation of data from the year 1990 up until 2007. It is the first study that shows the existence of tax avoidance persistence in the long-run and the relationship between tax avoidance persistence and earnings persistence.

The findings show the presence of tax avoidance persistence carried out by companies in South East Asia which are selected as a sample in this study. As expected, the estimation result of each company that shows a significant result circa between 0 and 1 and is not close to 1, which means tax avoidance persistence on a decreasing level.

The percentage of companies persistent in avoiding tax differs in each country. With the average of total companies of 25.27%, Indonesia, Philippines and Thailand stay above average while Singapore and Malaysia stay below average. This study has not gotten as far as providing the reason of the difference, which is an interesting topic that can be examined for further study.

Observing from the industry category, the persistence of tax avoidance also shows differing levels. Companies in industry category of Banks, Electricity, Food and Drug Retailing, Mining, Mobile Telecommunications as well as Oil and Gas Producers have a much more higher persistence level than other companies; while companies in the industry category of Forestry and Paper Products, Gas, Water and Multiline Utilities, Personal Goods, Software

and Computer Services as well as Support Services have a persistence level that is far below average. Some companies in other categories have a persistence level that is around the average. This study also has not observed the reason why there is a difference in the tax avoidance persistence level in different industries. This research opens up the opportunity for the next research to examine what are the factors that affect the persistence of tax avoidance, as well as to observe further whether this tax avoidance persistence can also be observed from the aggressiveness perspective of tax avoidance, such as if the tax avoidance persistence level and different industry category also determine the level of companies in carrying out a more aggressive tax avoidance.

This study also provides empirical evidence that tax avoidance attempts in the long run are also carried out in order to increase earnings quality. This is in line with the study of McGill dan Outslay (2004), which find that some companies make tax as a source to increase profit. Although making tax avoidance persistence as a measurement for company performance has a different viewpoint between government and company, in practice, empirical evidence shows that tax avoidance persistence has a positive impact on earnings quality. It still needs to be examined further whether this tax avoidance persistence is more because of tax avoidance that comply with regulations or tax evasion that breach regulations.

Observing from government's point of view, the persistence of tax avoidance is not good for government revenue from tax sector. The tax avoidance persistence indicates a decrease in state revenue, even though sometimes officials do not realize it as the total revenue can still be the same or even greater – but individually, many companies continue attempting to avoid tax. Government or other policy makers need to continuously evaluate their tax regulations to suppress corporate tax avoidance.

### **Conclusion**

This study manages to prove that some companies are persistent in carrying out tax avoidance. In such companies, it can be seen that in general, the persistence is on a declining trend. Each country in South East Asia shows a different level of persistence. Likewise, each industry category also shows different persistence level of corporate avoidance. These differences offer an opportunity for the next study to observe what cause the differing levels.

This study also proves the existence of a positive relationship between the persistence of tax avoidance and earnings persistence. This indicates there are companies that are consistent in carrying out tax avoidance behavior in order to maintain the level of earnings quality.

There are several limitations of this study. First, we only examine one aspect of earnings quality, which is earnings persistence. There are other measures of earnings quality, such as earnings management, earning smoothing, and earnings response coefficient. We already include country dummy variable to control differences between countries. However, there is a possibility that there are other country level factors that may affect our results.

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## TAX NON COMPLIANCE BEHAVIOUR AMONG HIGHER LEARNING EDUCATION INSTITUTION IN MALAYSIA

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### Abstract

This present study attempts to investigate the underlying reasons for non compliance behavior among higher learning education institutions in Malaysia. Tax non-compliance among individual taxpayers may have an impact on the collection of tax revenue to the government. The main purpose of this study was achieved by examining the relationship between tax non-compliance behavior as dependent variable while lack of tax knowledge, tax complexities, compliance cost and burden and ethic behavior as an independent variable. Data was gathered through survey with 271 respondents and analyzed using SSPS. The finding shows that there are two out four variables that have a significant relationship towards tax non-compliance. Therefore, the main purpose of the study is to identify the factors of tax non-compliance among higher learning education institutions. The results also show that there is a need for collaborative and collective effort from various parties such as individual taxpayers, tax practitioners and tax authority to shape and sustain a good environment of tax practices in Malaysia.

**Keywords:** *Tax Non-Compliance, Tax practitioners, Revenue,*

### Introduction

Managing tax compliance is a complex issue for every country and Malaysia is no exception. Taxes are the one of the main sources of income because it can generate revenue for our country. According to Abbasi (1985), taxes and states are complementing each other. The main aspect for the development of a country's tax system is its effectiveness and efficiency in managing the taxation. Singh (1995) stated that Malaysian government used funds collected from the various taxpayers in order to provide facilities to the benefit of public as whole. The Ministry of Finance through Inland Revenue Board Malaysia (IRBM) is responsible to ensure that the tax collected are allocated and distributed properly to the various of economic sectors. This is because taxes collected by IRBM will then be used for operating and development expenditure. This is important to ensure the prosperity and sustainability of the state in achieving Vision 2020. There are two types of taxes that had been imposed by government to the public namely direct tax and indirect tax. Both taxes are also known as tax revenue or main source income to the Malaysian government. Examples of direct taxes are individual income tax, petroleum tax, corporate tax, real property gains tax and stamp duty. While, import duty, excise duty, good and service tax are example of indirect taxes. According to Ministry of Finance, in Budget 2014, the tax revenue collection is estimated at RM224.1 billion which is increase by RM4 billion compared the previous year which is it quite unexpectedly shows that the increasing of tax revenue can contribute to the national income for that year. In order to ensure the effectiveness and efficiency of tax collection, there are two government agencies that are responsible to manage the tax administration system in Malaysia namely Inland Revenue Board Malaysia (IRBM) that responsible in collecting direct tax while Royal Malaysian Custom Department (RMCD) is responsible in collecting indirect taxes. In order to determine the amount of revenue generated by the Malaysian government, the willingness of the taxpayers to comply with tax laws and regulations of the country is important. Indeed previous study done by Kirchler (2007) stated that non-compliance behaviour still exist if the individual taxpayer fails to comply to the tax rules and laws. Further, research done by Roth et al (1996) and Soos, (1991) found that tax non-

compliance behaviour exist because individual taxpayer do not declare actual income, fail to file tax return form and much more. It is important to ensure the tax is fairly distributable to the public. Tax compliance is the major factor that only affecting tax revenue collection to government. For example, when the level of tax non-compliance is high total government revenue collection was affected and government programs could not be implemented. Tax revenue collected by the IRBM in year 2011 (RM109.609 billion), in 2012 (RM124.88 billion) and 2013 (RM129 billion). The increase of tax collections for those years which was managed effectively and efficiency by the IRBM. Therefore, the aim of this research is to study on the tax non-compliance behaviour among higher learning education institutions with specific to identify the factors of tax non-compliance, to examine the relationship of the four independent variables that affects tax non-compliance and to recommend the possible ways in improvement of tax non-compliance among higher learning education institutions.

From this research, it is hoped that it will provide a clear understanding to IRBM about what are the factors that will affects tax non-compliance behaviour among taxpayers in Malaysia. Indirectly, it can assist IRBM in formulating new guidelines, requirements, procedures and policies to enhance the tax collection among the taxpayer in Malaysia. Results obtained from the objectives of this study will provide the benchmarking to IRBM to strengthen its strategies in improving tax non-compliance among salaried tax paying individuals. Also, the findings of this research will help the government to establish the necessary legislative and administrative measures to ensure that individual taxpayers will comply with tax requirements.

### **Literature Review and Hypotheses Development**

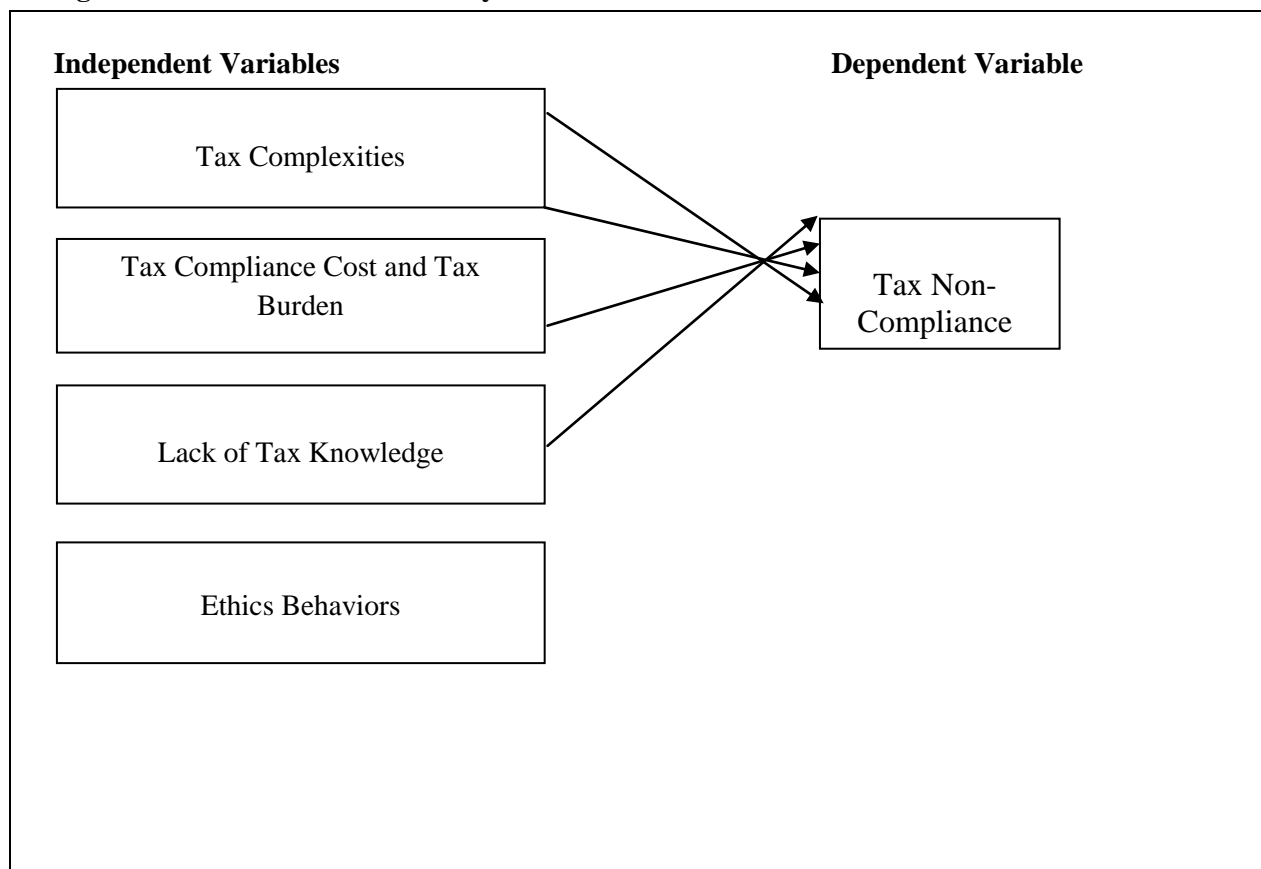
The growth of tax system in Malaysia has given many effects for various taxpayers such as sole proprietorship, partnerships, cooperatives and salaries workers. Kasipillai & Shanmugam (1997) reported that the tax system in Malaysia was first introduced by Malay rules in year 1910.

The factors that affect tax non-compliance behavior among higher learning education institutions will be analyzed in this research. The four relevant factors under this research are tax complexities, tax compliances cost and tax burden, ethics behaviours and lack of tax knowledge which it gives serious impact to revenue collection to the country. As mentioned by Oh Teik Hai and Lim Meng See (2011) there are 64 factors that affect tax non-compliance behaviour among taxpayer or company based on study done by Inland Revenue Services of USA such as gender, tax knowledge, income and many more. Tax non-compliance refers to those who do not obey with the tax rules and regulations set by the government which it affects the tax revenue collection to the country. Previous findings show no precise definition that related to tax non-compliance among taxpayers. Swingen (1991), Hasseldine and Li (1999) and Devos (2009) claimed that tax compliance can be define as filing all required tax return forms that are important in stipulated period of time and must report the correctly tax liability based on rules and regulation, tax code and court decision that establish by tax authority. Roth, Scholz, and Witte (1989) reported that according to Internal Revenue Service (IRS) tax compliance is a complex system which individual taxpayer must declare their income in voluntarily, calculate their chargeable income with correctly and must submit tax return form in a given period of time to tax authorities. Kirchler and Wahl (2010) stated that the intention of taxpayer to pay their income tax to tax authorities is important in determining the tax compliance behaviour. Section 113 (1) of Income Tax Act (1967) stated that one of the tax offences that derived from non-compliance behaviour is taxpayer fail to provide right information and return forms to tax authority.

This following research framework consists of the four (4) factors of tax non-compliance 1) tax complexities, 2) tax compliance cost and tax burden, 3) lack of tax knowledge and 4)

ethics behaviours that represent the independent variables whereby the tax non-compliance represents the dependent variable.

**Figure 2.1: Framework of the study**



Coskun and Savasan (2009) stated that, complexity can be defined as unwanted feature of a tax system as it enhances the opportunity by individual taxpayer to evade from paying the taxes. According to Natrah Saad (2014), there are four types the complexity of tax such as computational complexity, forms complexity, rule complexity and procedural complexity. Mohd Hanefah (1996) stated that the Malaysia tax is very complex, confusing and change regularly that will affect the tax non-compliance. The main obstacle of tax non-compliance among individual taxpayer is the tax law itself because of the tax law in a certain country is very complicated and difficult to understand by individual taxpayers and this may affect their payment of tax within the stipulated period of time. Thus, IRBM should think of an effective technique to make sure individual taxpayers fully understand the tax law that implement by the country. While Kasipillai al.(1999); Sheikh-Obid,(2004); Choong & Lai, (2008) reported that the complexity of tax law system in Malaysia will result in the growing high number of tax non-compliance which may be unintentional among individual taxpayers. But Pope and Abdul-Jabbar (2008) were arguing that the increasing level of tax compliance among individual taxpayers can be achieved by simplification of the Malaysia tax laws and regulations. Therefore it is hypothesized that:-

***H1: There is a significant relationship between tax complexities and the tax non-compliance among higher learning education institutions.***

Compliance cost can be defined all costs connected with the obeying the tax law and regulation. Tran Nam *et al* (2000) defined that tax compliance costs is the cost incurred by individual taxpayers in meeting tax requirement and therefore it is important that they pay



their tax within stipulated period of time to tax authorities. In Malaysia, taxpayers may get assistance and support from tax advisors which will increase their compliance cost (Sapiei, Abdullah 2008 Ern et al 2010). There are two types of compliance cost namely internal and external cost (Loh et al 1997 Sapiei and Abdullah 2008 Ern 2010). Tax compliance costs focused more on individual taxpayers because they incurred a lot of costs in order to comply with tax law and rules in paying their income tax to the tax authority. According to Abdul-Jabbar & Pope (2008a) & (2008b) there are three element of compliance costs that are related to non-compliance factors namely monetary cost, time cost and psychological cost. The costs of compliance are the cost incurred by individual taxpayer that derive from complying tax requirements such as the cost of hiring tax accountants, submission of tax return and many more. OECD (2003) noted that the higher the compliance cost, the higher the tendency to non-compliance behaviour. Compliance cost is higher because it involves cost to make sure tax computation correctly reflect the taxpayer's liability. There are three aspects of compliance costs in determining tax payable namely unpredictability, difficulty and manipulability Therefore, the second hypothesis is derived as follows:-

**H2: There is a significant relationship between tax compliance cost and burden and the tax non-compliance among higher learning education institutions.**

In computing the income tax payable to the tax authorities with correctly, tax knowledge is important aspect to every taxpayer. Khadizatul Asrin Bt Mazlan (2012) stated that in order for taxpayers to be more tax literate and knowledgeable on tax law system in Malaysia, they need to fully understand their responsibilities and duties to submit tax returns, taxability of income, penalty as well as learning how to use the E-Filing. Without sufficient and adequate information on tax knowledge, the taxpayer may misinterpret and misunderstand the rules in the tax law. On the issue of understanding of the tax law system in Malaysia, it shows that a greater number of individual taxpayer demonstrated poor understanding of the tax laws. This is because the tax law are written in a language that is not easy to understand and to apply. Collins, Milliron and Toy (1992) believe that one of the main factors resulting in tax non-compliance among individual taxpayer from Southwestern and Northeastern United States is their low tax knowledge. In Malaysia, the level of tax knowledge among individual taxpayers is different, thus contributing to tax non-compliance. Loo et al (2009) reported that in order to ensure that the individual taxpayers voluntarily in paying their income tax to the tax authorities, they must have sufficient knowledge and understanding of tax laws and rules to avoid tax non-compliance. Bardai (1992) also stated that tax knowledge is important to individual taxpayers in order to pay their income tax with correctly. While Groenland and Veldhoven (1983) found that even taxpayer with good understanding and knowledge about tax laws and rules, the tendency to non-compliance among them was still high because paying tax has no benefit to them or in other words they do not fully understand the important of paying tax to the tax authority. In addition, Eriksen and Fallan, (1996) stated that in order to examine the taxpayers' behaviour to tax system in a country, the individual taxpayers should fully understand what is the country's tax laws and regulations applicable for its tax system and structure. Palil and Lymer (2009) concluded that after the implementation of self-assessment system (SAS) in Malaysia, tax knowledge become the primary factor in tax compliance behaviour. This research is supported with a study done by Loo (2006) and Loo et al., (2009) where tax knowledge can directly affect tax compliance behaviour after the development of SAS in tax system. Therefore, the third hypothesis is derived as follows:-

**H3: There is a significant relationship between lack of tax knowledge and the tax non-compliance among higher learning education institutions.**

Taxpayers' ethics and morals are believed to have positive effect on their behavioural intentions. In Malaysia, taxpayers realized that it is their legal and moral obligation and responsibility to submit tax returns and pay their taxes within stipulated period of time to the tax authorities (Ho et al, 2006 Ern et al, 2010). An individual taxpayer who fail to fulfil their responsibility or obligation to pay the tax is considered as unethical and immoral and should be penalize (Kasipillai et al ,2008). Ho and Wong (2008) stated that in order to evade the penalties, the ethical taxpayers need to obey the tax rule and regulation. In contrast, the individual taxpayers is said to be unethical if they do not comply with laws and regulation for tax compliance. Researchers also believe that there are a lot of factors influencing individual taxpayers to commit to an unethical behaviour such as attitude of individual taxpayer to risk; the expected benefits that may get from unethical behaviour and many more will contribute to non-compliance behaviour. Several studies have been carried out and it has been proven that taxpayers with high knowledge tend to have positive learning in their tax ethics compared to those with low knowledge (Singh,2003). Trivedi (2005) and Henderson & Kaplan (2005) reported that individual taxpayers' behavior is influenced by their ethics or morale. In other words their unethical behavior may lead individual taxpayer in Malaysia to perform non-compliance behavior. While Kohlberg (1981) stated that in order to enhance their relationship with others, the individual taxpayers must have higher ethic or moral reasoning so that they can comply in paying of their income tax in voluntarily. In Malaysia, ethics have a positive influence on compliance behaviour among individual taxpayers that translates into voluntarily payment of their income tax. Therefore, the fourth hypothesis is derived as follows:-

**H4: There is a significant relationship between ethical behavior and tax non-compliance among among higher learning education institutions.**

### **Research Methodology**

The main focus of this research is on the individual taxpayers who derived income from employment in Malaysia. Therefore, data for this research is taken by distributing the questionnaire among 271 academic staff who worked in higher learning education institutions in Malaysia. A convenience sampling method was used rather than a random sampling because it was considered much more likely to produce a real number of responses from respondents The questionnaire used in this study consists of three parts. Part A contains eleventh questions regarding the demographic profile which gender, age, race, level of education, level of position (profession), length of services, mother tongue language, types of assessment, zakat, cash donation, paying Malaysia income tax or not could be used to analyze whether there is any relationship between demographic In Part B, respondents were asked about factors that contribute to tax non-compliance among higher learning education institutions in Malaysia such as lack of tax knowledge, tax complexities, tax compliance cost and burden and ethic behaviour. Likert Five-point Scale is taking place in this section where respondents are required to evaluate their behaviour on each of the items based on the scale : 1 = Strongly Disagree, 2 = Disagree, 3 = Not sure (Natural) , 4 = Agree, and 5 = Strongly Agree. In Part C, respondents were asked about academician's general opinion on taxation system in Malaysia. In order to ensure analysing process is easy and the respondents can answer the question with completely and honestly, the all questions are design into closed ended form of statement in order. For each question in all parts, respondent are required to choose only one answer. The area of sampling frame is focus on the higher learning education institutions in Malaysia where 800 respondents who are the academic staff will be tested. However, only 271 questionnaires (30%) managed to be collected. All information related to

the survey responses and the name of each respondent will be kept confidential for the purpose of this survey only.

**Result and Discussion**

The response rate was about 33.88% (271 respondents) of the 800 distributed questionnaires. The majority of the respondents were 99 % is Malay and 69% is female. Most of the respondents are between 65% is 26-34 years old and most of them have Masters Degree in various field. To ensure that the measurement of the attributes or variable is valid, test has been undertaken. The reliability test were undertaken to determine the consistency of the answer given by respondents in answering the questionnaires. Based on Chua (2013,p.147), the minimum requirement to determine the reliability is at alpha value of 0.65. Chua explained that if the alpha value is lower than 0.65, it means the internal correlation between the items of measurement is very weak and is not suitable to be used. On the other hand, George and Mallery (as cited in Gliem & Gliem,2003) regulated that if the alpha value is more than 0.90 is categorized as excellent; 0.80-0.89 is good; 0.70-0.79 is at acceptable range; 0.60-0.69 is questionable; 0.50-0.59 is at poor range and alpha less than 0.50 is totally unacceptable. Table 1 demonstrates that the Cronbach alpha for all variables.

**Table 1: Reliability test**

Items	Reliability output	Cronbach's Alpha
Tax Complexities	8 items	0.821
Tax Compliance Cost and Burden	10 items	0.695
Lack of Tax Knowledge	5 items	0.612
Ethic Behaviours	6 items	0.754

Note: Commonly accepted rule of thumb is an alpha of 6-7 which indicates acceptable reliability and 0.8 or higher which indicates good reliability (Cronbach,1951).

Referring to Table 1, only three items in the measurements in this study were considered reliable as overall are at good and excellent range, where at 82 percent of confidence interval, the Cronbach's alpha for measurements of variable tax complexities, tax compliance cost and burden and ethics behaviour are higher than 0.70, at the good and acceptable range level; whilst, lack of tax knowledge is achieved 0.6 that considered questionable as well. Even though by deleting some of the items of measurement will increase the alpha, yet, due to high correlation between the items of measurement within the variable, the particular items were remained.

**Table 2: KMO and Bartlett's Test**

KMO and Bartlett's Test		
Kaiser- Meyer-Olkin Measure of Sampling Adequacy		0.600
Bartlett's Test of Sphericity	Approx. Chi- Square	600.655
	Df	10
	Sig.	0.000

Table 2 shows the validity test was conducted in order to test the accuracy of a measure or the extent to which a score truthfully represent a concept. It was required to test the Kaiser Meyer Olkin (KMO) to measure of sampling adequacy ( Zhang et al.,2003). Table 2 showed the value of KMO is 0.600. According to Field (2013,p.684), value more than 0.5 would be accepted as suggested by Kaiser (1974). Therefore the value of 0.600 was acceptable and would be confident that the sample sizes are adequate for validity test. Meanwhile, Barlett's test Sphericity tests the null hypotheses that the original correlation matrix is an identity matrix (Field,2013,p.695). The significant test is needed and the large number of sample sizes

used in this current study would certainly be significant which is <0.001. This test result was 600.655 (p<.001), which confirms the adequacy of using validity test.

**Table 3: Correlation between Variables**

	Tax Complexities	Tax Compliance Cost and Burden	Lack of Tax Knowledge	Ethics Behaviour	Tax Non-Compliance
Tax Complexities	1.000	0.441	0.171	0.904	0.327
Tax Compliance Cost and Burden		1.000	0.097	0.391	0.206
Lack of Tax Knowledge			1.000	0.037	0.175
Ethics Behaviour				1.000	0.363
Tax Non Compliance					1.000

The Pearson’s Correlation Coefficient test was used to measure the strength between attributes or variables as presented in Table 3. Pearson correlation is used to examine the correlation between two variables, and it helps in determining if there is a relationship between the construct in the study. Pearson correlation values of 0.3 to 0.4 indicate that the variables are moderately correlated, Pearson correlation values of more than 0.4 illustrate that the variables are largely correlated and correlation value of less than 0.3 indicate that the variables has a weak and low positive correlated. In this study, Pearson correlation analysis is used to answer four (4) main research objectives. Table 3 above illustrates the relationship among the variables. Overall result as presented in Table 3 shows that the correlations between variables are low and moderately correlated to each other, meaning that there is no cases of multicollinearity problem exist. Thus, none of the variables are being rejected from this study.

**Model 1:**

The regressions equation is:

$$TNC = \beta_0 + \beta_1 TC + \beta_2 TCCB + \beta_3 LOTK + \beta_4 EB$$

**Table 4.**

Variables	Coefficient	t-statistics	P-value
Intercept	1.812	4.489	0.000*
Tax Complexities	0.162	1.263	0.208
Tax Compliance Cost and Burden	1.079	1.222	0.223
Lack of Tax Knowledge	2.295	3.047	0.003**
Ethics Behaviour	2.417	3.569	0.000*
R <sup>2</sup>	16.60%		
Adj. R <sup>2</sup>	15.30%		
F-statistics (P-value)	13.214 (0.000)**		

Note: \*\*Significant at 0.01 level; \*Significant at 0.05 level.

A multivariate analysis was performed on the tax non-compliance behaviour and its explanatory variables. Model 1 is develop to examine the relationship between tax complexities, tax compliance cost and burden, lack of tax knowledge and ethics behaviours with tax non-compliance among academicians’ at KPTM. In order to determine how good the

model is, this research firstly looks into the analysis of variance (ANOVA) which represented by F-statistic and p-value in Table 4 above. The F-statistic presented in the table shows that a significant P value of 0.000 which is much more less than 0.005 of significant level. Further, the t-values and the absolute value is equal to 1.00 or less, thus the variables is said to be insignificant or not significant. Based on the result of Model 1 presented in Table 4, the overall explanatory factors of tax non-compliance are statistically significant at 1% significant level with adjusted R-squared of 16.6% (F-value = 13.21; p-value = 0.000). Hence, with this condition, it reveals that independent and control variable explains 16.6% of the variance in tax non-compliance. The low value of  $R^2$  shows that most of the independent variables such as tax complexities, tax compliance cost and burden, lack of tax knowledge and ethic behaviour that selected are not able to demonstrate the magnitude and possibilities on the factors of tax non compliance. It means that only 16.6% of the variance in the tax non compliance rate can be explained by the chosen independent variables and the remaining variance 83.4% are unexplained. This is because may be the other variables such as the gender, income, tax rate, culture and many more that significant in influencing tax non-compliance but all these factors are outside the scope of this study.

Overall, the study revealed the significant relationship between all independent variables and dependent variable under study. The results have notified that lack of tax knowledge and ethical behaviour are the main factors that influence tax non-compliance among academicians. Even though the result reveals that there is no significant relationship between tax complexities and tax compliance cost and burden with tax non-compliance among the academicians's staff, these two variables show a positive relationship. In conclusion, tax non-compliance behaviour among the academicians's staff is positively influenced by lack of tax knowledge and ethical behaviour.

### **Conclusion and Recommendations**

To be tax compliant, individual taxpayers need to possess some basic knowledge on personal taxation such as taxability of income, deductibility of expenses, entitlements, reliefs, rebates, donation and exemptions in order to compute tax liability correctly. One of the ways to increase voluntarily tax compliance in the future, IRB can increase the number of consciousness by giving a seminar or colloquium on tax education by using different strategies so that, taxpayers in Malaysia generally can be a good citizenship. There are a few limitation exists when research was being undertaken The first limitation is related to the selection of the respondents because this study was only distributed and answered by the respondents who work in higher learning academic institutions, which only covered certain area. Secondly, the distribution of the questionnaires to the respondents is not monitored properly by the researcher. This resulted to less response from respondents because some of the respondents is not fully understand and not clear enough the term and terminologies that has been used in the questionnaires which the tendency of respondent may simply answer the questions is high. This situation may lead to the wrong interpretation and conclusion made. . Lastly, the pilot test was not undertaken by researcher before actual questionnaires are distributed to respondents. Pilot test is important for researcher to determine the weaknesses in designation of questionnaires because it can help the researcher to identify and eliminate the complex and sensitive questions that give problem in answering the questionnaires by the respondents. In general, there are a lot of other areas and field that could be investigated by other researchers for future research. For example, the researcher can used a larger sample such as individual taxpayers who derived income from both employment and business in Malaysia so that, the result can be more conclusive.

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## HOSPITAL SERVICE INNOVATION MODEL: TESTING WITH CONFIRMATORY FACTOR ANALYSIS

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### Abstract

Hospital as a health care institution, are required to do service innovation in facing the increase number of hospitals in Indonesia that has made inter-hospital competition becomes tougher. This study was a descriptive and explanatory survey that using Confirmatory Factor Analysis (CFA) as method of statistical modeling in evaluating the causal relationship between dimensions of latent variables and shown in a measure of validity and reliability. This research was conducted at the. Outpatient Clinic, Gatot Soebroto Indonesia Army Hospital. The result of this study showed that the entire loading factor in all variables were above 0.70. Composite reliability (CR) generated was 0.913, which is greater than the minimum limit CR suggested, 0.70. The value obtained for average variance extracted (AVE) was 0.724, which is greater than recommended minimum value, 0.50. Development of new services was the most influencing factor to hospital innovation services.

**Keywords:** *service innovation, hospital, confirmatory factor analysis*

Paper Type: competitive paper

### Introduction

Hospital as a health care institution, are required to do service innovation in facing the increase number of hospitals in Indonesia that has made inter-hospital competition becomes tougher. Innovation progression can be done in various ways; thus healthcare institution can have innovation on the service activity. Service innovation can be in a form of new services provided by the institution, new working methods applied by the institution, or the use of newest technology to meet consumer desires (Changkaew in Muslichati, 2015).

Patient is a major consumer of a hospital. According to Jamal and Naser (2002) in Delafrooz et al (2013) customer satisfaction is a key factor for consumers to make purchases in the future, satisfied customers who will recount their experiences in making a purchase to others. This means that patient satisfaction is essential in a hospital.

Therefore, each hospital is competing to innovate their services process and obtain patient satisfaction. Innovation can enterprise new products or services by combining or integrating previous separate products into a new and enhanced product (Gallouj and Weinstein, 1997). Innovative companies, have been leading the convergence trend for some product and revolutionized the product landscape. As the new product released, it becomes increasingly popular and replaces the previous products and thereby can affects the related industries. The purpose of this study was to analyze the factors that influence the services innovation, in outpatient clinic Gatot Soebroto Indonesia Army Hospital, Jakarta, Indonesia.

The remainder of the paper is structured as follows:

#### 1. Service Innovation

Service: Service is described by Sampson and Froehle (2006) as an important role customers play in the service production process, with the key distinction being the customer providing the inputs, versus the customer themselves being the input to the service delivery process, as

cited in Agarwal (2010). Co-produced services view customers as an integral part of service delivery as they simply interact during the transaction, allowing the split of a front- and back-stage approach of a service at any point in the continuum, as written in Agarwal (2011). Services are treated as an application of competencies, making use of knowledge, skills and experience of all stakeholders, taking into consideration the notion of the supply chain and collaborators across both goods and services (Vargo and Lusch, 2008).

## 2. **Innovation**

Innovation can be defined as a process and / or the development and use or mobilization of knowledge, skills, and experience to create or improve a product (goods and / or services), process, and the new system, which gives the value of meaningful or significant, relevant economic and social. Pearce II and Robinson (2009) stated that in the business world, innovation branches from the invention. If someone has already started producing, selling, and marketing goods such findings, then he is doing innovation. They mention that innovation is how the efforts twisted ideas into profit.

**Innovation** as an object also has a meaning as a new product or service that is available to applications, generally in a commercial context. The diversity of the level of novelty can be distinguished depending on the context. Meanwhile, the innovation as an activity is the creation of innovation is often identified with the commercialization of the invention. Innovation can also be regarded as a new change toward improvement, the other, or different from something that already exists, deliberate and planned or by chance.

According to Fontana (2011), innovation can make economically success by the introduction of new ways or new combinations of old ways in transforming inputs into outputs which resulted in significant changes or drastic in comparison between use-value perceived by the consumer on the benefits of a product (goods / services) and the price set by the manufacturer. Innovation in a broader context meaning means not only economic success, but also social success. Successful innovation is innovation that creates great value for consumers, communities, and the environment at the same time. Innovation is often associated with the development of products, processes, and technology. In fact, innovation can be applied to all parts of the company such as finance, business models, logistics, information technology, marketing, distribution, human resources, and so on.

Barras (1986) was one of the early contributors to a theory of innovation in services. According to Barras (1986), technological advances are the primary driving force behind service innovation. Later studies showed, however, that non-technological forms of innovation, so called service-oriented approaches, are also highly prevalent (Gallouj and Weinstein, 1997). Innovation in the service industry is distinctive due to a lack of standardization and formalization, greater decentralization of innovation activities within the firm and industry, and limited contributions by research and development departments (Ettlie and Rosenthal, 2012). However, service innovations can result in a competitive advantage because of the improvements in service novelty, quality, and customer satisfaction (Hertog et al., 2010; Lovelock and Wirtz, 2011).

## 3. **Service Innovation**

According to Kotler (2012), the service is any action or activity that can be offered by one party to another. Basically, services are intangible and do not consequence in any ownership.

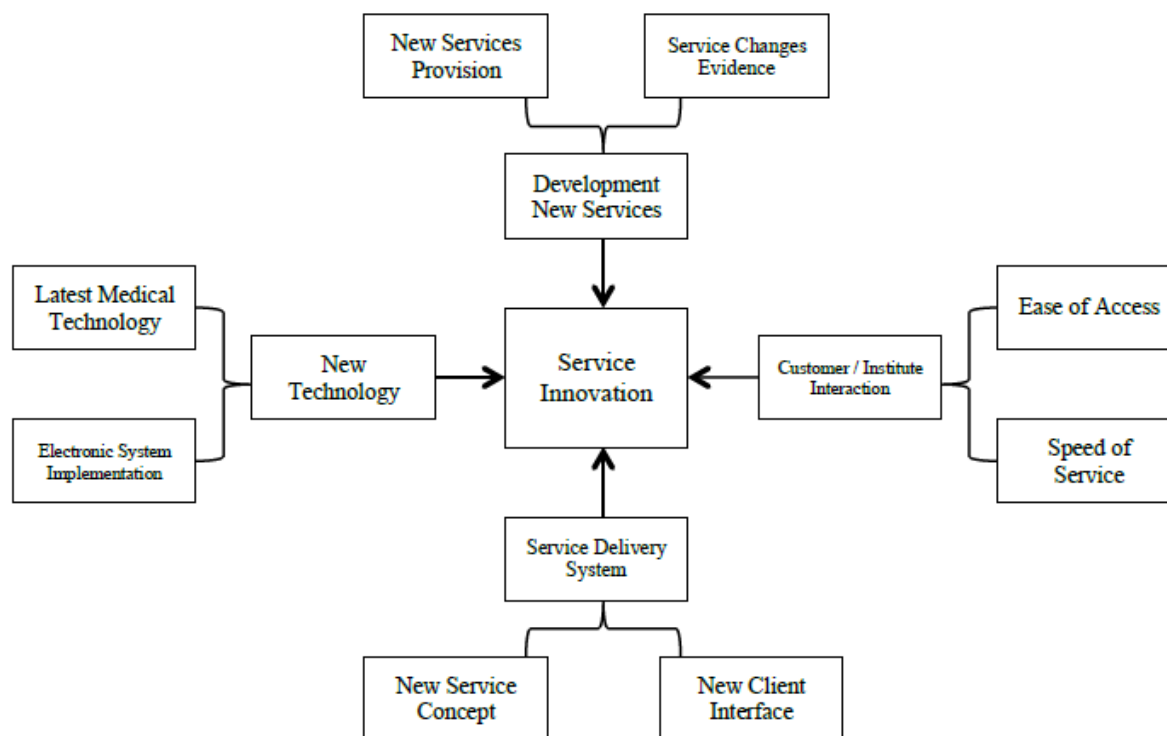
Act of the Republic of Indonesia Number 44/2009 on Hospital, explained that the duty of the hospital is carrying out the health care services in plenary with emphasis on healing and recovery efforts are carried out in harmony and integrated with efforts to improve and prevention as well as the implementation of the referral.



Health care can be included any organized effort in an organization to maintain and improve health, prevent and cure diseases, and restore the health of individuals, families, groups, and communities. Care in hospitals is given from the patient arrives until discharge from hospital (MOH, 2009). Innovation in services is possible in several dimensions through increased productivity, improvement in performance, and new service offerings (John and Storey, 1998; Menor et al., 2002; Van Der Aa and Elfring, 2002; Tidd et al., 2005; den Hertog, 2000; DTI, 2007; Kandampully, 2002). In particular, focusing on dimensions of service innovation, den Hertog (2000) developed a service innovation model centered on four key elements of any service innovation, including service concept, client interface, service delivery system, and technological options. Completely new service can be new features and attributes for a service offering. This changes the way employees work (delivery system), relate and interact with customers (client interface), and the way technology is used in business processes (technological options). As such, the concept of service innovation should include organisational forms of innovation as well. (Wernz, 2014; Agarwal, 2010)

Innovations are frequently categorized as radical or incremental. However, these do not capture the full scope and mechanisms of innovations in the service industry (Henderson and Clark, 1990). Gallouj and Weinstein (1997) differentiate between radical, improvement, incremental, ad hoc, re-combinative, and formalism innovations. The integration of medical services by a hospital can be classified as a re-combinative innovation. Re-combinative innovations generate a new service product by combining the characteristics of two or more existing service products, for instance medical services are enhanced by combining them with hospitality services as cited in Wernz (2014). Health care innovation means a process change or reform efforts undertaken by the service provider facility in disease prevention, health maintenance and improvement, as well as the recovery and treatment of individuals and groups who come for treatment to health facilities.

Measurement service innovation can be done through (Delafrooz et al, 2013): Firstly, development of new services. Development of new services is a new service that is applied which is different from the previous services, or improvements to the service process. Forms new service will affect the performance of marketing for the development of services that successfully implemented will increase the company's marketing performance. Vice versa, if the development of such services does not work in practice, the performance marketing companies will decline. Secondly, new technologies. The use of tools that is in accordance to recent technology will facilitate the company in the process of service that will accelerate the company to provide services. The use of technology will enhance consumer privacy, confidentiality, and the effect on communication between companies and consumers so it will be able to ease companies in evaluating the service process. Furthermore, service delivery system. The company's service delivery system can be measured by how well the product or service delivered to customers. This includes rapidity, precision, and attention during the delivery process. Finally, customer / institution interaction. Close interaction between the consumer and the company so can make an institution easily know the wants and needs of consumers. Additionally, interaction with customers will enable the company to make repairs in customer complaint.



**Figure 1. Service Innovation Model**

In conclusion, the study proposes a hypothesis as follows: Hypotheses Testing and Analysis Method

H1: Development of new services is contributed to hospital service innovation

H2: New technologies is contributed to hospital service innovation

H3: Service delivery system is contributed to hospital service innovation

H4: Customer / institute interaction is contributed to hospital service innovation

The model of hospital service innovation is a fit model, as pictured on Figure 2.

### Methodology

The study method used was descriptive survey and explanatory survey. This study describes the causal relationship by testing hypotheses that have been formulated in advance between the variables development of new services, new technologies, service delivery systems and customer/institution interaction to service innovation. This information is collected directly from the field to know the opinion of the respondents to the object being studied.

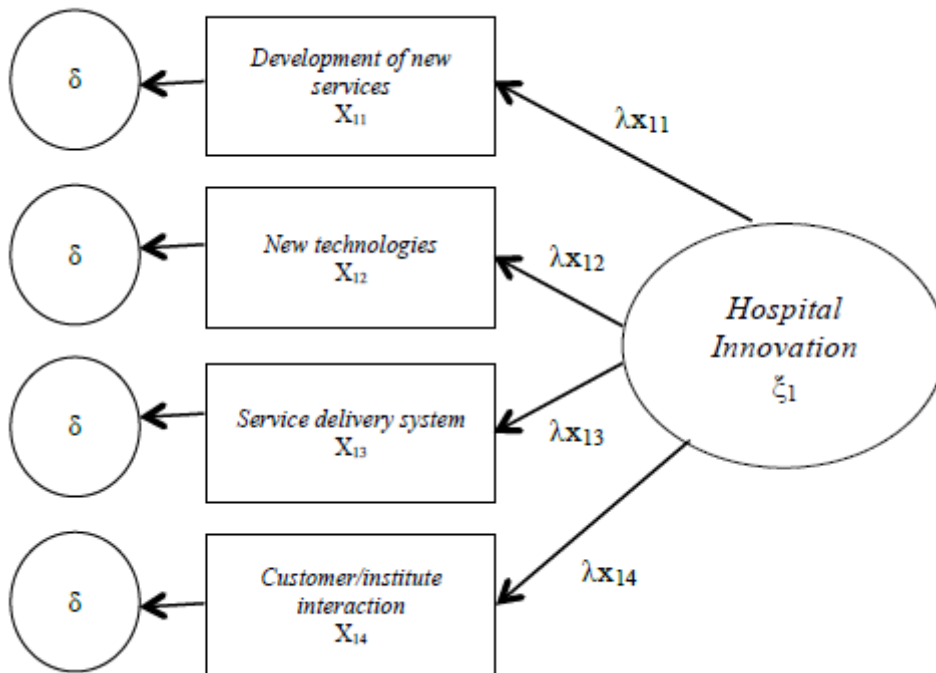


Figure 2. Structured Model of Hypotheses

Table 1. Operational Variables

Dimension	Indicator
<i>Development of new services</i>	1. Provision of new services
	2. Evidence of the service changes
	3. Innovative Services
<i>New technologies</i>	1. Provision of tools and the latest medical technology
	2. Implementation of an electronic queuing system
	3. The adoption of new technologies
<i>Service delivery system</i>	1. Ease of procedure in service
	2. Provision of online services and digital
	3. Provision of special services for specific consumer
<i>Customer / institute interaction</i>	1. Ease of access via electronic media
	2. Ease of access through the customer service staff
	3. Speed of service complaints

This study used a technique nonprobability sampling with purposive sampling type. Nonprobability sampling is a sampling technique that does not provide opportunities or equal opportunity for each element or member of the population to be selected into the sample (Sugiyono, 2012). While the sampling is purposive sampling technique with a certain consideration according to the research conducted (Sugiyono, 2012). Determination of the sample size based on the Hair et al (2010) which states that the number of samples taken is at least five times the number of parameters used in the study. The parameters used in this study are 40 parameters so that the number of samples taken is  $5 \times 40 = 200$  respondents. The

research sample consisted of patients who visit the outpatient clinic in Gatot Soebroto Indonesia Army Hospital during July 2016. The inclusion criteria were including individuals who seek treatment Kartika Pavilion in Gatot Soebroto Indonesia Army Hospital, and individuals who are willing to fill out a questionnaire. Exclusion criteria were including individuals who were unable to read and understand the purpose of the questionnaire and who do not fill out a questionnaire completely.

Data collection methods used in this study is a questionnaire method. A list of written questions needed to be filled by the respondents regarding service innovations. Methods of measurement on the questionnaire were using modified Likert scale. By using Likert scale, measurement of variables was translated into indicator variables. In each item Likert scale instrument has gradation.

### 1. Reliability and validity

Prior to data collection, content validity was supported by previous literature, interviews, and initial tests. After the data collection, analysis was performed to test the validity and reliability of the constructs.

Validity test used to measure whether questionnaires valid or invalid (Ghozali, 2011). A questionnaire considered valid if the questions in the questionnaire were able to express something that is measured by the questionnaire. Validity indicates the extent to which the precision and accuracy of a measuring instrument in doing measuring function.

Validity testing must be performed on each of the questions on the questionnaire as a measuring tool as a whole. According to Aaker et al., Validity testing was done by using product moment correlation or correlation coefficient. In this study, the correlation coefficient obtained from the corrected item-total correlation that can be done with SPSS for Windows version 23.

Decision making validity based on r result. If r result is positive and  $r \text{ result} > r \text{ table}$ , then the construct was valid and if r result is negative and  $r \text{ result} < r \text{ table}$ , then the construct was not valid. R coefficient table  $\alpha = 0.05\%$ . from the value table product moment by

The total item questionnaire in this study consisted of 40 items of questions. The results of the validity of the test showed that all items proposed questionnaire is valid as shown in Table 2, as follows:

**Table 2. Validity Test Result**

Variable	Questions Item	Correlation Coefficient (r)
	X1.1	0.786
	X1.2	0.824
	X1.3	0.723
	X1.4	0.723
	X1.5	0.687
	X1.6	0.597
Service Innovation	X1.7	0.824
	X1.8	0.549
	X1.9	0.764
	X1.10	0.821
	X1.11	0.719
	X1.12	0.793

According Ghozali (2011), reliability testing is a tool to measure a questionnaire which is an indicator of variables or constructs. A questionnaire said to be reliable if anyone answers to the above statement is consistent stable over time. Reliability indicates the consistency and stability of the score (scale of measurement). Reliability different validity because the first one focusing on consistency issues, while the second is more concerned with accuracy.

Nummally in Ghozali (2011) stated reliability test measurement can be done by means of Cronbach's Alpha statistical test with SPSS for Windows version 23. A variable is said to be reliable (reliable) if it has a Cronbach's Alpha > 0.70.

**Table 3. Reliability Test Result**

<b>Variable</b>	<b>Reliability (<i>Cronbach Alpha</i>)</b>
Service Innovation	0.915

Description: All variables reliable due to have a Cronbach Alpha value of more than 0.7

The results of calculation of the value of reliability for all items reliable because all variables Cronbach alpha values greater than 0.7. This indicates that the research data obtained using instruments used are consistent when the instrument is used repeatedly. With the results of validity and reliability that meets the minimum requirements, the research instrument can be used for a study of the main sample.

## **2. Descriptive Analysis**

Descriptive analysis techniques used to disclose formulation on how is the innovation of service in outpatient clinic, Gatot Subroto Hospital. Steps of the analysis started by describing the frequency and percentage obtained in the form in order to obtain a conclusion. Likert scale used in the study can be used in the descriptive analysis by summing the scores obtained and the calculated percentage of the score to see the proportion of respondents. Processing of the data used in this study is the use of percentage calculations derived from the total score of respondents compared with a total score ideal. Data are presented in tabular form frequency by using a simple percentage to see the size of central tendency.

## **3. Verification analysis**

This study used analysis techniques namely Confirmatory Factor Analysis. Confirmatory factor analysis was used to confirm the factors most dominant in one group of variables.

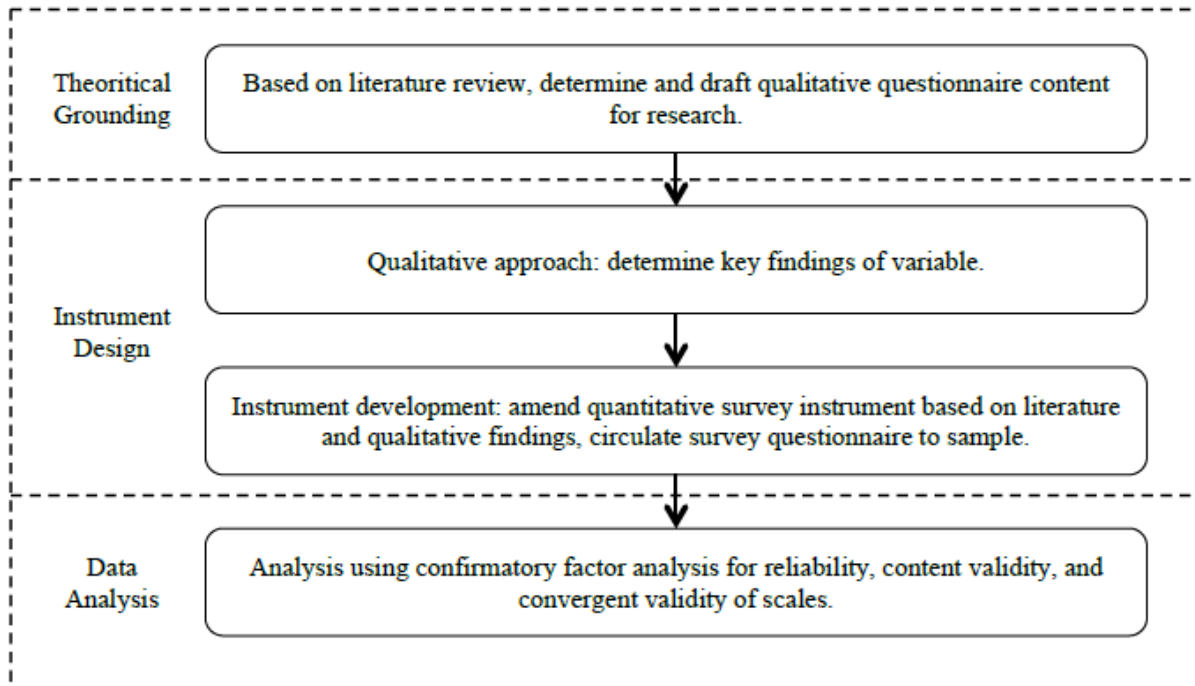


Figure 3. Steps of the Research

### Result

Table 4 shows demographic characteristics of the respondents. From the table it is known that the majority of respondents were women as many as 103 people (51.50%) and the rest are men that as many as 97 people (48.50%). However, basically the percentage of men and women do not differ much. This hospital is a public hospital, is not reserved for men or women only, so the comparison is obtained almost balanced between male and female respondents.

From the table it is known that the majority of respondents aged between 18 years to 64 years old with 185 people (92.50%) and the respondents whose age is below 18 years old were the least with 7 people (3.50%).

The majority of education level respondents were high school / equivalent as many as 107 people (53.50%) and the majority of respondents were private employees. From the table it is known that the majority of respondents are respondents whose income is between 2,600,000.00 IDR to 6,000,000.00 IDR as many as 99 people (49.50%). Most of the respondents were respondents who previously never went to the hospital as many as 162 people (81.00%) before.

Table 4. Demographic characteristics of the respondents surveyed

Gender	Frequency	Percentage
Male	97	48.50%
Female	103	51.50%
Age		
< 18 years old	7	3.50%
18 - 64 years old	185	92.50%
> 64 years old	8	4.00%
Education Level		
None	0	0.00%
Primary school/equivalent	2	1.00%

Junior high school/equivalent	6	3.00%
Senior high school/equivalent	107	53.50%
Diploma	25	12.50%
Bachelor Degree	50	25.00%
Master Degree	9	4.50%
Doctoral Degree	1	0.50%
<b>Occupation</b>		
Army/Police/Government		
Worker	12	6.00%
Private Sector	81	40.50%
Business	35	17.50%
Housewife	54	27.00%
Student	8	4.00%
Other	10	5.00%
<b>Income</b>		
< 2,600,000.00 IDR	68	34.00%
2,600,000.00 IDR	–	
6,000,000.00	99	49.50%
> 6,000,000.00 IDR	33	16.50%
<b>History of previous visit</b>		
No	38	19.00%
Yes	162	81.00%

Table 5 illustrates the responses of respondents regarding service innovation at Gatot Soebroto Hospital. Based on the processing results presented in the table, it can be seen that most of the patients in the hospital chose answers in service innovation on the answer strongly agree. Thus innovation in the service of the hospital has been well conducted. This shows that services innovation hospital has been felt by patients who seek treatment. Development of new services, new technologies, service delivery systems, and the interaction of the hospital with the patient to make this hospital as an innovative hospitals in the patient's perspective.

**Table 5. Recapitulation of Service Innovation Descriptive Analysis**

<b>Dimension</b>	<b>Likert Scale</b>			
	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
<i>Development of New Services</i>	81.00%	17.67%	0.67%	0.67%
<i>New Technologies</i>	71.50%	25.00%	2.50%	1.00%
<i>Service Delivery System</i>	67.33%	29.00%	3.00%	0.67%
<i>Customer / Institute</i>	50.67%	43.17%	5.00%	1.17%
<i>Interaction</i>				
<b>Service Innovation</b>	67.63%	28.71%	2.79%	0.88%

**Table 6. Loading Factor Construct Service Innovation**

	$\lambda_i$	$\lambda^2_i$	$\varepsilon_i$
X1.1 <--- X1	0.925	0.856	0.144
X1.2 <--- X1	0.881	0.776	0.224
X1.3 <--- X1	0.862	0.743	0.257
X1.4 <--- X1	0.723	0.523	0.477
<b>Total</b>	<b>3.391</b>	<b>2.898</b>	<b>1.102</b>

Based on exceeding table, CR and AVE was calculated as follows:

$$CR = \frac{\left(\sum_{i=1}^n \lambda_i\right)^2}{\left(\sum_{i=1}^n \lambda_i\right)^2 + \sum_{i=1}^n \varepsilon_i} = \frac{(3.391)^2}{(3.391)^2 + 1.102} = 0.913$$

$$AVE = \frac{\sum_{i=1}^n \lambda^2_i}{n} = \frac{2.898}{4} = 0.724$$

Based on table 6, all loading factor values that is measured, were above 0.7. Thus it is known that the dimensions are valid in measuring variables. CR generated at 0.913 greater than the minimum limit CR suggested that 0.70, and the value obtained for 0.724 AVE is greater than the value of the recommended minimum is 0.50 or  $0.724 > 0.50$ , so use the size of CR and construct AVE indicate that reliability is good.

### Discussion and Conclusion

Evaluation of the measurement model or Confirmatory Factor Analysis (CFA) is the earliest stage performed prior to the process of testing the structural model or influence between the latent variables in a study. CFA process used to evaluate the causal relationship between the dimensions of latent variables are shown in a measure of validity and reliability.

Validity relates to whether a variable measure what should be measured, while reliability is the consistency of a measurement. The high reliability demonstrated that these dimensions have a high consistency in measuring latent constructs. Evaluate the validity of each indicator refers to the value of the loading  $\geq$  factor 0.7, while (LF) which there liability sworth evaluation invalid if visits of construct reliability (CR)  $\geq$  and variance extracted (VE). CR reliable value is  $> 0.70$  and VE 0.50 (Vitello, 2008). Rated ( $\lambda$ ) loading generated factor will (be used to calculate the composite reliability coefficient or CR and AVE with the formula below.

Table 3 shows that development of new services have contributed most to the formation of innovation services. This is due to the success of the Gatot Soebroto Indonesia Army Hospital provision of new services, changes in long service into new services, and innovate better compared to other hospitals.

Based on the analysis and calculation using the CFA, it can be concluded that the factors related service innovations such as the development of new services, the use of new technologies, system service delivery, and interaction between the hospital with the patient,



can be used to assess the innovation of services performed in a hospital. The factors that best represents innovation assessment services, namely the development of new services.

### **Limitation**

Lastly, this study only focused on innovation in the military hospital, which is owned by the government. In fact, Indonesia's private hospitals are competing in innovation services to enhance patient visits to get a bigger profit. Therefore, the combination of samples taken in future studies need to be included a combination type of hospitals in order to do get better result.

Although the validity and reliability of the results showed a strong relationship between the variables construct the latent variables, the analysis on other constructs variables needed in future studies to look for other more variable constructs have a strong relationship to explain the latent variables.

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#### Indonesian Law

Act of the Republic of Indonesia Number 44 of 2009 on Hospital

Act of the Republic of Indonesia Number 36 of 2009 on Health

## THE RELATIONSHIP BETWEEN INNOVATION AND PERFORMANCE – IMPLEMENTATION IN A STATE-OWNED ENTERPRISE

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### Abstract

The main objective of this study was to determine the implementation of innovation practices in the government organizations. How is the innovation implemented in the state-owned enterprise in Indonesia? Does the employees who are engaged the innovation, have a positive correlation with their individual performance? Innovation has been defined in various forms by previous researchers. According to Schumpeter (1934), innovation is development or adoption of new concepts or ideas, and/ or the new or adopted ideas themselves as well as the successful exploitation of new ideas. By innovation, an organization or enterprise will be able to maintain its competitive advantage against its competitors, and earn profits in accordance with the objectives of the organization or enterprise in general. As known, that government organization is a non-profit organization runs public service obligation for social welfare escalation. Due to the lack of clarity about the owner of the enterprise, then there is a doubt whether the State-Owned Enterprise (SOE) in Indonesia is implementing innovation management to improve its internal capabilities. Based on the said understanding, researcher wanted to describe innovation practice that is in one of the SOE in Indonesia, which is engage in natural gas.

### Introduction

In order to deal with the dynamic environment, then the organization must constantly adapting to maintain or escalate their competitive advantage against other organizations. Literature of innovation shows that any firm needs innovation to succeed and survive (Jimenez & Sanz-Valle, 2011; Bell, 2005; Cho & Pucik, 2005; Gopalakrishnan & Damanpour, 1997; Damanpour, 1996; Fiol, 1996; Wolfe, 1994) and gain sustainable competitive advantage (Standing & Kiniti, 2011; Bartel & Garud, 2009; Johannessen, 2008; Mumford & Licuanan, 2004). Therefore, an organization should continually improving their organization's internal capabilities. The conditions that may affect an organization's main capabilities and competencies are uncertainty, complexity, and inter-organizational conflicts (Hitt, Ireland and Hoskisson, 2013). Based on the effects of these conditions, to improve its internal capabilities, then an organization should implementing the innovation on products as well as operational activities in the organization (Hitt, Ireland and Hoskisson, 2013). This must be done to create distinctive value for its customers.

“Innovation is the implementation of new knowledge that transform organizational processes or create new features of products and services” (Dess, G.G., Lumpkin, G.T., Eisner, A.B., McNamara, G. 2014). “Innovation is mainly defined as a change by human creativity, resulting in the adoption of new ideas, new products or services, systems or processes” (Zaltman, Duncan & Holbek, 1973; Daft, 1982; West & Farr, 1989). Innovation is intangible resources in an organization that is difficult to be duplicated by competitors that may support improving the organization's internal capabilities (Hitt, Ireland and Hoskisson, 2013). Innovation is intangible resources in an organization that is difficult to be duplicated by competitors that may support improving the organization's internal capabilities (Hitt, Ireland and Hoskisson, 2013). Innovation resources within an organization may be new ideas, scientific capabilities, and capacity to innovate (Hall, 1992). Associated with these innovation resources, it means the enterprise has human resources that oriented to the creation of

innovations in their duties, they must be able to provide added value for the business progress. This is possible because the workers who focusing on innovation would make every endeavor to find new ways or methods in resolving their duties, so it will be found a simpler method or product development than the current services. Thus, the enterprise will be more effective and efficient, which in turn will impact on the value offered to corporate customers.

Several studies said that innovation tends to be done by a business/profit-oriented organization or private sector (Lin and Su, 2013; Bank and Raza, 2014; Vitezic, 2015). In this case, the profit/ business-oriented organization is always driven to improving their competitive advantage, in order that the business is able to survive on an ongoing basis. The process of decision-making of profit-oriented organizations are also usually more tactical and fast, not like in bureaucratic organization. The process of innovation resources utilization becomes more optimal because of the decision-making process is shorter which is done by the owner or shareholder. That is different with the government organizations which is a non-profit organization, is known as an organization that has a long bureaucratic chain, so the decision-making was quite slow. Particularly in Indonesia, that one of the government organizations, which is state-owned enterprise (SOE), an organization mandated with the task that is in addition to seeking profits may also providing services to the community, as the embodiment of the government to perform public service obligation (PSO). Based on the above explanation, the purpose of this study was to ensure whether the SOE in Indonesia, particularly the SOE of natural gas transportation, has implemented the innovation practices in their daily operations. How is the innovation conducted by the SOE to create value for its stakeholders? Do the employees who are engaged the innovation, have a positive correlation with their individual performance?

### **Literature Review**

Innovation is related to a creation, but it is not an invention. That is, actually in the process of innovation, there's almost no really new products or services (Dess, G.G., Lumpkin, G.T., Eisner, A.B., McNamara, G. 2014). According to Dess, G. G., Lumpkin, G. T., Eisner, A. B. , McNamara, G. 2014, based on the type of innovation, it may be divided into:

- a. Product innovation is the efforts to create product designs and applications of technology to develop new products for end users
- b. Process innovation is the efforts to improve the efficiency of organizational processes, especially manufacturing systems and operations

Whereas based on the rate of speed in implementation, innovation may be divided into:

- a. Radical innovation is an innovation that fundamentally changes existing practices
- b. Incremental innovation is an innovation that enhances existing practices or makes small improvements in products and processes

Based on the above explanation, it may be said that innovation is a series of processes that start from problems identification in the organization till the product/ services process or implementation will be more effective and efficient than the previous one. According to Van de Ven, Polley, Garud, and Venkataraman (1999), the innovation journey is a nonlinear of divergent and convergent activities that may repeat over time and at different organizational levels if resources are obtained to renew the cycle. Based on this, then there is common elements in the innovation process, which are: (1) The initiation period; (2) The development period; and (3) The implementation/termination period.

Innovation is needed for the organization to improve its internal capabilities, how man is always thinking that the organizations should improving the effectiveness of existing processes or activities in the working environment. A group of individuals who always want innovating will make a competitive and efficient work culture. That in the end, the working performance of these workers will make added value to the enterprise's customers. This

innovation is commenced from new ideas relating to products or existing work processes. The Management who encourages in making creative ideas will create a conducive working atmosphere for their workers to believe that they are getting involved in every process in an organization. According to Bank and Raza (2014), there are three major inhibitors of innovation:

### **1. Growing size**

The growing size of an organization usually it will cause no organization internal communication strategy down to the rank and file workers. Organizations that have a growing business will make the organization busy with the preparation of business strategies in the high-level to boost the company's revenue on an ongoing basis. However, in general, the business strategy is quite difficult to be translated into operational strategies nor to be understood by the workers. The implementation of the business strategy that is extremely difficult or even failed to be performed. In many cases, the major reason identified is not the dearth of skill to execute the high-level strategy but a lack of communication initiatives to drive and manage the core message to all employees to help them work towards the organization's goals that have been already set. This led to the innovation process of the organization is not running well, especially if the organization actually discouraging the innovation program through the establishment of a working unit that is responsible for generating innovation for the companies. It is usually not involve a major resources in the innovation process, which is the front-end employees, who serve as the connection points between organization and its customers.

### **2. Operational silos**

The continuity development of the company will lead to the increasing of the amount or type of business managed and the increasing of the number of functions or working units within the organization. This causes each of working units tends to focus on the achievement of performance (key performance indicator) only and be not paying attention to the input and output of its work force. Because each division is so busy competing and is focused on completing their given tasks, "tunnel vision" may begin to inhibit innovation. By means of the operational silos in an organization's environmental will cause innovating towards a common goal becomes challenging.

### **3. Lack of employee motivation**

Another concerning that may hinder the innovation process is the lack of motivation of employees to contribute, innovate or provide creative ideas to encourage innovation. Employees work only to the job description or key performance indicators set by their superiors. Employees are not quite engage with the work he / she did nor the company where he/ she works. The long process of innovation and needs on the consistency required employees enthusiasm to live, which is in turn may provide a distinctive value to the customer company to support corporate sustainability.

To support the innovation implementation in order to become a culture in the organization, then the organization needs to do a variety of ways to improve the workers awareness who will eventually be culture internalized of innovation in the organization working environment. Organizations supports may be a role model of the leaders, whereas they focus on ideas or feedbacks from their employees and even willing to be a mentor in the innovation process which is undertaken by workers. So here the workers will feel listened to and involved in efforts to improve the company's internal capabilities on an ongoing basis. Parker et al. (2010) recognized that situational variables (e.g. leadership, climate) also indirectly contribute to individual innovativeness. Higher levels of support for innovation climate motivate team members to initiate and persist in innovative behaviors and coordinate their innovative efforts

with others (West, 1990). According to Gong et al., 2012; Pirola-Merlo & Mann, 2004; Taggar, 2002, average individual team members' creative performance positively relates to team creative performance, so that with having creative and innovative workers will enhance the performance of organization.

The stages of innovation according to Van de Ven, Polley, Garud, and Venkataraman (1999), the innovation journey starts from the insight, which the employees must understand the theory, procedures or regulations related to the their activities. After that, they get a clearer understanding by comparing the prevailing procedures with the reality. Second, the problem is found in the taken activities, which may be caused by the difference between the procedures to reality or are known as a continuous improvement or reengineering of the existing processes. Thirdly, after determining the problem, then the employee will look for alternative solutions to improve the effectiveness or efficiency of the working process (process innovation) or create a product development (product innovation) that provide added value for the customers. Furthermore, the solution is determined in a business model that will be run by the organization in order to improve corporates sustainability There are some writers who study on the innovations, one of which is The Ten Types of Innovation (Keeley, Pikkell, Quinn & Walters, 2013). This Ten Types Framework (Figure 1) is a simple shape, whereas this framework is a tool that may be used to diagnose and improve the sharpness of the innovation that is being done.

This Ten Types of Innovation is divided into three main parts:

- a. Configuration: the types of innovation which are focused on the innermost workings of an enterprise and its business system
- b. Offering: the types of innovation which are focused on an enterprise's core product or service
- c. Experience: the types of innovation which are focused on more customer-facing elements of an enterprise and its business system



**Figure 1. The Ten Types of Innovation**

By the needs of the organization to build its capabilities in order to maintain its competitive advantage through improving the existed innovation resources in the internal organization, it is necessary to study further whether the government organization implement the innovation practices? How is the innovation implemented in the state-owned enterprise in Indonesia? Does the employees who are engaged the innovation, have a positive relationship with the individual performance?

### **Method**

The respondents of this research are employees in SOEs transportation who were innovation award finalists in 2014 and 2015. The age of respondents ranged from 23 to 39 years old, their position from rank & file to managerial level. Education of the respondents were from highschool to post-graduates.

This research was conducted by using secondary data related to the implemented innovation practices, which is participated in innovation award program in 2014 and 2015. In this study, the data of innovation is the employees' participation, not the total result of award criteria. Then, secondary data of performance appraisal of the participant of innovation award is taken from the employee database. The data of performance appraisal is data in 2014 and 2015. The research was conducted to prove whether the innovators has a correlation with their performance in their unit concerned.

### **Analysis and Result**

SOE of natural gas transportation is the company that runs the business of transmission and natural gas distribution, which the company became a liaison between the natural gas sources and the customers who need energy in carrying out its activities. The existing customers are divided into three categories: housing, commercial and industrial. SOE has a goal to provide clean energy for the community associated with the mandate that carried public service obligation, in addition to generating revenue or profit.

SOE of natural gas transportation implemented the performance evaluation in order to measure the performance results of its workers. As for the performance evaluation starts from the stage of the company's business strategy cascading into the unit's and individual performance's targets, the company who expects alignment between organizational KPIs and individual KPI. By the alignment, success or failure may be measured more objectively so as to minimize the suspicion among workers and between the working units impact on work motivation of individuals within the organization. Performance evaluation is done on a yearly basis, which is divided into two parts: a review of the mid-year and year-end assessment. Mid-year review was done to analyze to the employee who has reached or not reached the target, and discuss on the things that must be done to renew or improve the performance, or if it should be done considering the target change current conditions. The final assessment was carried out as a cover of all activities and assessing the achievement of employee's performance evaluation in accordance with the goals or targets set.

In carrying out its vision and mission, SOE has a corporate culture as the driving force for their employees' behavior. This culture of SOE is ProCISE, which stands for Professionalism, Continuous Improvement, Integrity, Safety, and Excellent Service. As each element of the corporate culture has a major behavior that the main behavior associated with Continuous Improvement is creative, innovative, and adaptive to change. To raise workers awareness for the corporate culture, particularly the human form to employees who are creative and innovative company, the company devised a program, which is innovation awards program.

This program has been implemented since 2012, and has been followed by the workers in all existed working units. In this program, workers were asked to explain their innovation in three ways, which are: product / new service, working processes improvements or products / services that already exist, or adopt and develop the innovations that have successfully implemented elsewhere. From the innovations that have been submitted by the innovation award program participants, we conducted a selection process with the assessment criteria:



**Table 1. Criteria for Innovation Award**

No	Criteria	Weight
1.	Background	5%
2.	Creativity	25%
3.	Implementation	30%
4.	Impact/value creation	35%
5.	Originality	5%
	TOTAL	100%

Before following the judging process, workers equipped with an understanding of innovation, by explaining the Ten Types of Innovation as in Figure 1. Through the above debriefing program, workers gain the insight that innovation may take many forms and sources of endless ideas. As for some of the innovations that qualify for the finalists round is as follows:

**Table 2. The Innovation in Year 2014 - 2015**

No.	The Innovation	Type of Innovation	Benefits
1.	Smart Meter Reading Integration	Structure	<ul style="list-style-type: none"> <li>- Prudent operation to reduce the customer's complaint;</li> <li>- The more effectiveness in supervising the performance of meter reader;</li> <li>- Operational budget savings;</li> <li>- Increase the corporate's image.</li> </ul>
2.	POPAY	Process	<ul style="list-style-type: none"> <li>- Increase the effectiveness and efficiency;</li> <li>- Operational budget savings (paperless);</li> <li>- Online monitoring of administrator's performance;</li> <li>- Increase the customers' satisfaction.</li> </ul>
3.	gasPOL	Service	<ul style="list-style-type: none"> <li>- Increase corporate's competitive advantage;</li> <li>- Reduce the opportunity loss (risk mitigation);</li> <li>- Increase efficiency.</li> </ul>

Employees are encouraged to innovate and give creative ideas in the completion of their works, encourage workers to always contribute to the advancement of companies that could ultimately improve the sustainability of a company's competitive advantage. As has been explained that the employee's contribution may be shown through workers performance results. The results of such performance were made once per year through the performance evaluation process. Aspects of performance assessment consists of:

**Table 3. Criteria for Performance Appraisal**

No	Criteria	Weight
1.	Performance results (productivity targets)	70%
2.	Work attitudes	10%
3.	Working cultures	10%
4.	Additional tasks	10%
	TOTAL	100%

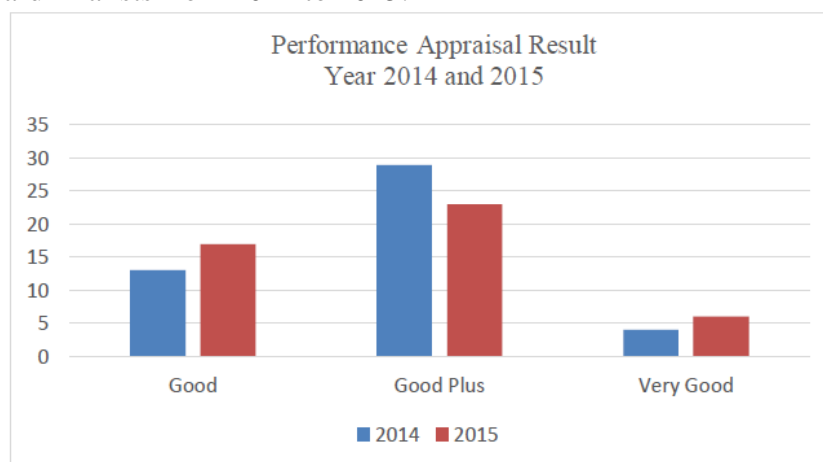
Performance appraisals are conducted to assess working results and behavioral aspects. Each employee is required to be able to complete the work target that has been set with behavior which suits to company values. Performance evaluation is done through the online system that every employee may do a recording on the progress of the work which is being done for achieving these targets to be properly managed. Besides, an online performance appraisal system is also to facilitate the executives to provide feedback at any time, by looking at the employees track record in the working unit. The online system also may reduce the using of paper in the work and physical assessment documents storage.

The performance appraisal which is conducted by the immediate supervisor will be calibrated by a higher superior to obtain the grade of cumulative rate index (IPK), in which the IPK is the individual performance rate divided by the group performance rate multiplied by 100%. By such result, we may set the rank of each employee as follows:

**Table 4. Performance Rating and IPK**

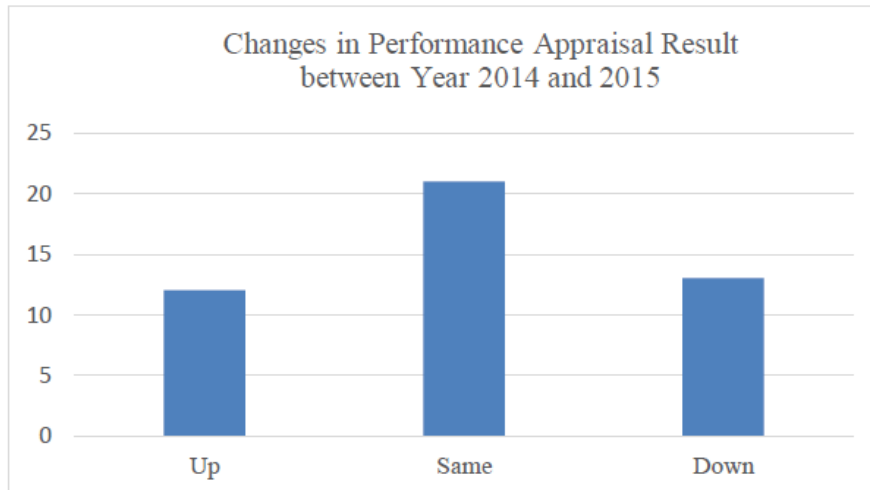
No	Performance Rating	IPK
1.	Outstanding	>125%
2.	Very Good	111% - 125%
3.	Good Plus	101% - 110%
4.	Good	86% - 100%
5.	Reasonable	65% - 85%
6.	Unsatisfactory	< 65%

Regarding to that explanation, below is a comparison of the performance appraisal of the innovation award finalists from 2014 to 2015:



**Figure 2. Performance Appraisal Result in Year 2014 and 2015**

As illustrated in Figure 2, it shows that the performance appraisal result of the innovation award finalists on average had a good performance. This may be explained by the results of performance appraisal, the employee who is innovation award finalist, is being rated Good, Good Plus and Very Good on average. In 2014 there were 13 employees with Good rating, 29 employees with Good Plus rating, and 4 employees with Very Good one. While in 2015 there were 17 employees with Good rating, 23 employees with Good Plus rating, and 6 employees with Very Good one. The rating may be compared with the overall rankings in Table 4.



**Figure 3. Changes in Performance Appraisal Result between Year 2014 and 2015**

As in Figure 3, it described the changes in the innovators performance between 2014 and 2015, with 12 employees who have improved performance, 21 employees who have the same performance, and 13 employees who have decreased performance. Based on these data, it may be concluded that in general the employees who make innovations actively have a positive correlation with their performance results.

### Discussion

This study illustrates that the government organizations are practicing innovation in their workplace, particularly in the SOE of natural gas transportation. This is illustrated by the support of the corporate culture in the SOE of natural gas transportation, the company has held innovation awards program since 2012. The Company believes that innovation is the intangible resources (Hitt, Ireland and Hoskisson, 2013) that may support improving the company capability to deal with competition or changes in the dynamic business environment. By innovation, the company strives to provide its best to the customers, thereby improving the customer satisfaction. Moreover, by doing innovation, the company is always looking for a more effective and efficient way in the work process that could ultimately affect the overall business chain (Dess, G.G., Lumpkin, G.T., Eisner, A.B., McNamara, G. 2014). The SOE of natural gas transportation has the goal of keeping the company's products could meet the needs of natural gas to its customers, for domestic, commercial and industrial. Not merely for profit profusely, but also doing its role as a public service obligation. This is demonstrated through the provision of services to domestic customers, that this customer segment is expected to meet the energy needs at reasonable prices and friendly environmental. The innovation made in the SOE of natural gas transportation, as shown in Table 2 ultimately perceived by customers, so that customer satisfaction could be improved. By improving the customer satisfaction, it will benefit the company and the company could improve its long-term competitive advantage, so that the company could maintain its sustainability.

As discussed earlier, that the SOE of natural gas transportation has implemented innovations in their daily activities. One of the organizational culture is Continuous Improvement encourages the employees to always be creative and innovative in performing their duties (Parker et al., 2010). This is also illustrated by the aspects of performance appraisal in the performance evaluation process (Table 3), that the assessed aspect is not only the results aspect but also the behavioral one. The Company is expecting its employees to do innovating then they will have a mental readiness to adapt to changes in a dynamic business environment. Not only through the performance evaluation, the company also held a program to internalize the creative and innovative aspects for their employees, which is an innovation award program. In this innovation award program, the employees are equipped with knowledge about innovation, which is The Ten Types of Innovation (Keely, Pikkell, Quinn & Walters, 2013). The employees are also being given a briefing to run this program starting from the idea to the implementation stage systematically (Van de Ven, Polley, Garud, and Venkataraman, 1999). This is explained by the appraisal aspect in the innovation award program as in Table 1. This innovation award program has been implemented since 2012 to the present, in which the innovations that have been implemented have contributed an added value to the company as described in Table 2. Companies are benefiting where such innovation may decrease the operating costs, improve the work process effectiveness within the company, and may ultimately increase the company's revenue and even improve its image.

In a state-owned enterprise that service-oriented, they also should implement innovation in its operational activities. Particularly in the SOE of natural gas transportation, innovation programs become into one of the programs that may drives the employees to be consistent in creative and innovative mind. By innovating, the company will optimize the utilization of its internal capabilities (Hitt, Ireland and Hoskisson, 2013) to always creating products/ services or their working processes. As has been explained that the innovation award program has been implemented since 2012, which is it needs to be done so that all employees in each business unit are being motivated to do the work practices more effectively and efficiently. Also with creative and innovative mind, it may encouraging a collaboration among the existing human resources, so that the silo operational could be minimized (Bank and Raza, 2014). By collaboration, each working unit would trying to understand the working process of input-process-output, in which the output from each working unit would be the input for the others. If the working unit solely focused on its KPI, then this will impede the achievement of corporate objectives that will ultimately slow the company business so it will lose the opportunity to maintain its competitive advantage sustainability (Standing & Kiniti, 2011; Bartel & Garud, 2009; Johannessen, 2008; Mumford & Licuanan, 2004). Besides, by implementing the innovation, the process of continuous improvement will be maintained in the company environment, that it will help the existed process of change when the company's business is growing (Bank and Raza, 2014). Because of that innovation needs to be consistently implemented within an organization, especially in the SOE of natural gas transportation in Indonesia.

A company that encourages its employees to innovate in their duties, may creating a competitive working atmosphere (Parker et al., 2010). Employees will give their best efforts at work when companies give attractive rewards to motivate them. In this case it may be said that the company's innovation award program is an attractive rewards for their employees, where they feel valued at their ideas and works (innovation) by the company. Employees were given the freedom to provide ideas and innovation that may support the objectives of the company, will give their best performance for the organization, as demonstrated in the individual performance results. In Table 3 above is explained that the aspects measured in the individual performance evaluation in the SOE of natural gas transportation is result and

behavior aspects, wherein the behavioral aspects, it assessed the implementation of the corporate culture which is the Continuous Improvement that major behavioral indicators are creative and innovative. As described in Figure 2, that the employees who are actively involved in innovation award program, obtain performance rank with a rating of Good, Good Plus and Very Good, where the results of the performance evaluation is an appraisal in 2014 and 2015. Although in Figure 3 is illustrated that there is an improvement, same or dropped from the performance appraisal of 2014 to 2015, but the distribution of the individual performance results remain in the rating of Good, Good Plus and Very Good. It may be concluded that the employees who make innovations, will have a positive correlation with their individual performance results.

### Conclusion

The results of this study has implications, both in terms of study or practical. That is, the government organizations, especially the SOE of natural gas transportation, also implementing the practice of innovation to deliver an unique value to its customers. It is necessary to support the SEO tasks, one of which is the public service obligation. The applied innovation in SOE is through one of the indicators of the performance appraisal to support the corporate culture in order to equip its employees to always think out of the box, creatively to adapt to ever-changing business environment. Lastly, the company who is able to facilitate its working conditions that respect their employees who provide creative ideas and innovation in its work, will affect individual performance positively. This is possible because the employees feel being involved by contributing for the development of the company's business.

For further research, may doing a quantitative analysis of the innovation correlation related to individual performance, which complements the qualitative analysis performed in this study. Thus, the existing research may provide a new perspective to the company related to the innovation practices to encourage individual performance and ultimately improve corporate performance in order to maintain the sustainability of corporate's competitive advantage.

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## INFLUENCE OF MARKET-SCANNING CAPABILITY AND TECHNOLOGY-SCANNING CAPABILITY ON FIRMS' PRODUCT INNOVATION PERFORMANCE

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### Abstract

Using sense-and-respond framework and resource-based view of firms as theoretical base, this article examines the effect of market-scanning (MktScan) capability and technology-scanning (TechScan) capability of firms on their product innovation performance (PIP). In the context of fast changing business environment and increasing practice of open innovation, environmental scanning capability is increasingly more relevant and using MktScan and TechScan lens to look at environmental scanning activities is helpful to managers. The findings suggest that both of these capabilities have positive influence on product innovation performance. TechScan capability mediates the MktScan-PIP relationship in case of market-pull firms, while MktScan capability mediates the TechScan-PIP relationship for technology-push firms.

### Introduction

Haeckel (1999) suggests that the success of enterprises operating in dynamic environments can be explained by 'sense-and-respond' framework. This framework emphasizes firms' need to understand the changes occurring in their business environment and provides a guideline for these firms to remain viable in spite of the evolving environment. Particularly, this framework suggests firms to invest in early detection of 'weak signals' (Ansoff 1975) to broaden their 'peripheral vision' (Haeckel 2004). Also, the resource-based view (RBV) of the firm (Wernerfelt 1984; Barney 1986; Barney 1991; Conner 1991; Peteraf 1993; Teece and Pisano 1994; Wernerfelt 1995; Eisenhardt and Martin 2000; Barney 2001) is an important anchor for the study. Having its roots in Penrose (1959), this theory looks at resources at the firm level as opposed to product-based analysis at the industry level. The theory explains why some firms achieve superior and sustainable competitive advantage compared to their peers in the industry. The theory holds that some firms achieve sustainability in competitive advantage by differentiating resource endowments that they create (Wernerfelt 1984; Barney 1986; Barney 1991).

In a dynamic business environment, the existing opportunities may disappear and the firm's static resources may no longer be enough to maintain an advantage once it had over its rivals. Hence, when the business environment is changing, sustaining competitive advantage of the firm is difficult. Wiggins and Ruefli (2002; 2005), drawing on the works of Schumpeter (1939; 1942) and D'Aveni (1994), explained how hyper-competition diminishes competitive advantage. Due to accelerated changes in the business environment, firms are finding it increasingly difficult to retain for a longer time their strategic advantage over their competitors. Rather, sustained advantage is increasingly becoming dependent on the firms' ability to create a series of competitive advantages over time (Wiggins and Ruefli 2005). In other words, firms operating in high 'clock-speed' (Fine 1998) business environments need to create a series of temporary advantages to achieve sustained competitive advantage over a duration of time (D'Aveni 1994; Brown and Eisenhardt 1998). In pursuit of identifying opportunities to create advantages on a continuous basis, firms have to develop information collecting and processing capabilities that focus on both market and technological domains – enabling them to sense the changing trends in business environment and to find tangible ways

to respond to those changes.

In this context, to create sustained competitive advantage, a firm needs: a capability to sense the changing nature of its business environment (e.g., MktScan capability) and a capability to find out the techniques and technologies that it could use to create or change its products and services (e.g., TechScan capability) and thereby monetize the expected changes in the business environment. Together these two capabilities to perform market-scanning and technology-scanning does the firm sustain its competitive advantage even when it faces a dynamic business environment.

### **Literature Review**

A sense-and-respond mindset helps firms to identify weak signals (Ansoff 1975) what may first appear to be random<sup>13</sup>. According to sense and respond framework (Haeckel 1999), firms are to 'imagine' these random signals into a sense-making pattern and respond to the changes occurring in their business environment. These weak signals may be related to changes either in the market domain or technology domain. If a weak signal is picked up in the market domain, it may represent a new customer need or a new type of offering from a competitor. The management in the focal firm may respond to that by looking for ways to fulfill the new customer need or to compete with the new offering from competitor. These responses may involve using the technological know-how that already exists within the firm and the knowledge would be exploited to implement the current business goals. However, if the knowledge needed doesn't currently exist within the firm, it will look for potential new technologies that others might be working on. A weak signal could also be picked up in the technology domain first and it may represent new knowledge that could affect either product development or process development. The management in the focal firm would then respond to that weak signal coming from technology domain by looking for relevant information in the market domain that would support or negate the use of technology under consideration.

Generally, a firm may sense weak signals in both technology domain and market domain (as in 'push-pull' theory, e.g., Zmud 1984). Some firms may be inclined to sense more signals in technology domain than in market domain, while some other firms will sense more signals in market domain than in technology domain. This preference will more likely be influenced by the firms' overall culture of 'technology push' or 'demand pull' thinking (Langrish et al. 1972; Myers and Marquis 1969; Gibbons and Johnston 1974; Rothwell et al. 1974; Mowery and Rosenberg 1979; van den Ende and Dolfsma 2005) and by their unique industry context. We anticipate that firms need to have well-developed scanning processes in place to acquire information about the business environment in both market and technology domains.

As several authors claim, the capabilities of firms to understand the direction of changes in market and technology domains are preconditions to success when operating in a dynamic environment (e.g., Capon and Glazer 1987; Bond and Houston 2003). These capabilities assist firms reduce uncertainty from two important sources: (1) uncertainty about the amount and type of demand for the firms' products and services, and (2) uncertainty about developing technologies. These two sources of uncertainties are important since firms have to sense the nature of their customers' changing needs and wants (i.e., 'what' needs to be done), and then find out what technologies can be used effectively to create the desired products or services (i.e., 'how' what needs to be done will be done). In addition, and more importantly, firms need to use both of these capabilities simultaneously given the dynamic nature of the business environment.

A market-oriented firm performs better than its less market-oriented counterparts (Narver and Slater 1990; Ruekert 1992; Deshpande et al. 1993; Jaworski and Kohli 1993; Slater and

<sup>13</sup> Of course, by weak signal we mean an early and emergent cue, not a feeble or vulnerable indicator.



Narver 1994; Atuahene-Gima 1995; Pelham and Wilson 1996; Pitt et al. 1996). A firm with a high degree of market-scanning activities has improved capability to process information relating to the changes in its customers' choices; i.e., the firm has a better idea about 'what needs to be done'. This capability enables the firm to significantly reduce the demand uncertainty for its products and services. While many scholars agree that market orientation is an important and necessary characteristic of better-performing firms, they also indicate that this capability is not sufficient to enable firms for continuous innovation and thereby, to achieve competitive advantage (Day and Nedungadi 1994; Slater and Narver 1995; Baker and Sinkula 2002). This is more applicable to manufacturing firms than to service firms (Cano et al. 2004). Firms explore ideas for new products and services to meet identified and unexpressed customer needs (e.g., 'lead users' in von Hippel, 1988). Firms then find ways to develop these new and improved products and services. In order to find an appropriate way to develop these products and services, firms gather and process information about available technological options. Firms use market information to guide the purposeful search for technologies to address customers' need. This way is akin to the pull model of new product development (Langrish et al. 1972; Myers and Marquis 1969; Gibbons and Johnston 1974; Rothwell et al. 1974; Mowery and Rosenberg 1979; van den Ende and Dolfsma 2005).

Technology-oriented firms place emphasis on using technological knowledge to solve their customers' problems (Gatignon and Xuereb 1997). These firms are proactive in acquiring new technologies and use them while developing new products (Cooper 1984; Cooper 1994). Atuahene-Gima and Evangelista (2000) asserted that technology-oriented firms are more likely to promote technology in their new products at the expense of customer needs; these firms are pre-disposed to push a certain technology into the market. Such firms have a pro-technology culture, according to Workman (1993; 1998), and these firms are likely to depend more on R&D insights than marketing insights. Firms with high degree of technology orientation have improved capability to process technical information and they are better at reducing uncertainty in developing technologies; i.e., these firms have a better idea about how things should be done. Hence, when firms effectively use their technology knowledge to find applications in products and services that are popular, firms achieve higher performance. This model is akin to push model of new product development (Langrish et al. 1972; Myers and Marquis 1969; Gibbons and Johnston 1974; Rothwell et al. 1974; Mowery and Rosenberg 1979; van den Ende and Dolfsma 2005).

A high level of scanning capability in both market and technology domains may be more necessary for firms in dynamic industries; since firms often experience high intensity change in either of these domains (Cetron and Davies 2001; Day and Schoemaker 2004) and uncertainties are often very high in both dimensions. These fast changing trends in development techniques and technology, customer preference and other environmental factors can deprive a firm of its current leading market position, allowing other firms, which place priority on innovation, to take the lead. One such example is Wang Computer, which "led the word processing industry in the early 1980s before Apple and IBM introduced PCs with word processing software. ...Wang could not see how PCs offered customer value. As a result, Wang's sales dropped and it went bankrupt" (Cohan and Unger 2006, p. 11). To avoid such outcomes, firms need to search and use the latest information to apply management practices effectively when innovating toward new products and services, a tactic that would eventually enable firms to achieve sustainable competitive advantage (Han et al. 1998).

### **Model Development and Hypotheses**

This article examines how information processing capabilities of a firm may help achieve competitive advantage – firms may do so by developing market-scanning capability (Alam et al. 2013a) and technology-scanning capability (Alam et al. 2013b). Market-scanning

capability enables firms to effectively recognize customers' changing needs and to decide on how to satisfy those needs either by implementing new products and services or by making changes to current products and services. Technology-scanning capability helps managers to make informed decisions on the use of technological options to implement those new products and services or to make changes to current products and services. In a broad sense, both market-scanning capability and technology-scanning capability are viewed as two resources that enable firms to identify the opportunities and threats in the business environment. In the parlance of resource-based view, when firms successfully create differentiating resource configurations, they better satisfy their customers' needs, they produce more efficiently, and eventually, they achieve superior performance leading to competitive advantage (Barney 1991; Peteraf 1993).

The underlying assumption of this study is that when firms have increased product innovation performance, they can convert their better-matched products and services into overall business performance, leading them eventually to gain sustainable competitive advantage. It is also acknowledged that product innovation performance is neither automatic nor sufficient; rather it is a necessary condition for sustainability of competitive advantage. Bacharach's (1989) framework is used to operationalize the theory for the study. The framework provides three different guidelines: for operationalizing independent variables, that is, technology-scanning capability and market-scanning capability; for operationalizing dependent variable, that is, product innovation performance; and for operationalizing relationships between independent and dependent variables. Two independent latent variables in this study represent two intangible resources reflecting firms' market-scanning capability and technology-scanning capability.

Studies anchored in the resource-based view face challenges in defining sustainability in terms of duration or degree, hence the attention in this regard in empirical studies are limited (Armstrong and Shimizu 2007). Based on the choice about how to ascertain sustainability of competitive advantage, research design might either be cross-sectional or longitudinal. For the current study that is cross-sectional in nature, product innovation performance is used as the outcome or dependent variable that is influenced by both market-scanning capability and technology-scanning capability. It is reasoned that with the higher level of these capabilities, firms attain product innovation performance that, in turn, help them achieve above average overall business performance that is sustainable. The inherent advantage of being innovative helps firms maintain their advantage once it is achieved.

RBV theory conveys the implication that both market-scanning capability and technology-scanning capability would positively influence the dependent variable of product innovation performance. These two capabilities enable firms to detect 'weak signals' (Ansoff 1975) that are early indications of future changes either in market or technology domain. Based on these early indications, firms can respond in a timely manner (Haeckel 1999; Haeckel 2000). These two capabilities of firms are demonstrated in the richness of sources of information and the ability of the firms to process the collected information to generate insights and to act on those insights. Firms identify the signals what may first appear to be random noise to an untrained eye and interpret those signals into a sense-making pattern and make decisions. Firms act as a pool of capabilities that are dynamically combined and recombined to sense the changing needs of individual customers and customers often do not have a clear idea about their own future needs (Haeckel 2000). Following resource-based theory of the firm, the effects of both market-scanning capability and technology-scanning capability on product innovation performance are expected to be positive.

H<sub>1</sub>: Firms with higher level of market-scanning capability will exhibit a higher level of product innovation performance.

H<sub>2</sub>: Firms with higher level of technology-scanning capability will have a higher level of product innovation performance.

The sense-and-respond framework (Haeckel 1999) helps to understand how information age firms successfully operate in a fast-changing business environment. This framework however does not provide a clear indication about where firms might source their signals first and where they might then get their information to respond to those weak signals. The sense-and-respond cycle might initiate either in market domain or in technology domain; it might depend on the firm culture or, on the unique industry context, or it could be a random sequence. Firms that are traditionally driven by market domain knowledge are known as market-pull firms (Langrish et al. 1972; Myers and Marquis 1969; Gibbons and Johnston 1974; Rothwell et al. 1974; Mowery and Rosenberg 1979; van den Ende and Dolfsma 2005); these firms are assumed to have relatively stronger marketing-scanning capability than technology-scanning capability. Market-pull firms would be inclined to use their market-scanning capability more often to identify (i.e., sense) a potential new customer need. Once firms identify a new customer need by using market-scanning capability, they will need to leverage their technology-scanning capability to find a tangible way to solve (i.e., respond) that customer problem. The sequence of sense-and-respond cycle would start in the market domain for firms that are culturally inclined to market-pull characteristics. These firms would exhibit stronger level of market-scanning capability that might translate into product innovation performance mediated by technology-scanning capability. This led to hypothesis H<sub>3</sub>.

H<sub>3</sub>: In case of market-pull firms, technology-scanning capability will strongly mediate the relationship between market-scanning capability and product innovation performance.

Firms that are traditionally driven by technology domain knowledge are known as technology-push firms (Langrish et al. 1972; Myers and Marquis 1969; Gibbons and Johnston 1974; Rothwell et al. 1974; Mowery and Rosenberg 1979; van den Ende and Dolfsma 2005). Technology-push firms would be inclined to use their technology-scanning capability more often to identify (i.e., sense) a new technological opportunity – either in the form of a new technology or in the form of re-using an existing technology. Once firms identify a new technology or an opportunity to reuse an existing technology by using technology-scanning capability, then they will need to leverage their market-scanning capability to find a suitable customer problem (i.e., respond) where the technology opportunity can be utilized. The sequence of sense-and-respond cycle would start in the technology domain for firms that are culturally inclined to technology-push characteristics. These firms would exhibit stronger level of technology-scanning capability that would translate into product innovation performance mediated by market-scanning capability. This led to hypothesis H<sub>4</sub>:

H<sub>4</sub>: In case of technology-push firms, market-scanning capability will strongly mediate the relationship between technology-scanning capability and product innovation performance.

### **Research Methodology and Data Collection**

Given the findings of the literature review and developed hypotheses, the overall research model is tested using empirical data collected through a Canadian national survey that was conducted as part of a broader research. The survey instrument was delivered through the web to a national sample of managers of different manufacturing firms. A web-based survey was selected as a methodological option because of the benefits of speed, reasonable cost, and easy accessibility, and because of the geographic dispersion of the target participants (Ilieva et

al. 2002; Deutskens et al. 2004; Cole 2005; Evans and Mathur 2005; Deutskens et al. 2006). When the contact email information of C-level officers (e.g., CEO, CTO) was not available, preference was given to recruit someone from General Management, R&D or Marketing.

The Industry Canada database of Canadian Company Capabilities (CCC 2008) was used to find contact information of Canadian companies who were engaged primarily in manufacturing. A total of 17,272 usable contacts (i.e., email addresses) of firms who listed their primary business activity as ‘Manufacturer / Processor / Producer’ were available at the time in the database. These firms were invited through email to participate in a web-based survey. Effort was made to increase the response rate by development of a user-friendly interface, by careful design of the questionnaire so that the questions were unambiguous, by use of reminders, and by timing of the survey. There were 467 participants who provided useful information for further analysis. The contact rate for the survey was 77.3%, while the cooperation rate was 3.1% with effective response rate of 2.7%.

**Measurement Scales for Latent Variables**

The above four hypotheses illustrate interactions among three main latent variables under consideration. These three latent constructs are market-scanning capability, technology-scanning capability, and product innovation performance. MktScan (Alam et al. 2013a) is a second-order reflective construct with four first-order components. The four sub-constructs of MktScan capability are identified as: collection of information about customers (CustInfo), information regarding competitiveness (CmpInfo), responsiveness to collected market-related information (MktResp) and coordination among different business units of the firm (Coord). Table 1 shows the details of the scale used.

**Table 1: Items and Factors of MktScan Scale**

Factor Names	Items
CustInfo	We help our customers anticipate developments in their markets.
	We continuously try to discover additional needs of our customers of which they are unaware.
	We brainstorm on how customers use our products and services.
	We search for opportunities in areas where customers have a difficult time expressing their needs.
	We work closely with lead users who try to recognize customer needs months or even years before the majority of the market may recognize them.
	We extrapolate key trends to gain insight into what users in a current market will need in the future.
CmpInfo	We constantly monitor our level of commitment and orientation to serving customer needs.
	Our strategy for competitive advantage is based on our understanding of customers’ needs.
	We are more customer-focused than our competitors.
MktResp	We respond rapidly to the competitive actions of our rivals.
	Top managers from each of our business units regularly visit customers.
	Business functions within our organization are integrated to serve the target market needs.
Coord	We freely communicate information about our successful and unsuccessful customer experiences across all business functions.

Factor Names	Items
	Our salespeople share information with each other about competitors.
	Top management regularly discusses competitors' strengths and weaknesses.
	We share resources among business units.

TechScan (Alam et al. 2013b) is a second-order reflective construct that includes its four first-order components. The four sub-constructs of TechScan capability are identified as: technological information gathering (TechInfo), technology alignment (TechAlign), responsiveness to collected technology-related information (TechRespond) and exploitation of existing technology portfolio (TechExploit). The details of the scale used are shown in Table 2.

Cooper and Kleinschmidt (1995) used a scale to measure the new product performance of firms when they reported their findings in benchmarking the firms' critical success factors in new product development. More recently, Alegre et al. (2006) reported a measurement scale of product innovation performance where they modeled it as a two-dimensional construct. The 'efficacy' component of their scale was similar to the assessment tool provided in Oslo Manual (OECD-EUROSTAT 1997) for economic innovation efficacy that reflected the degree of success of an innovation. The other component in their scale, called 'efficiency', reflected the effort carried out to achieve the degree of success captured by the efficacy component – it captured the cost and time required for the innovation. Wheelwright and Clark (1992) supported the use of these two as a measure of product innovation efficiency. Several other studies (Griffin 1993; Griffin and Page 1993; Pisano 1994; Griffin 1997; Hoopes and Postrel 1999; Zhang and Doll 2001; McEvily and Chakravarthy 2002; Valle and Avella 2003) had also considered cost and development time for their work in innovation efficiency, both as an objective measure and as a subjective measure. Items in the Alegre et al. (2006) scale were used during survey administration. These items were used for further exploratory analysis before using it in the overall research model. Table 3 shows the details of the scale as it is used for the current study.

**Table 2: Items and Factors of TechScan Scale**

Factor Names	Items
TechInfo	The market drives our search for new technological solutions.
	Technology plays an important role in our approach to tackling an issue, when appropriate.
	Encourages employees to explore new technological ideas voluntarily.
	Policies, processes and tools to enable employees to explore new technologies.
	Uses the information available within the organization.
	Gathers information from global sources when searching for new technological solutions.
TechAlign	Attempt to co-develop future development plans about its technology with other players in business network.
	Looks for synergy of product offerings with existing technological trends in the market.
	Seeks to ensure compatibility with existing technologies, resources and

Factor Names	Items
	competencies.
TechRespond	Responds well to any technology information that has a strategic implication.
	Responds well to any technology information that has an operational implication.
TechExploit	Seeks to exploit new international markets through acquisition and sale of intellectual property.
	Engages in both types of innovation, namely, incremental and breakthrough innovation.

**Table 3: Items and Factors of Product Innovation Performance Scale**

Factor Names	Items
PrdEfficacy	Our company successfully replaces the products that are being phased out.
	Our company extends its core product offering through technologically new products.
	Our company extends its core product offering through technologically improved products.
	Our company often extends its product range outside the core product offering.
Efficiency	Our company takes less time to develop a new product or a new component in comparison with our major competitors.
	Average cost to develop a new product or a new component is less for our company in comparison with our major competitors.
	Overall satisfaction of top management with the efficiency of new product development is very high.
MktEfficacy	Our company develops environment-friendly products.
	Market share of our products is improving.
	Our company often breaks into new overseas market.
	Our company often captures new domestic market segments.

### **1. Reliability and Validity of The Construct**

The core of the research model consisted of three firm-level constructs – technology-scanning capability, market-scanning capability and product innovation performance. All three constructs were modeled as second-order reflective constructs. According to Nunnally (1978), in order for factors to be considered as having convergent validity and reliability, both of Cronbach’s Alpha and Construct (Composite) Reliability scores have to be 0.7 or greater. Fornell and Larcker (1981) further provided guidelines by specifying the measure of Average Variance Extracted (AVE) value of greater than 0.5 in order for the measurement error associated with the construct to be outweighed by the variance extracted through its indicators. The corresponding factor loading, AVE, Cronbach’s Alpha and Composite Reliability value are shown in Table 4.

**Table 4: Details of the Constructs' Internal Consistency, Convergent Validity**

Constructs and their factors, if the construct is second order	Order of the Construct and Alpha of the first order components	AVE	Composite Reliability
TechScan	2 <sup>nd</sup> Order (0.866)	0.597	0.855
TechInfo	1 <sup>st</sup> Order (0.809)	0.516	0.861
TechAlign	1 <sup>st</sup> Order (0.708)	0.642	0.842
TechRespond	1 <sup>st</sup> Order (0.854)	0.865	0.928
TechExploit	1 <sup>st</sup> Order (0.586)	0.688	0.813
MktScan	2 <sup>nd</sup> Order (0.875)	0.608	0.861
CustInfo	1 <sup>st</sup> Order (0.843)	0.553	0.881
CmpInfo	1 <sup>st</sup> Order (0.739)	0.651	0.848
MktResp	1 <sup>st</sup> Order (0.676)	0.616	0.828
Coord	1 <sup>st</sup> Order (0.708)	0.534	0.821
Product Innovation Performance	2 <sup>nd</sup> Order (0.775)	0.562	0.793
PrdEfficacy	1 <sup>st</sup> Order (0.716)	0.568	0.836
Efficiency	1 <sup>st</sup> Order (0.759)	0.664	0.855
MktEfficacy	1 <sup>st</sup> Order (0.593)	0.465	0.773

Gefen et al. (2000) provided guidelines for examining the discriminant validity at the construct-level and indicator-level. The square root of AVE was compared with cross-correlation of the constructs. If all of the cross-correlations of the constructs were less than the square root value of the AVE, then the condition for construct-level discriminant validity would be fulfilled. Further, in order for the items and the components to be internally reliable and to have discriminant validity, component-level and item-level cross-loadings for each item should load more highly on its assigned construct than on the other constructs. Tables 5 and 6 show the results, which were satisfactory.

**Table 5: Discriminant Validity of Constructs**

	MktScan	PIP	TechScan
MktScan	0.779*		
PIP	0.609	0.749	
TechScan	0.664	0.629	0.773

\* Square Root of AVE where AVE is generated by aggregating first-order factors.

## 2. Influence of Techscan and Mktscan On Performance

The influences of market-scanning capability (MktScan) and technology-scanning capability (TechScan) of a firm on its product innovation performance (PIP) were examined. Product innovation performance was used to examine the direct influence of MktScan and TechScan. In order to explore the influence of MktScan and TechScan capabilities on PIP as it was manifested in the current set of data, Pearson correlations between MktScan-PIP and TechScan-PIP was derived. Both of these coefficients, as shown in Table 7, were found to be statistically significant - thereby supporting the hypotheses H<sub>1</sub> and H<sub>2</sub>.

**Table 6: Indicator Cross Loadings Showing Reliability and Discriminant Validity**

First Order Components	Second Order Constructs		
	MktScan	PIP	TechScan
CmpInfo	0.776	0.443	0.471
Coord	0.734	0.416	0.450
CustInfo	0.819	0.546	0.589
MktResp	0.782	0.455	0.520
Efficiency	0.398	0.710	0.392
MktEfficacy	0.451	0.729	0.427
PrdEfficacy	0.517	0.817	0.577
TechAlign	0.549	0.473	0.767
TechExploit	0.414	0.549	0.662
TechInfo	0.576	0.501	0.891
TechRespond	0.517	0.514	<b>0.775</b>

**Table 7: Pearson Coefficients to Test Hypotheses H<sub>1</sub> and H<sub>2</sub>**

Hypotheses			PIP
H <sub>1</sub>	TechScan	Pearson Correlation	0.645
		Sig. (2-tailed)	0.000*
		N	409
H <sub>2</sub>	MktScan	Pearson Correlation	0.571
		Sig. (2-tailed)	0.000*
		N	393

\*Correlation is significant at the 0.01 level (2-tailed).

### 3. Mediation Effect of TechScan (in market-pull firms)

In Hypothesis H<sub>3</sub>, it was examined whether TechScan capability has stronger mediation effect on the relationship between MktScan and PIP in case of market-pull firms. Mediation effect of TechScan capability on MktScan-PIP relationship is examined – on the full set of firms, on the firms having relatively stronger MktScan capability and lastly, on the firms having relatively weaker MktScan capability. Firms with a market-scanning capability higher than their technology-scanning capability have been treated as market-pull firms. Mediation effect of TechScan is found to be stronger in firms with market-pull characteristics. Table 8 shows the relevant measures of the tests for Hypothesis H<sub>3</sub>. A measure of the ratio of Indirect to Total Standardized Coefficients between MktScan and PIP showed that the mediation effect was higher for market-pull (i.e., MktScan > TechScan) firms with the ratio 0.503.

### 4. Mediation Effect of MktScan (in technology-push firms)

It was also examined whether MktScan capability had stronger mediation effect on the TechScan - PIP relationship in case of technology-push firms. This was captured in Hypothesis H<sub>4</sub>. Mediation effect of MktScan capability on TechScan-PIP relationship is examined - on the full set of firms, on the firms having relatively stronger TechScan capability and lastly, on the firms having relatively weaker TechScan capability. Firms with a technology-scanning capability higher than their market-scanning capability have been treated as technology-push firms. Table 9 shows the relevant measures of the tests for Hypothesis H<sub>4</sub> and the hypothesis is empirically supported. A measure of the ratio of Indirect to Total Standardized Coefficients between TechScan and PIP showed that the mediation effect was higher in technology-push (i.e., TechScan > MktScan) firms with the ratio 0.607.



**Table 8: Mediation Effect of TechScan (Hypothesis H<sub>3</sub>)\***

	Full Dataset (N = 467)	MktScan > TechScan (N = 257)	MktScan < TechScan (N = 123)
Hypothesis	H <sub>3</sub>	H <sub>3</sub>	H <sub>3</sub>
Independent Variable	MktScan	MktScan	MktScan
Outcome Variable	PIP	PIP	PIP
Mediating Variable	TechScan	TechScan	TechScan
Standardized Coefficient between MktScan and PIP (Total)	0.571	0.535	0.765
Standardized Coefficient between MktScan and PIP (Direct)	0.291	0.266	0.495
Standardized Coefficient between MktScan and PIP (Indirect)	0.280	0.269	0.270
Type of Mediation	Partial	Partial	Partial
Ratio of Indirect and Total Standardized Coefficients Between MktScan and PIP	0.490	0.503**	0.353

\* Mediation analysis performed using MedGraph (Jose 2003).

\*\* Mediation effect of TechScan was higher when MktScan > TechScan.

**Table 9: Mediation Effect of MktScan (Hypothesis H<sub>4</sub>)\***

	Full Dataset (N = 467)	TechScan > MktScan (N= 123)	TechScan < MktScan (N = 257)
Hypothesis	H <sub>4</sub>	H <sub>4</sub>	H <sub>4</sub>
Independent Variable	TechScan	TechScan	TechScan
Outcome Variable	PIP	PIP	PIP
Mediating Variable	MktScan	MktScan	MktScan
Standardized Coefficient between TechScan and PIP (Total)	0.645	0.749	0.565
Standardized Coefficient between TechScan and PIP (Direct)	0.454	0.294	0.373
Standardized Coefficient between TechScan and PIP (Indirect)	0.191	0.455	0.192
Type of Mediation	Partial	Partial	Partial
Ratio of Indirect and Total Standardized Coefficients Between MktScan and PIP	0.296	0.607**	0.339

\* Mediation analysis performed using MedGraph (Jose 2003).

\*\* Mediation effect of MktScan was higher when TechScan > MktScan.

### 5. Limitations of The Research and Future Directions

When collecting data, firms that were primarily in the business of manufacturing products were selected although no such constraint was imposed while developing the hypotheses. Such a focus during data collection provided a moderate choice as opposed to the two other extreme choices for selecting a sample population to test the research model. A more general

population of firms could have been selected for the national-level survey. While that choice might have caused the result to be more widely supported, it entailed the risk of being too broad for an exploratory type of study. Another option was to collect data from a more selective group of firms focused on a specific type of customer or a specific industry. Since new products in a single industry are more homogenous with respect to market, technology and their economic effects, analysis of data focused on a single industrial sector often was more useful (Santarelli and Piergiovanni 1996). At the cost of being too narrow, it might have enabled a deeper understanding of the chosen industry or chosen customer segment, in addition to the prospect for a more relevant and stronger result. It may be interesting to compare outputs among a few focal industries and examine whether a certain industry makes more use of either technology-scanning capability or market-scanning capability. It may also be worthwhile to explore the underlying causes (e.g., competitive pressure) that might be responsible for increased use of either MktScan or TechScan capability – if that is found to be the case - in an industrial sector at a given time.

## 6. Theoretical and Practical Implications and Conclusion

The findings of this study provide important insights for practitioners as well as researchers. Since firms need to know about external activities in market and technology domains as a result of the increasing popularity of open innovation practices (Chesbrough et al. 2006), market-scanning capability and technology-scanning capability are increasingly important. Indeed, Chesbrough (2003) stated that the job of R&D managers involved not only managing within the company but also looking beyond the firm's boundaries and managing the network relations to take advantage of other firms' technological efforts. Similarly, chief innovation officers or CEOs are interested to know about market dynamics to find the external opportunities that may exist. Alliances, mergers and acquisitions are frequently used as tactical tools to practice open innovation. An improved level of technology-scanning capability and market-scanning capability of firms would be helpful to execute these tactics to implement open innovation strategies of firms.

Technology-scanning capability was found to mediate the relationship between market-scanning capability and product innovation performance. Similarly, market-scanning capability mediated the technology-scanning capability and product innovation performance relationship. Results also implied that technology-push firms would benefit more from a stronger market-scanning capability. Firms operating in technologically volatile environments will need to improve their TechScan capability to maintain their product innovation performance. Overall, the study connected sense-and-respond framework and resource-based view of firms to put together a theoretical foundation for creating adaptive enterprises. On a more detailed level, the study illustrated how two intangible resources (i.e., capabilities) of firms interacted with each other to create product innovation performance.

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**HOW INNOVATION AFFECTS PERFORMANCE MANAGEMENT AND CONTROL SYSTEMS IN BUSINESS ORGANIZATIONS ACROSS ECONOMIC AND CULTURAL ECOSYSTEMS**

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**Introduction**

Innovation is one of the most important ingredients for maintaining the competitive advantage and gain leadership when it comes to growth and survival for large business organizations on the global stage with various cultural and economic challenges affecting them in domestic and international markets.

Businesses have always known that to sustain their success they must evolve and adapt to the changes in their operating environments and the ecosystems. Over the past decade or so the pace of change in the economic environment has been unprecedented, forcing businesses to evolve at a faster pace than ever before. The forces of this change have been multi-dimensional and somewhat omnipresent in the operating business environment for decades but have seen a significant acceleration in the last decade as most constituent variables have gone through a point of inflexion (Funk, 2013).

The new operating systems involved in innovation management consistently influence firms and industries, and they can have reactions with much better velocity, agility and creativity than the existing systems. The innovative system acts as a complementary entity rather than loads in the traditional hierarchy. Consequently, this sort of system is actually making firms more facile to operate, run and accelerate the strategic moves and changes (Sharp, Bergh, & Li, 2013).

Most of management thinking of the past few decades from Porter, who studied on “waking-up call that organizations need to consider strategy much more frequently and explicitly”, to Christensen's perception on how poorly traditionally organized companies have been handling the technological discontinuities in-built in such a very fast developing world, to the latest work done by Laureate and Kahneman (2013) about the role of innovations in transforming the contemporary firms on the global stage.

Innovation stimulus is initiated with establishing a “sense of urgency, emerging a revelation change, interacting the idea for buy-in, generating short-term wins, creating a guiding coalition, never allowing and combining changes into the culture, empowering broad-based action” are the ways which can be implemented by large business firms (Anderson et al., 2014).

Through the 1970s and 1980s the organizations needed to compete along the axis of productivity, pricing and access. However, recent decades have seen the tremendous acceleration in the technology adoption and also the market place becoming truly globalized with the advent of the internet and social media which led toward significant innovations in the success of organizations (Gressgård et. al., 2014).

Roberts (as cited in Schilling, 2015) argued that the rise of the internet concurred with quick innovations in related networking facilities and software, and quick drops in prices of IT products such as telecommunications and technological equipment. For enforcing the consequences of technology in development and advancement of organisms, some scholars found numerous challenges affecting product development, comprising more swift product merchandising, bringing up the global competition, and augmenting the uncertainty connected with technological and market restrictions. Technology convergence and market fragmentation have been the hallmarks of such innovation processes across large business firms (Song & Weiss 2001; Raisch et al., 2008; Cardinal, Turner, Fern, & Burton, 2011).

While Johnson and Kaplan (1987) claimed that the significance of management accounting and control systems should be reclaimed by capitalizing on substantial growths in information technology, which allow a growth of organizational technology innovation in gathering and processing information.

Today's contemporary consumer across the world has more choices as different sources of information available in real time and on demand and often come from a social context of their existing trusted relationships. In the line with Eccles, Ioannou, and Serafeim (2014) findings, this has required organizations to become much more adaptable, agile and responsive to the ever-shifting needs and preferences of the customers augmented by innovative technologies.

As large business firms have redesigned themselves to adapt to this new reality of the omnipresent hyper competitions, they are increasingly relying on disruptive business models as the source of sustaining their competitive advantage. Even established businesses are having to innovate in not only in all the marketing dimensions, but across the entire product and organizational development including though not limited to supply chain, sourcing, talent development, access to the capital and access to market etc. (Hannan & Freeman, 1984; Tripsas & Gavetti, 2000).

With some examples being that of UBER, the global transportation company that is now valued at over \$50 Billion and does not own a single car or employ any driver or one of the largest telecom company in the world, Skype – it does not even own/operate any traditional telecom infrastructure, but help millions of people to connect and communicate or AIRBNB that has the largest availability of rooms worldwide but does not own or operate a single hotel, while still being worth upwards of \$20 Billion. The induction effect of this unicorn type of businesses are that even established organizations are experimenting both with their business models and offerings, often by leveraging best of innovation and technologies, in a bid to become more innovative and competitive, McKesson, a fortune 500 in health care, space is taking on Amazon to protect its turf in the drugs distributing business or GE Engines redefining Analytics and Telemetry as the growth driver for its aircraft engines business or Insurance companies preparing to respond to Driverless Cars.

So while innovation has clearly made its case as arguably the greatest value creator or driver for the new global economy and there is a significant body of research (Ichniowski, & Shaw, 1999) fostering and managing innovation, there is one more area where organizations are beginning to feel the “stress” in the area of designing their "Control and Performance Management Systems" to adopt to these new expectations of a highly responsive customer facing organization, shorter decision cycles, shorter product release cycles, quick learning – assimilation goals, more quick research to monetization goals, cross functional product teams (Elenkov, 2005).

A formal process for innovation will assume that the competencies that are needed at different stages of innovation have been to a certain degree matured within the organization and have an effective engagement with the larger performance and control systems – it is therefore to understand the correlation between the relative formality and maturity of innovation systems with financial performance (Yuan & Woodman, 2010). Especially given that new economy businesses often referred to as amongst the most innovative like Zappos and Netflix have credited “boundless” innovation or innovation without boundaries.

Baer and Fresem (2002) examined the importance of understanding and exploring innovation in an industry context as presumably the dynamics of B2B innovation in the business model between GE and United, innovation in the business model between UBER and a self-employed driver are likely to follow different paths with different measurement of outcomes and different control systems implications.

This study aims to investigate how innovation will affect the control system and management



performance and how it will affect the business organization across different ecosystems as there are a number of variables that affects and impact organizations, particularly larger ones and how innovation plays an important role in it. As for the majority of the competitive organizations, innovation is established as a crucial facet of their business strategy. The capability to produce profits through the sale of innovative products that is taken account as the sustainable basis in global markets (Barney, 1985).

Discontinuity of being innovative in technology management influences the capability of an organization in obtaining or maintaining the positive organization performance. Chan and Huang (2012) mentioned that technological innovations affect organizational performance.

The challenges occur when individuals and their organizations focus their attention on routine tasks. As a result, they do not invest time and resources in generating new ideas (Van de Ven, 1986). While innovation is often achieved through shaping ideas and make them concrete and valuable to organizations, in large and successful organizations, it is more difficult to encourage employees to innovate (Ibid). Innovation involves the reflection and resources between alteration and extension of current capabilities and investigation substitutes (March, 1991).

Successful large business firms encounter numerous challenges in inspiring peoples (employees, suppliers and consumers) to come up with new ideas for innovative processes and systems (Damanpour, 1991; Amabile, 1988, Bisbe & Otley, 2004; Jørgensen & Messner, 2009, Pavie, Carthy, 2013; Owen, Bessant, Heintz, 2013, Von Schomberg, 2013; Owen, 2009; Owen, Macnaghten, Stilgoe, 2012).

## **Literature Review**

### **1. Performance Management:**

Performance management is a strategy that contributes to organizations' sustained success by developing and improving the potential of the human resource in the organization (Reynolds & Ablett, 1998). This type of management centrally focuses on performance improvement as a means to achieve individual, team, and ultimately organizational effectiveness (Armstrong, 2004). Perceiving people, not capital, as the key factor that provides organizations with a competitive advantage, performance management thus emphasizes transforming people's capabilities into effective performance by diminishing barriers and motivating the human resource (Kandula, 2006; Reynolds & Ablett, 1998). Performance management system provides a complete and skill management process for organizations to evaluate the performance consequences of organizations and employees. Worker performance might be expected, assessed and inspired. Macky and Johnson (2000) illustrated that the significance of the performance management system is endlessly rising organizational performance, and this is often achieved by improving individual worker performance.

### **2. Organizational Culture:**

A well-established culture is the key to satisfying performance. Therefore, organizational culture plays a more active and direct role in performance management (Kandula, 2006). As Ogbonna and Harris (2000) examined that the organizations which have a strong and positive culture can encourage an average employee to perform tasks and achieve the goals of company. On the other hand, organizations with an undesirable culture may make an outstanding employee underperform and thus end up with no accomplishment. (Magee, 2002; Murphy & Cleveland, 1995) investigated organizational culture as it directly affects how employees perform. Furthermore, innovation has a great impact on generating revenue for organizations and help to sustain it on a competitive environment (Yuan & Woodman, 2010).

Innovation:

Innovation has a profound impact on the business formation of an organization which leads

on unceasing innovation and productivity as vital tools for fostering competition (Gök, 2014). Innovation is not always considered as a new invention, in many cases it is a new solutions or ideas that come from a different country or an organization. Although it may not be the original solution, but it can significantly impact the market (Roberts & King, 1996). Innovation agencies around the world are more concerned on opportunities available for investment in technological industries driven by innovation but at the same time they consider contests through investment policies. The socioeconomic encounter involve technical, social and universal modifications to help improve industries and adopt to the changes (Foray et al. 2012) Innovation through technology has helped organizations of all kinds, particularly public organization such as the US Department of Defense which supported and finance Arpanet (the origin source of the internet) which accredited internal organizational subtleties and cultivated research and education (Abbate 1999; Block 2008). Furthermore, Innovation policy study has proven the impact of innovation on industries' economic improvement (Fagerberg, Srholec, and Verspagen 2010). Today innovation policy affects both short term and long term sustainable progression of organizations and because of its important innovation policy now researched by scholars and researchers across the world (Christensen and Fagerberg 2016).

### **3. Organizational Performance:**

Cainelli et al. (2006) observed the affiliation between innovation and performance in details and determines that there is a two-way relationship, innovative corporations win over non-innovative ones, furthermore the most creative innovator corporations, are more intended to innovate and distribute possessions to innovation.

There is a positive relationship between innovation and performance particularly to improve efficiency and development. Consumers have positive impact on innovation and innovation positively affects performance (Leiponen, 2005; Tether, 2005).

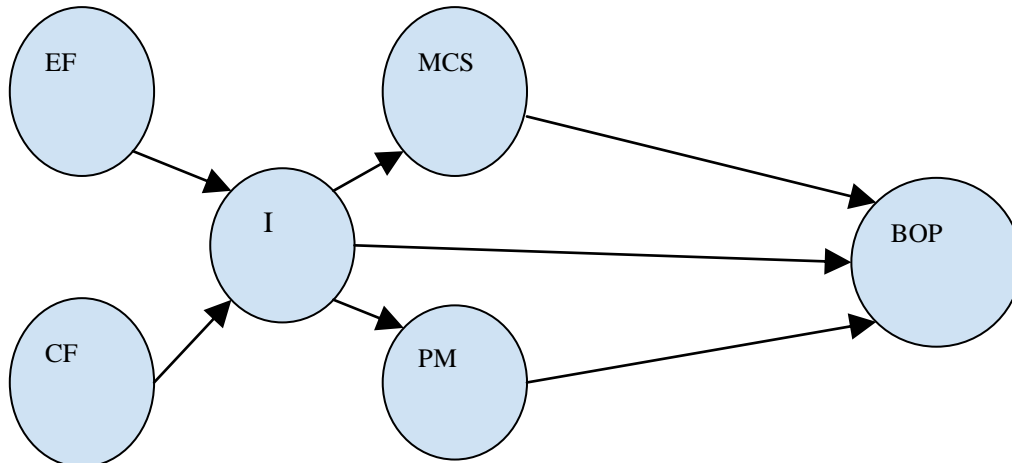
### **4. Management Control System:**

Management control systems develop over time. Traditional management accounting measures had lost their significance to management planning and control as management accounting failed to keep pace with business environment and organizations landscape and were frequently not suitable and up to date to be appropriate for planning, decision making and control” It needs to keep up with the changing information and process and control needs of an organization (Johnson & Kaplan, 1987). Management control system has to be designed explicitly to facilitate organizational strategies to achieve competitive advantage and desirable performance (Langfield-Smith, 1997). When an organization’s environment, strategies, and internal structures and systems go hand in hand, high organizational performance will yield dividends (Govindarajan, 1988).

### **5. Environmental Factors:**

There are many frameworks which demonstrate the reaction of companies when competitive environment change (Peljhan et al., 2008). Miles and Snow (1978) argued that corporations respond to a shifting environment, they acknowledge common strategies and they identified them in four categories labelled defender, prospector, analyzer and reactor which defender and prospector are considered to be in the end of continuum. They also claimed that defender accentuate cost control, tendency, observing and competence rather than scanning the environment for new opportunities. In divergent, prospectors use inclusive development and measure performance more instinctively.

**Research Model/Framework**



**1. Research Objectives**

Driven by my research questions and hypotheses, this research has following objectives:

- To identify the effects of cultural and economic factors in innovations.
- To investigate the impact of performance management and control systems on the business firm's organizational performance.
- To examine the challenges encountered by the business control system and management performance.
- To gain a better understanding of the relationships and interface between innovations, control systems and their individual and combined impact in performance management.
- To analyze the determinants, factors and variables that influence the efficiency of business firm's performance.

**2. Research Questions**

The following research questions have been framed for the pursuance of this study:

- To what extent control systems facilitate Innovation
- To what extent Formal Process for Innovation will facilitate financial returns
- Are there any difference in causality of different balance score card dimensions in the innovation?
- What factors contribute to the responsiveness in organizations within innovative industries?

**Hypotheses**

- H1: There is a positive relationship between innovation and control system.
- H2: There is a positive relationship between the innovation and performance management.
- H3: There is a positive relationship between Innovation and business organization performance.
- H4: There is a positive relationship between control system and business organization performance.
- H5: There is a positive relationship between performance management and business organization performance.
- H6: There is a positive relationship between cultural factor and innovation.
- H7: There is a positive relationship between economic factors and innovation.

### **Research Methodology**

Scholar will employ both quantitative and qualitative methods to collect primary data for the pursuance of this study. Questionnaire as well as structured interviews will be used to examine and inspect the relationships between dependent, independent, mediating and moderating variables and to examine their individual and combined affects on a business firm's organizational performance.

#### **1. Population (Sample)**

Participants (subjects) will be senior leaders, and managers (individuals with more than 10 years of experience) affiliated with different large firms of different industries headquartered in different geographical regions of the world.

Only firms with annual revenues of more than 500 million dollars and having global operations would be selected for this study.

#### **2. Questionnaire Construction:**

Constructs for the questionnaire would be retrieved from similar scholarly studies conducted in the past, and new constructs would be identified and gleaned from interviewed conducted with some of the top players in different industries on the global stage. Such firms and their respective leaders and managers would hail from different cultural and economic systems such as North America, European Union, Asia Pacific and Middle East regions.

#### **3. Expected Research Contribution**

This study is expected to make a globally profound contribution (both in terms of theoretical and practical dimensions) by developing a scholarly model for estimating and measuring innovations and their impact on the global entrepreneurship, consumer satisfaction, profitability, control systems, management performance, and thereby overall organizational performance across economic and cultural ecosystems.

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## EFFECTS OF CONTINUOUS IMPROVEMENT AND CREATIVE INTERNAL CLIMATE ON ORGANIZATIONS IN A DEVELOPING COUNTRY ENVIRONMENT

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### Abstract

This study investigates the competitiveness and performance of organizations based on their ability to adopt incremental innovation or continuous improvements (CI) and create creative climate in their efforts to be adaptable to change. We are able to confirm the influence of CI, and creative internal climate on the competitiveness and performance of Saudi Arabian organizations. We find some positive effect of CI and competitiveness on the performance of the organizations. Some implications of the findings to practice are also given.

**Keywords:** *Continuous improvement, Incremental innovation, Creative internal climate, Competitiveness, Organizational performance, Saudi Arabia*

### Introduction

An organization's ability to generate innovation continuously in the present era of globalization and highly competitive business environment is crucial for it to attain a sustainable competitive advantage (Montes *et al.*, 2004; Brennan and Dooley, 2005; Bowen and Schneider, 2014). Competition among firms resulting from changing business environment makes it necessary for firms to be more innovative (Deng *et al.*, 2012). Incremental innovations or continuous improvements (CI) are of strategic importance for organizations in their effort to achieve and sustain their competitive advantage (Bessant, Caffyn, & Gallagher, 2001; Lin, Su, & Higgins, 2006). Through CI organizations can generate long-lasting growth spurts (Durmusoglu *et al.*, 2013). Organizations that implemented various types of innovations including CI have been found to be more innovative and competitive than those that did not (see Narayanan *et al.*, 2008; Zain, 1995a, 1995b; Zain & Rickards, 1996). In some developed and developing countries of Asia, there have been many initiatives or policies carried out by their government or institutions aimed at making their organizations more technologically capable and innovative (see Baark, 2007; Debroux, 2008; Intarakumnerd and Chaminade, 2011; Rasiah and Shan, 2016). Nevertheless, in another example, Dekkers (2009) reported that Chinese companies have not yet adopted or developed adequate practices for innovation.

Innovation is the successful implementation of novel and useful creative ideas offered by employees when their creativity is required at work (Amabile, 2004). Innovation in an organization does not happen by accident but by conscious efforts made by certain individuals in certain situations inside the organization (Amabile, 1997). In order for innovation to happen the working climate or the climate inside the organization must be creative. Creativity is a relevant input or a prerequisite for innovation in organizations (Amabile 1998). It is commonly believed to emerge from an interaction of the person and the situation (Hunter *et al.*, 2007). In the current study, we are examining the linkage between CI adopted and implemented by Saudi Arabian organizations, where their internal climate is conducive to such adoption and implementation, with their competitiveness and performance. In other words, we investigate the competitiveness and performance of the organizations based on their ability to adopt CI and to create a creative internal climate in their organization in their efforts to be adaptable to change in a turbulent environment.



## Theoretical Background and Hypotheses

### 1. Continuous improvements (CI)

Organizations need to establish innovation routines in the form of CI in order to sustain their organizational capability (Bessant, Caffyn, and Gallagher, 2001). Tavassoli and Karlsson (2015) found that firms that chose to implement more than one strategy of CI were able to improve their future productivity as opposed to those that chose to implement only one strategy. They also stressed the need for organizations to have an appropriate mix of both technological and non-technological innovations. Certain types of firms' collaborative structures as well as inter-firm collaborative efforts have been found to result in more innovative activities or innovation among firms (Opper and Nee (2015; Zhang and Cantwell, 2011). In the United Arab Emirates, Mohamed (2002) found that various incremental changes implemented throughout organizations in the country were important predictors of group innovation, which could influence the competitive position of the organizations. Furthermore, large organizations that frequently introduced incremental technological improvements were found to be more effective competitors in their markets (McKendrick & Wade, 2009). Thus far, the literature has provided very limited guidelines as to what is the right innovation strategy that can help improve the performance of a firm (Le Bas and Poussing, 2013; Tavassoli and Karlsson, 2015). In the past, there have been more research focus given to technological innovations as compared to non-technological innovation even though Schumpeter (1934) has long suggested the need for both. Thus, it is not adequate for organizations to rely just on science and technology-based radical innovations, but they also need to carry out CI in order to remain competitive. In other words, in addition to occasionally carrying out few big or drastic changes, organizations also need to be involved with managerial and organizational improvements in all their functional areas on a continual basis (Zain, 1995a; Hobday, 1996; Hallgren et. al, 2010) as earlier identified by Schumpeter (1934).

In order to develop and sustain competitive advantage an organizations need to be able to innovate in many ways (Tidd *et al.*, 2001). Organizations not only need to introduce radical innovations but they also need to introduce small changes and to do new and better things on a continual basis (Slater and Narver, 1995). They also need to always manage their innovation process (Brown, 1997; Humphreys et al., 2005). Hence, our first hypothesis:

H1: CI implemented by an organization influences its competitiveness.

### 2. Creative Internal Climate and Competitiveness

Innovation in an organization is contingent upon a series of creative efforts in various functional areas and across different fields of specialization (Udwadia, 1990). Organizational internal climate is "a conglomerate of the attitudes, feelings and behaviour which characterize life in an organisation" (Ekvall *et. al*, 1983, p. 3). An organization needs to have a creative internal organizational climate or work environment in order to foster the right atmosphere for creativity and innovation to flourish (Ekvall and Ryhamnar, 1999; Kattara and El-Said, 2013; Yusuf, 2009). Past research has defined creativity as an outcome, concentrating on the production of new and useful ideas pertaining to products, processes, procedures, and services (e.g., Amabile, 1988; Ford, 1996; Oldham & Cummings, 1996; Shalley, 1991; Zhou, 1998). Thus, an organization needs to develop an internal climate that can promote creativity (Ahmed, 1998), and that can give a strong external focus on its many stakeholders (Cagliano *et al.*, 2001). Creative work environment has been found to influence creative outcome and organizational competitiveness (Dul and Ceylan, 2010). At the individual level, creativity in the organization is generally considered essential for fostering organizational innovation, an important ingredient for long-term organizational growth and survival (Amabile, 1988;

Kanter, 1983; Tushman & O'Reilly, 1997). Many researchers have suggested that a person can find creative insights or ideas by questioning his or her assumptions (e.g., Adam, 1982; Runco, 2011). By doing so, one can shift perspectives on a problem, which can result in a creative insight or idea (Runco, 2015). Creativity of employees in organizations has been found to be more effective if it is supported by organizational interventions that focus on training of supervisors and work-group members to support creativity than broader and less focused interventions (Diliello *et al.*, 2011). In one study conducted by Mayfield and Mayfield (2010) on garden variety creativity in the US, they found that in order to maximize workers' creative outputs, managers need to improve all aspects of their organizations' creative environment. Interestingly, research has found that in a climate of strong organizational innovation, time pressure hinders creative outcomes whereas in a climate of weak innovation, time pressure enhances the outcomes (Hsu and Fan, 2010). Type and role of leadership have also been found to influence creativity differently (Shalley and Gilson, 2004; Si and Wei, 2012). For example, Si and Wei (2012) found transactional leadership as opposed to transformational leader to be more effective in employees' creative performance. Researchers have suggested some ways in which climate can be developed in Asia and elsewhere (see Bowen and Schneider, 2014; Hoang *et al.*, 2015).

In Malaysia, Ismail (2005) found a significant relationship between creative climate and innovation implementation by organizations. Suliman and Al-Shaikh (2006) found that when quite a bit of conflicts are present among employees within an organization it tended to reduce the employees' readiness to create and innovate. Aleksic *et al.*, (2015) found that a preference for creativity among employees in an organization has resulted in higher creative outcomes. Conversely, a lack of creativity among employees would stifle new ideas and innovations (Amabile, 1988; Eyton, 1996; Goldsmith, 1996). A more recent study in Spain found that the relationship between creative climate and innovation is not a linear but an inverted "u-shaped" relation, which indicates that beyond a certain point the benefits from creativity decreases (del-Corte-Lora *et al.*, 2015). In measuring organizational creative climate of an organization, Ekvall *et al.* (1983) constructed and validated an instrument called the Creative Climate Questionnaire (CCQ). The CCQ, which is used to assess the creative climate of Saudi Arabian organizations in this study contains 50 questions that are categorized into ten indices: challenge/motivation, conflict, debates, freedom, idea support, idea time, liveliness/dynamism, playfulness/humor, trust/openness, and risk taking.

Yepes *et al.* (2016) pointed out that organizations must modify their attitudes towards innovation in order to sustain their competitiveness. In giving a holistic definition of competitiveness, Feurer and Chaharbaghi (1994, p. 58) say:

"Competitiveness is relative and not absolute. It depends on shareholder and customer values, financial strength which determines the ability to act and react within the competitive environment, and the potential of people and technology in implementing the necessary strategic changes. Competitiveness can only be sustained if an appropriate balance is maintained between these factors which can be of a conflicting nature."

Thus, there remains to be seen whether there is a link between creative climate and competitiveness in organizations. In the UAE, Politis (2005) found that providing a right stimulating work environment resulted in both creativity and productivity in an organization, which could enhance its ability to compete in the market place. Hence, the next hypothesis:

H2: Creative internal climate of an organization influences its competitiveness.

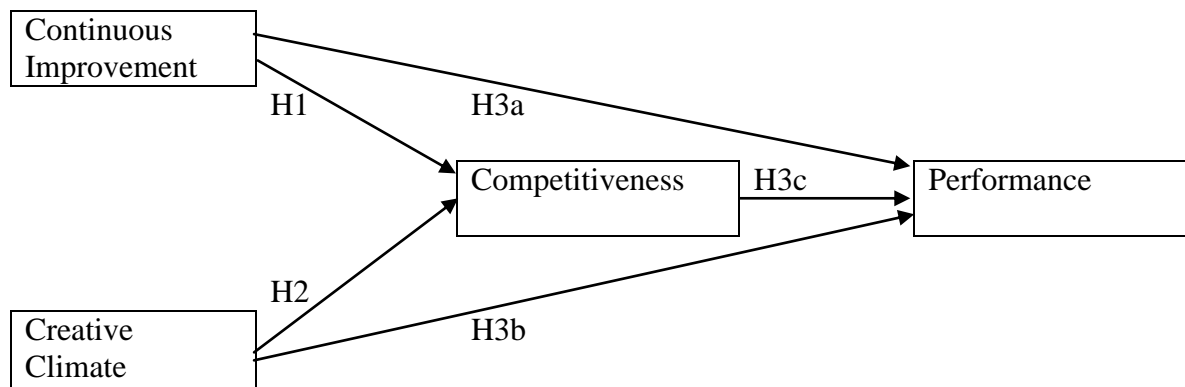
### 3. Performance

Creativity and innovation in any organization are vital to its successful performance (Anderson *et al.*, 2014). Creative organizational climate has been associated with several

positive organizational outcomes, such as increased organizational success and higher job satisfaction, as well as overall organizational performance (Koles and Kondath, 2015). Also, management of innovation is crucial to the performance of organizations. Several factors that are important for the success of innovation management were provided by Zairi (1995). Chen and Huang (2010) found that an increase of creative workforce density of an organization resulted in an increase in its innovation performance. Past studies have also shown that a country's innovation policies and enhanced capabilities have resulted in increased organizational performance (Giroud *et al.*, 2012; Yuan *et al.*, 2016). Furthermore, Fores and Camison (2016) found that knowledge accumulation of an organization and its size positively affect its incremental innovation performance. Thus, knowledge management is very important for an organization in its effort to improve performance (Leipone, 2006). In addition, Hine and Ryan (1999) found that more innovative organizations are of greater potential value to their industry than less innovative ones. A recent study found that organization performance is mediated by innovative organizational culture (Park *et al.*, 2016). Thus, a culture that stresses on CI is of paramount important to an organization. Hence, our final set of hypotheses for this research:

- H3a: CI carried out by an organization positively influences its performance.
- H3b: Creative climate of an organization positively influence its performance
- H3c: Competitiveness of an organization positively influences its performance.

Figure 1 shows the research framework and the various hypotheses of this research.



**Figure 1: The Research Framework**

**Methods**

We carried out descriptive analyses using the SPSS and structural equation modeling (SEM) software to establish the reliability and validity of the instrument used in this study as well as the causal relationships between the constructs. We used the AMOS software for SEM, which includes covariance structural causal data analysis method because it can simultaneously test the relationships under study (Bollen, 1989; Bollen and Long, 1993). These methods include both a measurement and a structural model, and are capable of evaluating latent variables and the overall model fit. The overall goodness-of-fit statistics are also more comprehensive as compared to other traditional methods (Ramanathan, 1989).

When using SEM, some broad guidelines about absolute sample sizes need to be followed: small sample size is less than 100, medium sample size is between 100 and 200, and large sample size is more than 200 (Hair *et al.* 2010; Hulland *et al.*, 1996; Kline, 1998). Normally, models with many parameters require a larger sample than more parsimonious models (Hulland *et al.*, 1996; Kline, 1998) even though there are no clear guidelines as to what

constitutes an ‘adequate’ sample size (Baumgartner and Homburg, 1996). The sample size of 135 respondents used in this research is appropriate for the complexity of the research model shown in Figure 1.

The questionnaire used in this research has five sections: (1) 18 statements that assess the CI initiatives carried out by the organizations within the last five years from the time of the survey; (2) 50 statements, adapted from Ekvall’s *et al* (1983), that assess the creative climate of the organizations; (3) 10 statements that assess the competitiveness of the organizations; (4) 4 statements that assess the performance of the organizations; and (5) a section that gathers the respondent’s demographics. The questionnaire used 6-point Likert-type scale that ranges from 1 (Strongly Disagree) to 6 (Strongly Agree). We used the even-numbered scale in order to discourage the respondents from choosing a mid-point scale in order to appear more socially acceptable in giving their answers (Garland, 1991). We carried out back-to-back translation procedure of the questionnaire recommended by Brislin (1970) in order to ensure the correct meanings of the items in both English and Arabic languages.

We employed a self-administered questionnaire method for the survey. The questionnaires were conveniently distributed to 145 Executive MBA students from two campuses (in Jeddah and Qassim) of a public university in Saudi Arabia in 2012. The questionnaires were distributed to the students during their class hours and they were asked to return the completed questionnaire within two weeks. Out of this exercise, 135 returned questionnaires were usable. Majority of the respondents were from service industry (67.4 percent) and holding either middle or lower level management position (50.4 percent). Most of the organizations were limited liability companies (39.4%), followed by private corporations (28.4%), sole proprietorships (14.6%) and partnerships (13.5%).

**Results**

Based on our preliminary data analysis, we found that all the estimated correlations of the constructs (CI, creative climate, competitiveness, and performance) ranged from 0.41 to 0.80 and were statistically significant ( $p < 0.01$ ). Our assessment of the creative climate of the organization based on Ekvall’s CCQ turned out that, with the exceptions of challenge/motivation, freedom, and conflict, all the organizations were found to be reasonably innovative (Table 1).

Based on our statistical analysis using SEM we found that the model's key statistics to be good (Table 2) and thus, we could safely conclude that the model is valid and we could thus continue to test the hypotheses.

**Table 1. Creative Climate Based on Ekvall’s CCQ Indices<sup>1</sup>**

Variables	Means	“S”	“P”
1 Challenge (CCM)	1.8	1.8	2.3
2 Freedom (CFR)	1.7	1.5	2.1
3 Idea support (CIS)	1.8	1.1	2.1
Liveliness (CLD)	1.8	1.3	2.2
5 Humor (CPH)	1.8	1.3	2.3
6 Debates (CDB)	1.8	1.1	1.5
7 Trust (CTO)	1.7	1.2	1.7
8 Conflicts (CCF)*	1.8	1.5	0.7
9 Risk taking (CRT)	1.8	0.6	1.8
Idea time (CTM)	1.7	0.9	1.5

Note: Means based on Ekvall's results:

S = Standard Companies; I = Innovative Companies

\* Reverse score

<sup>1</sup>The original 6-point scale was converted to a 3-point scale in order for it to be consistent with the scale used by Ekvall *et al* (1983).

**Table 2. Goodness of fit indices for structural model based on Hair *et al.* (2010)**

Fit indices	Recommended value	Structural model
$\chi^2/df$ (180.09/112)	> 3.00	1.61
$P_{value}$	Significant, $P > 0.0001$	0.00
CFI	> 0.95 or better	0.97
RMSEA	< 0.08 with CFI = 0.95 or higher	0.05

As shown in Table 2, we represented the strength of the relationships among the constructs using the respective standardized path coefficient based on Cohen's (1988) recommended standardized path coefficient ( $\beta$ ):  $\beta < 0.10$  indicates a "small" effect;  $\beta = 0.30$  indicates a "medium" effect; and  $\beta = 0.50$  or more indicates a "large" effect.

The results of the hypotheses testing are shown in Table 3. From this table we can see that, as expected, CI has significantly effects on both organization competitiveness (H1:  $\beta = 0.21$ ;  $t_{value} = 2.16$ ;  $P = 0.03$ ) and performance (H3a:  $\beta = 0.16$ ;  $t_{value} = 1.98$ ;  $P = 0.05$ ). We also found that creative organizational climate has a significant medium effect on competitiveness (H2:  $\beta = 0.36$ ;  $t_{value} = 3.37$ ;  $P = 0.00$ ). Thus, H1, H2, and H3a are confirmed. However, there was no significant relationship between organizational climate and performance (H3b:  $\beta = 0.04$ ;  $t_{value} = 0.51$ ;  $P = 0.61$ ), and thus, H3b is not supported. Finally, the findings indicate that the path between organization's competitiveness and performance is statistically significant. We found that the organizations' competitiveness tended to have a large and significant positive effect on organizations' performance (H3c:  $\beta = 0.77$ ;  $t_{value} = 6.40$ ;  $P = 0.00$ ), thus confirming H3c.

## Discussion

Some interesting results have emerged from this study on organizations in the developing country environment of Saudi Arabia. Firstly, the study has shown the importance of CI to be adopted and implemented by organizations in the country. By adopting and implementing this type of innovation, it would have a direct influence on the competitiveness as well as on the performance of the organizations. Thus, this study has confirmed in the developing of Saudi Arabia what other researchers have found elsewhere (for e.g. Slater and Narver, 1995; Brown, 1997, Terzvioski, 2002; Humphreys *et al*, 2005), i.e., the positive relationship between CI and competitiveness and performance of an organization. Secondly, this research has also found the significant contribution of an organization's creative internal or working climate on its competitiveness. Of seven of the ten creative climate variables or indices (the exception being challenge, freedom, and conflicts), the Saudi Arabian organizations are rated either as more than "standard companies" or as "innovative companies". In other words, in terms of idea support, liveliness, humor, debates, and trust, the scores obtained by the organizations are above the "standard" rating while in terms of risk taking, and idea time, the scores obtained by the organizations are rated as "innovative" companies. Thus, from this study we have found three specific areas the Saudi Arabian organizations need to work on in order to improve their creative climate: challenge/motivation, freedom, and conflict. In other words, in term of challenge/motivation, based on what was defined by Ekvall *et al.* (1983), Saudi

Arabian organizations need to encourage more emotional involvement of their employees in the operations and goals of their organization (Zain and Rickards, 1996). Similarly, in term of freedom, Saudi Arabian organizations need to allow more independence in the behavior practiced by the employees of their organizations. As for conflict, there is a need for Saudi Arabian organizations to lessen the occurrence of personal and emotional tensions among their employees.

**Table 3. Results of the hypotheses testing**

Path			Standardized path coefficients	t-value	p-value	Results	
Competitiveness	←	CI	0.21	2.16	0.03	H1:	Accepted
Competitiveness	←	Creative Climate	0.36	3.37	0.00	H2:	Accepted
Performance	←	CI	0.16	1.98	0.05*	H3a:	Accepted
Performance	←	Creative Climate	0.04	0.51	ns	H3b:	Rejected
Performance	←	Competitiveness	0.77	6.40	0.00	H3c:	Accepted

Note: Significant level at  $p < 0.01$  and  $p < 0.05^*$  (two-tailed); CI = Continuous improvements

Finally, as expected we found a positive influence of organizational competitiveness on the organizations' performance. Many previous researchers (for e.g., see Zain and Rickards, 1996; Lin and Chen, 2007; Santa *et al.*, 2010) found that innovative organizations performed better than the non-innovative ones. Thus, this research confirmed such a finding in the Middle Eastern developing country environment of Saudi Arabia. Nevertheless, implementing continuous improvement is not necessarily an easy thing to do since there are some barriers which an organization needs to overcome (Audretsch *et al.*, 2011).

### **Implications and Conclusion**

Through this research we are able to confirm as well as disconfirm the effect of CI, and creative internal or working climate on the competitiveness and performance of Saudi Arabian organizations. First, we are also able to confirm the positive influence of CI and creative internal climate on the competitiveness of the organizations. Second, we found positive effects of CI and competitiveness on the performance of the organizations. Third, we found a positive relationship between competitiveness and performance of the organizations. Thus, from these findings, a number of practical implications could be derived. First, it is important for Saudi Arabian managers to adopt and implement CI in their organization, in addition to implementing other types of innovation, such as technological or radical innovations (Tidd *et al.*, 2001; Coccia; 2015). Having a culture of CI is one of the ten commandments of quality in an organization (Antony, 2014). In carrying out CI, Quesada-Pineda and Madriga (2013) suggest five factors that affect the long-term sustainability of the CI process: change management, strategic planning, knowledge management, performance management, and sustainability of the CI process. Secondly, as demonstrated in other parts of the world, Saudi Arabian managers need to create an internal environment or working climate where creativity can be nurtured among their employees, as indicated by the ten creative climate measures or indices shown in Table 1. Creating an internal climate that is creative would help make their organizations to be more competitive vis-à-vis their rivals. This, in turn, would help improve the performance of their organizations. Previous researches in other parts of the world have suggested some frameworks for enhancing organizational creativity

and sustainable organizational innovation and organizational performance (see Brennan and Dooley, 2005; Hannevik *et al.*, 2014; Rezaei *et al.*, 2015). In term of climate, we have also found three specific areas in which Saudi Arabian managers need to work on in order to improve the creative climate of their organization: to provide more challenge/motivation, to provide more freedom, and to reduce conflicts among their employees. Finally, we have demonstrated the usefulness of the Ekvall's CCQ in assessing the creative climate of organizations in a developing Gulf Cooperation Council (GCC) country environment. Just like most other studies, this study is not without its limitations. The main limitation is that the sample is rather small and the respondents were confined to only executive MBA students from two cities in Saudi Arabia. Also, the use of convenience sampling method in itself has its own limitations. In order to strengthen or to further confirm the findings of this study, future studies need to collect data from bigger and wider spectrum of the Saudi Arabian population across the country.

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## BEHAVIOURAL COMPLEXITY SHAPING AMBIDEXTROUS BEHAVIOURS AMONG SMES IN MALAYSIA

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### Abstract

Although research on ambidextrous behaviour has surfaced over the recent years and were found to positively influence business performance, antecedents of individual ambidexterity are still largely unknown. This study focuses on the effect of behavioural complexity on exploitative and explorative behaviours ultimately leading to the development of individual level ambidexterity. Structured questionnaires have been collected from 183 managers of SMEs in mainly Selangor and Kuala Lumpur. Using partial least square, our result demonstrates that collaborate, compete and control behavioural roles positively predicts exploitative behaviour while collaborate, control and create behavioural roles positively predicts explorative behaviours. In addition, both exploitative and explorative behaviours were found to significant for ambidextrous behaviours.

**Keywords:** *Ambidextrous behaviour, behavioural complexity, exploitative behaviour, explorative behaviour, small and medium enterprises (SMEs)*

### Introduction

Studies has shown that the possession of dynamic capability is empirically critical in both sustaining the performance of the business. Wilden et al., (2016) argue that dynamic capabilities exist on multiple level within an organisation (i.e. individual, teams, business unit and corporate level) which in turn influence on organisational outcome (such as innovation, performance and competitive advantage). Tushman and O'Reilly (1996; 2013) argue that in order for firms to develop dynamic capabilities, firms should develop ambidexterity in addressing both short and long term needs Dynamic capability is related to ambidexterity, which in short can be explained as firm simultaneously pursue both exploitation and exploration capability for short-term and long-term survival. Ambidexterity was presented as a possible solution to increasing innovative effort in an organisation. Junni et al., (2013) analysis showed that ambidexterity were found to be consistently contributing in the improvement of firm performance. The purpose of this paper is to extend the understanding of antecedents in the development of ambidexterity that have underscored the importance of ambidextrous behaviour in an organisation

### Literature Review on Behavioural Complexity and Ambidextrous Behaviour

The concept of behavioural complexity may best explained with the concept of cognitive complexity (Denison et al., 1995; Rosing et al., 2011; Lawrence et al., 2009) due to the series of paradox and contradiction (Denison et al., 1995) that entails on the individual. According to Lawrence et al., (2009), the frameworks consist of flexible versus stable structure and internal versus external focus and with these four structure, together it forms four quadrant which consist of compete (rational goal criteria), control (internal process criteria), collaborate (human resource criteria) and create (open systems criteria). Compete behavioural roles refers to planning, goal setting and productivity, collaborate behavioural roles refers to cohesion,

morale and training, while control behavioural roles refers to information management, stability and control, and finally create behavioural roles refers to adaptation and growth (Lawrence et al., 2009).

Behavioural complexity demand individuals to be both loose and strict, creative and routine and formal and informal at the same time. The logic underlying behavioural complexity traces back to the competing values framework (See Lawrence et al., 2009). In an attempt to define behavioural complexity, Denison et al., (1995) explains it as someone who has the ability to “perform the multiple roles and behaviours that circumscribe the requisite variety implied by an organisational or environmental context.

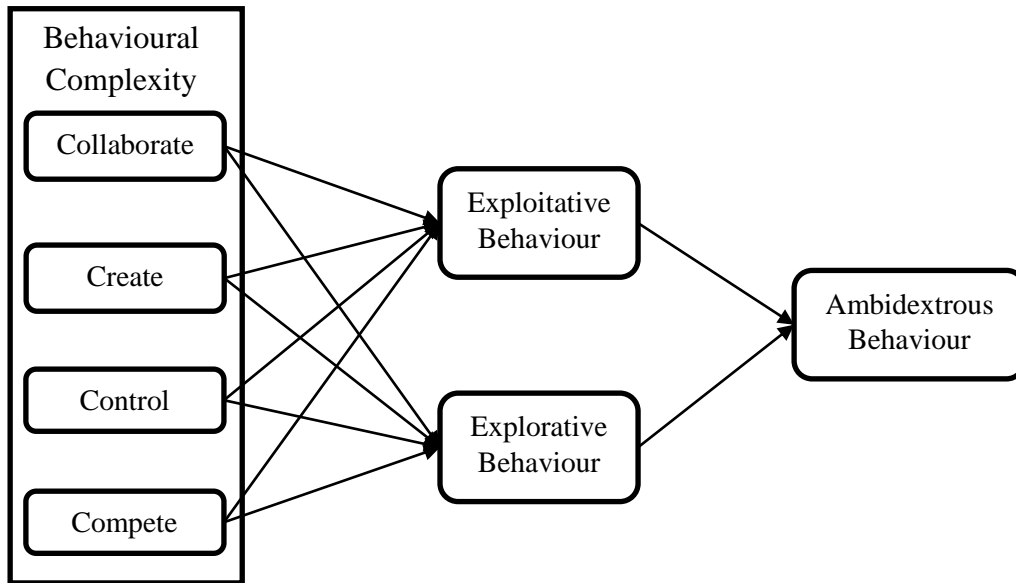
Raisch et al. (2009) remarked that ambidextrous individuals must manage contradictions and conflicting goals, engage in paradoxical thinking and fulfil multiple roles. Very often individuals are required to play a crucial role in finding the right balance between exploration and exploitation is important to encourage ambidexterity in preventing obsolescence. Exploitation behaviours refers toward the refinement and extension of existing assets, competencies, knowledge, efficiency, selection, implementation and implementation, while exploration behaviours refers to gaining broader knowledge, advance new or alternative opportunities, searching, risk taking, experimentation and flexibility (March, 1991; Benner and Tushman, 2003; Gupta et al., 2006; Jansen et al., 2008; O’Reilly and Tushman, 2013). At individual level, explorative increases the breadth of knowledge, thus creating prospects for radical changes, while exploitative increases the depth of knowledge, which typically leads to incremental development and enhanced reliability (Benner and Tushman, 2003).

Achieving ambidexterity on an individual level is the most difficult to attain, due to the contradicting demand faced by the individual (Gupta et al., 2006; Kauppila and Tempelaar, 2016). Individual resources such as time and knowledge are limited (March, 1991) which restrict and individual in developing both capability (i.e. exploitation and exploration) adequately (Ambos et al., 2008; Gupta et al., 2006). Raisch et al., (2009) suggested that performing both explorative and exploitative action are heavily influenced by individual characteristics.

While studies done by Kauppila and Tempelaar (2016) found that individual general self-efficacy positively influence learning orientation which then motivates employees to engage in ambidextrous behaviours. This indicates that individual level behaviours are influence by past knowledge and individual characteristics. Building upon past studies, it is expected that employees perform ambidextrous behaviours, however the mechanism in shaping ambidextrous behaviours remains unclear (See Lawrence et al., 2009). Thus, the main focus of this this study is to improve the understanding of complex and contradicting task perform by individual in cultivating both explorative and explorative behaviours.

It is important to note that, due to the nature of how SMEs operates, work roles are often shared among the entrepreneurs and its motivated employees (Carmeli and Halevi, 2009). The presents a particular challenge, where individuals of all levels in the organisation are now required to oscillate between the four behavioural roles as a response to different situation in order to achieve both exploitative and explorative behaviours. Finally, our conceptual model acknowledges that behavioural complexity plays a central role for individual in their effort of sensing, seizing and reconfiguring daily work roles (See Figure 1)

Figure 1: Conceptual Model



Hence, in this study we propose the following hypotheses:

- H1: Collaborate behavioural roles positively influence exploitative behaviour
- H2: Collaborate behavioural roles positively influence explorative behaviour
- H3: Create behavioural roles positively influence exploitative behaviour
- H4: Create behavioural roles positively influence explorative behaviour
- H5: Control behavioural roles positively influence exploitative behaviour
- H6: Control behavioural roles positively influence explorative behaviour
- H7: Compete behavioural roles positively influence exploitative behaviour
- H8: Compete behavioural roles positively influence explorative behaviour
- H9: Exploitative behaviour positively influence ambidextrous behaviour
- H10: Explorative behaviour positively influence ambidextrous behaviour

### Methodology

This study is quantitative in nature targeting managers in SME companies were approached around Kuala Lumpur and Selangor, Malaysia. In determining the sample size, Hair et al., (2011; 2013) suggested a rule of thumb 10 times the largest number of structural path directed at a particular construct in the structural model. Furthermore, Kline (2005) also recommended another way to estimate the minimum samples size which is power analysis by using G\*Power 3.1 program (Faul, et al., 2009) Using this software, the estimate sample size would be 98 respondents with the power at 95%, the alpha at 0.05 with the medium effect size of 0.15. In short, questionnaire were distributed through email and 183 useable responses were collected.

Behavioural Complexity were captured using the scales developed and validated by Lawrence et al., (2009). The scale consist of 36 measuring four different behavioural roles (i.e. create, compete, collaborate and control). As for explorative and exploitative behaviour, fourteen items from Mom et al., (2009) scale to capture individual explorative and exploitative behaviours. Similar to Mom et al., (2009), both explorative and exploitative behaviours of an individual by asking the extent to which they pursue a particular activities in the last year. Finally, in capturing ambidextrous behaviour, twelve items from Lubatkin et al., (2006), that

8 items were originally adapted from He and Wong (2004) scale to capture the extent of ambidextrous behaviour. Similarly for exploitative behaviour, explorative behaviour and ambidextrous behaviour as proposed by Lubatkin et al., (2009), an additive model were used to conceptualise the measurement.

Data Analysis

In testing the hypothesis, Partial Least Square (PLS) a second generation multivariate technique (Ringle et al., 2012) which evaluate both measurement and structural model to minimise error variance (Hair et al., 2013). Smart PLS 3 (Ringle et al., 2015) were used to analyse the data. Through our analysis, we observed that the results returned a 14 factor with a total variance explained of 71.87% and the first factor only explained 28.09% which indicated that there is no serious common method bias in this research (Podsakoff et al., 2003).

**Table 1. Items, Loadings, AVE and CR for First and Second Order Construct**

First Order Construct	Second Order Construct	Items	Loadings	AVE	CR
Exploitative Behaviour		AB_Exploit	SIC	SIC	SIC
Explorative Behaviour		AB_Explore	SIC	SIC	SIC
Ambidextrous Behaviour		ADD	SIC	SIC	SIC
	Collaborate	Encouraging Participation	0.84	0.72	0.89
		Developing People	0.89		
		Acknowledging People's Needs	0.82		
	Create	Anticipating Customer's Needs	0.74	0.65	0.85
		Initiating Significant Change	0.79		
		Inspiring People to Exceeds Expectations	0.87		
	Control	Clarifying Policies	0.82	0.67	0.86
		Expecting Accurate Work	0.84		
		Controlling Projects	0.79		
	Compete	Focussing on Competition	0.70	0.62	0.83
		Showing a Hard Work Ethic	0.82		
		Emphasizing Speed	0.84		

*Note.* SIC = Single Item Construct, AVE = Average Variance Extracted, CR = Composite Reliability

**1. Assessment of Measurement (Outer) Model**

As explorative behaviour, exploitative behaviour and ambidextrous behaviour was modelled as a single item measure, validity and reliability assessment were not required to be conducted. As for the second order construct behavioural complexity, firstly we assessed the

first order construct, all items met the minimum cut off value of 0.5 as proposed by Hair et al., (2014) where the outer loadings for all items were ranged from 0.67 to 0.91. In assessing convergent validity, each first order construct were assessed and achieve a composite reliability ranged from 0.83 to 0.89 exceeds the recommended value of 0.7 by Hair et al., (2014) and the value of average variance extracted (AVE) as recommended by Henseler et al., (2009) of above 0.5, as for the construct they were ranged from 0.62 to 0.72 (See Table 1). Subsequently, the discriminant validity was assessed. It was observed that all constructs fulfill Fornell-Larker criterion, where discriminant validity is established if a latent variable accounts for more variance in its associated indicator variables than it shares with other constructs in the same model (Fornell and Larker, 1981) (See Table 2).

**Table 2. Fornell-Larcker Criterion**

	1	2	3	4	5	6	7
1. Ambidextrous Behaviour	1.00						
2. Collaborate	0.42	0.74					
3. Compete	0.41	0.46	0.67				
4. Control	0.31	0.47	0.64	0.69			
5. Create	0.49	0.63	0.61	0.55	0.68		
6. Exploitative Behaviour	0.41	0.41	0.47	0.53	0.37	1.00	
7. Explorative Behaviour	0.50	0.61	0.38	0.28	0.64	0.42	1.00

## 2. Assessment of Structural (Inner) Model

Following suggestion by prominent researchers, bootstrapping method of 5000 re-sampling procedure was used to estimate for standard errors and significant of parameter estimates (Hair et al., 2014b, Henseler et al., 2009) for hypothesis testing. From the analysis, it was found that collaborate ( $\beta = 0.19$ ,  $p < 0.05$ ), compete ( $\beta = 0.19$ ,  $p < 0.05$ ) and control ( $\beta = 0.35$ ,  $p < 0.05$ ) was positively related to exploitative behaviour, while collaborate ( $\beta = 0.38$ ,  $p < 0.01$ ), control ( $\beta = -0.18$ ,  $p < 0.05$ ) and create ( $\beta = 0.49$ ,  $p < 0.01$ ) was positively related to explorative behaviour. Next, both exploitative behaviour ( $\beta = 0.24$ ,  $p < 0.01$ ) and explorative behaviour ( $\beta = 0.41$ ,  $p < 0.01$ ) was found to be positively related to ambidextrous behaviour. In evaluate the structural model, the path analysis was conducted to test the ten hypotheses outline in this study. We calculate  $R^2$ , which indicates the amount of variance explained by the exogenous variable. Based on guideline by Cohen (1988) regarding the effect size which states that  $f^2$  is small (0.02 – 0.14), medium (0.15 – 0.34) and large (more than 0.35) reflects the effect on the endogenous variable. The findings were summarised in Table 3. The  $R^2$  for explorative behaviour was 0.504 which indicates that 50.4% of the variance is explained by behavioural complexity, while as for exploitative behaviour, the  $R^2$  value was 0.33 which indicates 33%. As for ambidextrous behaviour, the  $R^2$  value was 0.30 which indicates 30% variance explained by explorative and exploitative behaviour.

As for the predictive relevance ( $Q^2$ ), which is assessed through blindfolding procedure. This method procedure is relevant for endogenous model with reflective items and single item construct, which intend to examine the capabilities of the exogenous variable in predictive relevance of the endogenous variable (Hair et al., 2014). The findings indicates that the predictive validity for all exogenous were ranged between 0.26 to 0.46 with all exogenous variable predictive value greater than zero, then the model is considered to have predictive validity (Hair et al., 2014).



**Table 3. Std. Beta, Std. Error, T-Value, Effect Size, Variance Explained and Predictive Relevance**

	$\beta$	Std Error	T-Value	Decisions	$f^2$	Effect	$R^2$	$Q^2$
Collaborate -> Exploitative Behaviour	0.19	0.09	2.04*	H1 Supported	0.03	Small	0.33	0.26
Collaborate -> Explorative Behaviour	0.38	0.06	5.85**	H2 Supported	0.17	Medium	0.51	0.46
Compete -> Exploitative Behaviour	0.19	0.11	1.66*	H3 Supported	0.03	Small		
Compete -> Explorative Behaviour	0.02	0.08	0.21	H4 Not Supported	-	-		
Control -> Exploitative Behaviour	0.35	0.12	3.06*	H5 Supported	0.10	Small		
Control -> Explorative Behaviour	-0.18	0.07	2.53*	H6 Supported	0.04	Small		
Create -> Exploitative Behaviour	-0.06	0.12	0.49	H7 Not Supported	-	-		
Create -> Explorative Behaviour	0.49	0.08	5.97**	H8 Supported	0.23	Medium		
Exploitative Behaviour -> Ambidextrous Behaviour	0.24	0.07	3.65**	H9 Supported	0.07	Small	0.30	0.28
Explorative Behaviour -> Ambidextrous Behaviour	0.41	0.07	5.93**	H10 Supported	0.20	Medium		

\* $p < 0.05$ , \*\* $p < 0.01$ ,  $f^2$  = Effect Size,  $R^2$  = Variance Explained,  $Q^2$  = Stone-Geisser Predictive Relevance (Bootstrapping = 5000, Omission Distance,  $D = 7$ )

## Discussion

Kauppila and Tempelaar (2016) argued that individual's ambidextrous behaviours are mainly influenced by factors and it's vital to better understand and determine individual predictors of ambidextrous behaviour. The study focuses on the central question of what influences the development of ambidextrous behaviours?

Members of the organisation demonstrate contradicting behaviours which positively influence both exploitative and explorative behaviours which in turn leads to the development of ambidextrous behaviours. This study also demonstrates that for individuals that perform collaborate, compete and control behavioural roles significantly influence exploitative behaviour while behavioural roles such as collaborate, control and create significantly

influence explorative behaviours. Create behavioural roles is an external focus in a flexible structure is not significantly affecting exploitative behaviours, on the other hand, data shows that it significantly influence explorative behaviour instead. As firm perform exploitative behaviours, organisation's routine and processes would have been establishing for maximum efficiency thus, create behavioural roles seems unnecessary to be carried out in achieving exploitative behaviour. In contrast, compete behavioural roles were found to be not significantly affecting explorative behaviours. Compete behavioural role encourages individuals to focus on competition, showing a hard work ethic and emphasising on speed, which isn't concurrent with explorative activities which might years for an organisation to explore and develop new opportunities domestically or abroad. Thus, performing a range of behavioural roles are vital in cultivating individual exploitative and explorative behaviours.

Di Stefano et al., (2014) highlights the importance of internal processes specifically on the roles of individuals in creating, implementing and renewing dynamic capabilities (p.332). Through this research, the study provides an insight to individual level of reconfiguration of existing skill and behaviours in achieving new forms of competitive advantages (i.e. exploitative and explorative behaviours). This research concurs with recent discussion on dynamic capability on an individual level (Di Stefano et al., 2014; Kurtmollaiev, 2015; Wilden et al., 2016). As a results, individuals performing exploitive and explorative behaviours leads to the cultivation of ambidextrous behaviours at an individual level.

Following Raisch et al. (2009), which suggested that employees' ambidexterity is heavily influenced by individual characteristics, the results from this study extended the understanding of individual behavioural complexity on individual exploitative and explorative behaviours. Unlike firm or team level ambidexterity which could be achieve due to numerous factors, individuals behaviours are much more precarious. As the environment among SMEs are hardly constant, the interaction between multiple behavioural roles promotes exploit and explorative behaviour, which motivate members in the organisation to deal with opposing tensions is likely results in greater adaptability and capacity (Weick, 2003). As individual who is able to balance and comparably skilled in all behavioural roles are likely to have a high level of behavioural complexity (Dennison et al., 1995; Hooijberg, 1996; Hooijberg and Quinn, 1992; Lawrence et al., 2009). Members of SMEs have a high level of behavioural complexity, where all four behavioural roles (i.e. create, compete, collaborate and control) are demonstrated.

### Conclusion

SMEs are constantly challenged with limited resources coupled with a hostile dynamic environment. These challenges further emphasise and motivate firms to establish dynamic capability with minimal impact of firm's resources. Based on the study, behavioural complexity has significant impact on exploitative and explorative behaviours, which leads to the establishment of ambidextrous behaviours. Hence it is importance for the entire firm, as a whole in formulating and cultivating different behavioural roles as a method of establishing ambidexterity that increase the chances for long term survival among SMEs.

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## PROPOSED BUSINESS STRATEGY OF GARUDA INDONESIA SUB-BRAND *EXPLORE* IN KOMODO ROUTE

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### Abstract

The growth of tourism and business activities in East Nusa Tenggara province has increase the demand of air transportation between the cities in this province, known as Komodo route. PT. Garuda Indonesia (Persero) Tbk. introduced a sub-brand called Explore to expand and strengthening its market in Komodo-type route. Although it look promising, but currently Explore faced strategic problems such as (i) low passenger load factor due to intense competition and limited market capacity (ii) price competition against low cost airlines and (iii) lack of internal capability in this type of market, which resulted in two-straight years financial loss. Therefore, Explore needs to implement a new strategy in the institutional and operational levels as a tool to create a sustainable competitive advantage. The business environment analysis adopts external and internal situation approach, combine with the extended service marketing (7Ps) model. Key success factors for creating value to Explore customers are seamless operation, and focusing on customer experience. The research recommended that strategic option for Explore is differentiation which focusing on superior service and network connectivity for business travellers and high-end leisure market. Crucial elements to meet these factors are the ability to improve operation reliability and efficiency, experiential marketing strategy, and human capital improvement. At the end, the implementation process will divide into quick wins and long term initiatives to ensure the effectivity of strategy implementation.

**Keywords:** *business strategy, extended service marketing (7Ps), experiential marketing, Garuda Indonesia Explore, Komodo route.*

### Introduction

The increasing number of air transportation passengers in Indonesia has opened an opportunity for Garuda Indonesia to expand their market and network by introducing a sub-brand called “*Explore*”. It is specialized for market between remote area and small cities, such as Komodo route which connected Denpasar - Labuan Bajo – Ende – Kupang in East Nusa Tenggara province. *Explore* planned to use the combination of excellent operation, service quality, and the power of Garuda Indonesia’s brand to accelerate customer awareness, and translate into successful business in Komodo route. Although the situation looks promising, but in reality *Explore*’s performance in Komodo route is below the target, and experiencing two years consecutive loss in 2014 and 2015.

PT Garuda Indonesia (Persero) Tbk. is one of the leading company in Indonesia’s airline industry. The history started shortly after the independence of Indonesia, when the people of Aceh donated their belongings to buy a DC-3 Dakota aircraft in 1948. Then the aircraft conduct its inaugural flight in the same year from Calcutta to Rangoon on 26 January 1949 using the name of Indonesia Airways, and since that time Garuda Indonesia has expanded their operation by operate 38 aircrafts and start to conduct international flight (PT Garuda Indonesia (Persero) Tbk., 2016). In the next two decades Garuda Indonesia has started to do revitalization and restructuring process to become more competitive in airline industry. The new management team formulate a new plan called *Quantum Leap*, consists of comprehensive re-evaluation and restructuring of the company to improve operational effectiveness, financial stability, service quality, and revitalize the spirit of them.

Garuda Indonesia has a vision to be a strong distinguished airline through providing quality services to serve people and goods around the world. This vision means Garuda Indonesia always try to implement appropriate strategies to record profit that is higher than competitor in this industry, and always maintain quality of safety and give comfortable feel for. In order to achieve its vision, Garuda Indonesia have define mission as the flag carrier of Indonesia that promotes Indonesia to the world, supporting national economic development by delivering professional air travel services.

As of 2015 they have seven subsidiaries which focus on supporting Garuda Indonesia's core business, which are: PT Garuda Maintenance Facility AeroAsia, focusing on aircraft maintenance, engineering, material services, and engine repair business. PT Aerowisata which develop business related to tourism and hospitality industry. PT Abacus Distribution Systems Indonesia to engage in *Global Distribution System* (GDS) by providing reservation system services for travel agents. PT Aero System Indonesia, with the core business in the field of consulting services and engineering of information technology. PT Citilink Indonesia, to perform business in low-cost air transportation under Garuda Indonesia Holiday (GIH) France S.A.S which runs business activities in aircraft rental service. Lastly, PT Gapura Angkasa which built to meet the growing needs of professional ground handling services for domestic and international airlines operating in all airports in Indonesia.



**Figure 1. Garuda Indonesia Explore brand (PT Garuda Indonesia (Persero) Tbk., 2016)**

As a part of Garuda Indonesia effort to expand and strengthening its network in domestic market, they introduced a new sub-brand called *Explore*. The unique characteristic of its operation are using brand new Aerospatiale ATR 72-600 aircraft which capable of take-off and landing from limited airport infrastructure (short runway, limited parking stand, and terminal building), suitable for small market with capacity of 70 passenger, and powered by turboprop engine to ensure efficient fuel usage. Some of the destinations operate by *Explore* are Denpasar, Labuan Bajo, Ende, Kupang, Medan, Gunung Sitoli, Pontianak, Ketapang, Jember, and Banyuwangi.

The decision of Garuda Indonesia to enter the market in Komodo route through sub-brand *Explore* can be seen as a strategic plan to expand the market and increase revenue. But this is not an easy process, several challenges appeared during their operation:

**a) Deciding which segment to focus.** The actual passenger data of *Explore* flight in 2015 has shown that the market in Komodo route divided into two major segments, leisure traveller to Labuan Bajo and business traveller from Ende to Kupang. This situation has create a problem for *Explore* because it must create an optimum service concept, operational, and marketing approach for both segment in a single journey will result in leveraging or deleveraging value

obtained by passengers.

**Table 1. The passenger data of Explore in Komodo route year 2015 (Internal data)**

Route	No of Pax	% of Total Pax
Denpasar - Labuan Bajo	14,764	33.4%
Denpasar - Ende	5,153	11.6%
Denpasar - Kupang	123	0.3%
Labuan Bajo - Ende	3,124	7.1%
Labuan Bajo - Kupang	6,600	14.9%
Ende - Kupang	14,486	32.7%

**b) Intense competition with limited capacity.** There are several airlines who conduct scheduled flight in Komodo route, and the limited number of passenger has make the competition become tougher.

**Table 2. Capacity offered in Komodo route (CAPA, 2016)**

Route	Airline Operator	Weekly Capacity (Seats)	Monthly Capacity (Seats)
DPS - LBJ	Garuda Indonesia, Lion Air, Kalstar Aviation	3276	13104
LBJ - ENE	Garuda Indonesia, Lion Air	994	3976
ENE - KOE	Garuda Indonesia, Lion Air, Kalstar Aviation, Transnusa	1799	7196

**c) Beating the price competition.** The competitors in Komodo route can be considered as *Low Cost Carrier* (LCC), and mostly sold the ticket with very low price. *Explore* cannot use the same concept because it is a *Full Service Carrier* (FSC), and has higher *Cost per Available Seat Kilometres* (CASK), which translated into higher ticket price, compare to LCC.

**d) Building internal capability.** Another challenges that appeared in is internal capabilities to handle the dynamic condition of the market and operation, because Garuda Indonesia did not have any experience in most routes fly by *Explore*. Secondly, they must dealing with limited airport infrastructure in this area, which could increase the possibility of irregularities in the flight.

The poor performance of *Explore* in Komodo route mostly happened due to its inability to overcome those challenges which resulted in low number of passenger and cargo. This kind of situation happened because *Explore* use the same business strategy with its main brand, Garuda Indonesia, although the market situation between both of them is very different. This research will try to fix the problem by defining a new business strategy for *Explore* in order to create sustainable competitive advantage over the competitor. In order to make the implementation become easier, then the strategy will be explained into tactical strategy in operation, marketing, and human capital aspect.

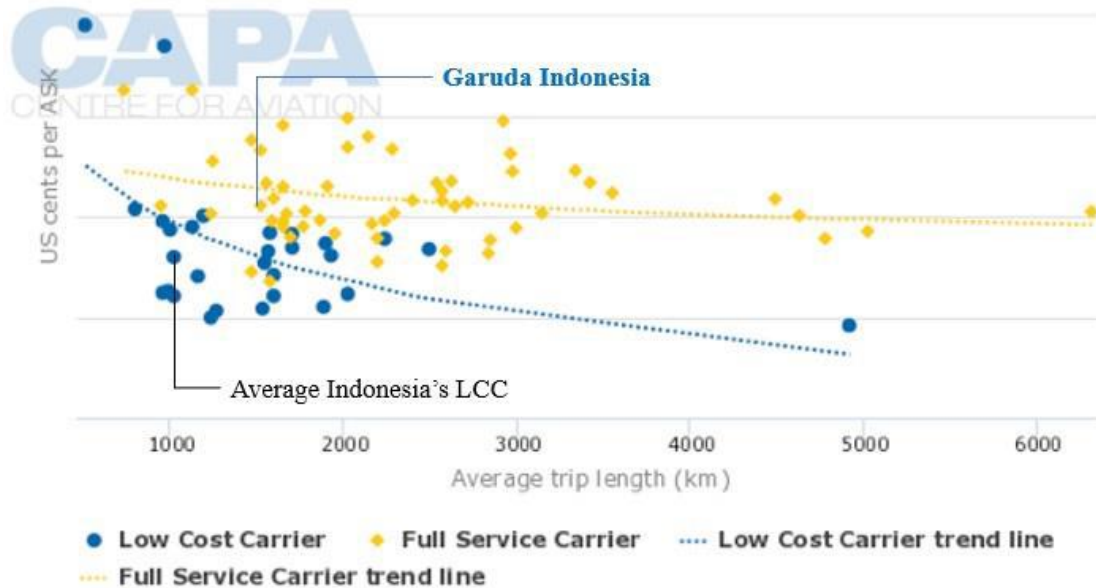


Figure 2 Average cost per seat per airline in Asia Pacific (CAPA, 2016)

### Business Issue Exploration

In order to develop a new strategy for *Explore*, a conceptual framework need to define to assist the process of finding root cause of the problem, analysing significant factors affecting the business, and using the result of the process as the foundation of strategic formulation process. The first part will elaborate the real business issues faced by *Explore* in Komodo, followed by scanning process of its business environment. The result of this analysis will be elaborate using SWOT concept, and combine with qualitative research through in-depth interview process. Lastly, the implementation part will be focusing on how *Explore* put the formulated strategy into implementation process (Appendix 1).

#### 1. External Environment

The aim of this analysis is understand the industry in which the firm operates, and competitive forces that affected the firm from outside (Rothaermel, 2015). The tool that will be used to understand the

current situation in the industry is PESTEL. On the other hand to analyse the competition and profit potential in airline industry, Porter's Five Forces concept will be used.

Table 3. Summary of PESTLE analysis for Explore

Political	Economic	Sociocultural	Technological	Ecological	Legal
Government's budget efficiency program	Lower growth rates	Increase of middle class	Improvement in aircraft technology	Community concern of climate change	Highly regulated in airline operation
Implementation of Open Sky Policy	High interest rates	Intrapersonal approach for business passenger	Limited airport infrastructure	Carbon trading mechanism	Government limitation in ticket price
Tax reduction for aircraft parts	Low fuel price		Rise of Internet in Indonesia		
Wonderful Indonesia campaign			Improvement in communication		

#### A. PESTLE Analysis

The PESTLE analysis of *Explore* divide the forces in general environment into six factors: *Political/Legal, Economic, Sociocultural, Technological, and Ecological*.



**a) Political:** (i) The government policy of reduce business trip for efficiency program. (ii) Implementation of open sky policy increase competition between airlines. (iii) The decision to reduce tax for aircraft spare parts has reduce maintenance cost. (iv) The *Wonderful Indonesia* campaign which encourage local government to improve air transportation.

**b) Economic:** (i) The Indonesia has lower growth rates in 2015, and significantly impact air travel demand. (ii) The exchange rates of US Dollar to Rupiah has increase 7.5% annually, which directly impact airline's cost structure. (iii) The fall of fuel price reduce fuel cost component around 10% but has negative impact in economic condition of Indonesia.

**c) Sociocultural:** (i) The rise of middle class has increase air travel demand, especially in middle-to-low market. (ii) The preference of business passenger in Komodo route mostly based on personal relation instead of advertising.

**d) Technological:** (i) The improvement in aircraft technology has increase efficiency. (ii) Limited airport infrastructure become an obstacle to maximize *Explore* performance. (iii) The rise of internet and online travel agent has increase customer preferences. (iv) The Improvement in communication has a potent to reduce traveling activities.

**e) Ecological:** (i) The concerns about global warming and climate change has impact the operation of an airline. (ii) Government plan to implement carbon trading initiatives can increase airline's cost.

**f) Legal Factor:** (i) airline industry is highly regulated in term of safety, so there is only small margin of error available. (ii) Government create a regulation to limit the highest and lowest price to keep the fair competition, and reduce the possibility of price war.

## B. Porter Five Forces

The aim of this analysis for *Explore* is reveals the roots of industry's profitability and characteristics while providing a framework for anticipating and influencing competition over time (Porter, 2005).

**a) Threat of New Entrants (LOW):** This threat can be considered low, due to several possible barriers to enter airline industry. (i) High resources needed with very low profit margin, and high cost during operation for buy or lease aircraft, maintenance, and promotional activities. (ii) Highly regulated industry. (iii) Incumbent has better economic of scale.

**b) Bargaining Power Buyer (HIGH):** the profitability of a firm in airline industry is strongly affected by the power of their customer. (i) A company traded a loyalty to airline for significant ticket price discount. (ii) The switching cost is low. (iii) The characteristics of Komodo route is price-sensitive.

**c) Bargaining Power Supplier (HIGH):** Airline industry is an example of industry which is totally dependent on limited supplier, which resulted in low power against suppliers. Some of the reasons are (i) Limited number of supplier due to high capital needed. (ii) The monopoly policy for certain components in Indonesia, such as fuel, and air traffic provider.

**d) Threat of Substitute (MID):** The possible substitute for airline in Komodo route are other transportation modes, and communication technology. (i) Comparing with sea and land transportation, airline has better competitive advantage against them. (ii) Whereas communication technology improvement will make frequent business travellers will travel less.

**e) Rivalry among Competitors (HIGH):** The competition between airlines in Komodo route is very tough due to limited capacity, similar marketing activities and the growth of each airline groups in Indonesia.

## 2. Internal Environment

In order to become market leader *Explore* also need to analyse their resources, capabilities

and core competencies to understand the strength and weakness owned by them. Then, types of resources and capabilities needed to create a sustainable competitive advantage.

### A. Value Chain Analysis

The value chain analysis is developed by Michael Porter to describe the activities the organization performs and links them to its competitive position based on primary and supporting activities. It also explains the sequential value-creating activities from the resource owned by *Explore*, in order to increase buyers' intention to pay their products (Dess, et al., 2014).

#### a. Primary Activities

First of all, inbound logistics is related to activities to manage inputs for operation process such as aircraft and flight crews. In order to do the process smoothly, Garuda Indonesia has created an integrated scheduling process which consists of monthly duty schedule for flight crews, assigning suitable pilots with their licensed aircraft, and optimization schedule process to reduce cost of operation. Secondly, in operations aspect Garuda Indonesia has a concept to bring Indonesian hospitality to each flight, and safety management system in each operational aspect. The element of outbound logistics related to Garuda Indonesia's capability to give better service quality and punctuality of each flight. The fourth element is marketing and sales, in which Garuda Indonesia has resource to do above and below the line marketing concept, and special event such as *Garuda Indonesia Travel Fair (GATF)* to promote their products. The last element related to capability to give best service to its customer to maintain their loyalty through dedicated key account officer and strong customer service support.

#### b. Supporting Activities

In term of creating competitive advantage from the element of firm infrastructure, Garuda Indonesia built a dedicated aircraft base in Bali for *Explore* to make the operation become more effective. Then, they also focusing on human resource aspect by implementing *Performance Management System (PMS)* concept as a backbone to evaluate employee's capability. Garuda Indonesia also improving their technology to support the operation by implementing technology to report its aircraft position and integrated passenger service system to manage their reservation process, check in procedure, loading process, and baggage monitoring. Lastly, Garuda Indonesia have built its capability in procurement by centralized the process for general goods or services needed not only by Garuda Indonesia, but also their subsidiary, in order to reduce the price and lowering cost.

### 3. Extended Marketing Mix

It is well known that service industry is very different with manufacture industry and it has unique challenges such as: cannot be inventoried, and intangible elements mostly dominate value creation process. As the implication, the conventional marketing mix concept (4Ps) are not adequate with challenges in service industry. Therefore there is a need to extend the marketing mix from into 7Ps, with additional components are Process, Physical environment, and People (Lovelock & Wirtz, 2011).

The first components of *Extended Marketing Mix* for *Explore* is **Product**, which defined as a set of elements (both physical and intangible) that create value for customer (Lovelock & Wirtz, 2011). 6

*Explore's* product is specialized to broaden and strengthen Garuda Indonesia's networks in Indonesia. All of its flights are short-haul with less than 90 minutes duration to develop tourism and business through Indonesian archipelago, and capture market in an area with limited airport infrastructure. As a differentiator with other airlines, *Explore* implement the same service standard with its main brand.

In order to make sure the product offered by *Explore* can easily reach the target market, a strong distribution channel (**Place**) must be built to connect customer and product. Some distribution channels for *Explore* are: Sales office in city centre and mall, travel agents, travel fair, and online distribution channel. Related to **pricing** strategy, Garuda Indonesia use *Revenue Management System*, which will optimize financial returns by setting the number of seats they sell, and the price for each class to maximize the profit. According to Lovelock, the element of **promotion** and education play significant roles in service industry, which are providing needed information and advice, persuading target customers, and encouraging them to take action. One of the strategy done by Garuda Indonesia in Komodo route is showcase the beauty of tourism activity with strong call to action to convert customer consideration into purchase using above the line campaign such as TV commercial, digital banner, and adlibs.

In addition to 4Ps elements, which has explained above, the 3 other elements of extended marketing mix also has implemented by *Explore*. The element of **process** is defined as the way a firm delivering its product or service into customer. In order to give strong performance well-designed service process must be built lead to fast response, flexible activities, and timely manage. In current situation Garuda Indonesia has create a standard business process for service delivery and operational activities, although it is still less flexible during the implementation. Organization which focusing on service industry have come to recognize that the **physical environment** is an important component of their service's marketing mix and overall value proposition (Lovelock & Wirtz, 2011). In term of Garuda Indonesia, they provide the concept of *Garuda Indonesia Experience* through the convenience of cabin seat, cabin equipment, ambience, restroom, inflight entertainment, and cabin services in each flight. Then in order to maximize the delivery process, Garuda Indonesia have maintain the quality of the people by having a human resource program which focused on three main pillars: talent management, corporate culture, and people manager development.

The Komodo route also impacted by the intense competition among airlines in Indonesia, currently there are five airlines which operate daily scheduled flight in this route. As a result, passengers have more power to choose between them, and transform the market into price-sensitive. This kind of situation has hurt *Explore*, due to its nature of business is full service which is most suitable for non-price sensitive market. In order to find out the actual competition, then this research also construct a competitive analysis using extended service marketing criteria as shown in *Appendix 3*. According to this analysis, the position of *Explore* compare to other airlines in Komodo route are:

**Advantage:** *Explore* is the only full service airline in Komodo route, so it must become the first choice for non-price sensitive passengers. In term of marketing mix, *Explore* also considerably superior than competitors in term of safety aspect, distribution channel, and in-flight service quality.

**Disadvantage:** The price level is higher than competitors, so it is hard to compete in leisure market. Otherwise, the operation aspects also become a weakness for them due to lack of flight connectivity and its multi-leg concepts increase the possibility of irregular flight, and bottlenecking passenger.

#### 4. SWOT Analysis

The SWOT (Strength, Weakness, Opportunity, and Threat) is one of the tools to combine external analysis and internal analysis of a company to become the foundation for the strategy formulation for Garuda Indonesia *Explore* in order to win the competition in Komodo route. The strength and weakness refer to internal conditions of the firm, then opportunity and threat mostly related to external factors.

Strength	Weakness
<ol style="list-style-type: none"> <li>1. Safety culture</li> <li>2. Integrated group business</li> <li>3. Strong brand</li> <li>4. Service concept</li> <li>5. Corporate culture</li> </ol>	<ol style="list-style-type: none"> <li>1. High unit cost per passenger</li> <li>2. Unintegrated IT support</li> <li>3. Lack of innovation in marketing &amp; sales</li> </ol>
Opportunity	Threat
<ol style="list-style-type: none"> <li>1. Low fuel volatility</li> <li>2. Traveling &amp; culinary lifestyle</li> <li>3. Government regulation</li> <li>4. Skyteam Alliance</li> <li>5. Corporate account</li> </ol>	<ol style="list-style-type: none"> <li>1. Intense competition</li> <li>2. Airport infrastructure</li> <li>3. Economic downturn</li> <li>4. Open Sky policy</li> <li>5. Communication technology</li> </ol>

**Figure 3 The result of SWOT analysis for Explore**

### Business Solution

The business environment analysis has provide relevant information about the actual situation of *Explore* operation in Komodo route. In order to define the best business strategy for *Explore*, then this research only focus on several critical problems faced by it.

#### 1. The Critical Problem

- a) The current business strategy has lack of capability to compete with LCC airlines in Komodo route in term of price, operational cost, and services.
- b) The problem in airport infrastructure and technology has made the operation become less efficient.
- c) The product is not strong enough to obtain leisure passenger due to lack of network connectivity between Komodo route and other flight sector.
- d) Lack of capability to compete in price-sensitive market, the plan to compensate it with excellent service concept does not draw much attention because mostly the flights are short haul.
- e) The problem in marketing innovations and educating customer for market like Komodo route due to it has two market segmentations (business, and leisure traveller).
- f) The business process related to *Explore* is very complicated and bureaucratic, which reduce its flexibility to compete against competitors in Komodo route.
- g) Inability to encourage their staff to do more than standard procedure when it is related to customer' satisfaction, due to weak leadership and lack of training.

#### 2. Key Success Factors

Garuda Indonesia *Explore* must transform their current strategy, and conduct a thorough analysis to position themselves against competitors by focusing on these key success factors.

- a) **Business Strategy:** Redefining strategy to explore its competitive advantage, by combining the concept of seamless operation, service, and experiential marketing.
- b) **Operation:** Creating efficient and reliable operation in order to reduce cost without sacrificing safety.

- c) **Product:** A proper route scheduling & connectivity for passenger, and integrated services during pre-flight and post-flight.
- d) **Price:** Incorporating the concept of flexible price, and capability to convince the customer regarding the value of *Explore*'s flight.
- e) **Process:** Improvement in business process by making it more flexible, and open opportunity for individual to innovate when needed. 8
- f) **Promotion:** Improve the customer education element in promotion to change the mind set of customer regarding *Explore* flight.
- g) **People:** Build strong leadership and customer centricity value to people in Garuda Indonesia.

### 3. New Business Strategy

The analysis has shown that *Explore* has a strength in strong brand awareness in Garuda Indonesia's name, service concept, and integrated group business. Whereas they can seek opportunity from corporate account, improvement in traveling & culinary lifestyle, and *Skyteam* alliance. It means, from Porter's generic strategy point of view, *Explore*'s designed to serve non-price sensitive customer and using differentiation strategy instead of cost leadership. What *Explore* must do is adding unique features to increase the value of their service to make the customers are willing to pay higher price. But, they also must pay attention to "keeping cost at the same or similar level" by conducting some cost efficiency program.

The decision to focus on differentiation strategy must be followed by an iterative process to achieve a robust, reinforced consistency among the elements of the strategy itself (Hambrick & Fredrickson, 2005). The new business strategy for *Explore* use the strategy diamond concept which integrate all five elements of strategy to achieve the objectives of become market leader and contribute to profit of organization. Here are the five strategy elements for *Explore* in Komodo route:

a) **Arenas:** (i) Superior service by giving more attention not only in-flight experience, but also pre-flight and post-flight. (ii) Increase its network connectivity to increase passenger flexibility. (ii) Focusing on business travellers & high-end leisure market which less sensitive to the price.

b) **Vehicle:** (i) Strategic agreement with corporate and travel agent by adding more value in tour and traveling package. (ii) Maximizing the potency of *Skyteam* alliance to grab high-end leisure market. (iii) Focusing on Garuda Group integration to be more powerful in the market.

c) **Differentiators:** (i) Expanding the Garuda Indonesia *Experience* service concept to improve passenger experience before and after the flight. (ii) Creating a seamless strategy to make sure the operation running smoothly. (iii) One stop shopping experience, not only give passenger the *Explore*' service but also all member of Garuda Group.

d) **Staging:** (i) Education process to give understanding to the customer related to correlation between price and service. (ii) In-ground service improvement to expand the customer experience in *Explore*. (iii) Intensive promotion through price discount, advertising, and local campaign

e) **Economic Logic:** (iii) Offering difficult to match product to customers in order to obtain premium price. (ii) Bundling travel package for the tourist which come to Bali. (ii) Maximizing group collaboration to reduce operational cost through.

f) The next step for *Explore* in order to ensure the strategy will be positively affect their performance is creating tactical strategy based on those five elements. It will covered operation side, marketing, and human capital strategy improvement.

### 4. Operation Strategy

The first part of tactical strategy development for *Explore* is related to operational activities, which focusing on (i) Ensuring effective and efficient operation to reduce operational cost, related to capability of *Explore* to reduce or keeping similar level of cost although it positioned as full service airline, and (ii) Reliability and flexibility of operation to support its differentiators in business travellers market which is very sensitive to punctuality, and reliability of the flight.

First of all, limited airport infrastructure has significantly impact the operation of *Explore* in Komodo route. Combine with limited aircraft technology has made the operation become sensitive some elements such as weather, and payload limitation. So, improvement in aircraft navigation technology is a must in order to allow *Explore's* aircraft to fly using instrument flying procedure instead of visual.

The second issue is related to *Explore's* cockpit crew home base which currently positioned in Jakarta. As a result, the operation become costly because *Explore* needs to pay their hotels, and traveling allowance. In order to solve the problem *Explore* must create a dedicated cockpit crew home base for *Explore* operation in Denpasar. When a crew has shift their base, then there will be a significant cost reduction in operation.

The third issue is route scheduling of Komodo route which is not favourable for passenger due to limited connectivity with domestic and international flight and bottleneck problem due to multi-leg operation. According to those situation, the proposed strategy for *Explore's* is re-designing its route structure in Komodo route, by re-timing the schedule, and split the route into shorter one as explained in (Appendix 4).

## **5. Marketing Strategy**

Implementing the best and suitable marketing strategy is very important to create profitable operation for *Explore* in Komodo route. In order to achieve those target, the strategy in the research will integrate some key important factors in service industry to improve *Explore's* STP and Marketing Mix using experiential marketing concept.

### **a. STP Improvement**

The building block of new business strategy for *Explore* in Komodo route has also impact the current STP. The biggest reason was the decision to focus only on business and high-end leisure travellers has shift the product itself, as the result, the new STP shown in table below.

**Table. 4 The new STP for Explore**

Market Segmentation	Origin of traveler	<ul style="list-style-type: none"> <li>• Indonesia resident, mostly from Jakarta, Makassar, Bali, East Nusa Tenggara</li> <li>• Foreign citizen, mostly from China, Japan, South Korea</li> </ul>
	Demographic	<ul style="list-style-type: none"> <li>• Age between 31 - 65 years old</li> <li>• Male become a focus for business, whereas female for leisure</li> </ul>
	Psychographic	<ul style="list-style-type: none"> <li>• Occupation are: civil servant, corporate employee, businessmann, retired citizen</li> </ul>
	Behavioral	<ul style="list-style-type: none"> <li>• Middle class to upper level class</li> <li>• Commuting passenger between cities in Komodo route</li> <li>• Passenger focusing on punctuality of flight</li> </ul>
Targeting	Concentrated Marketing	<ul style="list-style-type: none"> <li>• Focusing on business traveler and high-end leisure traveler</li> <li>• Corporate and government institution</li> <li>• Tour group passenger</li> <li>• Traveler who is looking for integrated services</li> </ul>
Positioning	Differentiated Full Service Airline	<ul style="list-style-type: none"> <li>• Superior in-flight service compare to other airlines</li> <li>• Focusing on passenger services during pre-flight and post-flight</li> <li>• High level of safety and on-time performance</li> <li>• Flexible payment process and broaden network connectivity</li> </ul>

**b. Extended Marketing Mix Improvement**

In order to fix the problem in Explore operation, the elements of extended marketing mix (7Ps) needs to inject by the value of key important factors in service industry as mentioned above, combine with the concept of experiential marketing. According to Schmitt, the experiential marketing concept is focusing on five elements: First, the element of *Sense* which focusing on creating experiences through the five senses owned by people. Secondly, the element of *Feel* focusing on creating affective experiences related to inner feelings and emotions. Thirdly, the element of *Think*, which has objective to engage customers creatively through problem-solving experiences. The next one is *Act*, related to enhance customer’s physical experiences, and give more alternatives of doing things. Lastly, the element of *Relate* which expands the value of product to individual experiences and become the part of customer life.



**Figure 4 Extended marketing mix improvement for Explore**

## 6. Human Capital Strategy

In order to create a brand new integrated business strategy, this chapter will focusing on creating Human Capital (HC) strategy to support *Explore* in Komodo route, which divided into recruiting process, and improving current employee. The recruitment activity become an important factor because it will define the quality of output for the company. Garuda Indonesia must investing in selecting employee process, by creating a custom criteria to get the best one, based on customer's data and current employee feedback. On the other hand improving the current employee in order to adapt with new strategy also very important. The strategy are redefining the concept of corporate university and training centre in order to give more knowledge and benefit for employee, then focusing on knowledge management process to improve the service to customers.

### Conclusion and Implementation Plan

As explained in this research, *Explore* facing problem related to its financial performance due to several factors.

a. **Lack of consistency in implementation of differentiation strategy.** The aim of this strategy is delivering higher service quality in-ground and during the flight compare to competitors, by keeping costs at the same or similar level. Unfortunately, it cannot be achieved due to limited capability of the aircraft and inefficiency during flight operation and delivering service.

b. **Inability to compete with other airlines in Komodo route.** *Explore's* competitor mostly low cost carrier which offer cheaper price. As a result, the passengers tend to choose other airlines than *Explore* which resulted in lower revenue for it. The marketing strategy for this route is also cannot show the *Explore* excellence, and promote its capability to the market.

c. **The gap between plan and implementation in human capital aspect.** The implementation gap between plan and actual in human capital strategy is still wide, as a result the company still experiencing lack of service leadership which impacted customer satisfaction.

In order to solve the problem, then it is recommended to redefine its business strategy through the using five diamond strategy concept and cascade it into operation efficiency, experiential marketing, and human capital strategy.

Furthermore, to implement the strategy a plan must be built which divided into quick wins and long term plan. The initiatives categorized as quick wins mostly can be quickly implemented and has biggest impact for the business, with the timeframe of this activities are six months. Some of the initiatives are creating task force, route restructuring, and service improvement. On the other hand, the long term plan is used to create a sustainable competitive advantage for *Explore*, and has one to five years horizon of implementation. Some of these initiatives are operation improvement, group synergy, human capital actions, and further service improvement. The detail implementation plan can be seen in (Appendix 5).

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Appendix 1 Conceptual Framework Diagram

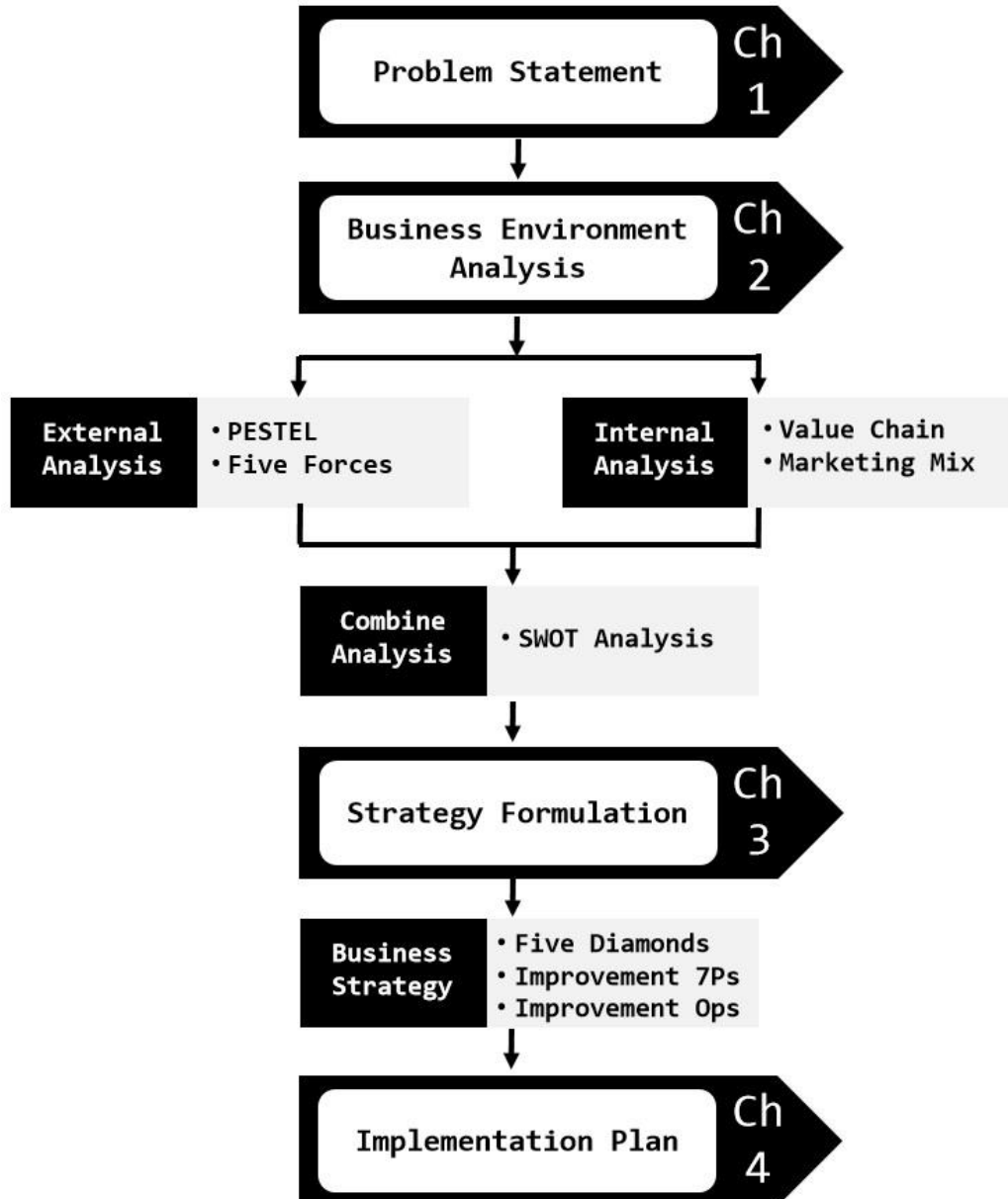


Figure 5 Conceptual framework of the research

Appendix 2 Value Chain Diagram of *Explore*

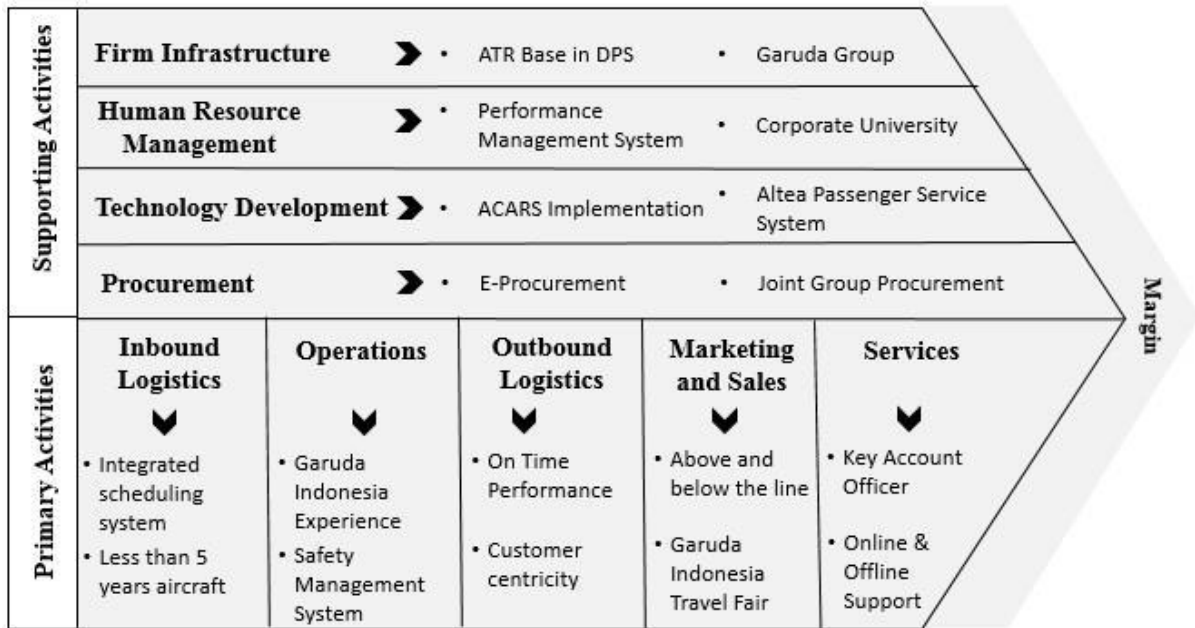


Figure 6 Value chain analysis of Garuda Indonesia Explore

Appendix 3 Competitive analysis of *Explore*

Table 5 The result of competitor analysis

	Garuda Indonesia	Lion Air	Kalstar Airlines	Trigana Air	NAM Air
<b>Aircraft Type</b>	Propeller - ATR72	Propeller - ATR72	Jet Type - B737	Propeller - ATR72	Jet - B737
<b>Same Day Connectivity</b>	No, pax need to layover	Yes	No, pax need to layover	No, pax need to layover	Yes
<b>Flight Leg</b>	Multi Leg	Multi Leg	Direct	Direct	Direct
<b>Product</b>	Full Service	No frills	No frills	No frills	Limited service
	Big network connectivity	Big network connectivity	Limited network connectivity	Limited network connectivity	Big network connectivity
<b>Price</b>	High	Low to medium	Low to medium	Low to medium	Low to medium
	Rare price discount	Frequent price discount	Frequent price discount	Rare price discount	Frequent price discount
<b>Physical</b>	Wide legroom space, with five stars airline standard	Narrow legroom space	Narrow legroom space	Narrow legroom space	Wide legroom space
<b>Promotion</b>	TV Commercial, website, new spaper, billboard, adlibs	TV Commercial, website, newspaper, billboard, adlibs	Website, new spaper	Website, new spaper	TV Commercial, website, new spaper, billboard, adlibs
<b>Place</b>	Sales Office, website, third party online booking, travel fair, call center	Sales Office, website, third party online booking, call center	Sales Office, third party online booking, call center	Sales Office, third party online booking, call center	Sales Office, website, third party online booking, call center
<b>People</b>	Performance Management System	-	-	-	-
	Training Center	Training Center	-	-	Training Center
<b>Process</b>	Non-IDR Payment Available	Non-IDR Payment Available	Non-IDR Payment Available	Only in IDR	Non-IDR Payment Available
	Online & city check in	Online & city check in	-	-	Online check in
	IOSA safety standard	-	-	-	-

**Appendix 4 Route Structuring Scenario for *Explore***

A. The first action is re-timing process by swapping the flight schedule with GA-7036 which currently operate DPS-LBJ vv and scheduled to fly daily at 11.00 WITA. This strategy benefits for *Explore* are:

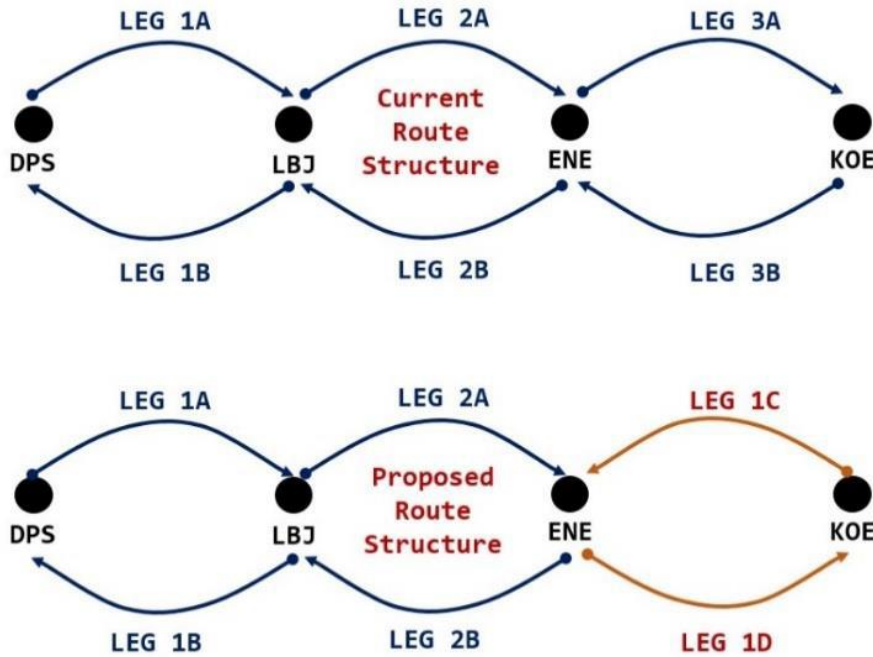
- i. It will open a connection with flight coming from Jakarta, Bandung, and Makassar.
- ii. The proposed schedule will be at 09:45 WITA instead 11.00 WITA as scheduled for GA-7036 before. This time is choose because it is the best available window time in route scheduling due last flight to Komodo route is conducted at 08.00 WITA by Lion Air, but it is also still before the schedule of Kalstar Airlines in 10.00 WITA.
- iii. Currently there are two shuttle flights to Labuan Bajo from Denpasar conducted daily by Garuda Indonesia with these schedule:
  - Denpasar – Labuan Bajo vv / Flight Number GA-7036 / Departure Time 10:45 WITA
  - Denpasar – Labuan Bajo vv / Flight Number GA-7028 / Departure Time 14:30 WITA

	Departure Time	Connected Flight
Previous Schedule	07:30 WITA	-
Proposed Schedule	09:45 WITA	GA-400/Jakarta-Denpasar
		GA-334/Bandung-Denpasar
		GA-675/Makassar-Denpasar

**Figure 7 Proposed schedule for *Explore* in Komodo route**

The idea for *Explore* in Komodo route is swapping the schedule with GA-7036 and retiming into 09:45 as explained in point (b) above. The airport slot availability will not become a problem because it is only swap the schedule within same airline, instead of publish a new schedule. This process also given many benefits for the financial performance because Garuda Indonesia will not lost the revenue from Labuan Bajo’s flight in the. Whereas the new schedule for the flight of Komodo route will increase its load factor, by absorbing the current passenger load factor of GA-7036 which is around 62%, and added more passengers which will go to Ende and Kupang.

B. The second solution is splitting the route into two shorter legs which are DPS-LBJ-ENE vv, and ENE-KOE vv instead of DPS-LBJ-ENE-KOE in order to give more flexibility to passenger, limiting operational risk due to airport operating hours, and reduce continuing delay due to a problem in one location. The proposed route can be seen in picture below.



**Figure 8 Proposed route structure of Explore in Komodo route**

The advantages of proposed route compare to current one are:

- i. The availability of Leg 1C and 1D in proposed route is intended to grab business traveler (especially civil servant) who travel between the capital city of Nusa Tenggara Timur, Kupang, to Ende and vice versa in the morning.
- ii. The proposed route structure also reduce the cost impact of irregular flight. For example with the current route, when an aircraft is having technical problem in Ende after doing Leg 2A, and cannot continue their flight to Kupang. Implementing the proposed route structure will solve the problem because whenever the problem happened, the aircraft which conduct Leg 1C can continue their flight to Leg 2B, and Leg 1B, without resulting in delays.
- iii. The last benefit of proposed new route is giving better flexibility to the passenger compare to current route.

Appendix 5 Implementation Plan of *Explore's* New Strategy

Action Plan	Month				
	I	II	III	IV	VI
<b>Task force Implementation</b>					
• Defining task force organization	■				
• Socialization & internalization		■			
<b>Route Restructuring</b>					
• Market Behaviour Analysis	■	■			
• Aircraft & schedule availability			■	■	
• New Route structure				■	■
<b>Service Improvement</b>					
• Pre & Post Flight improvement			■	■	
• Simplify payment process				■	
• Internal process improvement				■	
• Updating SOP				■	
<b>Evaluation Process</b>					
• Evaluation & customer feedback					■

Figure 9 Quick Wins plan for Explore.

Action Plan	YEAR				
	I	II	III	IV	V
<b>Operation Improvement</b>					
• Aircraft & airport technology	■	■	■		
• Dedicated crew base		■	■		
<b>Service Improvement</b>					
• Building partnership	■				
• Long term relationship with customer	■				
<b>Human Capital</b>					
• Corporate culture	■				
• Corporate university		■	■		
<b>General Strategy</b>					
• Group synergy	■	■	■		
• Strategy Evaluation				■	■
• Spin off analysis				■	■

Figure 10 Long Term Plan for Explore

## GLOBAL CULTURAL CLUSTERS AND DETERMINANTS OF MARKET POTENTIALITY RELATIONS AND INFLUENCES IN A LONGITUDINAL STUDY

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### Abstract

This paper explores the relationships between cultural clusters and the determinants that drive market potentiality. The research shows differences in variances using a longitudinal one way ANOVA method. Conclusions show three revealing issues: 1) Generally clusters don't differ from each other when a longitudinal analysis is applied supporting  $H^0$ . 2) The Latin American cluster differs more than other clusters when relates its Commercial Infrastructure (CI) and its Market Consumption Capacity (MCC), and 3). There is a high longitudinal correlation between the ease of doing business and the levels of corruption perceived in all a countries.

**Keywords:** *Market potentiality, clusters, culture, doing business, corruption.*

### Literature review

#### 1. GLOBE, clusters and culture

National culture is widely analyzed in the literature and its references to international business are quite relevant and regular. Rational and sociopolitical power in strategic decision-making is explored and country clusters appear to moderate the power relationships (Hoffman, 1987). Also, a combined role language, religion, and geography generates cluster formation and these forces play a prominent yet complex role (Ronen & Shenkar, 2013). Cultural and religious differences are incrementally related to perceived corruption in countries, even after controlling for other economic and political factors (Mensah, 2014). Cultural effects, the internationalization process and national culture are based on established International Business theory (Chabowski, Hult, Kiyak and Mena, 2010). Clusters of countries are analyzed suggesting correlations with national wealth, as well as with dimensions of national culture (Hofstede, Van Deusen, Mueller & Charles, 2002). Cultural country clusters identified by Ronen and Shenkar (1985) and Shenkar (2001), as Oesterle and Fisch (2000) have observed in different research projects, representing the 'soft' side of globalization. By classifying the geographical distribution of FDI is possible to take into account cultural and institutional diversity as a locational determining variable (Sullivan, 1994; Ietto-Gillies, 1998). Six clusters are considered in other research performed, an Anglo cluster, a Germanic-Nordic cluster, a Latin American cluster, a Latin European cluster, a Far Eastern cluster, and an 'Other' or 'Mixed' cluster, which includes all other countries (supporting the findings of Rugman and Verbeke). This explanation for the regional concentration of FDI and MNE activity reflects that of the gross domestic product (GDP) and trade of the countries concerned (Dunning & Fujita, 2007).

While geographic clusters may develop as a result of historic factors and co-location advantages (Mudambi & Swift, 2012; Zucker, Darby, & Armstrong, 1998), the functionality of clusters may be conditioned by different types of connectivity, such as personal relationships, pipelines, or a mix of both (Lorenzen & Mudambi, 2013), and networks of alliances (Markusen, 1999). Research suggests that firms can reduce the liability of foreignness by expanding to geographically proximate countries (Hymer, 1960) and co-locating with other home-country firms (Zaheer & Mosakowski, 1997). The clustering phenomenon has also been used to show a positive relationship between spatial proximity and knowledge spillovers (Cantwell & Piscitello, 2005) and the impact of proximity with collaborators and competitors on firm performance (Chang & Xu, 2008). Country clusters in

Vietnam and its FDI have been studies showing distinct clusters of foreign investors from a wide range of industries and countries of origin. (Tan & Meyer, 2011). Country and industry effects matters substantially in explaining the variation in the value of growth options of firms based in different countries (Tong, Alessandri, Reuer & Chintakananda, 2008). National culture influences as well the effectiveness of legal settings and regulations on ethical behaviors (Zengin Karaibrahimoglu & Guneri Cangarli, 2015).

National cultures differences influence to MNC's experience with foreign direct investments (FDI) and subsidiary mortality. (Zeng, Shenkar, Lee & Song, 2013). Other findings indicate the importance of 'fit' between cultural relational values and individual attachment orientations in shaping interpersonal justice perceptions (Game & Crawshaw, 2015). The effect of culture on corporate governance is analyzed using a single institutional framework, language, and religion as proxies for culture with results suggesting that a company board composition is significantly driven by language, although in contrast, ownership and equity structure are not significantly related to culture. (Volonte, 2015). Nation's culture affects the quality of information (Gnanlet & Yayla Kullu, 2014).

Some studies conducted by (Yim & Gray, 2009) assess the relative merits of alternative cultural frameworks as the basis to construct indices of cultural distance using the one introduced by Kogut and Singh (1988). Not only Hofstede (1980, 1991) but also Schwartz (1994, 2003) and GLOBE (2004) frameworks. These results support not only the robustness of Kogut and Singh's method to construct an index of cultural distance but also the consistency of the alternative indices of cultural distance used to explain ownership mode decisions by MNEs.

Some studies that have been using the GLOBE approach In particular, stating that some national cultures are more conducive to the implementation of quality management than others. The analysis of the data done by the authors endorses the idea that through an accumulation of scientific knowledge relevant to the applicability of quality management across national settings, managers can better understand how to transfer best quality management practices from one country to another, suggesting that the creation and transferability of knowledge and quality at an international level is relates to culture. (Vecchi & Brennan, 2011). The GLOBE project received criticisms from a marketing perspective, supporting others like Brewer and Venaik's. It is stated the fact that the implausibility of deterministic claims about the multi-level power of national culture is described and discussed by drawing on a wide range of disciplines (including anthropology, geography, and sociology). Findings related to "Descriptions of the characteristics and origins of subnational level behavior based on a priori depictions of national culture values look invalid and misleading. Research conducted highlights the unsoundness of descriptions of the subnational (individuals, consumer segments, organizations, and so forth) which are derived from national-level depictions of culture and the dangers of ignoring the independent causal influence of non-national culture and non-cultural factors. (McSweeney, 2013). Researchers should be cautious in using the Hofstede or GLOBE national culture dimension scores for analysis at the level of individuals (Venaik & Brewer, 2013).

Other models developed state that is possible to cluster European countries by market attractiveness. The authors encourage international marketing and business scholars to make use of Inglehart's framework. (Gaston-Breton & Martin, 2011). (Ronen & Shenkar) synthesized cultural clustering of countries based on similarity and dissimilarity in work-related attitudes. Their map uses an updated dataset, and expands coverage to world areas that were non-accessible at the time. Cluster boundaries are drawn empirically rather than intuitively, and the plot obtained is triple nested, indicating three levels of similarity across given country pairs. Also delineated are cluster adjacency and cluster cohesiveness, which vary from the highly cohesive Arab and Anglo clusters to the least cohesive Confucian and



Far Eastern clusters. Exploring predictors of cluster formation, it is drawn on the ecocultural perspective and other inputs, and examine the combined role of language, religion, and geography in generating cluster formation. Findings state that forces play a prominent yet complex role. (Stephan & Uhlaner, 2010) develop a cross-national study testing a framework relating cultural descriptive norms to entrepreneurship in a sample of 40 nations. Based on data from the GLOBE project, they identify two higher-order dimensions of culture as socially supportive culture (SSC) and performance-based culture (PBC) and relate them to entrepreneurship rates and associated supply-side and demand-side variables available from the Global Entrepreneurship Monitor.

Findings provide strong support for a social capital/SSC and supply-side variable explanation of entrepreneurship rate. PBC predicts demand-side variables, such as opportunity existence and the quality of formal institutions to support entrepreneurship.

Understanding the influence of culture on business operations has been one of the most enduring components of international business and international management theorizing and empirical investigation. While several critiques and debates questioned the significant progress made in this domain, authors tend to demonstrate that further advancement on how we conceptualize and measure culture is not only needed, but also possible. (Caprar, Deviney, Kirkman & Caligiuri, 2015). Also, (Dow, Bunyaratavej & Hahn, 2009) explores how within-country diversity of both language and religion influences the ownership structure of foreign acquisitions. They propose that diversity plays two distinct roles. Diversity within the home country may increase the cognitive complexity of the decision makers, moderating the firm response to the distance and diversity of the host country. The social dynamics which precede international exchange are considered and the hypothesis stated is that knowledge of foreign market opportunities is commonly acquired via existing inter-personal links rather than collected systematically via market research. (Ellis, 2000). Others as (Gomez-Mejia & Palich, 1997) test the hypothesis that culturally related international diversification will have a positive impact on firm performance and that the opposite will be true for culturally unrelated globalization.

## **2. Geography and strategic implications.**

Making reference to clusters, culture, societies and their potentiality as market, the importance of geographical location has been analyzed in as well. Findings of research suggest that the political and legal related risks associated with enterprises' activities pose a threat to the majority of executives and the vulnerability to these risks are not related to any enterprise's-specific characteristics (Khattab, Aldehayyat, Alrawad, Al-Yatama, Al, Khattab 2012). Research on Home Regional Orientation (HRO) suggests that there is an emerging consensus that most multinational companies are regional and performance significantly reduces Home Regional Orientation although this factor does not show a significant effect on performance. (Banalieva & Dhanaraj, 2013). Geographic location may be one reason why some ventures are able to acquire the resources needed to internationalize while others cannot. Location influences new venture internationalization, and firm characteristics impact the nature of the relationship (Fernhaber, Gilbert & McDougall, 2008) and international business has much to contribute to intranational business in helping develop a theory of the business enterprise in space (Ghemawat, 2015).

Regional institutional complexity is both a challenge and an opportunity for Multinational companies, (Arregle, Miller, Hitt & Beamish, 2016). Also it is highlighted in the literature the nature and importance of international segmentation (Wind & Douglas 1972). The relationship of country-specific corporate social responsibility (CSR) to international organizational strategy shows that institutional pressures, rather than strategic analysis of social issues and stakeholders, are guiding decision-making with respect to Corporate Social

Responsibility. (Husted & Allen 2006). National trust affects the governance structure used to organize alliances between partners. Research argues that this effect of national trust is moderated by improved information on the partner firm. (Kwon, Halebian & Hagedorn, 2016). Also and despite failure rates of around 30%, international joint ventures (IJVs) continue to grow. IJVs provide a platform for organizational learning, which contributes to the facilitation of organizational performance, suggesting that larger gains in performance are achieved by firms who have low initial levels of market orientation. (Farell, Oczkowski & Kharabsheh, 2008). Research has also been conducted on strategy related beliefs in organizations with substantial foreign participation finding that one of the strongest determinants of similarity of beliefs was being a member of the functional area favored by the strategic change. It looks that the effect of being in the favored area was greater than the effect of all other individual characteristics, including nationality. (Markoczy, 2000). Related to Emerging Markets (EM), also it has been demonstrated that Multinational Corporations (MNC) play a pivotal role in the development of the markets. (Meyer 2004).

### **3. The role or risk, corruption and doing business.**

The perception of the legal risk is an important consideration in dealing effectively with the threats exposed by international companies. It has been explored the relation between individualism and horizons and types of corporate investment, based on individualism and implications for risk taking. Research findings related to the idea that firms in individualistic countries invest more in long-term (risky) than in short-term (safe) assets. Also it is shown that individualistic firms tend to employ excess cash to increase R&D rather than increase dividends, and R&D decisions are less reliant on internal financing but more responsive to growth opportunities in individualistic countries. (Shao, Kwok & Zhang, 2013). Some authors provide space for the consideration of alternatives to the dominant conceptions of corruption and its measurement being quite critical with the application of the Corruption Perceptions Index (CPI) and other indexes of Transparency International in the way of measurement of African corruption. It is argued that some indices could be manipulated to serve Western economic interests. Conclusions reached related that the most popular measure of corruption, Transparency International's (TI's) corruption perception index (CPI), is a flawed instrument, capable only of calculating vague proxies of corruption. The index is oblivious to cultural variance and is business centric in style and philosophy. Corruption cannot be comprehended outside the experience, nor can it submit to empirical investigation. (Bill de Maria 2008). Supranational laws against bribery abroad are designed to reduce the supply of bribes by foreign investors by increasing the costs of bribing abroad. Such increase in costs will make foreign investors more sensitive to corruption, and induce them to reduce their investments in corrupt countries. However, research done argues that these laws need to be implemented and coordinated in multiple countries to become effective. Empirical analysis shows that investors from countries that implemented the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions of 1997 reduced their investments in corrupt countries. Investors from the US, which were bound by the Foreign Corrupt Practices Act of 1977, also reduced investments in corrupt countries, but only after the OECD Anti-Bribery Convention was in place. (Cuervo Cazorra 2008).

Corruption occurs in multiple forms such as bribery, entertainment, extortion, facilitating payments, favors, gifts, gratuities, and travel. International anticorruption accords now constitute a formal global norm against bribery and extortion in commercial or governmental transactions. Economic and political costs of corruption are high and an active enforcement is gradually increasing. Corporate policies should not relate to the payment of bribes, large or small, in any form for any reason. Such policy will in future extend to prohibit even minor

facilitating payments. Businesses should define and enforce broadly applied anticorruption norms. (Duane 2013). Corruption and its implications in international business trading and investments represent an increasing interest for academicians. It is extremely important to understand how corruption affects economic growth directly, by shifting the allocation of public funds, and, indirectly, by changing the incentives, prices, and opportunities faced by entrepreneurs (Jain, 2002). Corruption refers to behavior that violates the trust placed in public officials and serves to destabilize the basis on which generalized interpersonal trust relies and increases the risks faced by the entrepreneur (Anokhin & Schulze, 2009), showing positive correlation with the ease of doing business (Mongay & Filipescu, 2012). Also, the greater the access to information, the lower the corruption levels although bridging the digital disparity across countries can also serve to lessen national corruption levels. (Di Rienzo, Das, Cort, & Burbridge, 2007).

Some authors assess the extent to which institutional convergence has taken place in the new European Union (EU) countries. It does so by contrasting arguments that are inspired by transaction-cost economics within the mainstream international business literature and contentions within the comparative-capitalisms perspective. Some arguments within the former is that those countries that have less transparent ways of doing business will post poorer economic growth records than those with more predictable and less costly regulations. (Matthew and Maria 2013). This shows certain degree of relationships between economic growth and the ease of doing business.

#### **4. Market potentiality and attractiveness.**

The imperatives for sustainability marketing (SM) adoption in the emerging markets (EMs) have been evaluated due to their importance in today's international business context. (Anayo, 2011). Using Rugman and Verbeke's diamond network model, (Asmussen, Pedersen & Dhanaraj, 2009) its possible to hypothesize upon the contingencies influencing the links between host-country environments and subsidiary competence configuration. Results provide new insights into how multinational enterprises can overcome unbalanced national diamonds by acquiring complementary capabilities across borders. Companies seeking to expand abroad are faced with the complex task of screening and evaluating foreign markets. How managers define, characterize, and express foreign market opportunities, what makes a good market or an attractive industry environment? Markets differ in terms of market attractiveness, due to variations in the economic and commercial environment, growth rates, political stability, consumption capacity, receptiveness to foreign products, and other factors. Research proposes the use of two complementary approaches to preliminary foreign market assessment and selection: country clustering and country ranking. These two methods, in combination, can be extremely useful to managerial decision makers in the early stages of foreign market selection (Cavusgil, Kiyak & Yenyurt, 2004). It is also encouraged to business and international marketing scholars the use of Inglehart's framework. (Gaston-Breton & Martin 2011).

Market potentiality and attractiveness is not always easy to measure and compare. When comparing the BRIC countries with Germany as a representative mature market to put into perspective the short to medium-term market potential of BRIC markets, the majority of the companies examined focused their strategic investment priorities on emerging markets. The short-to mid-term revenue potential of the BRIC countries are expected to be lower in absolute terms than those for mature markets such as Germany. This holds true on several levels of granularity, such as GPD per capita, size and growth of high-income market segments. (Heinz & Tomenendal 2012). (Erhman & Hamburg 1986) report the development and testing of a normative model for determining how firms should select the countries to be used in the information search for foreign direct investment.

International business research has long acknowledged the importance of supranational regional factors in building models to explain phenomena such as where multinational corporations (MNCs) choose to locate. It is documented and supported in comparative analyses of regional schemes used to explain where US-based MNCs locate operations around the world. Geography, culture, trade and investment-based schemes with better structural coherence exhibit better initial fit with MNC location models and less change in fit after modest scheme refinement using a simulated annealing optimization algorithm. (Flores, Aguilera, Mahdian & Vaaler, 2013) while (Hashai 2011) theorizes and empirically demonstrates that born global firms stick to a dominant internationalization path over subsequent periods.

A robust understanding of international retailer's market selection process has been conducted and the results obtained highlight the importance of host market characteristics and the importance of understanding host market selections in the context of home market retail structural development and, by implication, the relative lack of importance of secondary managerial input factors. (Alexander, Rhodes & Myers, 2011). Although there are numerous techniques which are used in determining market potentials, when the data are scarce one of these becomes more readily useful than others. A relevant technique used is the multiple factor analysis. Research attempts to determine the market potential of East Europe by using this particular technique. This approach converts the unknown East European market conditions into the known U.S. market conditions by using a series of criteria as common denominators. (Samli, 1977).

Also, the importance of proximity in the supply chain has been analyzed on the field of the European automotive industry in order to simultaneously evaluate the relative importance of three dimensions: geographical, cultural, and relational proximity. Using a rich and novel data set, the authors find that carmakers value some aspects of each dimension independently in their sourcing strategy. The estimates indicate which proximity measures provide the largest (independent) benefits, but also that the positive effects the literature has attributed to some measures tend to reflect past relationships rather than predict new ones. In particular, co-location and a low cultural distance should be interpreted as outcomes of a sourcing strategy, not as predictors for sourcing success. (Schmitt & Van Biesebroeck, 2013).

Traditional market selection analysis relies on purely macroeconomic and political factors and fails to account for an emerging market's dynamism and future potential (Sakarya, Eckman & Hyllegard, 2007). A theoretical model of managerial decisions involving international market entry has been analyzed by (Malhotra & Sivakumar, 2011). The authors find that cultural distance and market potential have curvilinear and interaction effects on the level of equity participation. (Rahman, 2003) states that the importance and need for systematically evaluating and selecting potential foreign markets has been stressed by many researchers. The conclusions drawn by the author related to the fact that international businesses follow a stepwise; the first stage of this two-stage process is based on the evaluation of market size attractiveness which takes into consideration some macro and microeconomic variables along with some other macro level and firm related variables; and the second stage is based on the evaluation of a markets structural attractiveness which takes into consideration some cost, structural compatibility, government policy variables, along with some firm related variables.

Determining factors in the rate of franchising among emerging nations has been researched as well (Baena, 2012). Yet despite all this, little is known about the factors influencing country selection for expansion into these markets. In an attempt to enhance the knowledge that managers and scholars have on franchising expansion, a study examines how market conditions may constrain diffusion of franchising into emerging markets. They are: geographical distance; cultural distance; uncertainty avoidance; individualism; political

stability, and corruption. The author also controlled for gross domestic product, the efficiency of contract enforcement, and nascent. (Sahoo & Acharya, 2012) state that it exists a positive significant correlation between foreign direct investment (FDI) and Macroeconomic performance (MEP) indicates that a State's overall macroeconomic policy performance does matter to attract FDI.

### **Methodology, research and Hypothesis.**

This research project will try to determine if the fact of being a member of a certain cultural cluster has something to do with the variables that determine the market potentiality index, in line with prior research of variables identification (Cavusgil, 1997). A normality test is applied to verify the datasets and make sure that the correct statistical contrast is used. A one-way ANOVA will evaluate the significance between the groups including a Post Hoc analysis (if applies) in order to verify the significance between groups. Finally a generic correlation analysis will be executed including all the collected data of variables determinants of the Market Potentiality Index.

The research includes also the Ease of Doing Business and Corruption measures in its Distance To Frontier (DTF) mode. The literature states that some kind of relationships between Ease of Doing Business and FDI attraction exists, examining the effect that a country's business regulatory environment has on the amount of foreign direct investment it attracts. The Doing Business rank is highly significant when included in a standard empirical foreign direct investment (FDI) model (Corcoran & Gillanders, 2015) supporting as well the longitudinal approach of the research.

Using the GLOBE project as a framework for analysis looks coherent with the literature review e.g. (Dorfman % House, 2004), (Peterson & Castro, 2006) on measurements of the GLOBE, (Javidan, Dastalmachian, 2009) on managerial implications in Asia, (Den Hartog, Koopman, Thierry, Wilderom, Maczynski & Jarmuz, 1997) comparative research, or (Kabasakal, Dastmalchian, Karacay & Bayraktar, 2012).

This research starts collecting data of 10 different global clusters. Notice that African cluster is excluded in its MPI index analytics due to the lack of data (although not excluded in the CPI and DTF analysis). The clusters analyzed are as follows according to GLOBE classification: 1. Anglo, 2. Germanic, 3. Latin European, 4. African, 5. Eastern European, 6. Middle Eastern, 7. Confucian, 8. South East Asian. 9. Latin American and 10. Nordic. Each group of countries are considered our independent variable or factor in the study.

Collected longitudinal information on the dependent variables relate to the ease of doing business in its Distance to Frontier (DTF) calculations (World Bank, 2016) years 2010-2016 included, Corruption measures through the utilization of the most widely indicator as the Corruption Perception Index (CPI) years 2012-2015 and absolute values of the Market Potentiality Index (MPI) (Cavusgil, 1997) and its determinants which construct the MPI. The determinants are as follows: 1) Market size (MS), 2) Market growth (MG), 3) Market intensity (MI), 4) Market Consumption Capacity (MCC), 5) Commercial Infrastructure (CI), 6) Economic Freedom (EF), 7) Market Receptivity (MR) and 8) Risk. Longitudinal data collected refers to years 2014, 2015 and 2016 leading to an N=2204.

The cultural clusters are based on values and beliefs and abstract ideas influenced by lifestyle, religion or other human variables. The elements which compose the Market Potentiality Index (Cavusgil, 1997) depend on weighted factors.

Peculiarities of the sample:

- The US does not appear in the study of the MPI variables due to the fact that the MPI index explores a total of 87 nations identifying the levels of attractiveness or potentiality for US companies. So, consequently all possible nations are analyzed but the US.

- The country Switzerland is included in the cluster Germanic.
- The country South Africa is included in the cluster Anglo (due that most business and economic drivers are still under this cluster and not the African one).
- Absence of data in the MPI determinants in the African cluster (but still data is collected and analyzed in CPI and DTF).

### Hypothesis formulation

$H^0$  = Due to the natural asymmetry of the type of countries and in line with the complexity of the variables already stated by (Stephan & Uhlaner, 2010), there is no reason to believe that groups differ from each other regularly in a longitudinal way.

$H^1$  = some groups of countries might differ more than others in a regular and longitudinal way.

### Results of the research related to the normality tests.

1. Test of normality related to the DTF dataset ease of doing business in its values Distance to Frontier DTF). The results of the test are satisfactory in all groups with a  $\text{sig} > 0.05$  under the Shapiro-Wilk measure with the regular exception of group 10 which is Nordic countries. Only 3 countries are part of this group, Finland, Sweden and Denmark. In some particular cases other groups show lack of normality although this applies only to particular years of the longitudinal analysis. E.g. Latin European 2015, 2016 and South East Asia 2016. (See Appendix 1, Table 1). Also, it has been applied to the dataset a non-parametric normality test (K-S) Kolmogorov-Smirnov being  $>0.05$  in all the cases. (See Appendix 1, Table 2)
2. Test of normality section 2. Dataset of corruption using the Corruption Perceptions Index (CPI). All values are satisfactory stating that it is a normal distribution according to Shapiro-Wilk tests with the regular exception of the Nordic countries again and Latin American countries in year 2015 with a value of .009. (See Appendix 1, Table 3) After the normality test is applied a non-parametric K-S test reflects normality appears in all cases. (See Appendix 1, Table 4).
3. Test of normality section 3. It applies to all eight (8) variables and to the overall MPI index. In this case all variables show normality in their distributions (See Appendix 1, Tables 5-10). Still in the MPI determinant Risk, Six (6) countries out of ten (10) present distributions non-normal so it is decided to eliminate this section from the ANOVA test.

### Results related to One-way ANOVA analysis.

**1. Results ANOVA related to the Ease of Doing Business and its Distance to frontier (DTF)** measure show significance  $p < .005$  all years analyzed (.000 years 2010 to 2012 and .001 for years 2013 and 2014 and .002 (2015) and .004 year 2016.

As we can see there is significance ( $<0.05$ ) in all years. The test of homogeneity of variances (Levene), reveals homogeneity in the results of the variances stating that is it appropriate to apply Post-Hoc studies to verify significance between groups. The most relevant results of the Post Hoc Studies show that there is no significance between groups (clusters) when performing DTF analysis. Still some groups show certain significance. The binomials of groups which represent bigger variability and differences in their results are in most cases "Anglo-Latin American" and "Anglo-South East Asia". Also the group "Nordic-Latin American" shows significance although less. The location of countries in these groups or clusters state influence in the results versus some other clusters.

**2. ANOVA results related to the corruption indexes, CPI. Years 2015-2012**

There is a significance ( $<0.05$ ) in all years. The test of homogeneity of variances (Levene), reveals homogeneity in the results of the variances stating that it is appropriate to apply Post-Hoc studies to verify significance between groups. Taking into account the significance of ANOVA and the similarities in the variances it is applied a Tukey contrast to validate significant differences between the groups or clusters. Consequently these are the significant differences according to CPI dataset. The most appearing clusters showing differences applied normally to all years are the ones between the better scores in the 3 groups Germanic, Anglo and Nordic and their opposite clusters which are in this case SOUTH East Asia (SEA) and Latin American (LATAM).

**3. ANOVA results for the Determinant. "Market Growth". 2016-2014.**

This determinant variable shows significance  $<0.05$  in all 3 years analyzed, 2016, 2015 and 2014, showing values .000 in all cases with a  $F = 5.049$  (2016),  $F=4.824$  (2015) AND  $F=6.637$  (2014). Levene's test shows significance  $<0.05$  the year 2016 with a value of .039. In the first dataset related to year 2016 has been applied Tukey while in years 2015 and 2014 T2-Tamhane has been applied leading to the following Post Hoc results: In year 2016 Latino America (LATAM) cluster shows significance with Germanic and Nordic groups (.011 and .025 respectively). Years 2015 and 2014 show preponderance of a varied number of groups in a fragmented series.

**4. ANOVA results for the determinants "Market Size" (MS) and "Market intensity"** for years 2014, 2015 and 2016 do not show significance at the level  $<0.05$  at all.

**5. ANOVA results for Market Consumption Capacity (MCC). 2014, 2015 and 2016. Market Consumption capacity (MCC)**

determinant shows significance in 2 years (2016 and 2015), with levels  $<0.05$  as .003(2016) and .032 (2015). Levene's test show significance all 3 years 2016, 2015 and 2014 with levels of .013, .041 and .014 respectively. The post hoc analysis shows a great significance and presence of the cluster LATAM with levels of significance of  $<0.05$  in its pair with the Germanic cluster in the years 2016 and 2015 and with the Eastern European (EE) cluster in all 3 years.

**6. ANOVA results for Commercial Infrastructure.**

(CI). 2014, 2015 and 2016. In this case the analysis shows a great significance in the levels of Commercial Infrastructure appear very significant showing levels of  $F=12.943$  (2016),  $F=6.537$  (2015) and  $F=9.252$  (2014), being significance at the .000 level in all years. The Levene's test of homogeneity of variances shows levels  $<0.05$  in the years 2015 with a value of .013) and 2014 with a value of .047. Post Hoc analysis applies under Tukey and T2-Tamhane reflecting a very fragmented series of binomials in year 2016 and a quite important presence of the LATAM cluster in the years 2015 and 2014.

- c. ANOVA results for Economic Freedom. 2014, 2015 and 2016. Significance appears here again in this determinant. The results show an  $F=4.156$  and a  $\text{sig}=.001$  (Year 2016),  $F=2.891$  and  $\text{sig}=.013$  (2015) and  $F=4.257$  and  $\text{sig}=.001$  (2014). In the test of homogeneity of variances (Levene), shows significance the years 2016 and 2014 (.036 and .028) respectively while not in the year 2015 with a value of .062. After applying Tukey corrector no significance appear for any group during the year 2015. On the other side and using T2, we see again a predominance of LATAM cluster combined with a fragmented series of clusters.
- d. ANOVA results for Market Receptivity (MR). 2014, 2015 and 2016. There is

significance in all groups and years, Year 2016,  $p=.001$ , Year 2015,  $p = .006$ , Year 2014,  $p = .010$ . Levene's test express significance in the differences in the variances as well with a Sig.,  $p= .000$  in all 3 years. Post hoc applied under T2-Tamhane is performed showing no significant differences at all between binomials.

**7. ANOVA results for the overall Market Potential Index (MPI).** 2014, 2015 and 2016. There is significance in all groups and years, (.000 in all years). Levene's test express significance in the differences in the variances as well (.009, .007 and .008) , so post hoc analysis under T2-Tamhane is performed showing significance only in the pair Latin America-Germanic with a value of  $\text{sig}=0.049$ . Next you can see the table showing the ANOVA results with significance in the study:

(Table 1 goes here)

After the Post Hoc test are applied to the relevant groups and significance appears, not all groups show differences and when differences appear not always shows a longitudinal consistency. Only D1, D2, D6 and D7 show this significance supporting H1.

(Table 2 goes here)

Specifically, the analysis of the Ease of Doing Business in its Distance to frontier (DTF) test shows regular significance in all periods in the Anglo-Latin America and in 5 periods Anglo with South East Asia. Clearly the Anglo cluster differs in providing better frameworks for doing business that the other clusters.

(Table 3 goes here)

According to Corruption measures, (CPI) suggest that there is significant differences in results between the Anglo group and Latin America and South East Asia. Also Germanic group differs with the same groups (Latin America and South East Asia). Finally the next cluster showing very different behaviors is Eastern European cluster against Anglo and Nordic.

According to Market Consumption Capacity (MCC) we see that Latin America cluster differ from others all the 3 years, with Germanic in 2 years and with EE and Nordic. No doubt that the behavior of the Market Consumption Capacity in Latin America tends to differ from other groups analyzed.

(Table 4 goes here)

According with Commercial Infrastructure (CI), we see again that the clusters Latin



American is the one that differs more from other groups consistently during the 3 years.

(Table 5 goes here)

(Table 6 goes here)

(Table 7 goes here)

### **Limitations and future research.**

This research refers to the collected information providing 6 years in the analysis of the DTF (2010 to 2016), 4 years in the analysis of the CPI (2012 to 2015) and only has been possible to collect 3 years of the analysis of the determinants (2014 to 2016) due that the MPI index is still relatively young. The research uses the GLOBE classification which in some cases has been criticized (mainly from a marketing perspective), although I believe that it provides a generic robust framework very useful to understand mechanisms related to market potentials and culture. Another limitation of the research is the fact that the determinants of the market potentiality used are the ones made by (Cavusgil, 1997) and they are made from a US point of view in order to evaluate the market potentiality versus the US. Obviously the US is excluded from the Anglo cluster in its analysis of determinants, but still, future recommended research would go in line of the elaboration of the Market Potentiality Index of countries versus other countries instead of countries versus the US only.

### **Conclusions**

The clusters do not show significant differences according to the MPI determinants with the exception of Latin American cluster:

Latin American cluster in its Market Consumption Capacity (MCC) factor differs more than other clusters (mainly with the Anglo, Germanic and Nordic clusters). It is important to state that the MCC is a mix of other sub-factors as Consumer Expenditure, Income Share of Middle-Class, or Household Annual Disposable Income of Middle-Class. The behavior of the MCC, is not in line with other groups and in the same cluster but here there is a much more heterogeneous approach. Possible explanations to be explored might related to the facts that the distribution of the consumer expenditure or income behaves radically different than in Anglo or Nordic parameters.

Latin American clusters differ from others in its Commercial Infrastructure (CI). This determinant is made by a fragmented collection of sub-factors which increase its complexity. These factors are Cellular Mobile Subscribers, Households with Internet Access, International Internet Bandwidth, Number of PC's, Paved Road Density, Population per Retail Outlet, Available Airline Seats and Logistics Performance Index. The evolution of the commercial infrastructure in Latin America might differ from other countries because of political reasons, political economy decisions or vulnerability to economic crisis or periods of expansion. Also, the degree of economic and financial volatility might influence as well.

Also, it is found high correlation between the levels of corruption perceived (CPI) and the ease of doing business (DTF). The paper states that this variables might impact indirectly in a market potentiality, mainly with the connection existing between Economic Freedom and Doing Business. The correlation appears all the time between 0.8 and 0.89 stating that all countries data navigates in parallel.

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**Table 1: ANOVA results showing significance.**

Distance To Frontier (DTF)	F	Sig.	Corruption Perceived Index (CPI)	F	Sig.			
DTF2010	4.61	0.000 *	C2015	6.42	0.000 *			
DTF2011	4.565	0.000 *	C2014	5.955	0.000 *			
DTF2012	4.236	0.000 *	C2013	6.128	0.000 *			
DTF2013	4.06	0.001 *	C2012	5.951	0.000 *			
DTF2014	3.898	0.001 *						
DTF2015	3.673	0.002 *						
DTF2016	3.283	0.004 *						
Market Consumption Capacity. (MCC)	F	Sig.	Commercial Infrastructure (CI)	F	Sig.	Economic Freedom (EE)	F	Sig.
Y2016	3.678	0.003 *	Y2016	12.943	0.000 *	Y2016	4.156	0.001 *
Y2015	2.41	0.032 *	Y2015	6.537	0.000 *	Y2015	2.891	0.013 *
Y2014	1.956	0.079	Y2014	9.252	0.000 *	Y2014	4.257	0.001 *
Market Growth (MG)	F	Sig.	Market Size (MS)	F	Sig.	Market Potential Index. (MPI)	F	Sig.
Y2016	5.049	0.000 *	Y2016	1.307	0.268	Y2016	5.559	0.000 *
Y2015	4.824	0.000 *	Y2015	1.301	0.272	Y2015	5.618	0.000 *
Y2014	6.637	0.000 *	Y2014	1.292	0.276	Y2014	4.819	0.000 *
Market Intensity (MI)	F	Sig.	Market Receptivity (MR)	F	Sig.			
Y2016	1.036	0.427	Y2016	2.963	0.011 *			
Y2015	0.878	0.543	Y2015	3.268	0.006 *			
Y2014	1.488	0.193	Y2014	3.005	0.010 *			

(\*): Sig <0.05 level



**Table 2: Table of Determinant Market Potentiality Index + (Corruption Perception Index & Distance to Frontier) and their hypothesis relationship.**

Deter M.	Years of Analysis	Anov A Sig.	Years of Sig.	Post-Hoc	Groups Sig.	Years of Sig.	Period Studied	Supports H0, H1
D1.	6	Yes	6	Yes	2	6 and	2010-	-
DTF(*)						5	2016	
D2.	4	Yes	4	Yes	7	All = 4	2015-	-
CPI(*)							2012	
D3. MG	3	Yes	3	-	-	-	2014-	H0
							2016	
D4. MS	3	No	-	-	-	-	2024-	H0
							2016	
D5. MI.	3	No	-	-	-	-	2024-	H0
							2016	
D6. MCC	3	Yes	2	Yes	1	3 years	2024-	H1
							2016	
D7. CI	3	Yes	3	Yes	4	3 years	2024-	H1
							2016	
D8. EF	3	Yes	2	-	-	-	2024-	H0
							2016	
D9. MR	3	Yes	3	-	-	-	2024-	H0
							2016	

(\*): Sig <0.05 level

(Note that Determinant "Risk" been previously excluded from the Anova analysis). (\*): Not integrated in the Market Potentiality Index group of determinants

**Table 3: Post Hoc results Distance to frontier. Showing significance. 2010-2016.**

<i>Post-Hoc Sig.Results</i>	<i>YEARS</i>						
	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>
Anglo-Latin America	0.001	0.001	0.002	0.002	0.003	0.008	0.17
South East Asia- Anglo	0.008	0.01	0.017	0.018	0.023	0.035	
Nordic-Latin American	0.033	0.027	0.0035	0.049			
Eastern European- Anglo		0.044					

(\*): Sig <0.05 level

**Table 4: Post Hoc for Market Consumption Capacity  
 Showing significant differences. 2016-2014.**

POST HOC	2016	2015	2014
T2-Tamhane	X	X	X
YEAR 2016	Sig		
Germanic- Latam	0.015		
Eastern European - Latam	0.008		
YEAR 2015	Sig		
Germanic- Latam	0.023		
Eastern European - Latam	0.01		
YEAR 2014	Sig		
Eastern European - Latam	0.016		
Nordic - Latam	0.003		

(\*): Sig <0.05 level

**Table 5: Commercial Infrastructure. Tukey test. Year 2016.**

POST HOC	2016	2015	2014
Tukey	X		
T2-Tamhane		X	X
YEAR 2016	Sig		
Anglo- Latin European	0.006		
Anglo- EE	0.000		
Anglo- Middle East	0.000		
Anglo- SEA	0.000		
Anglo- Latam	0.000		
Germanic- ME	0.025		
Germanic- SEA	0.014		
Germanic- Latam	0.000		
Latin European- Latam	0.041		
EE-Confucionism	0.031		
ME-Confucionism	0.007		
Confucionism- SEA	0.004		
Confucionism- Latam	0.000		
Latam- Nordic	0.006		.

(\*): Sig <0.05 level

**Table 6: T2-Tamhane test for Commercial Infrastructure.**

Year 2015 and 2014.			
POST HOC	2016	2015	2014
Tukey	X		
T2-Tamhane		X	X

YEAR 2015	Sig
Germanic - LATAM	0.033
Germanic - EE	0.001
Latam - Latin European	0.024

YEAR 2014	Sig
Anglo - SEA	0.015
Germanic - Latam	0.000
Latam - Latin European	0.020
Latam - Anglo	0.015
Latam - EE	0.021
Latam - Nordic	0.000

(\*): Sig <0.05 level

**Table 7: Longitudinal Pearson Correlation between Corruption Perception Index and Distance to frontier.**

	GLOBE	DTF	DTF	DTF	DTF	DTF	DTF	DTF	C	C	C	C
		2010	2011	2012	2013	2014	2015	2016	2015	2014	2013	2012
GLOBE	1	-.313*	-.303*	-.298*	-.306*	-.305*	-.332*	-.314*	-.323*	-.306*	-.296*	-.298*
DTF 2010	-.313*	1	.997**	.990**	.984**	.974**	.932**	.915**	.872**	.872**	.865**	.868**
DTF 2011	-.303*	.997**	1	.995**	.990**	.979**	.941**	.925**	.872**	.872**	.866**	.870**
DTF 2012	-.298*	.990**	.995**	1	.995**	.987**	.945**	.936**	.860**	.862**	.854**	.859**
DTF 2013	-.306*	.984**	.990**	.995**	1	.994**	.954**	.946**	.857**	.858**	.849**	.854**
DTF 2014	-.305*	.974**	.979**	.987**	.994**	1	.964**	.958**	.841**	.842**	.834**	.838**
DTF 2015	-.332*	.932**	.941**	.945**	.954**	.964**	1	.993**	.814**	.814**	.810**	.815**
DTF 2016	-.314*	.915**	.925**	.936**	.946**	.958**	.993**	1	.808**	.808**	.803**	.809**
C2015	-.323*	.872**	.872**	.860**	.857**	.841**	.814**	.808**	1	.996**	.992**	.988**
C2014	-.306*	.872**	.872**	.862**	.858**	.842**	.814**	.808**	.996**	1	.996**	.994**
C2013	-.296*	.865**	.866**	.854**	.849**	.834**	.810**	.803**	.992**	.996**	1	.996**
C2012	-.298*	.868**	.870**	.859**	.854**	.838**	.815**	.809**	.988**	.994**	.996**	1

\*. Correlation is significant at the 0.05 level (2-tailed). \*\*. Correlation is significant at the 0.01 level (2-tailed).

## EXPLORING THE MARKET POTENTIAL OF TRADITIONAL FOOD AND RESTAURANT IN CENTRAL JAVA

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### Abstract

This research aims to analysis the correlation of prices, qualities, and obtainable merchandise on positive behavior and purchasing intent. It was started with consumers' opinion analysis on snack products and restaurant foods.

The samples of this research were 970 respondents and the data were collected using convenient methods in Central Java Province. This research used descriptive statistics and factor analysis.

The result of this research shows that public opinion on diversities products tends to indicate snacks as healthy foods, acceptable price, delicious flavor and tasteful, non-perishable, obtainable, attractive color, and sufficient products. Respondents also tend to choose restaurant foods that acceptable price, many flavors, healthy foods, non-perishable and effective, sufficient products, high quality, and invigorate products. Respondents tend to find the indicators of products above that strengthened through the increase of public opinion, public feeling and public marketing.

**Keywords:** *acceptable price, high quality, local brands, diversities products, positive thinking, purchasing intent*

### Introduction

Technology advancement and complex competition are two important things that must be considered by marketers to sell their products, particularly the one associated with local or traditional brands. Marketer s should be able to create a strategy that can direct consumers to do purchasing process on the products they sell.

Purchasing process of a product begins with the process of thinking, behaving, and acting (Dodds *et al.*, 1991; Engel *et al.*, 2001). What an individual thinks is the one that marketers try to catch, then this person will start to like it, after that, the intention to purchase will bring up (see Haryanto, 2014; Setiawan & Haryanto, 2014), and so is the purchasing process of local and traditional brands. Some cases encountered by the marketers of local brands are the lack of knowledge about what the person thinks, their market share, which ultimately decreases the marketing performance. Therefore, it becomes a phenomenon for local brand marketers due to the unlimited influx of foreign brands; so many consumers prefer purchasing foreign brands to domestic ones. The object which is interesting to observe in this study is consumers' behavior in choosing the product types of local or foreign brands.

This research focuses on the question of how the purchasing process of a consumer that prefers the local brands by considering the product types, which is expected to provide insights into traditional or local brand marketers to determine the more effective strategy in attracting consumers toward the traditional brands.

## **Literature Literature Review and Hypothesis Development**

This research focuses on individual behavioral process toward local brands, and it discloses a process of formatting attitude and product purchase intention.

### **1. Positive Attitude and Purchasing Intention of Local Brands**

Positive attitude and purchasing intention are variables which are used to predict real purchasing from a consumer. Purchasing intention is an action that has not been expressing in the real terms and still in the level of individual's thought. In the consumer's behavior it is often called purchase intention. Dodds *et al.*, (1991), define purchase intention as individual's desire to buy a product. Because of that, in the behavioral study, the desire is shown by individual's tendency, individual's possibility, and individual's decision to buy a product (Howard & Shay, 1988).

The literature review has explained that intention is a good predictor for individual in making a purchase (Kim & Chung, 2001; Munger & Grewal, 2000; Kwek, 2010; Delafrooz & Paim, 2011; Harcar *et al.*, 2012; Beneke *et al.*, 2013). As a predictor, intention is an important variable to decide the amount of market share which indicates a potential demand on a product and service. Marketer is very concerned about purchase intention, because from the purchase intention, the marketer can determine the success rate of marketing performance. Therefore, high effort is required to explain the variable which is considered important by individual to decide the purchase intention of a product.

In the behavioral process, the positive attitude of a brand and purchase intention on it is conceptualized as positive relationships (See Mitchell & Olson, 1981; Simonin & Ruth, 1998; Haryanto, 2014). It means that the higher positive attitude on a product, the higher purchase intention on it is. Thus, a hypothesis can be formulated to explain the behavioral process on local brands.

***Hypothesis 1: The higher positive attitude on a product, the higher purchase intention on it is.***

### **2. Product Price**

Product price is defined as individual's perception on a value that must be paid by the buyer to get a product or a service which has use and service values. In behavioral, price is described as the result of individual perception on some money that is sacrificed of a product or brand. (De-Matos *et al.*, 2007). This concept explains that price is a quality indicator. If the price of a brand is high, the quality of that brand is high as well.

In this research, the price in question is a price in accordance with quality that is accepted from a product or also called price fairness or honest price (see Ayres & Nalebuff, 2003). This concept is also called price-quality inference (Dodds *et al.*, 1991). In the behavioral process, price has a positive relationship with purchasing decision (See Campbell, 1999; Vaidyanathan & Aggarwal, 2003, Xia *et al.*, 2004). In accordance with positive attitude, it is conceptualized that the higher the price fairness, the higher the positive attitude on local brands is (See Delafrooz and Paim, 2011; Harcar *et al.* 2012; Beneke *et al.* 2013).

***Hypothesis 2: The higher the price fairness, the higher the positive attitude on local brands is.***

Then, in relation to the purchasing intention of local brands, it is conceived that the price fairness has a positive relationship with purchasing intention (See Delafrooz dan Paim, 2011; Harcar *et al.* 2012; Beneke *et al.* 2013). It means that the higher the price fairness, the higher



the positive attitude of brands is. Thus, the hypothesis 3 formulated in the local brands context is as follows.

***Hypothesis 3: The higher the price fairness, the higher the purchasing intention on local brands is.***

### **3. Product Quality**

Several different concepts associated with product quality were employed by previous researchers. First, they claimed that the quality of a product, apart from the shape of good or service, is value opportunity for a company to achieve the greater profit margin (Selnes, 1993). Secondly, they explained that the product quality from marketer's perspective is always associated with the specification, feature, functionality or performance of a product (Van-Trijp *et al.*, 1996). Thirdly, they stated that quality is defined as superiority or advantage on a product when it is compared with the alternative product from market perspective (Mittal *et al.*, 1998). In the context of culinary product, food quality is shown by the color, presentation, portion, shape, temperature, freshness, texture, aroma, mellowness and flavor. In behavioral, it is conceived that product quality has a positive relationship with the purchasing decision (Weiss, 2003) and in purchasing intention, the higher the product quality, the higher the positive attitude on a product is, and the high quality will bring up the purchasing intention (See Munger & Grewal, 2001; Beneke *et al.*, 2013; dan Kordnaeji *et al.*, 2013).

***Hypothesis 4: The higher the product quality, the higher the positive attitude on local brand is.***

Besides the positive attitude, the product quality has a relationship with the purchasing intention (See Munger & Grewal, 2001; Beneke *et al.*, 2013; and Kordnaeji *et al.*, 2013). It explains that the higher the product quality, the higher the purchasing intention on a product. Below is the fifth hypothesis:

***Hypothesis 5: The higher the product quality, the higher the purchasing intention on local brands is.***

### **4. Ease of Getting the Products**

Ease of getting the products is taken from convenience term, and based on the result of literature review; convenience has variety of understanding based on the application. First, convenience is defined as individual capacity in using all owned source efficiently to get a product (Nickols & Fox, 1983; Gofton & Ness, 1991; Scholderer, J., & Grunert, K.G., 2005). It means that convenience has a meaning of easiness for obtaining goods or shopping a product. Second, convenience is defined as the easiness for using a product (Verlegh & Candel, 1999; Scholderer, J., & Grunert, K.G., 2005). It means that an individual needs some efforts to use a product.

In the context of observed product, which is traditional cuisine, convenience is ease of product acquisition (See Thom, 2007; Delafrooz & Paim, 2011; Harcar *et al.*, 2012). It is based on an observation that in the modern society, especially in Indonesia, transportation is relatively expensive in terms of time, psychic, and psychological that is sacrificed to achieve a product that is relatively long. This consideration becomes an important determinant in buying a product, so that if the sacrificed effort to get the product is higher, the positive attitude and purchasing intention on a product is lower. Thus, it can be conceived that the higher the ease of product acquisition, the higher the positive attitude on the product is (See

Thom, 2007; Delafrooz & Paim, 2011; Harcar *et al*, 2012). Therefore, the hypothesis is:

***Hypothesis 6: The higher the ease of product acquisition, the higher the positive attitude on the local brands is.***

Likewise, the purchasing intention is conceptualized as follows: the higher the ease of a product acquisition, the higher the purchasing intention on it is (Thom, 2007; Kwek, 2010; Delafrooz & Paim, 2011; Harcar *et al*, 2012). Thus, the hypothesis is formulated as follows:

***Hypothesis 7: The higher the ease of local brands acquisition, the higher the purchasing intention on it is.***

## **5. Type of Product**

Type of product is a behavioral external variable that allegedly moderates the behavioral process (see Dmitrovic & Vida, 2010, Bearden & Etzel, 2001). As a moderating variable, type of product has a role to distinguish behavioral process in buying a product. Thus, the phenomenon is the process of forming positive attitude and purchasing intention on local brands is differentiated by the product types, namely: snack and restaurant food products. Here is the hypothesis for the phenomenon.

***Hypothesis 8: The process of forming positive attitude and purchasing intention on local brands is moderated by product types***

## **Methodology**

This research was focused on the determination of market share of consumers who knew about snack and restaurant food products. Of 1000 questionnaires spread, 970 were returned. 485 respondents knew the former and 485 knew the latter.

The samples of research were determined by using the convenience sampling technique through survey, without any consideration but being based on ease. Factor analysis was employed to explain the public opinions of the snack products and restaurant food products.

### **1. Public Opinions of Snack products**

In Table 1, the rotated factor indicated that OPI4, OPI5, OPI9, OPI10, OPI13, OPI14, OPI17, and OPI20 were members of Factor 1. The consumers' main opinions were those related to health, namely: the snack products were fresh, fresh-made, healthy, hygienic, preservative-free, and nutritious so that Factor 1 was health dimension. Factor 2 consisted of OPI22, OPI23, OPI24, OPI25, and OPI26, meaning that the consumers desired appropriate, reasonable, acceptable, and proportional prices so that Factor 2 was price reasonableness dimension. Factor 3 consisted of OPI1, OPI2, OPI3, and OPI8, meaning that the consumers required snack products which were tasty, delicious, scrumptious, and suitable in terms of flavor so that Factor 3 was flavor dimension. Factor 4 consisted of OPI8, OPI11, OPI12, meaning that the snack products were durable, attractive, and long-lasting so that Factor 4 was durability dimension. Factor 5 consisted of OPI19 and OPI21 indicating that the snack products were easily available and practical so that Factor 5 was ease of getting dimension. Factor 6 consisted of OPI6 and OPI7, meaning that the snack products were bright and attractive so that Factor 6 was color and attractiveness dimensions. Factor 7 consisted of OPI15 and OPI16, meaning that the snack products were plentiful and filling so that Factor 7 was product quantity dimension.

Thus, public opinions of snack products could be categorized into seven dimensions: the snack products were connoted as healthy snack products (Factor 1), reasonable price snack

products (Factor 2), appropriate flavor snack products which (Factor 3), long-lasting snack products (Factor 4), ease-of-getting snack products (Factor 5), attractive color snack products (Factor 6), and plentiful quantity snack products (Factor 7).

**Table 1**  
**Rotated Component Matrix<sup>a</sup>**

	Component						
	1	2	3	4	5	6	7
OPI1			.630				
OPI2			.819				
OPI3			.800				
OPI4	.888						
OPI5	.530					.431	
OPI6						.727	
OPI7						.696	
OPI8				.841			
OPI9	.885						
OPI10	.532						
OPI11				.472			
OPI12				.865			
OPI13	.675						
OPI14	.769						
OPI15							.819
OPI16	.427						.716
OPI17	.769						
OPI18			.478				
OPI19					.724		
OPI20	.507						
OPI21					.822		
OPI22		.676					
OPI23		.772					
OPI24		.768					
OPI25		.823					
OPI26		.796					

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 9 iterations.

## 2. Public Opinions of Restaurant Food Products

In Table 2, the rotated factor indicates that OPIM22, OPIM23, OPIM24, OPIM25, and OPIM26 were members of Factor 1. The consumers' main opinion was related to prices. The consumers required reasonable, appropriate, and proportional prices so that Factor 1 was price reasonableness dimension. Factor 2 consisted of OPIM1, OPIM2, and OPIM3, meaning that the consumers wanted the tasty, delicious, scrumptious restaurant food products so that Factor 2 was flavor dimension. Factor 3 consisted of OPIM9, OPIM10, OPIM11, and OPIM17, meaning that the consumers required healthy, clean, attractive and nutritious restaurant food products so that Factor 3 was health dimension. Factor 4 consisted of OPIM7, OPIM8, OPIM12, and OPIM21, meaning that the consumers required attractive, durable, long-lasting, and practical restaurant food products so that Factor 4 was durability and practicality dimensions. Factor 5 consisted of OPIM13, OPIM14, and OPIM15, meaning that the consumers required preservative-free, natural, and plentiful restaurant food products so that

Factor 5 was no-preservative and plentiful quantity dimensions. Factor 6 consisted of OPIM16 and OPIM20, meaning that the consumers wished filling and quality restaurant food products so that Factor 6 was food quality dimension. Factor 7 consisted of OPIM4, OPIM5, and OPIM6, meaning that the consumers required fresh, fresh-cooked and bright restaurant food products so that Factor 7 was food freshness dimension.

Thus, the public opinions of restaurant food products could be classified into seven dimensions: reasonable price food products (Factor 1), varied-flavor food products (Factor 2), healthy food products (Factor 3), durable and practical food products (Factor 4), preservative-free and plentiful food products (Factor 5), quality food products (Factor 6), and refreshing food products (Factor 7).

### **3. Market Share of Snack Products and Restaurant Food Products**

There were three market shares of snack products and restaurant food products, namely: (1) mind share to explain the average level of brands in the individuals' mind; (2) hear share to explain the average level of brands in the individuals' heart; and (3) market share to explain the average level of individuals' desire to buy a brand.

### **4. Market Share of Snack products**

Table 3 shows that the mean score of public opinions of snack products was 3.38. The score indicates that the public opinions of snack products were moderate (neutral). The public was aware that the snack products were mediocre and nothing special. The mean score of mind share of snack products was 4.22. Snack products were relatively good to occupy the mind of individuals, meaning that the public regarded that the snack products were perceived as good products. The mean score of heart share of snack products was 4.42. The public valued the products positively, which was expressed through their pleased and excited feelings by the presence of the brands. The markets share of snack products was 4.32, indicating that the snack products received relatively good reactions from the public, which was expressed through their intention to purchase the products in the future.

**Tabel 2**  
**Rotated Component Matrix<sup>a</sup>**

	Component						
	1	2	3	4	5	6	7
OPI1		.811					
OPI2		.839					
OPI3		.806					
OPI4							.619
OPI5							.898
OPI6							.893
OPI7				.553			
OPI8				.822			
OPI9			.619				
OPI10			.893				
OPI11			.894				
OPI12				.785			
OPI13					.933		
OPI14					.610		
OPI15					.935		
OPI16							.902
OPI17			.518				.468
OPI18							
OPI19							
OPI20							.901
OPI21				.632			
OPI22	.753						
OPI23	.808						
OPI24	.820						
OPI25	.840						
OPI26	.733						

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 9 iterations.

**Tabel 3**  
**Market Share of Snack products**

		<b>Opinion</b>	<b>Mind Share</b>	<b>Heart Share</b>	<b>Market Share</b>
N	Valid	485	485	485	485
	Missing	0	0	0	0
	g				
	Mean	3.3895	4.2297	4.4219	4.3732
	Median	3.3478	4.0000	4.4000	4.2000
	Mode	3.35	4.00	4.00	4.00
	Std. Deviation	.50927	1.16886	1.24699	1.24874
	Minimum	1.96	1.00	1.00	1.00
	Maximum	5.00	7.00	7.00	7.00

### 5. Market Share of Restaurant Food Products

Table 4 shows that the mean score of public opinions of restaurant food products was 3.86. The score indicates that the public opinions of them were relatively good, meaning that the public was aware that the products were good.

Table 4 above shows that the mean score of mind share of restaurant food products was 4.98. The score indicates that the public had relatively good perception of the food products in their mind. The mean score of heart share was 5.33. The score indicates that the public loved the restaurant food products, which was expressed through their pleased and excited feelings toward the restaurant food products. The mean score of market share of restaurant food products was 5.24. The score indicates that the restaurant food products received relatively good reactions from the public, which was shown by their intention to purchase the restaurant food products in the future.

**Table 4.**  
**Market Share of Restaurant Food Products**

		<b>Opinion</b>	<b>Mind Share</b>	<b>Heart Share</b>	<b>Rerata Share</b>
N	Valid	485	485	485	485
	Missing	0	0	0	0
	Mean	3.8664	4.9864	5.3311	5.2458
	Median	3.8462	5.0000	5.6000	5.4000
	Mode	4.00	6.00	6.00	6.00
	Std. Deviation	.46512	1.22760	1.19238	1.10362
	Minimum	2.23	1.00	1.00	1.60
	Maximum	5.00	7.00	7.00	7.00

a. Multiple modes exist. The smallest value is shown

### Conclusion

Public opinions of snack products show that the snack products were healthy, reasonable-priced, easy to obtain, attractive, and plentiful. Meanwhile, the restaurant food products were connoted as reasonable price, plentiful flavor and taste, healthy, durable, practical, plentiful, fresh, and quality food products.

In term of market share, snack products have neutral public opinions meaning that the

products are mediocre good products, and the public intend to buy them in the future. Meanwhile, the restaurant food products have relatively good public opinions, and the public like and intend to purchase such products in the future.

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## CRITICAL EVALUATION OF CIRCUITRY MARKETING ENVISAGING THE GLOBALIZED ECONOMIC EPOCH

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### Abstract

In the digital era stride ahead at the speed of thought, everything is in its dynamic state of flux. The explosions in the Circuitry Marketing (CM) are an infrequently explored vicinity in doing research to compare the distributor's insight on strategies from two selective companies of our scholarly research presentation. Such a comprehensive study ultimately relieves marketing strides after developing tools and techniques for generating knowledge by throwing light to new vistas to collaborate with multiple science-based fields such as computer science, biotechnology, and neuroscience as well as with other knowledge fields such as cultural anthropology, philosophy, and the arts in coordination with viable models of research. The study significantly focuses on the importance of taking appropriate corrective measures to attend major classes like demographics, customer-loyalty and satisfaction. Even though precautions are taken to include all sections to represent the Telangana state, it is more effective to conduct such studies geo-stratified to be more accurate. It is intended that outcomes will help customers, distributors, and companies' executives to respond to the ever-changing needs of end-users in Indian marketing through increasing flexibility via (Network Marketing) NM. Few studies that have been explored till recently focus on comparison of MLM in Indian and hence add more value in understanding customer's buying behavior. The findings hypothetically reveal relevant facades. The presentation will discuss various critical aspects of CM foreseeing the universal economic era.

**Keywords:** *Circuitry Marketing, Distributor, Globalization, Entrepreneurship Development Micro-Business.*

### Introduction

The concept of *Circuitry Marketing* has been transforming the way companies are doing business and is gaining a steady momentum. Many companies across the world have perceived the potential of this concept to reach prospective customers in the nook and corners of the world. The traditional distribution structure in most of the marketing companies for a long time depended on tried and tested physical distribution system of "Manufacturer – Wholesaler – Retailer - Consumer". It is like lessening the scale of networking of sales persons in selling products to the end-users through 'Referral' and 'Word of Mouth' (WOM) publicity.

*Circuitary Marketing* is an opportunity through which people can protect themselves from the unemployment or insufficient salary of paid jobs. In foreseeable future significant number of goods and services sold in the world will be through *Circuitary Marketing* companies.

Most of the *Circuitary Marketing* companies feel that there is a bright future because of plethora of reasons like 'diffusion of brands' through powerful 'word of mouth', 'referral', 'product quality', 'Low Investment-cum-High Returns' and 'Royalty Income' etc. While *Circuitary Marketing* has been fast growing as per organizational spectrum, it has sizable unorganized sector.

The World Federation of Direct Selling Association (WFDSA) encourages various member

country associations, such as Indian Direct Selling Association (IDSA)<sup>14</sup> in India and other country Regulatory Bodies (or Associations), for organizing and promoting *Circutary Marketing*. The *Circutary Marketing* has been in vogue in many of the countries.

There has been a surge in *Circutary Marketing* in India to improve standard of living of Indians by converting unproductive time of housewives, unemployed, physically challenged, retired people and students into productive time on either part-time or on full-time basis.

Globally direct selling has gained prominence, primarily in product categories such as *Cosmetics-cum-Personal care products* has maximum share of 30%, followed by *Wellness products* 28% and *Household goods and durables* 21% as per WFDSA<sup>15</sup> (2011).

**1. Direct Selling in India:** Direct selling market in India is about 1.2 billion US Dollars. It is expected to increase to 10 billion 2025, engaging over 18 million consumers. In a recent report on direct selling market in India by FICCI and KPMG the direct selling industry will have a positive impact on industry. Direct selling industry impact positively by creating additional income opportunities for large number of people (micro-entrepreneurship – 18 million), women empowerment (self-employment – 11 million), development of SME sector (transfer of know-how, process and technology), employment generation (manufacturing, packaging, processing and now retail stores: 2.5 million people), CSR activities (health, education, etc.: INR 0.5 billion) and contribution to exchequer (INR 90 billion). Recognizing the potential of direct selling market, Government of India has come up with a guidelines that shall voluntarily regulate direct selling and protect consumers.

The need to protect consumers from pyramid or Ponzi schemes that emulate MLM to dupe consumers, most at the base of the pyramid, is real. Same applies to genuine MLM companies that are operating in India resulting in arbitrary legal actions. The country head of well know global MLM company in India and his associates were arrested twice in the last five years. The need for a supportive legal framework has become necessary, specifically considering social and economic benefits of MLM in India, its potential growth and its popularity among consumers. The recent guidelines, which is likely to eventually become an act, regulating *Circutary Marketing* in India is an important step in this direction.

Recently, some of the MLM brands, for example Amway, are setting up pick centers and experience stores. It is expected that with increasing awareness, increasing purchasing power, convenience of buying and possibility of earning commission by selling to others will continue to expand MLM market. Foray in online sales and selling through e-commerce sites are on the rise. Social media network are likely to contribute to the scale, thereby expanding the scope of *Circutary Marketing* as well as willingness to consider a market mix by MLM companies, which is becoming imperative in 21st century, specifically in the content of digital and social networking.

**2. Relevance:** In this context, a micro-level study of circutary marketing in India is timely. This study provides certain useful insights that may be of relevance to policy makers, CMOs, investors, academicians and general public at large. Specific insights on consumer segment and its characteristics, consumer touch points, profile of distributors, drivers for distributors, service quality improvement requirements, and emerging role of social media. The objectives of the studies were firmred through a systematic literature review (salient points presented below) identifying certain persisting gaps, specifically in the context of marketing landscape in India.

<sup>14</sup>. [www.idsa.co.in](http://www.idsa.co.in) (Accessed on 10<sup>th</sup> May, 2013)

<sup>15</sup>. [www.wfdsa.org](http://www.wfdsa.org) (Accessed on 15<sup>th</sup> July, 2013)

The gaps identified, based on literature review, are:

**Gap**

1. The researcher felt the need to identify the problem and prospects of *Circuitary Marketing* in the Indian context as this dimension was not included in the earlier studies.
2. Detailed comparative study of two or more companies in the field of *Circuitary Marketing* was not comprehensively covered.
3. The researcher did not come across the attempt to explain and analyze the role of distributors in *Circuitary Marketing*.
4. The researcher did not come across analysis of impact of ‘demographics characteristics’ on ‘factors influence business orientation’.
5. ‘Sources of Information’ about *Circuitary Marketing*, which was not covered comprehensively in the Indian context. Hence the researcher wanted to ascertain this aspect.

**3. Objectives of the study:**

1. To identify the factors that motivate distributors to join Circuitry marketing companies?
2. To study the factors influencing distributors to deal with circuitry marketing companies?
3. To find out/develop the factors influencing level of satisfaction of distributors belong to Circuitry marketing companies and to establish their association?

**4. Research Questions**

The Research Questions are derived from the review of literature, after identification of literature gaps.

RQ1: What are the factors that motivate distributors to ‘join’ *Circuitary Marketing Companies*?

RQ2: What are the factors influencing distributors to ‘deal’ with *Circuitary Marketing Companies*?

RQ3: What are the factors influencing ‘Level of Satisfaction’ of distributors belongs to *Circuitary Marketing Companies* and what is their nature of association?

The study pivot focus importance of taking appropriate corrective measures to attend major classes like demographics, customer loyalty and satisfaction. Even though precautions are taken to include all sections to represent the Telangana state, it is more effective to conduct such studies geo-stratified to be more accurate. It is intended that outcomes of this study will help customers, distributors, and companies’ executives to respond to the ever changing needs of end users in Indian marketing through increasing flexibility via NM. The studies which focus on comparison of MLM in Indian context are very few and hence add more value in understanding customer’s buying behavior in these areas.

The findings of the survey of *Circuitry Marketing* distributors *Hindustan Unilever Network* and *Amway India* includes distributors’ demographic profiles, experiences, sources of information related to *Circuitry Marketing*, motivational factors, their opinion towards *Circuitry Marketing*, problems as expressed by the distributors and also suggestions. Attributes of *Circuitry Marketing* like distributor satisfaction on Network Products, Proprietary Products, ‘Word of Mouth’ Publicity, Prestige, Quality Perception, Service Perception and ‘Reputation of Company’ are included in the study.

**5. Originality** It is part of Ph.d thesis of corresponding author.

**6. The limitations of the study are as follows:**

1. This study is limited to two major Circuitry Marketing Companies (CMCs). Even though these two Circuitry Marketing Companies capture the essence of Circuitry Marketing, there are more number of players in the market. A detailed study of the entire spectrum of Circuitry Marketing will reveal nitty-gritty's of this business model.
  2. Only MLM was considered for the study whereas the formats like Single Level Marketing, Home Party Plan, with different compensation plans can be taken for consideration.
  3. The study does not cover actors, layers, verticals in Circuitry Marketing business.
7. **Sampling technique:** Gathered data using 'Snowball' sampling technique from 300 *HUN* and 300 *AIE* customers through structured questionnaire in Telangana joint state capital Hyderabad.

### Data Analysis

The analysis of data and to reveal the results of the survey. The results were obtained by using 'Descriptive' as well as 'Inferential' statistics on the basis of responses collected from the distributors of selected *Circuitry Marketing* companies through questionnaire survey method. 'Inferential' statistical tools like Reliability Test (Cronbach's Alpha Co-efficient), Factor Analysis, Testing of hypotheses, Chi Square ( $\chi^2$ ), Phi Cramer's V Test and ANOVA (Analysis of Variance) were applied for testing of the hypotheses and to answer the research questions (mentioned in the review of literature), research objectives, Regression (Multiple Linear) and Henry Garret Rank Technique.

The data was analyzed through descriptive and inferential statistics. Descriptive Statistics tools like mean, standard deviation, and cross tabulations were applied to distributor's demographic variables, which were mentioned in the Part-A of the questionnaire. These were followed by *Circuitry Marketing* behavior, Motivational factors, and opinion covered in Part-B of the questionnaire. Subsequently analysis of practitioner's approach to *Circuitry Marketing* was conducted in Part-C of the questionnaire.

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3. The study does not cover actors, layers, verticals in Circuitry Marketing business.

### Review of Literature

*Circuitry Marketing* is an extension of direct selling and its basis is positive 'Word of Mouth' publicity. It can do anything and everything for the rapid spread of what it intends to spread. According to news item published in *India Today*<sup>16</sup> many liters of milk is appeared into the tiny Ganesha's idol in Mumbai and other parts of India and also other countries of the

<sup>16</sup>. "Ganesh Idol Drinking Milk?!", *India Today*, English Edition, 26<sup>th</sup> May, 1995, [www.milkmiracle.com](http://www.milkmiracle.com).

world. The example of Lord Ganesha's idol drinking milk is globally quite evident and popular among all circles. It is quite clear that the piece of news about Ganesh idol's drinking milk has been spread globally in a rapid manner. This is what 'Word of Mouth' publicity can do.

Even though *Circuitary Marketing* is quite a new territory for most Indian marketing *pundits*, some of the interested scholars and researchers have furnished many valuable opinions concerning what constitutes a *Circuitary Marketing*. It is always good and useful to explore what research scholars and eminent writers in the field of *Circuitary Marketing* have done so far. That will give us an idea of the area covered so far and what yet remains to be addressed. Also, it will save a researcher from repeating what has been done before.

1. **Joining Business Groups** Richard C. Bartlett<sup>17</sup> (1992) made a survey on "A Profile of Direct Salespeople" and it presents information on the demographic characteristics and direct-selling experience of direct salespeople. More specifically, the report covers personal characteristics of direct salespeople, including gender, age, ethnicity, education, marital status, and household income. Direct-selling employment experience is measured by average weekly hours in direct selling, direct-selling income, expenses and other items. The article also provides key salespeople and characteristics of the salesperson. In addition, the report provides foundation for future research.

Bloch Brain<sup>18</sup> (1996) stated that *Multilevel Marketing* is the relationship between the would-be seller and his prospective 'Down line'. He opines that truly determined sellers may well make money but most will not, yielding rather in the face of rejection ranging from uninterestedness to serious disapproval and resentment of the matter having been raised at all. He further described that if you get your friends to join up, you get a commission not only from the cosmetics, magazines or whatever your friends purchase, but from the sales they make to their friends too. Theoretically, you can make a fortune as this process expands in a sort of multi-layered network which, when drawn on paper, fans out into a pyramid-like structure.

Richard Berry<sup>19</sup> (1997) articulates that in essence, *Circuitary Marketing* [NM] is a way of organizing sales operations of a direct selling organization. It is a non-store approach to relating and distribution of goods and services, directly to the customers. *Circuitary Marketing* embodies the essence of free enterprise by providing an opportunity for the interested individuals or independent contractors to run a home based business. Richard Berry<sup>20</sup> (1997) also indicates that, instead of a supply organization constructing a large administrative and sales force comprising of employees, self-employed independent contractors can be encouraged to build a sales organization of persons, like themselves, by using a unique coaching and training system called 'sponsoring'. In this system of sponsoring the distributor (sometimes referred to as an 'independent contractor' or 'a direct salesperson') shares knowledge and expertise with new entrants leaving the business for the first time. In turn, for this commitment, the sponsor earns commission based on a percentage of the sales from those recruited, subject to the structure of the organization plan.

<sup>17</sup>. Richard C. Bartlett "A Profile of Direct Salespeople: Survey for the Direct Selling Association" in Appendix B of 'The Direct Option', 1992. Texas: A & M University Press.

<sup>18</sup>. Bloch, Brain, "Multilevel Marketing: What's the Catch?" Journal of Consumer Marketing, 1996, Vol.13, No.4, pp.18-26.

<sup>19</sup>. Richard Berry., "Direct Selling: From Door to Door to Circuitary Marketing" 1997 Butterworth-Heinemann <http://wfdsa.org/library/index.cfm?fa=rberry> (Accessed on 11th May, 2013)

<sup>20</sup>. Ibid-3

Patralekha B. and M.Krishna Kumar<sup>21</sup> (2000) exemplified the fact of attracting many-a-distributor which was proved in the *Nu Skin* annual convention held in March, 1998 attracted 13,000 distributors out of which more than 8,000 came from Japan, Taiwan, Hong Kong, Korea, Thailand, and Philippines. *Rexall* hosted series of conventions in 1998, each of which was attended by about 2,000 distributors. Five thousand distributors from USA, Canada, Australia, New Zealand attended USANA's Health Science 1998 convention. Nearly 15,000 attended America's 1998 convention.

Even more astonishing than the phenomenal growth of Circuitary Marketing Organizations (NMO) is the controversies these organizations seem to attract critics which have complained that the average Circuitary Marketing Organization distributor earns very little. Every NMO has its share of distributors but most NMO distributors make negligible debate of their propensity to mould into close knit (and often very exclusive) social groups and revolve primarily around parties, meeting, rallies, convention and other occasions organized under the NMOs banner.

The chapters are supported by local directors who receive a 250-page manual and hours of training before managing an area. Directors are offered training twice a year in three-day conferences on strategies that give them a *distinct competitive advantage* in their markets. Business Networking International (BNI) emphasizes the following benefits to join: increased business through referrals, participation in business tradeshows, free networking workshops and the knowledge that everyone in a group has been screened for competency and ethics.

## **Findings of the Study**

### **1. Demographics Description**

Demographic characteristics include Age, Gender, Marital Status, Education, Occupation and Monthly Income.

<sup>21</sup>. Patralekha B. and M.Krishna Kumar, "Socialization in Circuitary Marketing organizations: is it cult behavior?" July 2000, *The Journal of Socio-Economics* Vol 29, Iss 4, pp 361-374.

**Table 1. Sample Composition – Overall (N=600)**

<b>Demographic Characteristics</b>	<b>Description</b>	<b>No of respondents</b>	<b>Perctg %</b>	<b>Mean</b>	<b>S.D</b>
Age (Years)	18-30	276	46	33	7.887*
	31-40	181	30		
	41 Plus	143	24		
Gender	Men	202	34	N O T  A P P L I C A B L E	N O T  A P P L I C A B L E
	Women	398	66		
Marital Status	Married	395	61		
	Unmarried	205	39		
Education	SSC	144	24		
	Graduation	301	50		
	Post-Graduates & Above	155	26		
Occupation	Housewives	243	41		
	Employees	147	25		
	Agriculturists	37	6		
	Business Persons	121	20		
	Professional	36	6		
	Others (Students)	16	3		
Monthly Income.	Less than Rs. 10,000	206	34	20,300	0.844**
	10,001 to 20,000	173	29		
	Above 20,001	221	37		

\* Indicates Standard Deviation for Age & ‘\*\*’ indicates Standard Deviation for Income

Source: Primary Data

Table 1 shows the profiles of 600 respondents. The respondents are the distributors of sample companies. 46% of respondents are between 18-30 years of age, 30% are between 31-40 years age group. Respondents above 41 years constitute 24% of the sample. Women dominated constituting 66% of the sample. 61% of the respondents are married. 50% of the respondents are graduates. SSC constituted 24% of the sample. Housewives constituted the segment 41% of the sample. 37% of respondents have monthly Income above Rs.20,001, 29% have income in the range of Rs.10,001-Rs.20,000 and 34% have income of less than Rs.10,001. Thus the sample represents heterogenic demographic categories.

Cronbaachs’ Alpha

**Table 4.2: Reliability Table**



**Reliability Statistics**

Cronbach's Alpha	No of Items
.712	18

Cronbach's Alpha Reliability statistics shows .712 for 18 Items, it is more than .600 which is close to .6. In social sciences, it is adequate Malhotra<sup>22</sup> hence proceeded with further study.

**Scale Statistics**

Mean	Variance	SD	No of Items
43.45	24.201	4.919	18

The eighteen statements are condensed to eight factors. Factor analysis was used to test the construct validity as shown in Figure No 4.1 Scatter Scree Plot.

**Key findings**

1. **Findings** reveal that the majority of *HUN* respondents are business people, whereas housewives are more prevalent in *AIE*. 'Word of Mouth' (WOM) through 'Reference group' plays a leading role. 'Distribution Flexibility' is mostly by Network management support and acquaintances. 'Support' is low in *AIE* when compared to *HUN*. 'International quality' is comparatively high in *AIE* than *HUN*. Prices are perceived to be higher in *AIE* than *HUN* customers.

**2. Suggestions**

Based on the findings present suggestions were given.

- a) Organization intending to adopt Circuitry Marketing has to offer a product range/mix, which is acceptable to various age groups. People in the age groups of 18-40 years are purchasing less regularly compared to above 40 years, hence this segment need more attention in the aspects of product salability and Price.
- b) As distributors of all age groups are equally interested to use as well as sell entire product mix, organizations involved in Circuitry Marketing need to focus on the needs of all the age groups, while giving priority age group of 18-40 years.
- c) Employees appear to use more CM products, when compared to Agriculturists, Businessmen, Professional and others. This may be because of fixed salaried persons may show more interest to increase their income through CM as part time occupation. A full time businessman may find it more advantages to focusing on his own business than diverting his attention on CM. It may pay well to focus on Agriculturists and Professionals, who may find time during slack period.
- d) Overall the regular customer contact is less across all occupations. However employees are having less 'Regular contact with customer' than Non-employees. Promotional plans may be worked out to ensure 'regular contact with customers' by all the segments with focus on employees. Frequent customer meet should be arranged necessary support to the distributor by CM Company need to be given by the company.
- e) Distributors above 41 years of Age group, Men and Agriculturist 'Keeping in touch more with distributors of other NM companies'. To ascertain the reasons for being touch with other NM companies and take remedial actions to cultivate these segment to retain them.

<sup>22</sup> Value above 0.6 is considered sufficient as per statistician and famous author Malhotra

- f) The practice of ‘Guiding down line’ across all the age groups’ is not satisfactory across all demographics. Married distributor are ‘guiding down line’ more than the unmarried distributors. Employee are guiding down line better than Businessman, Professionals and Agriculturists and others. Motivating Non-Employee segment is important.
- g) To highlight the role of service in Circuitary Marketing and communicates its importance to the distributors suitable. Tangible measures of service quality can be measured and monitored. Kaizen (Small improvement on continuous basis across the organization) needs to be adopted for continuous improvement of services.
- h) Since the reasons like ‘Retail Margins’ and ‘Be own boss’ are preferred by the distributors. These have to be highlighted in the sales pitch, while showing the plan to prospects.
- i) International Quality, benefits from the products and Prompt service and WOM publicity are the top four reasons which influence the purchase of products from NM.
- j) Service, self-employment, monetary gains, Feature Advantage Benefit are top four reasons for recommend others to join. As the distributor based is increasing year after year, maintain the quality of service is challenging. Focus on service quality should be given top priority.
- k) ‘Friends’, ‘Relatives’, Media and Internet are figuring top source of information. Attempt should to made to use social Network Media such as Facebook, Twitter etc. to be used to established between the customers and customer contact with the company. To cultivate groups, chat rooms, blogs etc. to facilitate customers meet and chat online.

**Definitions**

IDSA defines Circuitary Marketing as the act of marketing of consumer goods and services through personal contact, away from a fixed location or a shop. Direct selling involves the marketing of products and services directly to consumers in a face-to-face manner, away from permanent retail locations. Circuitary Marketing and Direct Selling are used inter-changeably. The WFDSA defines direct selling as ‘a dynamic, vibrant, rapidly expanding channel of distribution for the marketing of products and services directly to the consumers’.

Federation of European Direct Selling Association (FEDSA) which was founded in 1978 defines Circuitary Marketing as “the marketing of goods and services directly to consumers principally in a face-to-face manner, generally in their homes or the homes of others, at their workplace and other places away from permanent retail locations. Direct selling typically occurs through explanation or demonstration of the products by salespersons, referred to as direct sellers”<sup>23</sup>.

A form of selling without retail outlets, distributors, wholesalers or any type of middlemen. Traditional UK methods of direct selling to the consumer include the milkman and the creamboy. This form of selling is also used by various publishing houses especially to sell encyclopedias. More sophisticated versions of direct selling are used by companies such as Avon Cosmetics and Tupperware who organize in-home demonstrations of their goods.

<u>Author Source</u>	<u>Definitions</u>
BAKER (1984)	A form of selling without retail outlets, distributors, wholesalers or any type of middlemen.

<sup>23</sup>. Peterson R.A., and T.R.Wotruba.“What Is Direct Selling? Definition, Perspectives, and Research Agenda”, Journal of Personal Selling and Sales Management, 1996, Vol XVI. p.2.

BERNSTEIN (1984)	Direct Selling is the technique of approaching a customer on a person-to-person basis, either with a group approach (as in in-home party plan) or individually, one-on-one, to offer products conveniently with a personal service emphasis.
BENNET (1988)	A marketing approach that involves direct sales of goods and services to consumers through personal explanation and demonstrations primarily in their homes.
OSTROW & SMITH (1988)	Direct Selling commonly refers to such activities as telephone sales, door-to-door selling, or in-home parties.
ARON, DAVIES & SWINDLEY (1991)	The establishment of an immediate exchange relationship with a customer in which the usual intermediaries in the distribution chain are omitted.
CLEMENTE (1992)	A sales approach characterized by personal product explanations and demonstrations, often in the consumer's home or retailer's establishment.
HART & STAPLELON (1992)	Selling without the use of a retail outlet, distributor, broker or wholesaler or any other form of middleperson.

**Circuitary Marketing Concept** Circuitary Marketing Companies (NMCs) produce and supply the products to distributors on wholesale price (i.e. Distribution Acquisition Price) and provide the necessary promotional and sales materials, (i.e. product and literature kit) which are chargeable; handle the data processing, accounting and even impart training. NMCs initially appoint founder members who are by default satisfied customers, and also empowered as distributors and further they recruit new 'down line' distributors. These motivational groups (i.e. Britt Worldwide, Quest Corporation, Network 21, Dester Yager group and Winners International etc in case of *Amway*) of people then introduce the products and business opportunities to others, who in turn, introduce it to even more people. Thus, it continues with the base of consumers and independent contractors from time to time.

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## WHY DO SATISFIED CUSTOMERS WANT TO SWITCH?

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### Abstract

The purpose of this study is to find the causes of why satisfied customers is not a guarantee to remain in the same restaurant? Based on previous researches, some variables are examined in this study including service quality, food quality, atmosphere, price, satisfaction, intention to stay and the influence of variety-seeking moderate the relation of customer satisfaction and intention to stay in traditional family restaurant setting.

Respondents of this study are 320 customers of that restaurant who have high satisfaction rates, but has intention to switch. To fulfill the objective of this study, Partial Least Square (PLS) was used to calculate data. The result indicates that all independent variables (service quality, food quality, atmosphere, and price) effects to satisfaction except price variable. Furthermore, satisfaction influences intention to stay and variety-seeking negatively moderate the relationship between customer satisfaction and intention to stay.

This research faces limitations and the laxities of this study are discussed at the end of this article.

**Keywords:** *service quality, food quality, store atmosphere, price, customer satisfaction, intention to stay, variety-seeking*

### Introduction

Pre-research on this study has been conducted on 26 February 2016 in Restaurant Omah Lawas, Solo City. The collected data of this study are 40 respondents consisting of 19 respondents aged 17-25 years and 21 respondents aged above 25 years. Respondents of this study are citizens of Solo City and students, the results obtained from pre-research was 95% of respondents have intention to move from the restaurant, although the level of satisfaction (customer satisfaction) was high, in this case we can say that Intention to Stay on consumers is low. While 5% of respondents over 25 years do not feel like to switch to other restaurants, in other words the Intention to stay is high. Based on the result of the pre-research that has been done, researcher interested to make a research on a restaurant that have traditional concept that is Wedangan Omah Lawas in Solo City.

When customer get the satisfaction they will usually buy again and more but it looks different in culinary case as exposed in pre-research of this study. It is suspected that variety seeking variable influences the satisfaction variable. Kan et al, (1995) describes that variety seeking is customer's tendency to replace the product had been purchased or to find another product or service. Jung & Yoon (2012) has same perspective about variety seeking, but their emphasis on experience to meet the customer's emotional needs. Some researchers said clearly that satisfaction is a good predictor to repurchase intention, but this pre-research shows a bit different. Thus, study of relationship among satisfaction and repurchase intention is interesting to be conducted. This aim of this research is to find the causes of why satisfied customers is not a guarantee to remain in the same restaurant.

### Background Review

#### 1. Service Quality

According to Parasuraman et al., (1985 ) in Liza and Carolina (2011) Service Quality is a whole variety of features and characteristics of a product or service in terms of ability to meet the various needs that have been determined or latent. Good quality is not based on the

viewpoint of the company, but based on the customer's viewpoint (Jimmy and Sugiono, 2013). Service Quality items based on consumer ratings of the entirety of the various features and characteristics of a service restaurants in terms of ability to meet the various needs that have been determined or latent. According to Zeithaml et al., (2009) there are five dimensions for service quality there are tangibles, reliability, assurance, responsiveness, and empathy.

## **2. Food Quality**

Food is a product for a service provider especially for a restaurant. A good product is a product that can satisfy a desire or need (Kotler, 2002). According to Knight and Kotschever (2000) the quality of the food is a consistency of quality levels in the menu that achieved with standard setting products. According Essinger and Wylie (2003) indicators used to measure the quality of the food are flavor of food, food portions, and Various types of food, the specificity of the taste of food, Food Hygiene, and Food Innovations.

## **3. Store Atmosphere**

Store atmosphere is everything related to the store environment, such factors exterior, factors interiors, store displays, scent, color and music to create an impression that is convenient to attract customers, a good store atmosphere is designed for the purpose of consumer convenience (William, 2013). In the relation in this study Store Atmosphere means Restaurant Atmosphere, because the object of this study was the restaurant. The operational definition for this variable is consumers' assessment of the environmental quality of the restaurant. There are four dimensions to measure the atmosphere of the store, according to Hadi (1995) in (Stefan, 2014), the dimensions are exterior factors, interior factors, design and layout, and display.

## **4. Price**

High or low prices could affect customer perception, thus it will affect the purchases. According Basu Swasta (2000) price is the amount of money needed to add a number of combinations of items and their ministry. High prices describe the good quality of a product, whereas a low price will benefit for customers (Kirmani and Rao, 2000). The operational definition of the price is a form of consumer ratings on the amount of money needed, to add a number of combinations of goods along with services commensurate with a product that will take consumers to the restaurant. The indicator used to measure prices by Zeithaml and Bitner (2006) in Jimmy and Sugiono (2013) are Affordable prices, Conformity with the price of the food portions, Conformity with the price of the food display, and Competitive price.

## **5. Customer Satisfaction**

According to Kotler (2001), customer satisfaction is a sense of happiness or disappointed from someone to a product after customers compare the performance of these products with their expectations. Meanwhile, according to Zethamal et al., (2009) customer satisfaction is customers' ratings for products or services in terms of assessing whether products or services meet the needs and expectations of customers. Customer satisfaction increases when consumers have good experience during a visit to a restaurant. Perceived by consumers experience it is a combination of food, service, atmosphere of restaurant, as well as the price offered. Operational definitions on this variable is consumers' assessment of the restaurant when consumers make a visit, whether the product or service has met the needs and expectations of the customers or not. The following parameters are used by Jung and Yoon (2012), among others: compatible with expectation, Happiness, Enjoy, and a pleasant experience.

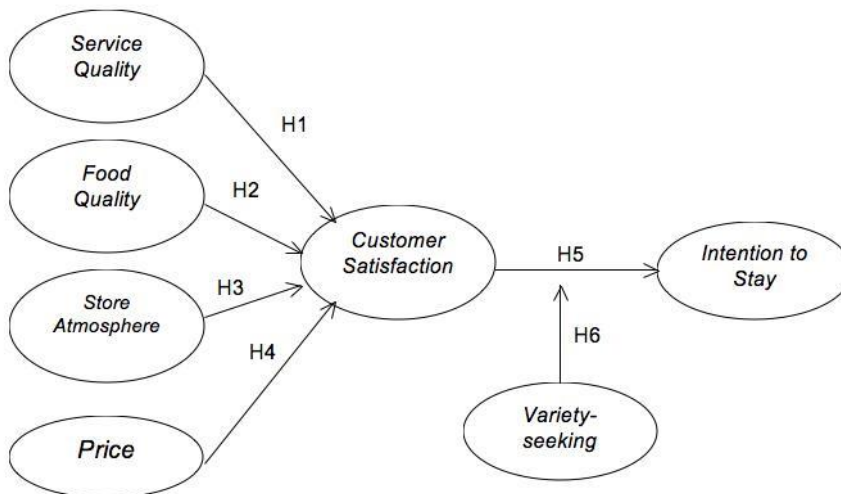
### 6. Intention to Stay

Intention to stay is defined as intentions contained on consumers to conduct repeated or re-purchase the specific product or service (Gerpott et al., 2001). Consumers choose to stay or keep doing the activity because the products or services has a good quality. In this study the intention to stay is meant consumer intentions to remain in a restaurant. Operational definitions on this variable is consumers' assessment of whether they had the intention to conduct to re-purchase or to keep doing the activity in the restaurant.

### 7. Variety-seeking

Variety-seeking according to Ratneshwar and Mick (2005) in (Jun and Yoon, 2012) is a reduced possibility of purchasing specific products in the future from the same products. Consumer-oriented look for variations defined as customers who are always looking for variation in a visit for restaurants (Holbrook and Hirscham, 1982, in Jun and Yoong, 2012). The consumer will not visit the same place in a row because they are always looking for something new and different to meet their emotional needs. According Szmigin and Carrigan (2001), teenagers tend to look for things or new products and make the shift that could reduce consumer intention to stay. Indicators in this variable is a form of consumers' ratings about the possibility of making a purchase of products decreased in the future. So the variety-seeking votes by Jung Yoon (2012) operationalized using five measurement items include: customers like to try new places, customers want to try new places, customers dare to take risks, customers like the familiar food (R), customer like to make a re-visit (R), customers aware with new restaurants (R).

### Model and Hypothesis Research



**Figure 1: Research Model**

This study was a construction from previous research (Park and Jang, 2014; Yoon Jung, 2012; Sugianto and Sugiharto, 2013). The framework above described that service quality significantly affect customer satisfaction (Park & Jang, 2014; Sugianto & Sugiharto, 2013). Food quality significantly affect customer satisfaction (Park & Jang, 2014; Sugianto & Sugiharto, 2013). Store atmosphere significantly influence customer satisfaction (Park & Jang, 2014). Price significantly affect customer satisfaction (Sugianto & Sugiharto, 2013). Customer satisfaction adversely affect the switching intention (Park & Jang, 2014; Jung &

Yoon, 2012). Variety-seeking moderate the relationship between Customer satisfaction and switching intention (Jung & Yoon, 2012).

### **1. The relationship between Service Quality on Customer Satisfaction**

There are some empirical studies that support the theory of relationship between service quality and customer satisfaction. Research conducted by Atmawati and Wahyuddin (2005) explained that to obtain high customer satisfaction, the company requires a good quality of service as well. This is supported by other research that has been done by Jimmy and Sugiono (2013), service quality has a significant impact on consumer satisfaction restaurants. Other literature also supports that service quality affect satisfaction (Fullerton and Taylor, 2002, Caruana, 2002, Namkung and Jang, 2008). It can be concluded that when service quality of the restaurant is high, it will increased customer satisfaction. and established the following hypothesis:

**H1: Service Quality significantly affect Customer Satisfaction**

### **2. The relationship between Food Quality to Customer Satisfaction**

Product quality is an important aspect for a company. In this study, the product is food itself, which is the main product of the restaurant.

In the study by Jimmy and Sugiono (2013) food quality significantly affect customer satisfaction. Namkung and Jang (2007) in their research at American restaurants, stating that the quality of the food affect customer satisfaction and behavioral intentions. This is supported by Ha (2009) on his research in ethnic restaurants, Korean cuisine in the United States, the results mention that the food quality had positive effect on customer satisfaction. Ryu and Han (2010) states the quality of food, service, as well as the physical environment are the determining factors of customer satisfaction. Ivyanno (2014) also supports that the Dining Experience Attributes (Food Quality, Service Quality, and Physical Environment) had positive effect on customer satisfaction.

Therefore, if the elements contained in food quality in restaurants are improved then it would help improve customer satisfaction and established the following hypothesis:

**H2: Food Quality significantly affect Customer Satisfaction**

### **3. The relationship between Store Atmosphere on Customer Satisfaction**

Ryu and Han (2010) on their research explains that the quality of the physical environment has a positive influence on customer satisfaction. Other literatures also supports that the physical environment can significantly affect the perception of the overall service at the restaurant, and then will have an impact on customer satisfaction in the restaurant industry (Brady and Cronin, 2001; Ryu and Jang, 2007). Research conducted by Bitner (1990) mentions that the physical environment can significantly affect customer satisfaction. In Ivyanno study (2014) on restaurants in Jakarta also said that the physical environment had positive effect on customer satisfaction. Based on the translation described the physical environment had positive effect on customer satisfaction the hypothesis is:

**H3: Store Atmosphere significantly affect Customer Satisfaction**

### **4. The relationship between Price on Customer Satisfaction**

Price is an important element for the company from the customer's perspective. From previous research, it said that the price on the restaurant affects customer satisfaction. Therefore, if the price of the restaurants is more affordable and in accordance with customer expectations, then the customer satisfaction will increase (Jimmy and Sugiono, 2013). In consumer behavior research states that the price perception has a positive influence on consumer satisfaction (Bowman and Narayandas, 2001). Other literatures also supports that

the price positively affects customer satisfaction (Huffman and Cain 2001; Cao et al., 2003; Ordonez et al., 2000).

If the price is considered very high, customers usually expect a high quality, and the actual perception of customers will be affected by these expectations. If the price is too high, the company will be considered as a company that doesn't care about their customers, or considered committing fraud. Conversely, if the price is too low, then the customer may doubt the reliability of the company. Based on the description, the hypothesis obtained as follows:

**H4: Price significant influence on Customer Satisfaction**

**5. Relationship between Customer Satisfaction on Intention to Stay**

Customer satisfaction has an important role in measuring customer ratings on the company. Customer satisfaction also has a considerable influence on the intention to stay on the consumer because as it is known that consumers who have a high level of satisfaction will be less likely to make the shift. Conversely a low level of satisfaction of customers will make the transaction no longer happen. It will lead them to the behavior to move to another place (Homburg et al., 2005).

Results of research conducted by Ari (2008) explains that the factors that cause consumers want to remain in a product or service are the quality of service and customer satisfaction. The higher the level of satisfaction, the higher the satisfaction of Intention to stay on the consumer. Therefore if restaurants want to maintain consumers it is necessary to increase consumer satisfaction with the quality of services offered. According to Hartline et al. (2003) quality of service in service companies significantly affect the intention to stay.

**H5: Customer Satisfaction significantly affect Intention to stay**

**6. The relationship between Variety-seeking moderate the relationship between Customer Satisfaction on Intention to Stay**

Variety-seeking means that the consumer is looking for a variety of restaurants that will be visited by consumers. In the model developed by Hoyer and Ridgway (1984) in (Uturantix et al. 2012), the need for variety is the most influential factor in the study of customer switching intentions. Nevertheless, this behavior is not always caused by a low level of customer satisfaction, but it is because the customer wants to explore new things (Raju, 1980, in Uturantix et al. 2012). According to Szmigin and Carrigan (2001), teenagers tend to look for new things or new products and make the shift that could affect consumer intention to stay out of it.

The previous study explains that consumers making transactions in certain restaurants in the future will likely to have same transaction on previous restaurant (Ratneshwar and Mick, 2005). Consumers who are looking for a variation will be the cause of the change in the level of either revisit of the consumers. Research conducted by Bansal et al., (2005) mentions that the high level of satisfaction would be meaningless when consumers have a high level of variety-seeking. It is then also supported by Homburg and Giering (2001), which explains that consumers who satisfied does not guarantee them to stay. Thus the hypotheses is:

**H6: Variety-seeking moderate the relationship between Customer Satisfaction on Intention to Stay**

**Research Methodology**

**1. Instrument Development**

The survey instrument for this study was composed of 2 parts. The first part pertained to service quality, food quality, store atmosphere, price, customer satisfaction, intention to stay on customer, and customer variety-seeking orientation includes a five point scale: "How much do you agree or disagree with these statements?" (1: strongly disagree to 5: strongly agree).

The measurement items for the study constructs are presented in Appendix A. Second Part contained questions about participant demographic information (e.g., age, gender, education level, and income per month).

2. Sample and Data Collection

Table 1: Profile Respondents

Respondent Characteristic	Total	Category	Frequent	Percentage
Gender	320	1. Male	141	44,1%
		2. Female	179	55,9%
Age	320	1. 17 – 24 years	144	45%
		2. 25 – 30 years	69	21,5%
		3. 31 – 40 years	55	17,2%
		4. 41 – 50 years	29	9,1%
		5. above 50 years	23	7,2%
Education (On	320	1. High School	5	1,6%
		2. Diploma	21	6,6%
		3. Bachelor Student	77	24,1%
		4. Postgrad Student	42	13,1%
		5. Doctoral Student	3	0,9%
		6. Non-student	172	53,8%
Last Education	320	1. Middle School	5	1,6%
		2. High School	92	28,7%
		3. Diploma	43	13,4%
		4. Bachelor Degree	140	43,8%
		5. Master Degree	39	12,2%
		6. Doctoral Degree	1	0,3%
Income per month	320	1. < Rp 500.000	21	7,5%
		2. Rp 500.000 – Rp 2.500.000	138	43,1%
		3. Rp 2.500.001 – Rp 5.000.000	111	34,7%
		4. Rp 5.000.001 – Rp 10.000.000	40	12,5%
		5. > Rp 10.000.000	10	3,1%
Occupation	320	Employee	114	35,6%
		Entrepreneur	15	4,7%
		Student	132	41,3%
		Professional	38	11,9%
		Un-employee	21	6,6%

The samples of this study is the customers of Restaurant Omah Lawas that has the intention to switch to others restaurants. While according Sekaran (2006), the sample consisted differences number of members chosen from the population. According to Hair (1998) the amount of ideal and representative sample is an amount of parameter used in the study

multiplied by 5 until 10. Thus the minimum amount of sample taken in this study are  $60 \times 5 = 300$ . In order to prevent damaged samples, researcher took a sample a number of 320 samples. Data Source used in this research is primary data. Primary data is the data collected and processed by an organization or an individual from the object with spesific purposes (Sekaran, 2006). Data Source in this study used a direct answer from the respondents in order to answer the questions in questionnaire.

Based on data, the percentage of female visitors who visit Omah Lawas were higher than males. The percentage of women was 55.9% with the number of 179 visitors, while for males are slightly lower at 44.1% with the number of 141 visitors. This percentage indicates that women prefer a visit to the restaurant than men.

On age category, visitors who are 17-24 years are the highest percentage at 45%. While the fewest percentage of this category, visitors who above 50 years, the percentage is only 7.2%. This indicates that the most frequent visitors to Restaurant Omah Lawas are young men aged 17-24 years.

While from educational background, the number of respondents indicated that most of them are educated. The data shows that S1/ Bachelor degree is the highest percentage with the number 77 people with a percentage of 24.1%. This indicates that consumers of Omah Lawas is consumers who have a good educational background.

Meanwhile, based on the amount of income, Omah Lawas visitors who earn Rp 500,000 – Rp 2,500,000 per month as many as 138 people with a percentage of 43.1%. These rates are followed by visitors with an income of Rp 2,500,001 – Rp 5,000,000 per month, as many as 111 people with a percentage of 34.7%. These results indicate that the majority of respondents who visited Omah Lawas is an upper middle class community.

Based on profession of the customers of Omah Lawas, the majority of visitors of Omah Lawas is about 132 students with a percentage of 41.3%. This indicates that students are the most often visited Omah Lawas.

### **3. Partial Least Square**

Partial Least Square (PLS) is a method of family-based regression introduced by Herman O.A Wold (1982) for the creation and development of models and methods for the social sciences with a prediction-oriented approach. PLS had free research data distribution assumption, it means the research does not follow on specific distribution (eg normal distribution). PLS is an alternative method of (SEM) which can be used to solve the complex relationships between variables but the data sample size is small (30 to 100), considering that SEM has a data sample size of at least 100 (Hair et al., 2010).

PLS is used to determine the complexity of the relationship between constructs, as well as the relationship of a construct and their indicators. PLS is defined by two equations, namely inner model and outer model. Inner models determine the specifications relationship between the construct and the indicators, while the outer defining the specification models the relationship between a construct and their indicators. PLS method has its own advantages such as: data does not have a multivariate normal distribution (with a scale indicator categories, ordinal, interval until the ratio can be used on the same model) and the sample size should not be large (Gahazali, 2006).

Hypothesis testing on PLS is done with Bootstrap resampling method developed by Geisser & Stone. The statistic test used in PLS is a statistic T or t test. Application of resampling methods, enabling the enactment of distributed data freely and does not require the assumption of a normal distribution, and does not require a large sample (minimum of 30 samples). Tests conducted by T- statistics , if obtained values  $> 1.96$ .

### **Table 2: Output of PLS**

	<i>Original Sample (O)</i>	<i>Sample Mean (M)</i>	<i>Standard Deviation (STDEV)</i>	<i>Standard Error (STERR)</i>	<i>T Statistics (/O/STERR/)</i>
AT -> CS	0,5031	0,5079	0,0752	0,0752	6,6880
AT -> DL	0,2356	0,2299	0,1042	0,1042	2,2610
AT -> DS	0,7669	0,7690	0,0265	0,0265	28,9286
AT -> EF	0,5987	0,5930	0,0662	0,0662	9,0434
AT -> IF	0,8886	0,8889	0,0130	0,0130	68,5530
CS -> ITS	0,9870	10,747	0,5034	0,5034	1,9607
FQ -> CS	0,1171	0,1138	0,0422	0,0422	2,7768
PRC -> CS	0,1395	0,1356	0,0752	0,0752	1,8555
SQ -> A	0,6607	0,6583	0,0408	0,0408	16,1975
SQ -> CS	0,1022	0,1026	0,0524	0,0524	1,9572
SQ -> E	0,7427	0,7438	0,0291	0,0291	25,5527
SQ -> J	0,7519	0,7514	0,0257	0,0257	29,2694
SQ -> TG	0,7263	0,7264	0,0446	0,0446	16,2944
SQ -> W	0,5182	0,5193	0,0676	0,0676	7,6655
VS -> ITS	1,0027	1,0641	0,3317	0,3317	3,0226
VSCS -> ITS	-1,2412	-1,3483	0,6270	0,6270	1,9794

SQ (Service Quality), W (Tangibles), A (Reliability), J (Assurance), TG (Responsiveness), E (Empathy), FQ (Food Quality), PRC (Price), AT (Atmosphere), EF (Exterior Factor), IF (Interior Factor), DL (Design and layout), DS (Display), CS (Customer Satisfaction), ITS (Intention to stay), VS (Variety-seeking), dan CR\* (significant at 5% level)

### **Analysis and Discussion**

The result showed that the service quality in the restaurant Omah Lawas has a positive effect on customer satisfaction. This happens because the service quality in the restaurant can make consumers satisfied. The results supported by previous research carried out by Park and Jang (2014), which shows that the quality of service can make consumers feel happy and comfortable so that consumers will be satisfied. Service Quality is formed by five dimensions that exist at the restaurant Omah Lawas, there are Tangibles, Reliability, Assurance, Responsiveness and Empathy. From the five dimensions, the highest significance level is Assurance. It shows that the guarantee (assurance) is the most positive and has significant impact on Service Quality in Omah Lawas.

The results of the second hypothesis states that food quality affects customer satisfaction. This indicates that the food quality provided by Omah Lawas is have a good rates, and this increase satisfaction on consumers. The results support previous research that carried out by Park and Jang (2014), and research conducted by Jimmy and Sugiono (2013) which states that the quality of food can make consumers feel happy and comfortable so that consumers will be satisfied. In the third hypothesis testing results, found that price affects customer satisfaction. The result of this third hypothesis is contrary to the previous research conducted by Jimmy and Sugiono (2013) in one of the restaurants in Surabaya, which states that the price significantly affect customer satisfaction, but it is different in this study. Based on data, it can be seen that the majority of survey respondents have a burgeoning middle segment, that is make them not really concern about the price in Omah Lawas. thus making this hypothesis is unsupported.

The result from the fourth hypothesis states that the atmosphere in the restaurant affects customer satisfaction. Based on the data the atmosphere in the restaurant affects positively towards customer satisfaction. Additionally atmosphere at the restaurant is the variable that



the most influence on customer satisfaction, and the most responsible dimension of atmosphere in Omah Lawas is Interior Factor.

The fourth hypothesis testing shows that the atmosphere of the restaurant is in Omah Lawas influence on consumer satisfaction. Hypothesis test results also support previous research that says that if the atmosphere is low, the quality will make customer satisfaction decreases, otherwise if a high quality atmosphere it will create increased customer satisfaction (Park and Jang, 2014). It can be concluded that the atmosphere of the restaurant in Omah Lawas greatly affect the level of consumer satisfaction.

The Results from the fifth hypothesis states that customer satisfaction affects the intention to stay. Based on data shows that consumer satisfaction at Omah Lawas influence on the decision to stay in the restaurant. Results support the hypothesis testing research conducted by Bansal et al., (2004) which states that the commitments made by the customers affected by the satisfaction and trust. This hypothesis also supports research Huang and Chiang (2014) which states that there are positive relationship between customer satisfaction and intention to stay.

Based on the latest and the major result of hypothesis testing in this study it was found that variety-seeking negatively moderate the relationship between customer satisfaction and intention to stay. The results support the hypothesis of previous research conducted by Jung Yoon (2012), which states that consumers who satisfied it shall still have intention to switch, this caused by the level of variety-seeking is high. Research Park and Jang (2014) which states that consumers who have a high satisfaction score still have the intention to move. It is also supported by the results of this hypothesis. While the study Le Chi Cong et al., (2013), mentions the variety-seeking makes consumers think to look for new places to have diner and leave the previous place that alraeday been visited although consumers are satisfied with the place before.

### **Conclusion**

Overall the conclusions of this study is the customers of the restaurant who have a high level of satisfaction still having intention to switch to other restaurants, because the variety-seeking of the customers is high, thus undermining the intention to stay or to remain in Restaurant Omah Lawas in Solo City.

While for specifics on the terms of hypothesis testing is done, this research also has the following conclusion:

1. Service Quality proven has positive effect on the Customer Satisfaction. The guarantee on service makes Omah Lawas increased consumer satisfaction.
2. Food Quality proven positive effect on the Customer Satisfaction. Diverse variety of foods to make customer satisfaction levels in Omah Lawas increased.
3. Store Atmosphere proven positive effect on Customer Satisfaction. Interior Factor contribute most to the atmosphere in Omah Lawas.
4. Price is not proven effect on Customer Satisfaction. Omah Lawas market segment which is the middle class and above, making the price variable was not considered important.
5. Customer Satisfaction proven positive effect on Intention to stay. High customer satisfaction is influenced by the quality of service, quality of food, price, and atmosphere of the restaurant makes consumers think to survive in the restaurant Omah Lawas.
6. Variety-seeking proven to moderate the relationship Customer satisfaction and intention to stay. Pleasure seeking a new variation on the consumer Omah Lawas weaken consumer intentions are to survive in the restaurant.

### **Limitations and future research**

The author realizes that this study would not be separated from the limitations and shortcomings. Several limitations of this study include the object of research is a restaurant with traditional concept that can not describe the phenomenon that occurs in restaurants in general. Secondly, the location of Omah Lawas is located in a small town that is Solo City, thus the respondents are less able to describe the characteristics of respondents from big cities in Indonesia and abroad, if in further research, researcher would like to do research in the larger city than Solo City.

Based on the results obtained, the advice for further research include, profile of respondents in this study are only limited to the customers' of restaurants Omah Lawas in Solo City, therefore the impact on the results of this study is limited. For further research is expected to involve more respondents from different backgrounds so the results will be maximized. Further research is also expected to look for more literatures related to the variables studied so that the research would be more accurate. Researchers also hope that in the future studies to add variable "Intention to WOM" as mediation between customer satisfaction and intention to stay in order to get the results that consumers will still remain in restaurant, as has been done by Le Chi Cong et al., (2013). Lastly further research is also expected to have a wider object for research, because it will be easier for readers, practitioners, and academics to understand the content of future studies.

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**Appendix: Constructs and Items**

	<b>Factor Loadings</b>
<b>A. Service Quality</b>	
<i>Tangibles, Cronbach's Alpha: 0,858</i>	
Restaurant's Property, such as: tables, chairs, plates etc.	0.852
The neat of waiters clothes	0.837
The clearness of menu book	0.834
<i>Reliability, Cronbach's Alpha: 0,984</i>	
the food is compatible with the orders	0.919
time for making the menu is fast	0.916
the receipt is match with the orders	0.927
<i>Responsiveness, Cronbach's Alpha: 0,984</i>	
the waiters respond fastly	0.941
waiters responsive providing service	0.919
the waiters responsible if something went wrong in the selection of menu	0.953
the waiters help costumers choosing the menu	0.952
<i>Assurance, Cronbach's Alpha: 0,993</i>	
waiters knows about the product	0.92
waiters always speak politely to customers	0.917
customers feeling safe having transaction in the restaurant	0.915
<i>Emphaty, Cronbach's Alpha: 0,889</i>	
the waiters can understand what customers want	0.781
Karyawan mau mendengarkan keluhan konsumen	0.841
Karyawan menanggapi keluhan konsumen	0.813
<b>B. Food Quality, Cronbach's Alpha: 0,991</b>	
Makanan di tempat makan ini memiliki rasa yang enak	0.958
Porsi makanan yang sesuai dengan keinginan	0.965
Variasi jenis makanan yang bermacam- macam	0.943
Cita rasa makanan dari restoran yang khas.	0.966
Kebersihan makanan yang selalu dijaga	0.97
Inovasi jenis makanan baru	0.965
<b>C. Atmosphere Restaurant</b>	
<i>Exterior Factor, Cronbach's Alpha: 0,994</i>	
aces to the restaurant is easy	0.948
parking acces is easy	0.939
I think the surrounding of the restaurant is beautiful	0.938
restaurant's property that shows outside is beautiful	0.951
<i>Interior Facto, Cronbach's Alpha: 0,916</i>	
color and the wall of the restaurant is attractive	0.718
this restaurant is really clean	0.711
the lighthing of this restaurant is comfortable	0.859
the temperature is mild	0.687
music in the restaurant makes me happy	0.856
<i>Design dan Layout, Cronbach's Alpha: 0,984</i>	
the building of the restaurant is beautiful	0.936
the placement of tables and chairs is suitable	0.933
the layout of the restaurant is suitable with the traditional concept	0.942
<i>Display, Cronbach's Alpha: 0,984</i>	

Tampilan informasi mengenai produk yang dijual jelas.	0.845
Tampilan makanan di restoran indah dan estetik.	0.836
Tampilan informasi mengenai harga produk jelas.	0.85
<b>D. Price, Cronbach's Alpha: 0,990</b>	
the price is affordable	0.957
the price is suitable with the portion of the menu	0.95
the price is suitable with the display of the foof	0.951
the price is competitive	0.942
<b>E. Customer Satisfaction, Cronbach's Alpha: 0,958</b>	
this restaurant is as the same as my expectation	0.899
I am glad to visit this restaurant	0.903
I enjoying myself having dine in this restaurant	0.892
Overall I am very pleased with my experience in this restaurant	0.837
<b>F. Intention to Stay, Cronbach's Alpha: 0,981</b>	
I will choose this restaurant as my first option	0.937
I will visit this restaurant in other days	0.934
I do not want to switch to other restaurant with the same category	0.938
<b>G. Variety-seeking, Cronbach's Alpha: 0,911</b>	
I want to try new restaurants	0.756
I want to try other restaurants	0.698
I like to take the risk to visit new restaurants that provides more menu options	0.873
When I went to restaurants, I am more comfortable to order menu that familiar with me. (R)	0.832
I am more likely to visit restaurants that I am familiar with, rather than trying	0.859
I am very careful to try new place or restaurants (R)	0.817

## CITY MARKETING SCALE ON MALUKU PROVINCE INDONESIA

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### Abstract

City marketing (CM) is not a new phenomenon in the world of marketing. Basically, this phenomenon is used to introduce the uniqueness of a city compared to other cities as well as how a city to use any ideas, concepts and tools in marketing to market a city / region. This policy was first used by the Dutch (Braun: 2008). According to Rufaidah (2007), city marketing (CM) consists of three dimensions namely visitability, investability and livability. This paper is aimed at measuring the scale used to calculate the dimensions of CM in Maluku province. There are 100 respondents participate in this study. Confirmatory Factor Analysis is employed to analyse the data.

Results: All indicators used to measure the three-dimensional of CM have a positive influence. Visitability, investability and livability have positive relationship with magnitude of 0.894, 0.896 and 0.889 respectively.

**Keyword:** *City marketing, city marketing scale, visitability, investability, livability*

### Introduction

During the year of 1993 to 2015, city marketing (CM) is constantly changing and evolving reflecting the global changes and economic growth. CM has been discussed by academics coming from different field of scientific backgrounds. Some of them are experts in the field of management (Kotler, Kavaratzis, Rufaidah, Ograjensek), Geography (Paddison, Boisen), Urban Planning (Asworth & Voogd, Smyth, Braun, Hospers), and even communication (Gelders) and Engineering & Design (Jiyoung Yoon ). Various background leads to various definitions of CM. However, inspite of differences, there are some similar understanding between city marketing and place marketing.

CM is one way to introduce a city or region. CM is not a new phenomenon in the world of marketing. This concept has been practiced for decades. In 1960 Kevin Lynch published a book entitled "The Image Of The City". CM phenomenon is the way a city to use ideas, concepts and tools in marketing to market a city/region. In the mid-1980s in several cities in the Netherlands claimed to have a policy in CM. Since then, a number of cities reported to have a very good development. (Braun: 2008)

A broad definition of CM makes the dimensions of this concept is also diverse. However, this paper discusses more about the CM scale as adopted by some previous researchers (Kotler, 2003; Geyonggi 2007; Rufaidah, 2007; Braun, 2008; AMA 2008; Hospers, 2011; and Balencourt, 2012). According to them, there are three-dimensional in the CM; population or community, visitors and investors/ entrepreneurs.

Since the enactment of Law No. 32/2004 on regional autonomy, many regions in Indonesia are trying to increase the Regional Revenue Budget through the tourism sector. This sector is considered more profitable than any other capital-intensive sector. Besides, it is also supported by the amazingly beautiful natural potential of Indonesia. As other Maluku province in Indonesia are also being aggressively increaae revenue from the tourism sector. National Statistical Bereau report for the year of 2014-2015, the revenue from the tourism sector has not yet reached the expected target. It is the underlying research to measure the scale of the CM in accordance with the indicators that have been built.

Furthermore, this paper will examine the validity of the indicators as adopted from Rufaidah model (2007), using the criteria liveability representing community / host cities, visitability

representing visitors, and investability representing businesses. Liveability, visitability and investability dimensions consists of eight, ten and six items of questions respectively. So a total of 24 questions are used to measure the CM scale. To get the expected results, the 100 respondents are employed in this research. To analyse the data, Confirmatory Factor Analysis with SEM-PLS approach is employed.

### **Literature Review**

According to Van Den Berg et al. (1990) when the CM terminology extends in some urban literature in the year of 1980 in Europe, it has actually much longer begun in the US. In contrast to Berg, Braun (2008) states that the terminology of CM begins as "Dutch Invention". In 2005, the city of Amsterdam launch a new marketing policy labeled 'Amsterdam'. Efforts to market the city of Amsterdam and the strapline 'Amsterdam' appear to be popular in the media. In 2006 Rotterdam appoint Chief Marketing Officer to market the city.

The problem arises when there are differences of understanding in CM. In America, the city marketing practitioners connected to the development of the local economy, the promotion places and between public and private partnerships to achieve regeneration (Paddison, 1993: 340). While most academics understand the CM as a long-term process that requires an organized capacity to fulfill the needs of a different target area - they see it as a strategic activity, synthetic and integrated (Hospers, 2010).

The big cities using CM expect to create differentiation from other cities that can attract new investment. (Hospers,2010). The purpose of CM is to achieve long-term sustainability of the community and create satisfaction (Ograjensek, 2015)

CM can be divided according to the expert background who have different understanding on the concept. Some experts claim the city as a product and CM as the marketing process. Experts who have such opinion are Burges (1982), Paddison (1993), Gelders (2012), and Smyth (2005). But inspite of having such idea, the researchers still urgue that marketing a city is different from marketing a product. Meanwhile, according to some experts such as; Rufaidah, Boisen, and Lombarts state that CM is a process, directed and scalable to be able to achieve long-term or sustainable.

In the period of 1980 to 2000, discussion and defining CM is limited to the characteristics of each academic field (economics, geography and planning). This debate has led to the understanding of the traditional concept of CM, problems and solutions, and application of marketing in a city. Therefore, experts have used more conventional marketing methods such as increasing promotion in order to improve the image of the city that leads to increased social economy. At this time, CM put more emphasis on a method or strategy of attracting tourists and selling potential of the city. Whereas in the 2000s until today, the definition of CM are widespread and contain functions in marketing management more scalable and clear and consider the interests of all stakeholders (residents, investors and visitors) in which not just talking about the image of a city but more emphasis as a competitive strategy between one city to another city, highlighting the uniqueness of a city and the positive things that lifted the value of city. Even the definition of CM in this period has dimension of the economic sustainability broader and long-term (Rufaidah, 2007).



### **1. Definition of City Marketing**

Some experts agree that CM is a marketing activity in the form of promotions and sell the image of a city, the researchers are Burges (1982) which states that: "city marketing is a strategy to do better than other Cities in competition, and all activities that productise and sell a city space factors with a positive image of a city so it can develop attractive points of interest ".Paddison (1993: 339) also defines marketing the city as a "city marketing is more than the promotion of place, being used in some Cities to rebuild and redefine Reviews their image, allied to the which has been a strategy of targeting specific types of activity roomates both reflect and bolster the image "(Paddison, 1993: 339).

Authors who agree with this concept is also expressed by Gelders (2012) also agree with the previous opinions. He defines "city branding or city marketing as the whole of activities by a city Aimed to initiate, promote, Facilitate, foster and execute transactions as far as Reviews These activities fit into the city's strategy and as long as they are coordinated by the city's authorities. In 2005, Smyth defines city marketing as "as promotion of a city (or a district within a city) with the aim of drawing attention to the which pre selected activities take place there". It is used to change the external perception of the city which sometimes the goal is not necessarily suitable, such as relocation of businesses; to attract in-migration; and to encourage the development of tourism. JiyoungYoon (2010) assert that "city marketing is a strategy to do better than other cities in competition, and all activities that productise and sell a city space with positive image factors of a city so it can develop attractive points of interest".

In addition to the above opinion, there are some opinions stating the CM as a method that lead to three aspects or dimensions of the residents, visitors and investors. This opinion is suggested by Kotler (2003) urging that "city marketing concept by Realizing specific locations as a product and through cooperation with various concerned parties, facilitates the regional economy and raises the value of the city for the investors, residents and visitors through the development of it environment, image and various Infrastructures ". This was confirmed by Geyonggi (2007) which defines the CM as "city marketing is a commercial marketing activity that sells and exchanges spaces for the capital city, and seeks to Attract both visitors and residents. In other words, city marketing is a strategy to deal with residents, enterprises and visitors as the target market and Attract Them through promotion combined with values of sales and a city environment. ". Whereas the same definition is supported by Rufaidah (2007) stating "City marketing as a process of creating, communicating, and delivering values towards the stakeholders of the city or region to create economic, social and environmental sustainability.

Braun (2008) also agreed with Rufaidah (2014) by referring to the definition of the AMA, "City marketing is the coordinated use of marketing tools supported by a shared customer-oriented philosophy, for creating, communicating, delivering, and exchanging urban offerings that have value for the city's customers and the city's community at large ".Balencourt (2012) more clearly define the city marketing as "promotion of a city, or a district within it, with the aim of encouraging Certain activities to take place there. It is used to alter the external perceptions of a city in order to encourage tourism, Attract inward migration of residents, or enable business relocation. A significant feature of city marketing is the development of new landmarks, or flagship, buildings and structures ".

### **2. Scale Of Development**

Noviana & Rufaidah (2012) in their study which adopted the Rufaidah study (2007), there are three dimensions to measure CM. The first dimension is visitability that leads to comfort of s city or places to visit. It is associated with domestic and foreign travelers who visit for the first time and recurrent. To achieve visitability cities, local governments must accentuate the friendliness of the people, sites, artifacts, and various attractions viable and attractive to visit.

This study adopts the studies that have been conducted by Rufaidah stating that to measure the CM there are three dimensions. The first dimension is visitability. Visitability is the term for measuring the comfort of a place worth visiting. It is very important for tourists visiting the first time so it could be a repeat visit. To achieve visitability in the city, the government should be able to provide the elements of such a spirit, the friendliness of the local people, artifacts, and a variety of attractions and activities that are viable and interesting place to visit. In this dimension, the number of the item in question amounted to eight and represent all the indicators set. The second dimension is investability. Investability is the management of a number of investment into an area and the number of workers involved, the number of SMEs that grow and develop, the level of business confidence, and the number of immigrants seeking work. In order investability increase, the government is expected to have the ability to identify and optimize the competitiveness of the city. One of the steps that need to be owned by the city government is the competition index as an indicator to see the competitiveness of a country or region. The number of the item in question from this second dimension of ten questions. While the last dimension is livability. Livability is managing the number of permanent residents and immigrants who settled in the city by level of education, profession and social activities, the amount of household waste that is processed by the cleanliness department, the amount of consumption, and the availability of water and air quality. To achieve livability, a city must have the ability to provide an opportunity for individuals to optimize their potential to become more prosperous. Indicator used to measure the dimension between six and represent items livability. Thus, the total of the item in question amounted to twenty-four. By looking at Rufaidah studies, this research also uses the same dimensions as the dimensions of the CM.

### **Methodology**

To explain the City Marketing Scale of Maluku province in this study the authors use Confirmatory Factor Analysis approach to Component / variance Based Structural Equation Modeling. SEM-based component or variance is known as Partial Least Square (PLS). SEM-PLS models used have a reflexive measurement model. To perform data processing they use SmartPLS 3. Rate reflexive measurement model using Internal consistency (composite reliability), Indicator reliability, Convergent validity (average variance extracted) and Discriminant validity. For structural models rated berdasarkan Coefficients of determination (R<sup>2</sup>), Size and significance of the path coefficients. (Hair et al, 2014).

### **Results**

CM-scale used in this study consist of 3 dimensions indicated by by 24 elements as manifest variables (observed variables). Variable scale consists of CM latent variables, Visitability with 8 indicators as manifest variables (observed variables), latent variables Investability with 10 indicators as manifest variables (observed variables) and latent variables of livability with 6 indicator as manifest variables (observed variables). CFA-Structural Equation Modeling (SEM) used as a model approach to the Second Order. The calculation result can be seen in the figure below.

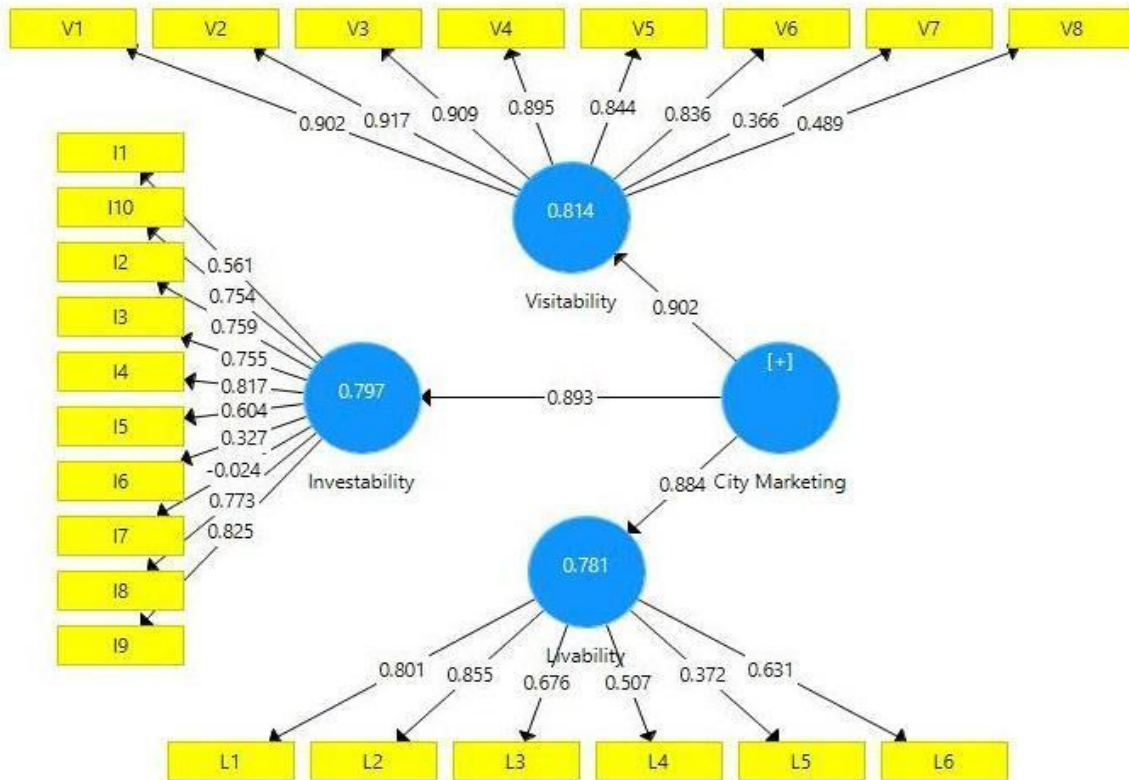


Figure 1. Confirmatory Factor Analysis of CM

### 1. Outer Model Measurement

Outer Assessment Model is measured by made by testing the reliability and validity of observed variables. Outer models describe the relationship among latent variable indicators. The criteria used in assessing the outer 'model are convergent validity, composite discriminant validity and reliability.

Convergent validity of the measurement is based on the correlation between the estimate item score / component score (Loading Factor Value). The size is said to be high if it is correlated with the construct being measured is more than 0.70. However, according to Chin, 1998 (in Ghazali, 2008; 24) to study the early stages of development measurement scale loading value of 0.5 to 0.6 is considered adequate. In this study loading factor of 0.50 will be used limit criterion validity can also be seen from discriminan validity based on the average variance extracted (AVE). If it has a good construct AVE is above 0.50. Composite reliability is a measure of internal consistency.

### 2. Validity

For each variable model parameter estimation obtained variable measurement or weighting factor, to reflect rhe variable. The results are displayed in Table 1 below.

**Table 1. Estimation of Parameter Model**

Indicator	Outer Loading Phase 1					Outer Loading Phase 2				
	Outer Loading	Note.	T Value	p-value	Ket	Outer Loading	Note.	T Hitung	p-value	Ket
V1	0.902	Valid	34,662	0,000	Significant	0,921	Valid	49,362	0,000	Significant
V2	0.917	Valid	42,317	0,000	Significant	0,930	Valid	47,939	0,000	Significant
V3	0.909	Valid	33,653	0,000	Significant	0,923	Valid	41,758	0,000	Significant
V4	0.895	Valid	43,757	0,000	Significant	0,899	Valid	36,808	0,000	Significant
V5	0.844	Valid	20,600	0,000	Significant	0,848	Valid	20,895	0,000	Significant
V6	0.836	Valid	20,547	0,000	Significant	0,840	Valid	19,124	0,000	Significant
<b>V7</b>	<b>0.366</b>	<b>Not Valid</b>	<b>2,449</b>	<b>0.016</b>	Significant	-	-	-	-	-
<b>V8</b>	<b>0.489</b>	<b>Not Valid</b>	<b>4,674</b>	<b>0,000</b>	<b>Significant</b>	-	-	-	-	-
I1	0.561	Valid	6,095	0,000	Significant	0,554	Valid	5,796	0,000	Significant
I2	0.759	Valid	10,468	0,000	Significant	0,753	Valid	8,919	0,000	Significant
I3	0.755	Valid	11,375	0,000	Significant	0,754	Valid	8,013	0,000	Significant
I4	0.817	Valid	20,704	0,000	Significant	0,820	Valid	19,123	0,000	Significant
I5	0.604	Valid	5,498	0,000	Significant	0,601	Valid	4,348	0,000	Significant
<b>I6</b>	<b>0.327</b>	<b>Not Valid</b>	<b>2,667</b>	<b>0.009</b>	<b>Not Significant</b>	-	-	-	-	-
<b>I7</b>	<b>-0.024</b>	<b>Not Valid</b>	<b>0.128</b>	<b>0.899</b>	<b>Not Significant</b>	-	-	-	-	-
I8	0.773	Valid	12,788	0,000	Significant	0,781	Valid	16,039	0,000	Significant
I9	0.825	Valid	24,838	0,000	Significant	0,824	Valid	24,524	0,000	Significant
I10	0.754	Valid	10,843	0,000	Significant	0,762	Valid	11,370	0,000	Significant
L1	0.801	Valid	16,409	0,000	Significant	0,811	Valid	17,393	0,000	Significant
L2	0.855	Valid	25,513	0,000	Significant	0,864	Valid	30,332	0,000	Significant
L3	0.676	Valid	6,342	0,000	Significant	0,698	Valid	7,095	0,000	Significant
L4	0.507	Valid	6,197	0,000	Significant	0,507	Valid	4,791	0,000	Significant
<b>L5</b>	<b>0.372</b>	<b>Not-Valid</b>	<b>2,341</b>	<b>0.021</b>	Significant	-	-	-	-	-
L6	0.631	Valid	5,275	0,000	Significant	0,591	Valid	5,002	0,000	Signifikan

The result of the calculation shows the outer loading of the first stage for eight manifest variables (indicators) of the latent variable with visitability ranging from 0.366 to 0.917. There are two outer loading indicators with values less than 0.5. Outer loading for 10 manifest variables (indicators) of the latent variable investability ranging from 0.024 to 0.825. There are two outer loading indicators with values less than 0.5. Outer loading to 6 manifest variables (indicators) of the latent variable livability ranged from 0.372 to 0.855. There is one indicator of the value of outer loading of less than 0.5. Because the outer loading of less than 0.5 is declared invalid then there are five manifest variables (indicators) of the three latent variables which are eliminated from the calculation model.

Results of outer loading after elimination can be seen in Table 2 of Outer Loading Phase II in which all manifest variables (indicators) are valid and the value of t-test showed significant indicators (because t value is more than 1.96 at 5% significance level) in the latent variable of Visitability, Investability, and the latent variables Livability.

**Table 2. Convergent Validity dan Reliability Analysis**

Latent variable	Indicators	Loadings	Indicator	Composite	AVE			
			reliability	reliability				
<i>Visitability</i>	V1	0,921	0,848	0,960	0,800			
	V2	0,930	0,865					
	V3	0,923	0,852					
	V4	0,899	0,808					
	V5	0,848	0,719					
	V6	0,840	0,706					
<i>Investability</i>	I1	0,554	0,307	0,904	0,500			
	I2	0,753	0,567					
	I3	0,754	0,569					
	I4	0,820	0,672					
	I5	0,601	0,361					
	I8	0,781	0,610					
	I9	0,824	0,679					
	I10	0,762	0,581					
	<i>Livability</i>	L1	0,811			0,658	0,828	0,543
		L2	0,864			0,746		
L3		0,698	0,487					
L4		0,507	0,257					
L6		0,591	0,349					

**Tabel 3. Latent Variable and Discriminant validity**

Construct	<i>Visitability</i>	<i>Investability</i>	<i>Livability</i>
<i>Visitability</i>	<b>0,894</b>		
<i>Investability</i>	0,637	<b>0,737</b>	
<i>Livability</i>	0,708	0,765	<b>0,707</b>

Note : The bold number shows the root square of AVE

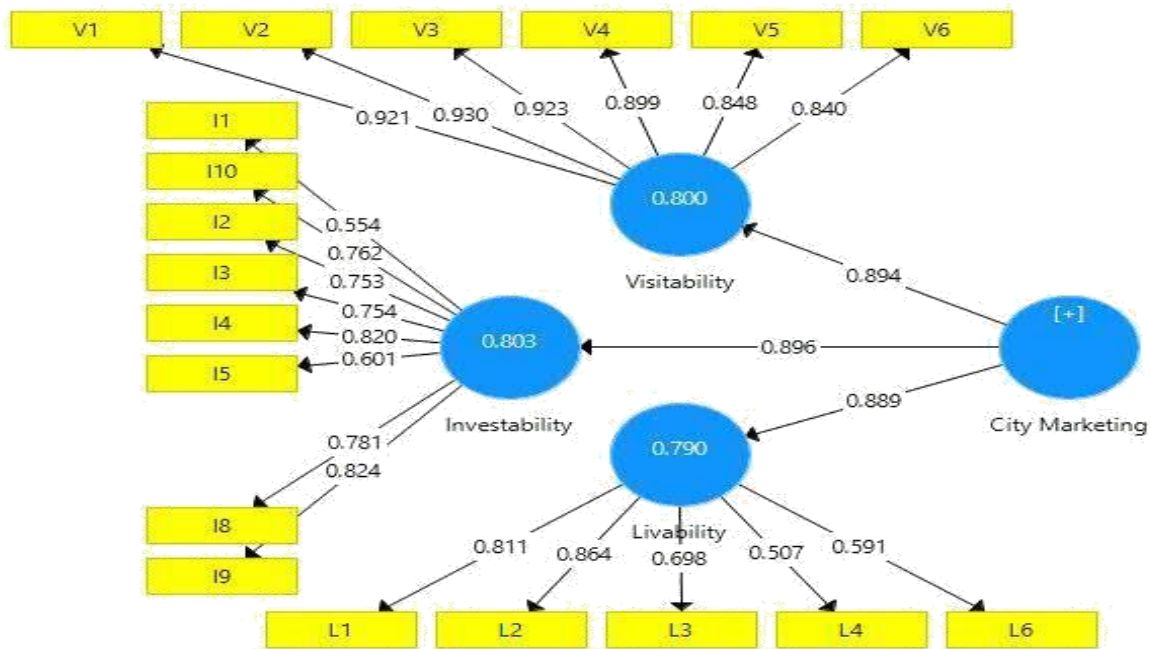
Table 2 shows the Value of composite reliability (CR) which was obtained for Visitability (0960), Investability (0904), and Livability (0828). Since they are all above 0.70, it can be concluded that all constructs have high internal consistency reliability. The results in Table 4 show Factor loadings of each construct cross loadings greater than with the other constructs.

**Table 4. Factor loadings dan Cross loadings**

Latent variable	Indicators	<i>Visitability</i>	<i>Investability</i>	<i>Livability</i>	
<i>Visitability</i>	V1	<b>0.921</b>	0.554	0.635	
	V2	<b>0.930</b>	0.498	0.564	
	V3	<b>0.923</b>	0.560	0.629	
	V4	<b>0.899</b>	0.541	0.610	
	V5	<b>0.848</b>	0.700	0.717	
	V6	<b>0.840</b>	0.549	0.630	
<i>Investability</i>	I1	0.266	<b>0.554</b>	0.363	
	I2	0.448	<b>0.753</b>	0.454	
	I3	0.416	<b>0.754</b>	0.517	
	I4	0.549	<b>0.820</b>	0.658	
	I5	0.329	<b>0.601</b>	0.350	
	I8	0.567	<b>0.781</b>	0.729	
	I9	0.564	<b>0.824</b>	0.641	
	I10	0.518	<b>0.762</b>	0.669	
	<i>Livability</i>	L1	0.604	0.661	<b>0.811</b>
		L2	0.607	0.725	<b>0.864</b>
L3		0.507	0.582	<b>0.698</b>	
L4		0.332	0.282	<b>0.507</b>	
L6		0.384	0.294	<b>0.591</b>	

### 3. $R^2$ Analysis

To find out the effect of each variable on CM, it can be seen from the value of  $R^2$ . The  $R^2$  shows the prediction of the model accuracy. (Hair, 2014).  $R^2$  value equal to 0:25 means a weak effect while 0.5 and 0.75 have a substantial effect (Chin, 2010). In figure 3 it can be seen that the value of  $R^2$  of Visitability on CM is 0,800. So the research model in establishing Visitability-CM accuracy of 0,800 or enter into a substantial category. To Investability viewable  $R^2$  value obtained for 0.803. So the research model accuracy of Investabilityon City Marketing is 0.803 (a substantial category). For Livability it can be seen on the  $R^2$  value of 0.790. So the research model in establishing Livability-CM accuracy of 0.790 (a substantial category).



**Figure 2**  
**SEM-PLS – CFA Structural Model**

**4. Hypothesis testing**

Hypothesis testing is conducted to see the significant value. This significant value can be obtained by bootstrapping procedure. The significance of the hypothesis is determined by looking at the value of the coefficient parameter and the value of statistical significance at the T-algorithm bootstrapping report. To find out whether it is significant or not, the T-table at alpha 0.05 (5%) = 1.96, then the T-table compared by T-test (T-statistic) The results in Table 5 and Figure 3 show the impact of Visitability, Investability, and the latent variables to the CM are significant.

**Table 5**  
**Impact of Visitability, Investability, dan variabel laten Livability on CM**

No.	Hypothesis	Path coefficient	Standard error	t-value	p-value	Conclusion
1	City Marketing -> Visitability	0,894	0,028	31,412	0,000**	Significant
2	City Marketing -> Investability	0,896	0,035	25,827	0,000**	Significant
3	City Marketing -> Livability	0,889	0,023	39,399	0,000**	Significant

Note : \*\* shows significant level of p < 0.01

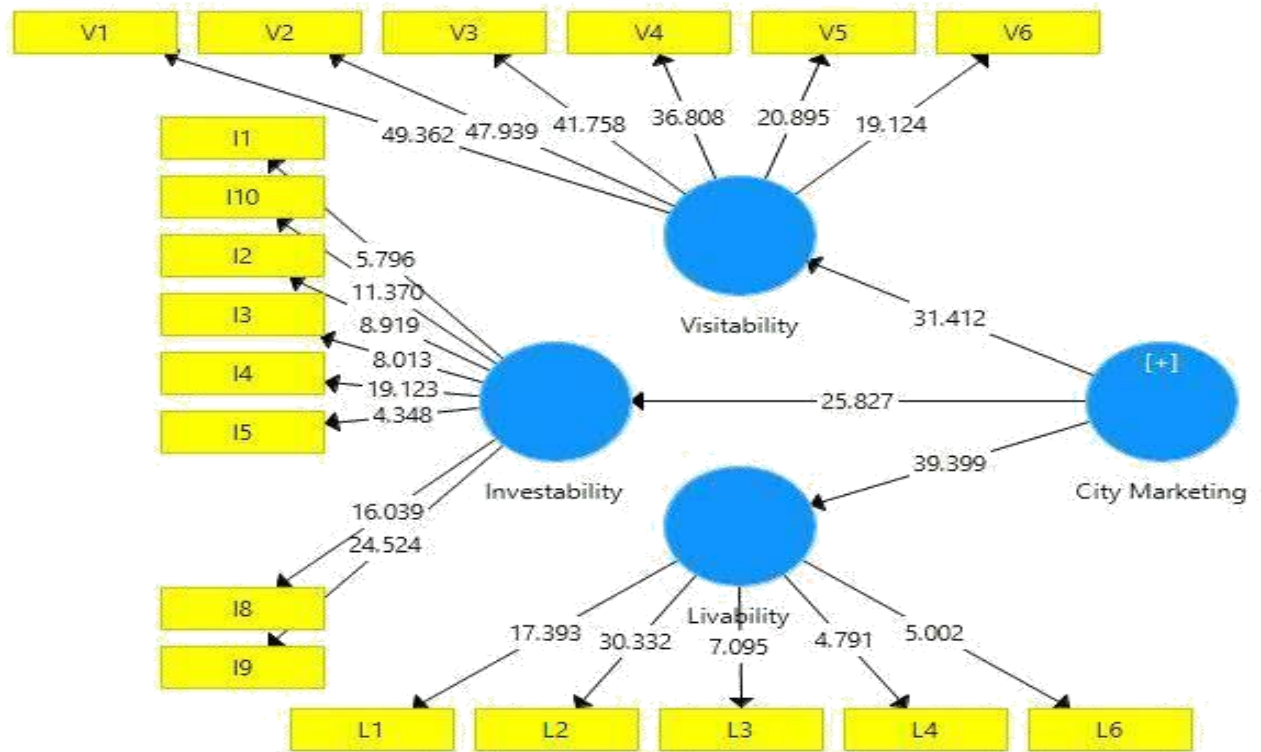


Figure 3. Bootstrapping Result Structural Model

**Hypothesis Testing 1: Visitability effect on CM**

The result of Statistical hypothesis testing is as follows:

H0:  $\lambda 1 = 0$  Visitability has no effect on CM

H1:  $\lambda 1 \neq 0$  Visitability has an effect on CM

Table 5 shows that the coefficient value of Visitability and CM is 0.894 with a t value of 31,412. Scores t-statistic is greater than t critical (1,960) and a P-value = 0.000 <0.005, and is therefore null hypothesis is rejected. It can be concluded Visitability affect the City Marketing. Its influence is positive with magnitude of 0.894 relationships.

**Hypothesis Testing 2: Investability effect on CM Statistical hypothesis testing is as follows:**

H0:  $\lambda 2 = 0$  Investability no effect on CM

H1:  $\lambda 2 \neq 0$  Investability effect on CM

Table 5 shows that the relationship between Investability and CM is indicated by coefficient of 0.896 with a t value of 25.827. T-statistic score is greater than t critical (1,960) and a P-value = 0.000 <0.005, and is therefore null hypothesis is rejected. It can be concluded that investability affect CM. Its influence is positive with magnitude 0.896 relationships.

**Hypothesis Testing 3: Livability effect on CM.**

Statistical hypothesis testing is as follows:

H0:  $\lambda 3 = 0$  Livability no effect on CM

H1:  $\lambda 3 \neq 0$  Livability effect on CM

Table 5 shows that the relationship between Livability and CM is indicated by coefficient of 0.889 with a t value of 39.399. T-statistic score is greater than t critical (1,960) and a P-value = 0.000 <0.005, and is therefore null hypothesis is rejected. It can be concluded Livability affect the CM. Its influence is positive with magnitude 0.889 relationships.



### Conclusion

The study of the measurement scale model of the all indicators are valid in measuring the sub-variables (visitability, investability and livability) and the sub-variables are valid in measuring the research variable (CM). The calculation shows the outer loading of the first stage for eight manifest variables (indicators) of the latent variable with visitability ranging from 0.366 to 0.917. There are two outer loading indicators with values less than 0.5. Outer loading for 10 manifest variables (indicators) of the latent variable investability ranging from 0.024 to 0.825. There are two outer loading indicators with values less than 0.5. Outer loading to 6 manifest variables (indicators) of the latent variable livability ranged from 0.372 to 0.855. There is one indicator of the value of outer loading of less than 0.5. Because the outer loading of less than 0.5 is declared invalid then there are five manifest variables (indicators) of the three latent variables which are eliminated from the calculation model. Results of outer loading after elimination indicators V7, V8, I6, I7, and L5 (Table 1) and can be seen in Table 2 of outer loading phase II in which all manifest variables (indicators) are valid.

The study has proven that this scale is an established measurement for examining the city marketing of Maluku Province. The results from the study indicate that using confirmatory factor analysis approach to test the model validity that is conducted through variance structure model approach (PLS-PM) is an essential way for this study.

Thus, the paper contributes to design management and marketing theories about the component of CM. It also contributes to Maluku Province Government and other local government or cities for building and marketing the city more competitiveness.

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Appendix-1. Instruments for measuring CM (Items of the dimensions)

No	Items of the dimensions
<b>I</b>	<b><i>Dimension of Visitability</i></b>
1.	The First visit to Maluku is a pleasant one
2.	Having the first visit to Maluku, I feel happy
3.	Visiting Maluku is somethings that I want
4.	Visiting Maluku is something that I plan to go back
5.	Natural resources of Maluku is a wonderful thing
6.	The nearest beach from the center like the Pintu Kota beach, Natsepa beach and Liang beach in my opinion is one of the sites to be visited
7.	Visiting the events held by the local government is the boring one.
8.	The events held on Maluku in my opinion is not interesting
<b>II</b>	<b><i>Dimensions of Investability</i></b>
9.	Business / product business fishing / marine in Maluku now, according to me is growing rapidly
10.	Opening the business / product business fishing / marine in Maluku I think is very interesting because it is profitable
11.	By opening a business / product business fishing / marine, it will recruit the labor in Maluku
12.	The more events held local government will increase business opportunities
13.	More and more businesses are coming from outside of Maluku as a sign of business opportunities in the Moluccas, the better
14.	The population of Maluku which have had a job in my opinion is more than the unemployed
15.	Business in the field of food processing of fishery products / marine in Maluku, to me it does not follow trends.
16.	I think other than in the field of fisheries products / marine, open a business in the field of culinary is interesting to invest.
17.	If opening a business in Maluku, I believe my business will flourish
18.	Beside growing, I think opening in Maluku can attract investors who want to work together.
<b>III</b>	<b><i>Dimensions of Livability</i></b>
19.	Ambon as the capital city of Maluku has a nickname as "Ambon Manise" I consider it very precisely.
20.	Some of the best tourism destinations are located in Maluku
21.	To optimize the individual in Maluku, I think opportunities like jobs are still limited
22.	With the high number of people who work moved to Maluku, then jobs in Maluku wanewill be decreasing
23.	For me, living in Maluku is desirable.
24.	Spending more time in Maluku according to my is delighting

**THE MEDIATING ROLE OF INTER-ORGANIZATIONAL TRUST BETWEEN  
EXTERNAL GROWTH STRATEGIES AND ORGANIZATIONAL PERFORMANCE  
OF MALAYSIAN COMPANIES**

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**Abstract**

Inter-organizational trust has a vital role in any external trade relationship. But studies relating growth strategies and inter-organizational trust are few. The purpose of this paper is to identify and compare the effect of external growth strategies on organizational performance of companies and to examine the mediating role of inter-organizational trust between the variables. Data was collected from 240 senior managers from public listed companies in Malaysia and was analyzed using AMOS. The findings indicate that growth strategies has significant effect on organizational performance. Strategic alliance and acquisition, have significant effects on organizational performance. Inter-organizational trust fully mediates the effect of growth strategies on organizational performance. Its relationship component has no mediating effect while task component partially mediates the effect. Building inter-organizational trust among companies and relying on strategic alliance rather than merger and acquisition will sharpen their competitiveness and enable them to survive and thrive.

**Keywords:** *External growth strategies, Inter-organizational trust, Strategic alliance, Merger, acquisition, Public listed companies*

**Introduction**

A continuous review of growth potential and change is critical to a company's competitiveness. This particularly proves to be critical considering the ever-increasing levels of change and uncertainty in the business environment, and the emerging shifts in principles of competition in markets (Hilman & Zainal A.M., 2011; Zainal A.M. et al. 2009). Against this new competitive background, selecting the direction and focus of the growth strategy will be a critical decision that entails a degree of risk, and consequently the company's competitive position (Nath et al., 2010; Chang & Thomas, 1989; Abdullah et al., 2009). Companies assume growth as their central strategic paradigm (Gümüs and Apak, 2011). Survival occurs when a company utilizes its ability to create new resources, build on its capabilities platform, and make the capabilities more inimitable to achieve competitive advantage (Prahalad & Hamel, 1990). Growth can be achieved either by internal or external strategies (Ortiz-de-Urbina-Criado et al., 2014). The internal one is slow while the external is more preferable because it leads to faster results (Isoraite, 2009). External growth usually achieved by involving in merger and acquisition (M&A), or strategic alliance (Ömür et al., 2012).

External growth strategies foster the growth of businesses and enhance their accesses of technology, knowledge, financial capital, and market capabilities (Cassia & Minola, 2012; Lechner & Dowling, 2003). Evidences from the literature refer to the growing importance of external growth strategies and companies are benefiting greatly from alliance and M&A for reducing the costs and increasing the efficiency of distribution networks (Qiu, 2010). Previous studies indicate that researchers either focus on the effect of M&A (e.g. Shanmugam & Nair,

2004; Aik et al., 2015) or on strategic alliance (Sambasivan et al., 2011: 2013; Hilman & Zainal A. M. 2011). In addition, the majority of the previous studies are qualitative in nature while the quantitative studies related to external growth are few (Furlan et al., 2014).

In Malaysia, according to the Malaysian Merger and Acquisition Association (MMAA), the value of M&A increased from \$16 billion in 2010 to \$30 billion in 2014 (MMAA, 2015). This value will continue to increase due to the competition in the country and region as well as due to the involvement in partnership such as the launching of the Trans-Pacific-Partnership (TPP). The recent report of Merger & Acquisition produced by Global Legal Insight (GLI) in 2012 indicates that the volume and value of mergers and acquisitions in Malaysia stem mainly from government initiatives that encourage economic growth in certain sectors. Mainly, the initiatives include (a) The Economic Transformation Programme (ETP) which is the catalyst for the transformation needed by Malaysia to achieve the status of a developed nation by 2020 as targeted under the Malaysian New Economic Model; and (b) The cooperation and understanding amongst the Association of Southeast Asian Nations (ASEAN) which encourages the member countries to synergize (GLI, 2012). The Star newspaper indicated that most of the merger and acquisition were conducted by insurance companies (The Star, 2014). In addition, banks and other financial institutions are increasingly involved in strategic alliance. For example, in 2015, four banks had established strategic alliances to develop a multi-bank platform (Bank Islam, 2015).

It can be seen that the trend for merger and acquisition as well as for strategic alliance is increasing among companies in Malaysia. This paper investigates only the external trust (inter-organizational) as it being part of the external growth strategies. Researchers have divided trust into relationship side and task side (Zainal A.M. et al, 2014), or goodwill trust and competence trust (Jiang et al. 2013). In this study, the trust components of the former is adopted. The motive of this study is to contribute to the literature related to trust and growth strategies. Consequently, the purpose of this paper is to investigate and compare the effect of growth strategies on the organizational performance of companies in Malaysia. It aims also to test the mediating role of inter-organizational trust between the growth strategy and organizational performance.

### **Literature review and hypotheses development**

This section will cover specifically on three topics namely organizational performance, external growth and inter organizational trust as well as the related proposed hypotheses.

#### **a. Organizational Performance**

Organizational performance is one of the highly researched dependent variables in the literature (e.g. Abdullah et al., 2009; Zainal A.M. et al., 2009; Sambasivan et al., 2011). It is defined as a set of financial and non-financial indicators which offer information on the degree of achievement of objectives and results (Lebans & Euske, 2007). It is difficult to measure the organizational performance without including the external relationship and intangible values such as knowledge, competencies, and partnerships (Cotora, 2007). Gyula (2013) comments that there are strong limitations on measuring organizational performance with only financial indicators (Gyula, 2013). Using only financial indicators is not sufficient to measure the real performance of organizations and likewise in case of using only non-financial ones. Therefore, this study is measuring performance using financial and non-financial indicators. These measurements have been used by many researchers (e.g. Alaarj et al., 2016; Holsapple & Wu, 2011; Tseng 2014).

#### **b. External Growth Strategy**

Strategy has been one of the major topics that received attention from researchers. It is defined as a concern with integrating company activities and allocating resources, so that the

present objective can be met (Zainal A.M., 2010). Businesses adjust their strategies in order to survive and grow in rapidly changing environments. Company growth can be divided into internal growth and external growth. Internal growth is a strategy to grow through accumulating profits by management rationalization such as expanding investment, increasing production, and improving sales while external growth is a strategy to grow by acquiring some or all of the assets of another company. M&A and strategic alliance are major approaches to external growth (Ömür et al., 2012; Yoo et al., 2013).

This paper focuses on external growth strategies because they foster the growth of businesses and enhance accesses of technology, knowledge, financial capital, and market capabilities (Cassia & Minola, 2012; Lechner & Dowling, 2003). Evidence from the literature refers to the growing importance of external growth strategies. Chang and Wang (2007) investigated the effect of product diversification strategies on the relationship between international diversification and firm performance. The findings indicated that the number of M&A and strategic alliances are positively related to the performance. Similarly, Qiu (2010) found that a large number of cross-border strategic alliances are marketing and distribution alliances that reduce distribution costs for the allied companies. Cross-border mergers and acquisitions are often found to be motivated by taking advantages of each other's distribution networks. Ortiz-de-Urbina-Criado et al. (2014) found that external growth has strong effect on organizational performance when the involved parties seek to diversify their businesses. Thus, the first hypothesis of this study is:

H1: External growth strategies has a significant effect on organizational performance

Supporters of Resource-based View Theory pointed out that organizations can use its own resources and capabilities to achieve competitive advantage and superior performance (Barney, 1991). Building inter-organizational relationship is a strategic capability that companies can use to establish networks with partners in the form of M&A or strategic alliance. Strategic alliance are important sources for companies to achieve sustainable competitive advantages (Sambasivan et al. 2013). Previous studies tested the effect of strategic alliance and found that it has positive implications on the organizational performance of involved parties (Das et al., 1998; Schreiner et al., 2009). Jiang and Li (2008) commented that having strategic alliance can improve the organizational learning and performance. Similarly, Khalid and Larimo (2012) found a significant effect of alliance entrepreneurship on the performance. Accordingly, it is expected that:

H1a: strategic alliance has a significant effect on organizational performance.

M&A have become a global phenomenon and a popular strategic choice for companies pursuing growth and expansion (Buckley and Ghauri, 2002; Shimizu et al., 2004). The literature shows that M&A are investigated heavily by researchers from different disciplines but the majority focused on banks' M&A (e.g. Kuriakose and Paul, 2016; Aik et al., 2015). M&A are effective tools in the hands of the management to achieve greater efficiency by exploiting synergies and growth opportunities (Ghosh & Dutta, 2014). They are important vehicles for companies' business, product, and geographic strategies. M&A has become major strategic tools for multinational corporations' growth (Hitt et al., 2001).

M&A have significant impact on companies' performance (Laamanen and Keil, 2008), and hold long-term consequences for the company (Capron & Pistre, 2002). Rani et al. (2015) found that M&A in India had resulted in significant improvement in the profitability of acquiring companies. Aik et al. (2015) found that mergers are driven by managerial self-

interest to create market power and those non-merging rival organizations in Malaysia have significantly higher productivity. At the same token, Kuriakose and Paul (2016) suggested that the dissimilarity between the merging partners has led to weak and adverse impact on performance. In this paper, it is expected that M&A have significant effect on the organizational performance. Thus, it is hypothesized that:

H1b: Acquisition has a significant effect on organizational performance.

H1c: Merger has a significant effect on organizational performance.

### c. Inter-organizational Trust

Trust has emerged as an important factor that can affect entirely the performance of the parties that are involved in inter-relationships. Trust is defined “the degree to which parties are willing to act on the words, actions, and decisions of others (McAllister, 1995). Jiang et al. (2013) investigated the effect of trust and contract on knowledge leakage in strategic alliance. Trust was divided into goodwill trust and competence trust. The findings indicate that competence trust is the most effective safeguard against knowledge leakage, whereas formal contracts are not an effective mechanism. Seppänen et al. (2007) suggest further empirical studies on inter-organizational trust in order to derive the benefits of both empirical and theoretical generalizations in this emerging field. Zainal A.M., (2014) pointed out that the need for trust has arose due to expanding strategies of companies when they look for growth opportunities with partners, outsourcing from new suppliers, or having to deal with different culture. Sambasivan et al. (2011) emphasized on the importance of including trust as a major component in relationship capital and strategic alliance.

Pesämaa, et al (2013) investigated the role of inter-organizational trust on commitment. The finding reveals that trust and reciprocity are related to inter-organizational commitment. Similarly, a study conducted by Lusch et al. (2003) to investigate the inter-organizational trust between suppliers and retailers before and after conducting strategic changes. The findings show that higher levels of trust in the pre-change organization by the retailer results in higher support for the change. They conclude that trust from business partners is important for initiating a collective action to gain support for a strategically changed organization.

It can be seen that inter-organizational trust is an important factor to enhance the relationship and the effectiveness of business partners. Previous studies found that trust could play a mediating role between knowledge management processes and organizational performance (Alaarij et al., 2016). Lui et al. (2006) found that inter-organizational trust played a full mediating role between the relationships of firm similarity and partner reputation with coercive strategy. Perrone et al. (2003) found also that inter-organizational trust mediates the relationship between an individual’s firm’s clan culture and the trust placed in that individual by other boundary spanners. In this paper, it is expected that:

H2: Inter-organizational trust mediates the effect of external growth strategies on organizational performance.

Zainal A.M. et al. (2014) divided external trust to complementary components namely relationship and task. This is because relationship alone is not enough and must be supported by tasks, actions, and competence (McAllister, 1995; Jiang et al, 2013). According to Zainal A.M. et al (2014), the relationship side of trust is dealt with by the staff involved in inter-relationships who interact and create the relationship. The relationship increases the communication level and that helps in solving problems. Wong et al. (2005) emphasized on the relationship side of trust. They pointed out that in all forms of strategic alliance, members from the organizations need to collaborate and work together. Theory of relationship states

that commitment will develop as a result of direct and mediating variables of trust and only then will commitment influence successful relational exchanges (Morgan & Hunt, 1994). Accordingly, the following is hypothesized:

H2a: Relationship side mediates the effect of strategic alliance on organizational performance.

H2b: Relationship side mediates the effect of M&A on organizational performance.

For the task side of trust, Zainal A. M. et al. (2014), deliberated that the staffs who are involved in relationship side must be consistent and competent in performing their work. In addition, a team with task side must have integrity, competence, reliability, and accountability. The study of Jiang et al (2013) identified the competence of trust as the most effective safeguard against knowledge leakage between partners. In this study, the task side is expected to influence positively the performance of public listed companies in Malaysia. Based on above, the following is hypothesized:

H2c: Task side mediates the effect of strategic alliance on the organizational performance.

H2d: Task side mediates the effect of M&A on the organizational performance.

### **Research methodology**

A quantitative approach of analysis was selected to look into these issues. A survey method was applied and thus a questionnaire need to be applied.

#### **a. Population and Sampling**

The population of this study were the public listed companies in Malaysia. A purposive sampling technique was deployed because they have to be those who have the information related to the organizational strategies. The sample thus includes senior managers who were chosen because of their awareness of the growth strategies and the relationship with business partners.

#### **b. Validity and Reliability**

Hair et al. (2006) suggested that validity and reliability tests need to be done in all researches as they are necessary to ensure that the instruments used are not questionable. In this study, two professors in strategic management were invited to validate the measurement. The comments and feedbacks were addressed accordingly. Next, the instrument was checked for reliability. A total of 31 Ph.D. students participated in a pilot study. All the Cronbach's Alpha were greater than 0.70.

#### **c. Instrument of the Study**

The instrument of this study is an online questionnaire. It consists of invitation letter to the respondents that shows the purpose of data collection as well as the consent form, followed by the background information of the respondents along with questions related to the variables of the study. The measurement of strategic alliance (7 items), acquisition (7 items), and merger (5 items) are self-developed. Measurement of inter-organizational trust (relationship (4 items) and task (4 items) are adapted and adjusted from Zainal A. M., et al. (2014). Financial and non-financial performance measures are adapted and adjusted from Tseng (2014). A ten point Likert scale was used to assess the questions. The scale ranges from (1) strongly disagree to (10) strongly agree.

#### **d. Data Collection**

A total of 813 questionnaires were mailed to respondents using social media website and network referral as well as websites of the companies. A total of 251 complete questionnaires were returned. Data was examined for univariate and multivariate outliers. As a result, 11 responses were removed. This makes the final complete and usable responses to



be 240, a response rate of about 40.8%. Kline (2011) considered 200 as a typical and acceptable sample size for Structural Equation Modeling (SEM). Thus, AMOS will be used.

e. Cleansing and Improving the Data

After removing the outliers, the normality of the data was checked. The values of Kurtosis and skewness are within the recommended range of less than absolute two. Thus, the assumption of normality was achieved. Multicollinearity was also checked and it was found that the variance inflation factors (VIF) is less than 5.3 and the value of tolerance is less than 0.19 thus confirming its non-existence (Hair et al., 2006). Exploratory factor analysis was also conducted. Some items were deleted due to weak factor loading. Seven components were identified based on the Eigenvalue (>1) and the Kaiser-Meyer-Olkin (KMO) is 0.921 with 496 degree of freedom (df) and Sig value of <.05.

**Data analysis**

A brief descriptive analysis of the profile of the 240 respondents noted that their age ranges between 28 and 54 with a mean of 38.04 years. The majority were males (60%) with bachelor degree (59.2%) and working experience ranging from 3-29 years with a mean of 11.67 years.

a. Measurement Model

CFA was employed to estimate the subscales of the growth strategies, organizational performance, and inter-organizational trust. Maximum likelihood estimation was used as estimation methods for the analysis with indices such as RMSEA, GFI, CFI, IFI, and Chi sq used to assess the model fit. These indices are considered sufficient (Hair et al., 2006; Awang, 2012). Variables with factor loading of less than 0.60 were removed. All the indices were achieved. CFA for growth strategies showed that the construct has three components; strategic alliance, acquisition, and merger. For other two constructs, the CFA indicated that organizational performance has two components (financial and non-financial performance) and inter-organizational trust has two components (relationship and task side).

The measurement model was performed with all constructs included. Factor loading of items and components of the construct were all greater than 0.60 and the model fit indices were achieved (RMSEA=0.065, IFI=0.94, CFI=0.94, GFI=0.83, and Chi sq=2.008). These indicate that all the indices were achieved except GFI. However, Hair et al. (2006) recommended that analysis can continue further when at least three of the indices meet the threshold requirement.

b. Convergent and Discriminant Validity

The convergent validity of the model is assessed using the output of the measurement model and it is achieved when the composite reliability (CR) > 0.70 (Hair et al. 2006) and the Average Variance Extracted (AVE) >0.50. In addition, the Cronbach’s Alpha (CA) is >0.70 (Hair et al. 2006). On the other hand, the discriminant validity is achieved when the root square of AVE is greater than the cross loading (Hair et al., 2006). Based on these criteria, all the indices can be accepted.

. Table 1: Convergent and Discriminant Validity

	CR >.70	AVE>0.5 0	CA>0.7 0	TS	SA	AQ	MR	NFP	FP	RS
TS	0.925	0.754	0.923	0.868						
SA	0.944	0.770	0.942	0.496	0.878					

AQ	0.914	0.681	0.912	0.41 3	0.64 5	0.82 5				
MR	0.962	0.864	0.961	0.53 4	0.72 2	0.52 4	0.93 0			
NFP	0.875	0.541	0.871	0.41 6	0.40 6	0.40 8	0.31 2	0.73 6		
FP	0.919	0.740	0.911	0.45 7	0.46 4	0.35 4	0.40 9	0.44 8	0.86 0	
RS	0.871	0.772	0.871	0.69 2	0.60 4	0.50 5	0.57 5	0.51 0	0.36 4	0.87 9

Note: TS: Task Side, SA: Strategic Alliance, AQ: Acquisition, MR: Merger, NFP: Non-Financial Performance, FP: Financial Performance, RS: Relationship Side.

c. Hypotheses Testing

This study has developed direct and indirect hypotheses. Figure 1 shows the structural model of this study.

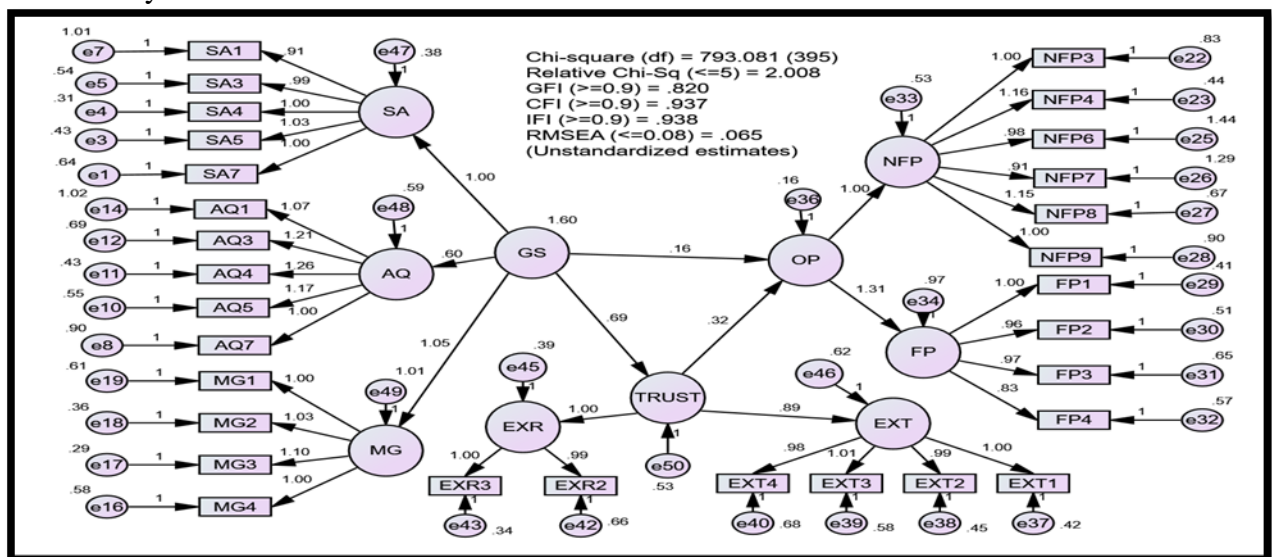


Figure 1: Research Structural Model

1) Direct Effect

The direct effect of growth strategies on the organizational performance was tested using the structural model. Result of the analysis is given in Table 2.

Table 2: Result of Direct Effect

H*				Estimate	S.E.	C.R.	P	Label
H1	Organizational performance	<---	Growth strategies	.336	.058	5.801	.001	Sig**
H1a	Organizational Performance	<---	Strategic alliance	.184	.061	2.999	.003	Sig**
H1b	Organizational performance	<---	Acquisition	.133	.063	2.123	.034	Sig**
H1c	Organizational performance	<---	Merger	.048	.043	1.115	.265	Not sig

H\*: Hypothesis, sig\*\*: significant, P<0.05, N=240.

As shown in Table 2, H1 is accepted. The direct effect of growth strategies is significant. H1a and H1b are also accepted. Strategic alliance and acquisition have significant effects on organizational performance. While merger has insignificant effect on organizational performance. Thus, H1c is rejected.

2) Indirect Effect

Table 3 presents the results of testing inter-organizational trust and its dimensions as a mediator between external growth strategies and organizational performance. Since the direct effect of merger is not significant, no test of mediation will be conducted and the related hypotheses are removed.

Table 3: Result of Mediating Testing

			Estimate	S.E.	C.R.	P	Label
Inter-organizational Trust	<---	Growth strategies	.688	.074	9.324	.001	Sig
Organizational performance	<---	Growth strategies	.158	.082	1.923	.054	Not Sig
Organizational performance	<---	Trust	.324	.100	3.229	.001	Sig
Relationship side	<---	Acquisition	.251	.071	3.518	.001	Sig
Task side		Acquisition	.205	.073	2.795	.005	Sig
Task side	<---	Strategic alliance	.371	.058	6.421	.001	Sig
Relationship side		Strategic alliance	.444	.058	7.677	.001	Sig
Organizational performance	<---	Acquisition	.106	.049	2.162	.031	Sig
Organizational performance	<---	Strategic alliance	.126	.047	2.668	.008	Sig
Organizational performance	<---	Relationship side	.099	.054	1.833	.067	Not sig
Organizational performance	<---	Task side	.172	.049	3.533	.001	Sig

In comparison between Table 2 and Table 3, it can be seen that the direct effect of growth strategies on organizational performance is reduced from 0.336 (before entering the mediator) to 0.158 (after entering the mediator). This shows that the mediation occurs. However, the direct effect has insignificant effect which indicates that the mediation is full. This leads to the acceptance of H2. For H2a and H2b, the effect of relationship side on organizational performance is not significant thus, relationship side does not play a mediator role. Accordingly, H2a, and H2b are rejected. For H2c and H2d, the effect of strategic alliance and acquisition on organizational performance decreased after entering task side as a mediator. However, the effect is still significant. Thus, it is concluded that task side is a partial mediator between the variables. Accordingly, H2c and H2d are accepted.

**Discussion**

The finding of this study showed that inter-organizational trust is essential for growth strategies and organizational performance. Trust could reduce the transaction cost and the cost

of writing to tighten the contracts. It also promotes knowledge sharing among partners. Strategic alliance is vital for the organizational performance and it has the highest effect followed by acquisition. Merger on the other hand has no effect on organizational performance. Previous findings are in agreement with the outcome of this study. Researchers agreed that external growth can foster the development and performance of organization (Anderson et al., 2010). Strategic alliance has strong effect in reducing cost (Qiu, 2010). Similarly, acquisition is important for achieving advantage in the distribution network. In contrast, this study found that the effect of merger on organizational performance is insignificant. Most of the literature found that merger has a significant effect on organizational performance. However, in agreement with the finding of this study, Aik et al. (2015) and Kuriakose and Paul (2016) related the weak performance of companies after merger to managerial self-interest and dissimilarity between merged partners.

Inter-organizational trust is essential for the external growth strategies. The existence of trust reduces the anxiety and promote more opportunity for future deals between partners. The inter-organizational trust is an essential variable and it played a full mediating role. This finding is in accordance with the literature (e.g. Lui et al., 2006; Perrone et al., 2003). The task side and the relationship side confirmed to work as complementary components of inter-organizational trust. The task side mediated partially the effect of strategic alliance and acquisition on organizational performance while the relationship side has no mediating role. A possible explanation derived from an interview with respondents who pointed out that in the case of small and medium enterprises (SMEs) or family-owned businesses, the relationship side and the task side could mediate the effect of growth strategies on organizational performance. This is because the size of the company is small and the number of alliance is limited. However, in the case of public listed companies where each company might have several acquisitions and alliances on different level (local, regional, and international), it is difficult to focus on the relationship side and only will be matter, is the action or the task side i.e. each party has to perform its role and contribute to the inter-relationship as agreed upon the binding contracts.

### **Conclusion and future work**

This study was conducted to examine the effect of growth strategies on organizational performance of Malaysian public listed companies. The study also sought to test the mediating role of inter-organizational trust between the variables. A total of 240 senior managers have participated in this study. The finding indicated that growth strategies has a significant effect on organizational performance. More importantly, strategic alliance is comparatively the best strategic growth option among the surveyed companies. The finding also showed that inter-organizational trust fully mediated the effect of growth strategies on organizational performance. Task side confirmed to have a partial mediating role between strategic alliance and acquisition, and organizational performance.

This study has contributed to the literature in the area of trust and growth strategies. However, the studies that are related to the variables in emerging economies are still in their infancy. It is recommended for future work to investigate more the effect of organizational and inter-organizational trust under environmental uncertainty. In addition, the majority of literature is related to banks. There is a need for more studies on different types of industry such manufacturing or services. Lastly, the relationship side of trust was insignificant as a mediator. It is recommended for future work to replicate this study using different sample such as social enterprises, small and medium enterprise (SMEs), or family-owned business.

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**THE INFLUENCE OF GREEN MARKETING MIX ON CONSUMER SATISFACTION AND LOYALTY (CASE STUDY: CARGILLS (CEYLON) PLC, COLOMBO DISTRICT, SRI LANKA)**

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**Abstract**

The purpose of this research study is to evaluate the influence of green marketing mix on satisfaction and loyalty of the customers and consumers of Cargills (Ceylon) plc, Colombo District, Sri Lanka. For this purpose, all customers and consumers (total of 5000) of the company in Colombo District were taken as the statistical population and two forms of questionnaires were distributed among them as the sample population. The customers are taken as those who sell the Cargills Company's products in the district and consumers are the people in the district who consume the company's products. After analysis it was concluded that green marketing mix has significant effect on consumer satisfaction. It was also concluded that consumers' satisfaction has significant effect on their loyalty. By considering the effect of green marketing mix upon consumers' and customers' satisfaction and the effect of such satisfaction upon their loyalty, it can be assumed that companies can create competitive advantage in their organization through taking steps in making the green marketing part of their overall marketing strategy.

**Keywords:** *Green Marketing, Consumer Satisfaction, Loyalty*

**Introduction**

Green marketing has been viewed as one of the most important academic research subjects since its conception (Ottoman, J., 1994). The issue gained more emphasis in the late 1970s; when the American Marketing Association held its first seminar on Ecological Marketing in 1975, which led to the publication of a book entitled Environmental Marketing (Henion, K.E. and T.C. Kinnear, 1976). The first definition of green marketing was according to Henion (1976); "the implementation of marketing programs directed at the environmentally conscious market segment" (Banerjee, S.B., 2001). Despite the early development, it was only in the late 1980s that the idea of green marketing actually made an appearance because of the consumers' growing interest in green products, increased awareness and willingness to pay for green features (Peattie, K., 1995). Henion's definition of green marketing has evolved and many more definitions for green marketing have arisen throughout the years. Consumers have started to show more interest in green products and the tendency to spend on products with green features has increased. Since then, research programs have been conducted to study the interest of people towards the environment and green products.

With respect to the existing data, research results, growing public awareness and also responsibilities, ever increasing attention to environment, increasing attention of companies to customer satisfaction and loyalty and also tendency of organizations to acquire international certificates such as ISO (e. g. ISO 4001) and also the fact that green marketing has brought about a competitive advantage for the companies, the significance of green marketing has been greatly highlighted.

**Research problem**



Tremendous increase in use of natural resources and inconsiderateness towards environment, human health risks and irreversible severe ecosystem damages make human being more cautious about environment and related health problems. Since companies look for competitive advantage to increase their customer satisfaction and loyalty, they are being forced to consider environmental issues in producing their products. So far, a lot of research has been done on the management of customer communications, satisfaction and loyalty (Greenberg, P., 2000) and also on the subject of green planning management in compiling company strategies (Olsson, P., C. Folke and T. Hahn, 2004), however, very little research has been done on green marketing and its relationship with customer satisfaction and loyalty.

### **literature review**

Review of the related literature shows that there is not so much research, nor a unique definition about green marketing approach due to its youngness, however, what is a common fact among proposed definitions, is fulfilling the company's goals with the least damage to living environment and human beings. Following is a number of definitions being floated on the subject:

- Green marketing is a managerial process to identify, foresee and meet society's and customer needs via a sustainable and profitable procedure (Peattie, K., 1995).
- Green marketing or ecological marketing focuses on all designed activities to meet human's needs and wants with the least impact on natural environment (Polonsky, M.J., 1994).
- According to the American Marketing Association (1976), green marketing is the study of positive and negative aspects of marketing on pollution and reducing consumption of energy and other scarce resources.
- Green marketing or environmental marketing includes all activities that are designed to facilitate the transactions in order to meet human wants and needs in a way with the least adverse effects on living environment (Polonsky, M.J., 1994).

Primary studies on green marketing and about customer interest for green products was first done by Vandermerwe and Oliff in 1990. In 1989, a study in the United States of America indicated that 49 percent of responders have made changes in their purchase habits for the sake of environment. According to another research by Callan and Thomas in 1992, 93 percent of participants stated that environmental consequences have had a role in their purchasing habits (Callan, S. and J.M. Thomas, 1992). The results of another research which was done in developing countries by Peattie in the same year showed that 75 percent of participants somehow involved environmental criteria in their purchasing (Peattie, K., 1995).

In a study in 1994, Dietz and Stern proved that 42 percent of the British consumers paid attention to environmental consequences in their purchases and 27 percent of them had the will to pay 25 percent more than the normal market prices for environment-friendly products. According to the studies done by Levinson J.C. and S. Horowitz, 2010, 83 percent of customers claimed that they chose environment-friendly brands and 80 percent concerned the company reputation regarding environmental protection issues.

### *Customer Satisfaction*

During recent four decades, customer satisfaction has been viewed as an important theoretical and practical issue for most of the marketers and researchers. Kotler (2000) defines it as a feeling in individuals after comparing product and service performances with their expectations (Kotler, P., 2000). Hawkins (1995) states that such factors as friendly, polite, knowledgeable and useful employees, clear and accurate bills, competitive prices and quick services, can affect customer satisfaction. Satisfaction also refers to pleasant or unpleasant

feeling caused with comparison between imaginative function and expectations (Hawkins, D.I., R.J. Best and K.A. Kony, 1995). If a good's performance is better than expectations, customer will be pleased (Kotler, P., G., Armstrong, V. Wong and J. Saunders, 2008).

Satisfaction is directed to consumer's judgment to the extent to which a product's or service's feature can create joy and pleasantness at the time of consumption (Oliver, R.L., 2006). According to experiences and customer comments, satisfaction works as complementing the consumption purposes of the customer (Oliver, R.L., 2006).

Previous studies have indicated two different conceptualizations from customer satisfaction: Particular purchase and Cumulative purchase. The former refers to evaluated judgment after purchase for a particular occasion, while the latter is based upon general experience with goods and services of a particular company during a period of time. A common agreement on all the definitions proposed is on the necessity of purpose by which the customer looks for.

All companies face an increasing pressure towards creating greener products. Jamal and Nasser define customer satisfaction as the customer's attitude towards a product or post-usage services (Divandary, A. and J. Delkhah, 2003). Satisfaction is also referred to as customer reactions to use or consume a product (Westbrook, R.A., 1987). A comprehensive definition of customer satisfaction would be as follows: "customer satisfaction is a result received through the comparison of expected performance before purchase with the real perceived performance and paid expense" (Farris, P.W., T.B. Neil, E. Phillip and J.D. Rubinstein, 2010).

#### *Customer Loyalty*

Customer loyalty refers to the customer's behavior in keeping in touch with institution after buying products and obtaining after sale services (Bhara, *et al*, 2002 and Singh, J., 1990). Loyalty is having and keeping a deep commitment to re-purchase of an offered product. In other words, loyalty can be considered as ensuring future behavior for buying a product or a service, or getting in touch with a factory in all situations even if there are other alternatives for purchasing (Oliver, R.L., 2006). Therefore, customer loyalty requires a positive attitude towards the company's products and services. It is reached through desired behavior which results in buying goods and services and recommending to others (Backman, S.J., 1991). Customer loyalty is also a sustainable source of income for companies that, as an informal communication channel, introduce the products or services to families and friends (Martensen, *et al*, 2000)

#### *Interrelationship between Customer Satisfaction and Loyalty*

Much research has been done on the interrelationship between customer satisfaction and loyalty which is the direct result of customer satisfaction (Haskett *et al*, (1994)). Andersen and Fornell (1994) have mentioned that customer satisfaction depends upon his/her overall satisfaction. All customers do not become loyal due to receiving a satisfying service, but due to the fact that a group of them do not want to bother to transfer to another provider.

#### *Background of Study Done Abroad*

In their research paper "Green product quality, green corporate image, green customer satisfaction and green customer loyalty", Nai-Jen Chang and Chen-Min Fong (2010) studied the effects of these variables with the use of a questionnaire survey. Consumers who had experienced purchasing green products were identified as the subjects of this study. The results showed that (1) the green product quality is positively associated with green customer satisfaction and green customer loyalty; (2) green corporate image is positively associated with green customer satisfaction and green customer loyalty; and (3) green customer satisfaction is positively associated with green customer loyalty. The results also indicate that green product quality could bring about green customer satisfaction and green customer

*loyalty*

In their study "Strategic green marketing: a comparative study of how green Marketing affects corporate strategy within business to business", Oscar Baverstam and Maria Larsson (2009) examined how strategic green marketing can be developed and what incentives there are for companies to do so. To fulfill the objectives of this study, four research questions were formed and a qualitative case study was conducted of three business to business companies from different industries. Interviews helped gain insight as to how companies develop their green marketing strategies and for what reasons. The results indicated that most companies were not segmenting their target markets based on consumer's environmental attitude. Findings also indicated that green market strategies differed for each company and might be derived from a company's individual circumstances including its objectives, resources and competitive advantages. Furthermore, the findings showed that most companies can implement green changes in their marketing mix but that these should be actively promoted when a product's green attributes constitute a key selling point. Finally, the findings indicated that financial benefits and the possibility of gaining a competitive advantage were the foremost incentives for implementing green measures.

In another research study entitled "A study on the relationship among green marketing, consumer satisfaction, consumer loyalty and the degree of consumer involvement in environmental protection: examples from chain stores in the middle section of Taiwan", Hung-Ta (2009) argued that in recent years, due to the global rise of environmental awareness, enterprises are indirectly let to begin affording more social responsibilities and implementing concepts of social marketing (Hung-Ta W., 2009). Thus, it has prevalence on the concept of green marketing and a number of small and medium-sized and even large enterprises are taking part in this trend. Of course, Taiwan is not exception, for example, the convenience chain stores use shopping bags of green environmental protection and the Environmental Protection Administration policies limit use of plastic ba So in this study, it takes examples from the four major convenience chain stores consumers in the middle section of Taiwan and use survey method questionnaire to explore the relationship with convenience stores' green marketing, consumer satisfaction and consumer loyalty.

Finally, results show that the convenience stores' green marketing will have positive influence on consumer satisfaction and loyalty and the consumer satisfaction will have positive influence on consumer loyalty and finally consumer satisfaction plays an intermediary role between the convenience stores' green marketing and consumer loyalty. Then, the different degrees of consumer involvement in environmental protection will interfere in the relationship between consumer satisfaction and his/her loyalty.

In their research study "Cosmetics green marketing in Thailand", Johari and Sahasakmontri (1998) surveyed green marketing strategies and consumer attitude towards green products in two competitor companies namely Body Shop and Oriental Princess using a sample of 120 customers. The results showed that from the view of Body Shop's customers, natural materials, shop atmosphere, skin protection, brand logo and lack of animal tests were important factors in their decision to purchase. Questionnaire analysis indicated that Oriental Princess's customers considered such factors as skin protection, product function, ingredient materials, product fragrance and fee, in their decision to purchase (Chan, J.K.L. and T. Baum, 2007).

In another exploratory research study "Determination of satisfaction and dissatisfaction using Herzberg's motivator and hygiene factor theory", Chan and Baum (2007), using 29 informed customers in Sukau, Sabah, Malaysia, explored underlying satisfaction dimensions adopting Herzberg's Motivator and Hygiene Factor Theory. The study suggests that consumer satisfaction can be measured by proposing a paradigm that adopts a behavioral and experiential perspective as an alternative to the

confirmation/disconfirmation paradigm, rather than the expectancy disconfirmation paradigm that is predominantly employed in measuring consumer satisfaction. Building on Herzberg, underlying satisfaction and dissatisfaction dimensions are linked to job satisfaction in a way that is a function of two types of condition, known as hygiene factors (dissatisfiers), leading to the condition of dissatisfaction (prevention) and motivators (satisfiers), leading to a condition of satisfaction (Chan, J.K.L. and T. Baum, 2007).

In a research study entitled "An empirical study on the influence of environmental labels on consumers" by D'Souza *et al.*, (2006), the data were collected on an Australian sample using a structured questionnaire administered on the phone. A total of 155 questionnaires were completed and used for analysis. The data were analyzed using both descriptive measures and correlations between variables. There appears to be a proportion of consumers that find product labels hard to understand. The research found that there are consumers who will buy green products even if they are lower in quality in comparison to alternative products, but would look for environmental information on labels. With respect to price sensitive green consumers, there appears to be a relationship between price sensitivity and 'always' reading labels as well as indicating that there is 'sufficient' information on product labels to make informed purchase decisions (D'Souza, C., *et al*, 2006).

#### *Background of Study Done in Iran*

In their research study "measuring the relationship between customer loyalty and relevant factors e-banking in Tehran", S. Javadin et al, (2009) assessed the relations of key customer loyalty factors among Tehran bank customers. Attributing the concepts of satisfaction, perceived quality, change costs and accuracy to loyalty and using data analysis of research hypotheses about direct variable effects on each other, they concluded that such factors had positive effects on loyalty (Sayyid Javadin, S.R. and S. Yazdani, 2005).

In their research study "designing a model for customer loyalty in banking industry of Iran", Tabatabaie Nasab (2009) explored the model for customer loyalty in banking industry (Tabatabaie Nasab, S.M., 2009). In this study, first loyalty affecting factors were identified and then interactions between dependent and independent variables were tested within the model framework. At the first level, variables of "trust" and "commitment" as the key medium variables in establishing long-term relations in B2B environment and relational marketing were identified and their effects on loyalty were confirmed. At the second level, different variables of affective and cognitive processes involved in evolving different levels of trust and commitment were analyzed and their relationship in the final loyalty model was clarified. Final model declared that in line with customer satisfaction, customer's relational commitment and trust had important role in reaching loyal customers and consumers.

#### **Methodology**

By considering the importance of products of the Cargills Ceylon Company and the tendency of the company's management team for green management, the present research is aimed to study the effect of green management on customer's satisfaction and loyalty and the effect of green marketing mix on the customer mental image and value, his satisfaction and loyalty and in practice, to facilitate the way for establishing green management.

#### *Research Hypotheses*

Main Hypothesis:

Green marketing mix has effect on customer and consumer satisfaction and loyalty.

Minor Hypotheses:

Green marketing mix has effect on customer and consumer satisfaction.

Green marketing mix has effect on customer and consumer loyalty

### **Sampling and Determining Sample Size**

To determine sample size, a preliminary study was carried out by distributing a questionnaire among 30 customers and consumers. Through variance analysis of primary sample at the confidence level of 95%, sample size for the customers and consumers was calculated to be 375.

### **Data Collection Procedures**

Required data was collected via two procedures of library studies and field studies. In the library study section relevant sources including scientific books and articles, magazines, brochures and journals are used. In field study section, questionnaire is used to collect data. Regarding the research subject, which focuses on the effect of variables among customers (sales agents) and consumers, two questionnaires with distinct questions were designed and distributed among customers and consumers.

Questionnaires included two types of questions: general questions containing age and sex of the responders and technical questions. In design technical questions, different parameters were used. To determine green marketing mix-related parameters and other parameters were determined from reviewing previous research. In this research, Lickert's ranking scale is used for evaluation. The scale includes options of "very much=5" to "very little=1".

### **Data Analysis Procedure**

Data processing for the research is done at two levels: 1. descriptive statistics and 2. Multi-purpose analysis. In this section, mean (m), standard deviation (SD), maximum, minimum, range of variations, skewness and kurtosis of the variables are calculated to establish a general map of the population. In the second section, multi-purpose analysis, multi-factor, variance analysis is used to measuring the general validity of the research model.

### **Questionnaire Validity and Reliability**

Questionnaire validity was measured and confirmed using expertise comments. Questionnaire reliability is one of the technical features of measurement, which indicates the extent to which measurement tools devised for measuring particular trait and variable produce the same results under similar conditions. A method of estimating reliability is using Cronbach's alpha. To estimate Cronbach's alpha coefficient in this research, a preliminary study was done by distributing 30 questionnaires among customers and 30 questionnaires among consumers. After that, Cronbach's alpha was calculated with SPSS software. Its value was 0.85.

### **Frequency Distribution of Gender**

Out of the samples under study, 55 percent of the consumers were male and 45 percent were female. 92.9 percent of customers were male and 7.1 percent are female.

Table 1: Depicting frequency distribution of responders' gender

Group	Gender	Frequency	Percent (%)
Consumers	Male	176	55.0
	Female	144	45.0
	Total	320	100
Customers	Male	288	92.9
	Female	22	7.1
	Total	310	100

### Frequency Distribution of Education

Out of the samples under study, 4.7 percent is uneducated (U), 9.4 percent is at reading and writing level (RW), 12.5 is at Ordinary Level (OL), 11.6 percent is at Advanced level (AL), 31.2 percent is with diploma (D), 25 percent is with bachelor’s degree (BS) and 5.6 percent is with master’s degree (MS) and higher. 3.8 percent of customers is uneducated (U), 6.4 is at reading and writing level (RW) 12.9 percent is at Ordinary Level (OL), 26.4 is at Advanced Level (AL), 12.9 percent is diploma, 27.7 percent is with bachelor’s degree (BS) and 9.7 percent is with master’s degree (MS) and higher.

Table 2: Depicting frequency distribution of education of responders

Group	Education	Frequency	Percent
Consumers	U	15	4.7
	RW	30	9.4
	OL	40	12.5
	AL	37	11.6
	D	100	31.2
	BS	80	25
	MS	18	5.6
	Total	320	100
Customers	U	12	3.8
	RW	20	6.4
	OL	40	12.9
	AL	82	26.4
	D	40	12.9
	BS	86	27.7
	MS	30	9.7
	Total	310	100

### Age Description

For age variable, the number of sample, mean, median, standard deviation, minimum and maximum, are calculated and their histogram is drawn, separately for consumers and customers. The mean of age for consumers and customers are 38.57 and 37.94 years, respectively.

Table 3: Depicting age description of responders

Consumers	Number	320
	Mean	38.57

	Median	38.00
	Standard Deviation	8.876
	Minimum	22
	Maximum	60
Customers	Number	310
	Mean	37.94
	Median	37.00
	Standard Deviation	8.183
	Minimum	22
	Maximum	60

### Description of the Effect of Green Marketing on Satisfaction

For the effect of the variable of green marketing on satisfaction, the number of sample, mean, median, standard deviation, minimum and maximum, are calculated and their histogram is drawn separately for consumers and customers. The range of grades is 1-5. The mean of the variable for consumers and customers are 3.72 and 3.65, respectively.

Table 4: Depicting description of the effect of green marketing on satisfaction

Consumers	Number	320
	Mean	3.7165
	Median	3.7500
	standard deviation	0.62617
	Minimum	2.17
	Maximum	5.00
Customers	Number	310
	Mean	3.6511
	Median	3.6667
	standard deviation	0.62351
	Minimum	1.80
	Maximum	5.00

### Description of the Effect of Satisfaction on Loyalty

For the effect of satisfaction on loyalty, number of sample, mean, median, standard deviation, minimum and maximum, are calculated and their histogram is drawn, separately for consumers and customers. The range of grades is 1-5. The mean of the variable for consumers and customers are 3.71 and 3.79, respectively.

Table 5: Depicting description of the effect of satisfaction on loyalty Variable

Consumers	Number	320
	Mean	3.7051
	Median	3.6667
	standard deviation	0.80855
	Minimum	1.67

	Maximum	5.00
Customers	Number	310
	Mean	3.7911
	Median	3.6667
	standard deviation	0.76920
	Minimum	1.67
	Maximum	5.00

### Checking for Normal Distribution of the Grades of the Variables

To test normality of the distribution, Kolmogorov-Smirnov test (K-S test) is used. Null hypothesis in this test is that variable distribution is normal. If significance level of the test is less than 0.05, null hypothesis will be rejected and it will be concluded that the given variable distribution is not normal. The result of significance level shows that the variable of green marketing effect on perceived image of both consumers and customers have normal distribution (significance level more than 0.05), while, other variables do not display normal distribution, neither in consumers nor in customers (significance level less than 0.05). However, due to numerousness of samples and lack of irrelevant data, data distribution is supposed to be normal. Finally, parametric and non-parametric tests are both used.

Hypothesis 1: Green marketing mix has effect on customer and consumer satisfaction.

Table 6: Depicting results of K-S test for normality of the variable grades distribution

Variable	Group	Number	Kolmogorov-Smirnov statistic	Significance level
Green marketing effect on satisfaction	Consumers	320	1.979	0.001
	Customers	310	1.501	0.022
Satisfaction effect on loyalty	Consumers	320	1.835	0.002
	Customers	310	2.178	0.000

With every question in the questionnaire, we directly asked for the amount of effect from the responders. So, there is only one variable. The distribution of this variable was not normal. In regard with large sample size and lack of irrelevant data, to test this hypothesis, single-sample t-test is used. To obtain results confidence, non-parametric binomial test is used. Grades fall in the range of 1 to 5. So, the test size is 3 which is average variable is presumed. The variable mean more than 3 indicates higher effect and variable mean less than 3 shows lower effect.

- Null hypothesis = amount of green marketing mix effect on customer and consumer satisfaction is average (3).
- Alternative hypothesis = amount of green marketing mix effect on customer and consumer satisfaction is not average (3).

Among consumers, variable mean is 3.72 and significance level of the test is 0.000. Since the mean is more than 3 and significance level is less than 0.05, null hypothesis is rejected. As a result, green marketing mix has a significant effect on consumer satisfaction. Among customers, variable mean is 3.65 and significance level of the test is 0.000. Since the mean is more than 3 and significance level is less than 0.05, null hypothesis is rejected. As a result, green marketing mix has a significant effect on customers' satisfaction.



The hypothesis was retested with non-parametric binomial test, which produced no difference.

Table 7: Depicting results of single-sample t-test for testing the green marketing effect on satisfaction

Test size = 3								
Variable	Group	Number	Mean	SD	t	D.O.F	Significance level	Mean of variable difference with test size
Effect of green marketing on satisfaction	Consumers	320	3.717	0.626	20.212	311	0.000	0.717
	Customers	310	3.651	0.624	18.086	299	0.000	0.651

Table 8: Depicting results of binomial test for testing the green marketing effect on satisfaction

Variable		Group	Size	No.	Observed probability	Probability test	Significance level
Effect of green marketing on satisfaction	Consumer	Group 1	$\leq 3$	60	.17	.50	.000
		Group 2	$> 3$	260	.83		
	Customer	Group 1	$\leq 3$	60	.17	.50	.000
		Group 2	$> 3$	250	.83	.50	

Table 9: Depicting results of single-sample t-test for testing the satisfaction effect on loyalty

Test size = 3								
Variable	Group	Number	Mean	SD	t	D.O.F	Significance level	Mean of variable difference with test size
Effect of green marketing on satisfaction	Consumers	320	3.705	0.809	15.404	311	0.000	0.705
	Customers	310	3.791	0.769	17.814	299	0.000	0.791

Table 10: Depicting results of binomial test

**Results of Testing the Hypotheses**

On the basis of the data analysis, the following results about the hypotheses are obtained: Considering the fact that the data was not normal, to test this hypothesis, one-sample t-test is used. To obtain results confidence, non-parametric binomial test is used. Among consumers, the variable mean is 3.72 and significance level of the test is 0.000. Since the mean is more than 3 and significance level is less than 0.05, it is concluded that green marketing mix has a significant effect on consumer satisfaction. Among customers, variable mean is 3.65 and significance level of the test is 0.000. Since the mean is more than 3 and significance level is less than 0.05, it is concluded that green marketing mix has a significant effect on customers ' satisfaction. The hypothesis was tested with non-parametric binomial test, which produced no difference in results. As to the second hypothesis, considering the fact that the data was not normal, in the same way, to test this hypothesis, one-sample t-test is used. To obtain results confidence, non-parametric binomial test is used. Among consumers, the variable mean is 3.70 and significance level of the test is 0.000. Since the mean is more than 3 and significance level is less than 0.05, it is concluded that consumer satisfaction has a significant effect on their loyalty. Among customers, the variable mean is 3.79 and significance level of the test is 0.000. Since the mean is more than 3 and significance level is less than 0.05, it is concluded that customer satisfaction has a significant effect on their loyalty. The hypothesis was retested with non-parametric binomial test, which produced no

Variable		Group	Size	No	Observed probability	Probabil ity test	Significance level
Effect of green marketing on satisfaction	Consumer	Group 1	<= 3	90	0.27	0.50	0.000
		Group 2	> 3	230	0.73		
	Customer	Group 1	<= 3	68	0.19	0.50	0.000
		Group 2	> 3	242	0.81		

difference in results. As a result, the research hypotheses were verified.

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## DEVELOPMENT OF NEW PRODUCT FOR ON HARD DISK DRIVES COMPETITIVE ADVANTAGE

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### Abstract

Thailand's electronics and hard-disk drive component industries are on the precipice of swift and radical change with technologies such as much faster solid state drives which use solid-state memory chips accelerate in sales. Replacing the older and slower hard-disk drives of the past, these new drives are used in products such as tablets, ultra-thin laptops and the newest smartphones. It is critical that Thailand's electronics industry, which was worth nearly US\$60 billion in 2014 and employed 600,000 people, embrace this change to stay competitive. This study therefore presents a conceptual framework about the structure of the factors including supply chain management and new product development that affect the competitive advantage of electronics components and hard-disk drive component industries. Quantitative data is being obtained from a proposed sample of 200 production control and operations managers, including executive directors, managers and department heads that have had a minimum of five years of experience. Qualitative research is being conducted with 10 executives by the use of purposive sampling. Analysis will be conducted using Partial Least Square (PLS-Graph) software to apply Structural Equation Modeling (SEM).

**Keywords:** *HDD, Competitive Advantage, structural equation model*

### Introduction

Thailand has been one of the world's foremost manufacturing bases for hard-disk drives (HDD), with a 2014 trade record showing a 30.1 percent market share on 180.9 million HDDs exported, second only to China whose exports totaled 35.2 percent of the global total (Kasikorn Bank Research, 2015). Also, Thailand's electronics industry is a core element of the Thai manufacturing sector and in 2014, Thailand's overall trade in the electronics industry was worth nearly US\$60 billion, with export revenues accounting for over US\$32 billion (BOI, 2015).

In 2014, Thailand's main electronics exports were computer components and integrated circuits (IC), which accounted for approximately 56% and 24% of total electronics exports respectively. Having two of the global data storage manufacturers, Western Digital and Seagate, has also helped make Thailand the second largest data storage product producer and exporter in the world. At the same time, Thailand holds an equally renowned reputation in the IC and semiconductor sectors due to Thailand being one of the main manufacturing bases for these products in the ASEAN (Association of Southeast Asian Nation) region with exports reaching US\$32 billion in 2014 (BOI, 2015). The AEC (ASEAN Economic Community) is presently a \$2.5 trillion economy with over 625 million people growing at an annual rate of 6 percent (Menon, 2016).

At the moment however, HDD exports are falling as they are primarily used in personal computers which are being displaced by the much faster solid state drives (SSDs) which use solid-state memory chips and are used in products such as tablets and ultra-thin laptops. SSDs are light in weight and have swifter data access speeds and are fast becoming a popular choice with many projecting skyrocketing annual growth of over 34 percent for them through 2017 (Kasikorn Bank Research, 2015).

Additionally, the evolution of cloud computing and the general 'Internet of Things' trend has augmented demand for enterprise data storage, consumer electronics as well as other electronic equipment for daily use. With such demand, especially for business and retail consumers, growth potential should still be evident for the HDD industry. Also, to ensure a sustainable path, innovations must not be limited to large companies. Encouraging innovations among our SMEs is crucial to uplift the growth potential (Amornvivat, 2014). As Thailand surges up the ladder of economic development, the country naturally has moved away from an over-reliance upon labor-intensive industries to a more tech-savvy, knowledge-based economy. To further support this move towards a high value-added economy, the government has prioritized the development and promotion of science, research and development, technology and innovation and has stated its intention to increase R&D expenditures to 1% of total GDP (TIR, 2015).

Within this highly complex environment discussed above, supply chain leaders struggle to align corporate and supply chain strategy and drive improved performance. This difficult balancing act involves the process of balancing growth, profitability, cycle and complexity within a company's supply chain operations (Mayer, 2014). Semiconductor and hard disk drive manufacturers have been successful in a challenging downstream position while cost pressures from OEMS has not (as of yet) cut into margin with growth levels remaining strong during the move to mobile.

Product innovation is a major driver of growth and is the lifeblood of the semiconductor and hard disk drive industries. Strong planning processes enabled adaptation in the face of extreme supply and demand volatility. Manufacturers in these industries are also disadvantaged as well because of their downstream position in the supply chain. However, rising complexity and outsourcing bring new supply chain challenges but the good news is that the supply chain capabilities within this industry are strong and ready to meet the challenge (Mayer, 2014). According to Intarakumnerda, Chairatanab, and Chaiyanajitb (2016), although Thailand's electronics industry has been considered as one of strategic sectors, the evidence shows that it is dominated by midstream and downstream activities with the multi-national corporations (MNCs) dominating the assembly activity with an extensive control over supply chain of parts and components. The case studies show that firms in Thailand must acquire and develop technological capabilities to stimulate the industry's transformation from low to high value added activities.

In the above overview of Thailand's electronics and hard-disk drive (HDD) manufacturing sector, experts are becoming stronger in their analysis about the need for competitive change so Thailand can maintain its once unchallenged competitive advantage. Those days are now over and with entry into the AEC, some speculate that competition will become even more fierce. With the tighter integration of the AEC at the end of 2015, many regulations, laws, tariffs and the ability for the movement of workers changed. As yet, this change is small as bureaucracies move slowly. Companies however must be quick to change or their very survival might be at stake. According to Maleval (2013) and Shilov (2015), of the 218 companies worldwide that have taken a stab at HDD assembly production - not

including components -, now only three remain (Seagate, Toshiba and WD). The other ones didn't survive or were acquired. The researchers therefore have decided to undertake a study how competitive advantage is affected by new product development and Supply Chain Management.

## Literature review

### *Supply Chain Management*

Supply Chain Management is the management of a network of interconnected businesses involved in the ultimate provision of product and service packages required by end customers (Harland, 1996). Supply Chain Management spans all movement and storage of raw materials, work-in-process inventory, and finished goods from point of origin to point of consumption (supply chain). A big piece of SCM planning is developing a set of metrics to monitor the supply chain so that it is efficient, costs less and delivers high quality and value to customers. This is consistent with Hsu, Tan, Kannam, & Leong, (2009) which state that supply chain management stresses the seamless integration of value-creating activities across organizational boundaries. It enables firms in a supply chain to eliminate waste, leverage synergies and compete more effectively in an intensely competitive global market.

Abdallah, Obeidat, & Aqqad (2014) tested the impact of supply chain management practices on supply chain performance in terms of supply chain efficiency and supply chain effectiveness on 104 Jordanian manufacturing companies. The results indicated that three supply chain management practices, internal integration, information sharing, and postponement significantly and positively affect supply chain efficiency performance. The results also showed that three supply chain management practices, internal integration, customer integration, and postponement significantly and positively affect supply chain effectiveness performance. This is supported by Feng and Wang (2013) which stated that the success of new products relies on supply chain involvement. Time to market and development cost are also effected by supply chain coordination and new product development.

Lai, Chen, & Yang (2012) examined the effects of supply chain and third party involvement on product innovation performance on 208 Taiwanese firms. The concept of supply chain network was studied as the type of external member collaboration for firm new product development. The results indicated that external member involvement had a positive impact on product innovation performance. According to the study's research and examination of the literature, it was determined that there were 4 key manifest variants or observable variables related to *Competitive Advantage*. Scholars have studied these manifest variants or observable variables effects on *Supply Chain Management* from which the researchers have synthesized the research to include *customer involvement*, *internal involvement*, and *supplier involvement* in this study (Hsu, Tan, Kannam, & Leong, 2009; Abdallah, Obeidat, & Aqqad, 2014; Lai, C-S., Chen, C-S., & Yang, C-F., 2012; Feng & Wang, 201).

### *New Product Development*

Success depends on the ability of organizations to develop new products and constantly and consistently bring these products to market. A case in point are P&G's leaders recognizing the need for this as the kind of growth the company was after couldn't come from simply doing more of the same. It needed to come up with more breakthrough innovations—ones that could create completely new markets (Brown & Anthony, 2011). Brown and Anthony (2011) further discussed P&G's success in innovation in new product development

with something the leaders called a “new-growth factory,” which strengthened both its core businesses and its ability to capture innovative new-growth opportunities. Innovation has long been the backbone of P&G’s growth with the company spending nearly \$2 billion annually on R&D—roughly 50% more than its closest competitor and more than most other competitors combined, teaching its senior management and project team members the mind-sets and behaviors that foster ‘disruptive growth’.

Trainor, Krush, & Agnihotri (2013) examined how a firm's behavioral tendencies, along with its existing business resources, contribute to the formation of new product development (NPD) capability. Findings also suggested that a firm's competency in marketing intelligence and its tendency to engage in partner-style relationships have both direct and interactive effects on NPD capability. This capability is further shown to positively relate to organizational performance, and this relationship is moderated by technological uncertainty.

This is consistent with Feng and Wang (2013) which found that internal involvement is important in improving NPD speed, while customer and supplier involvement have significant effects on NPD cost and NPD speed. A customer needs to standardize the technology and manufacturing industries. Ability to develop products in shorter times can improve the timeliness of products and increase market share. Developing new products faster than the competition can increase customer satisfaction and customer loyalty, which results in cross-selling and increased sales.

Other studies have demonstrated a relationship between management of the supply chain and new product design and development (NPDD). McGinnis and Vallopra (1999) proposed that purchasing and supplier involvement in NPDD is a source of competitive advantage. Ettl and Sethuraman (2002) showed that NPDD intensity and the resulting percentage of revenue generated are directly related to levels of global sourcing. Ragatz, Handfield, and Petersen (2002) demonstrated that early supplier involvement in NPDD leads to significant improvements in cost, quality, and cycle time across the supply chain when customers have clear goals and specifications.

According to the study’s research and examination of the literature, it was determined that there were 3 key manifest variants or observable variables related to *Competitive Advantage*. Scholars have studied these manifest variants or observable variables effects on *New Product Development* from which the researchers have synthesized the research to include *time to market*, *engineering change request*, and *development cost* in this study (Trainor, Krush, & Agnihotri, 2013; Feng & Wang, 2013; Brown & Anthony, 2011; McGinnis & Vallopra, 1999; Ettl & Sethuraman, 2002; Ragatz, Handfield, & Petersen, 2002).

### *Competitive Advantage*

Hayes and Wheelwright (1984) suggested that companies compete in the marketplace by virtue of one or more of the following competitive priorities including quality, lead-time, cost, and flexibility. This is consistent with Li, Ragu-Nathan, Ragu-Nathan, and Rao (2006) which stated that with supply chain management (SCM) the empirical literature has been quite consistent in identifying price/cost, quality, delivery, and flexibility as important. Additionally, study results indicate that higher levels of SCM practice can lead to enhanced competitive advantage and improved organizational performance. Also, competitive advantage can have a direct, positive impact on organizational performance.

Wang, Lin, and Chu (2011) discussed internal sources of competitive advantage and identified technology and innovation, human resources and organizational structure as crucial key elements and further states that most innovative firms engage in a continual search for better products, services, and ways of doing things. They try to continuously upgrade their



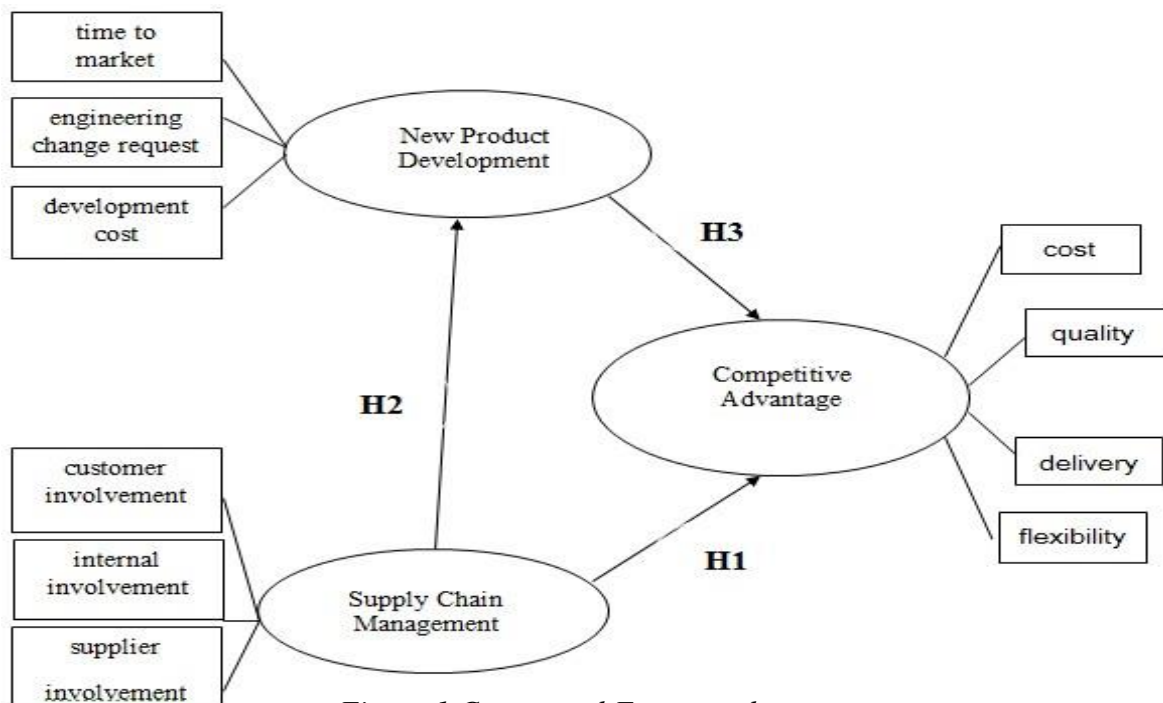
internal capabilities and other resources. This is consistent with Awwad, Al Khattab, and Anchor (2013) which stated that competitive priorities included quality, cost, flexibility and delivery. Furthermore, competitive priorities and competitive advantage need to be recognized and nurtured as this relationship provides the master key for a firm to survive in a turbulent environment.

Leonidou, Leonidou, Fotiadis, and Zeriti (2013) stated that creating a long-term strategy that makes a difference uses low costs in order to generate revenue and profits. The organization should benefit from increased customer satisfaction and the building of customer retention. This also includes the use of innovative processes and products to take advantage of the cost and the difference in the market (Wong, 2012). According to the study's research and examination of the literature, it was determined that there were 4 key manifest variants or observable variables related to *competitive advantage*. Scholars have studied these manifest variants or observable variables effects on *competitive advantage* from which the researchers have synthesized the research to include *cost*, *quality*, *delivery*, and *flexibility* in this study (Hayes & Wheelwright, 1984; Li, Ragu-Nathan, Ragu-Nathan, & Rao, 2006; Wang, Lin, & Chu, 2011, Awwad, Al Khattab, & Anchor , 2013; Leonidou, Leonidou, Fotiadis, & Zeriti, 2013; Wong, 2012).

**Proposed research hypotheses**

- H :1 *Supply Chain Management* has a direct influence on *Competitive Advantage*
- H :2 *Supply Chain Management* has a direct influence on *New Product Development*
- H :3 *New Product Development* has a direct influence on *Competitive Advantage*

**Proposed conceptual framework**



*Figure 1 Conceptual Framework*

**Methodology**

This research aims to study the structure of the factors influence the competitive advantage of enterprises in Thailand's electronics and hard-disk components industry. Therefore, researchers have determined the following detailed steps of how to carry out the proposed research.

For this study the researchers used both quantitative and qualitative research from both primary and secondary data. The researchers thus determined the following steps for this study: The researchers are reviewing the literature related to the electronics and hard-disk drive (HDD) components industry. Thus far, research has been comprised of published research, textbooks, internet materials, media reports, and data which have been synthesized from the secondary data to develop a conceptual model for the variables that influence the competitive advantage of Thailand's electronics and hard-disk drive (HDD) components industry.

#### *Quantitative Research Methods*

Quantitative research will be performed using the primary data by collecting a questionnaire from the target sample. The questionnaire to be used to collect data is structured and written in a realistic, easy-to-understand format which is deemed to be reliable and reasonable. Further measurement and reliability validation will be undertaken as follows:

1. Questionnaire review will be conducted by academic scholars to validate the investigation questions and the use of rhetoric and the simplicity and comprehension of the questions.
2. During the questionnaire trial stage, questions and responses will be monitored so better clarity can be achieved. Questions will be updated as needed.
3. Perform data collection and statistical analysis

#### *Qualitative Research Methods*

Qualitative research will involve confirming the model of the quantitative research. It is a collection of interviews with individuals who have been involved in the electronics and hard-disk drive components industry, including executive directors, managers and department heads that have had a minimum of five years of experience.

#### *Population and sample*

The sample used in this study was executive directors, managers and department heads with at least five years' experience in the electronics and hard-disk components industry.

#### *The sample size*

Schumacker and Lomax (2010) stated that Structural Equation Modeling (SEM) uses a variety of models to show the relationships between observed variables with the same basic goal of providing a quantitative test of a theoretical model hypothesized by a researcher with Meldrum (2010) further stating that a sample size smaller than 100 should not be used in SEM as it is unreliable. Therefore, using a factor of 20 for each of the 10 variables from the research survey, it is anticipated that a total of 200 samples are adequate to assure a reliable sample size (Schumacker & Lomax, 2010). To confirm the model of quantitative research, 10 in-depth interviews with those involved in innovation, production control and operations, including executive directors, managers and department heads that have had a minimum of five years of experience to confirm the quantitative research.

#### *Tools used in the research*

For this research, the measurement instrument or questionnaires utilized was prepared from the literature. A self-administered questionnaire (SAQ) is being used as it is exploratory in nature and serves as a starting point for other methodologies (Mahdi, 2012).

#### *Research quality inspection tools*

Researchers will continue to monitor the quality of the instruments used in the research to be used as a measurement of quality. The entire content validity and reliability is divided into two stages.

1. The questionnaire will be created by the research team, and be peer-reviewed and tested by use of the content validity of item objective congruence index (IOC) by five experts in their respective fields. The index of Item-Objective Congruence (IOC) developed by Rovinelli and Hambleton (1977) being employed to carry out the screening of questions is a procedure used in test development for evaluating content validity at the item development stage. This measure is limited to the assessment of unidimensional items or items that measure specified composites of skills. The method prescribed by Rovinelli and Hambleton (1977) results in indices of item congruence in which experts rate the match between an item and several constructs assuming that the item taps only one of the constructs which is unbeknownst to the experts. The study will then proceed to select items that have an IOC index higher than 0.5 which will be considered acceptable for the research. The IOC for each item is the summation of scores given by the experts divided by the number of experts. This ensures the quality of the questionnaire with any IOC score less than 0.05 being eliminated.
2. Checked by five experts in their fields including:

Management Engineer	1 individual
Production and Cost Control Management	2 individuals
Academic Management Scholars	2 individuals

#### **Data collection**

Primary data is a collection of factors that influence Thailand's electronics and hard-disk drive (HDD) components industry firms. Secondary Data consists of studying the theories related to the research from various sources; including books, manuals, tutorials, articles, research papers, etc., which will be used to define the concepts and theories used in the study.

#### *Analysis of data and statistical methods used*

Quantitative data analysis research will be conducted using statistical analysis as follows: Descriptive statistics including frequency, percentage, mean, and standard deviations will be used to represent the data. Both univariate and multivariate logistic regression analysis will be performed to examine the association between dependent variables and independent variables. Descriptive statistics is also used to demonstrate the profiles as well as rating scores and response rate. An analysis will be conducted using structural equation modeling (SEM) to determine the relationship of the factors influencing the competitive advantage of Thailand's electronics and hard-disk drive (HDD) components industry enterprises.

#### *Qualitative data analysis*

To confirm the results of the quantitative analysis are credible and the findings reliable, the researchers will conduct interviews with those involved in product innovation

such as executive directors, managers and department heads in manufacturing or operations that have had a minimum of five years of experience.

Afterwards, the researchers will proceed to interpret qualitative information, including classified information. According to Hancock, Windridge, and Ockleford (2007) data collection and analysis should proceed concurrently: in theory, data analysis should occur at the same time as data collection to allow researchers to refine the research question and data collection procedures in the light of new findings, but in reality, this is hard to achieve (e.g. because transcribing recorded interviews takes time, and analysis takes even more time). However it is important to review transcripts as they are transcribed and to undertake informal modification of prompt guides.

The idea that qualitative data is mainly ‘unstructured’ is useful, if this is taken not as a definition but rather as an imperative for analysis. Although unstructured data may not be classified, it can be classified and indeed one of the main aims of qualitative analysis is often to do just that (Dey, 1993). *Qualitative* data deals with characteristics and descriptors that can't be easily measured, but can be observed subjectively (Martz, 2014).

## Conclusion

After a preliminary review of the literature in the development of the study's hypotheses on *Supply Chain Management and New Product Development effects on Thai Electronics/Hard Disk Drives Competitive Advantage*, it was established that Thai HDD assemblers need to concentrate on enterprise and consumer electronics HDDs which would allow Thai factories to respond better to global HDD demand. Additionally, there is a steady and growing trend towards SSD in HDD key markets, internet-connected devices and smartphones. Furthermore, it has been suggested that Thailand needs to adjust its current HDD-focused manufacturing strategy to incorporate production of various types of storage devices which will allow the industry to rise to current challenges amid changes in global demand, lowering the risk from HDD market saturation as used by businesses and in consumer electronics in the past.

Flash memory technology is exceptionally important to Thailand's long-term competitiveness and as a result, getting into flash memory production supply chains would help ready Thailand for SSD manufacturing later on. To achieve this, the industry we will need good planning, effective skills development policies, plus private technology research and development, with an emphasis placed on technical skill-based training.

Economists say that Thailand is not as nimble as other low-cost economies to adapt to newer types of technology, and its innovation ranking in the World Economic Forum's Global Competitiveness Index fell to 67 in 2014 from 33 in 2007 (Reuters. 2015).. As the old children's song goes, “Jack be nimble, Jack be quick!” According to Sathirathai (a senior economist of Credit Suisse in Singapore); “When you look at the context of the continuous decline, you see there is a structural competitiveness problem that has been eroding Thailand” (Reuters, 2015). This is consistent with SCB (Siam Commercial Bank) Economic Intelligence Center analyst Amornvivat (2014), who stated that “the inconvenient truth is that Thailand has reached the tail end of growth in several of Thailand's major tech-related exports; e.g., computer hard disk drives”. At present, Thai companies rank low in R&D investment levels with spending on R&D at just 0.3% of GDP, much lower than those in China and Malaysia (Amornvivat, 2014). Maybe it's time for competitive change?

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**ELECTRONICS AND HARD DISK INDUSTRY COMPETITIVE ADVANTAGE:  
IS TECHNOLOGY CAPABILITY PERSPECTIVE ON THE FUTURE?**

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**Abstract**

In 2014 Thailand's overall trade in the electronics industry was worth approximately US\$59.5 billion currently, employing over 600,000 people in the sector. At the end of 2015, Thailand joined a 10-nation economic community with 625 million people and a \$2.5 trillion economy with a projected growth of six percent per year over the next decade which opens many doors for sales, but competition as well. This study therefore presents a conceptual framework about the structure of the factors including technology capability and new product development that affect the competitive advantage of manufacturing enterprises in the electronics components and hard disk drive industries. Quantitative data is being obtained from a proposed sample of 220 production control and operations managers, including executive directors, managers and department heads that have had a minimum of five years of experience. Qualitative research is being conducted with 10 executives by the use of purposive sampling. Analysis will be conducted using Partial Least Square (PLS-Graph) software to apply Structural Equation Modeling (SEM).

**Keywords:** *ASEAN, HDD, new product development, SEM*

**Introduction**

According to Thailand's Board of Investment (BOI, 2015), Thailand's electronics industry is a core element of the Thai manufacturing sector's success and in 2014, Thailand's overall trade in the electronics industry was worth approximately US\$59.5 billion, with export revenues accounting for over US\$32 billion. The electrical and electronics industry has not merely played an important role in Thailand's economy as a main growth driver, but has also made Thailand Southeast Asia's electrical and electronics manufacturing hub.

In 2014, Thailand's main electronics exports (Figure 1) were computer components and integrated circuits (IC), which accounted for approximately 56% and 24% of total electronics exports respectively. Having two of the global data storage manufacturers, Western Digital and Seagate, has made Thailand the second largest data storage product producer and exporter in the world. At the same time, Thailand holds an equally renowned reputation in the IC and semiconductor sectors due to Thailand being one of the main manufacturing bases for these products in the ASEAN (Association of Southeast Asian Nation) region with exports reaching US\$32 billion in 2014 (BOI, 2015).

Having long been a cornerstone for an automatic data processing (ADP) machine industry, Thailand is one of the largest global producers and exporters of automatic data

processing machines. In 2014, Thailand’s exports totaled US\$12 billion and grew by 7% from 2011. The competitiveness of Thailand’s HDD industry is based on its world class industrial clusters containing supporting industries that manufacture most of the components utilized in the assembly of HDDs. Technological innovations in the consumer and enterprise sectors have produced next generation of HDD and newer data storage techniques such as Solid State Drives (SSD) and Solid State Hybrid Drives (SSHD).

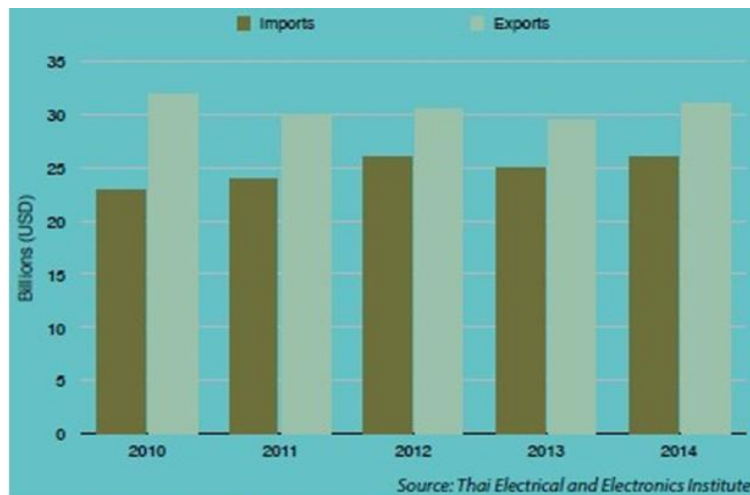


Figure 1 Thailand’s Electronics Exports and Imports, 2010-2014

HDD production in Thailand began in 1983 after Seagate Technology shifted its head-stack assembly (HSA), the most labor-intensive segment in the HDD production process, out of Singapore (TIR, 2015). It was relatively low-wage labor as well as a favorable investment climate in the Kingdom that enticed HDD makers. Back then, the imported content of HSA exports was close to 80%. Despite the presence of high tariffs, HDD manufacturers were eligible for exemption schemes as their products were principally for export.

In 2013, Thailand’s main electronics exports were still hard disk drives (HDD) and integrated circuits (IC), which accounted for approximately US\$11.79 billion and US\$7.42 billion worth of total electronics exports, respectively (TIR, 2015). Major HDD producers – Western Digital, Seagate, Hitachi and Toshiba – have production facilities in Thailand. Similarly, the country is recognized as a leader in the IC and semiconductor industries, and boasts one of the largest concentrations of assembly plants in Southeast Asia for these products. The primary markets for these exports were the USA (19.5%), Hong Kong (19.3%), ASEAN (14.3%), China (10.8%) and Japan (7%). Increasing demand for electronics saw imports rise to US\$27 billion with mainly printed circuits and IC being imported to supply Thailand’s increasingly advanced electronics manufacturing ecosystem.

Furthermore, Techanuvat and Tantisunthorn (2015) reported that Thai exports of electronic circuits expanded significantly by 20% YOY in April, 2015 after a 10% drop the previous month. The growth was propelled by exports to Hong Kong and the U.S. that grew by 37.7% YOY and 24.4% YOY. In addition, exports of electronic circuits to China rose by 60% YOY in April. Auto and parts exports grew by 9% YOY in April after a 5% rise in March. Particularly, auto exports to Australia, one of Thailand’s key markets, leaped by 71.8% YOY. Similarly, auto exports to markets such as CLMV and EU maintained the high growth levels of 30.6% YOY and 74.1% YOY in the first four months of 2015.

Currently, over 600,000 people are employed in Thailand’s electrical and electronics sector and with entry into the AEC (ASEAN Economic Community) at the end of 2015; Thailand entered a 625 million, \$2.5 trillion economic community projected to grow 6



percent per annum over the next decade (Menon, 2016). The AEC will expand export opportunities for electrical & electronics manufacturers located in Thailand with manufacturers benefiting from manufacturing clusters, government research programs, and incentives devoted to the electrical & electronics industry. Thailand's government, recognizing the crucial role the electrical and electronics industry will continue to play in Thailand's economic development, offers attractive investment incentives to attract major global players in the electrical and electronics industry. Some unfortunately do not see such a rosy picture as others might suggest.

According to the SCB (Siam Commercial Bank) Economic Intelligence Center analyst Amornvivat (2014), the inconvenient truth is that Thailand has reached the tail end of growth in several of Thailand's major tech-related exports; e.g., computer hard disk drives. Foreign direct investment is only a short-term solution, notwithstanding. Thai businesses indeed must invest more in research and development for a more sustainable growth path. At present, Thai companies rank low in R&D investment levels with spending on R&D at just 0.3% of GDP, much lower than those in China and Malaysia (Amornvivat, 2014).

Also, to ensure a sustainable path, innovations must not be limited to large companies. Encouraging innovations among our SMEs is crucial to uplift the growth potential. The government has to equip them with knowledge and access. One way to facilitate this is to establish testing facilities for SMEs to improve their products. Domestic testing center that is up to par with international standard will reduce test time sending sample products overseas for testing, facilitating innovation and increasing our value added (Amornvivat, 2014),

As Thailand surges up the ladder of economic development, the country naturally has moved away from an over-reliance upon labor-intensive industries to a more tech-savvy, knowledge-based economy. To further support this move towards a high value-added economy, the government has prioritized the development and promotion of science, research and development, technology and innovation and has stated its intention to increase R&D expenditures to 1% of total GDP (TIR, 2015).

The commercial production and marketing of electronic and industrial components and hard disk drives is causing dramatic changes to the competitive environment of the industry. A case in point is Seagate Technologies which opened its operations in Thailand in 1983 having to date invested more than US\$2.5 billion in capital now having two manufacturing facilities with over 16,000 employees (TIR, 2015). It is the largest hard drive facility in the world and produces slider, head gimbal assembly (HGA), head stack assembly (HSA), and drive assembly and conducts R&D.

According to Seagate Technology, data storage will continue to expand at 26% per year through 2020, when the data storage market is expected to be three or four times its current size and about 60% of it will be in the cloud (TIR, 2015). More big data is to come as demand keeps increasing from governments and the private sector, especially manufacturing, retail, media, banking, real estate and science with Asia being the largest revenue source for the industry.

In the above short discussion of Thailand's electronics and hard disk drive manufacturing sector we have seen an industry to soar to new highs which momentarily seems to be on the precipice of change. From all directions we hear government leaders and corporate CEOs bang the drum for the development of R&D and testing facilities that are up to international standards along with higher investment in innovation to increase Thailand's competitive advantage. With the tighter integration of the AEC at the end of 2015, many regulations, laws, tariffs and the ability for the movement of workers changed. As yet, this change is small as bureaucracies move slowly. Companies however must be quick to change or their very survival often times becomes critical. Production, trade, marketing and

investment are also other components in the equation of having a competitive advantage. The researchers therefore have decided to undertake a study how *competitive advantage* is affected by new *product development* and *technology capability*.

## Literature review

### *Technology Capability*

There are many interpretations of what technology capabilities consist of but according to the German Development Institute (GDI, 1994) it is stated that adequately developed technological capability that is essential is the knowledge of the technologies available, the ability to evaluate and select such technologies, to utilize, adapt, improve, and, finally, to further develop them.

This is consistent with Meyer-Stamer (GDI, 1994) which describes the *Four Pillars of Technological Capability* (embraced by the GDI) as the capacity to gain an overview of the technological components on the market, assess their value, select which specific technology is needed, use it, adapt and improve it and finally develop technologies oneself. Technological capabilities can also vary between sectors (Eckaus, 1991; Zahlan, 1990). In the industrial sector, the elements of technology capability - production engineering, manufacture of capital goods, and research and development, etc. - are different from those essential for the services sector.

Huang (2011) investigated technology competencies and stated it plays a significant role in firm innovation and competitiveness. Research from Taiwan's information and communication technology (ICT) industry suggested that capabilities of exploring or exploiting technological opportunities, core technology capability, and autonomy of R&D decisions are particularly important to firm innovation in a highly competitive environment.

Rasiah (2004) discusses the importance of foreign firms in technological capability building and economic performance in developing countries. Research reveals that although foreign firms tend to enjoy higher human resource and process technology capabilities in the most underdeveloped economies, in the more advanced nations this comparative advantage is significantly eroded. Institutional and systemic strength of a country can help to explain the level of participation of foreign firms in R&D activities. Also, domestic and regional markets, infrastructure, incentives, natural resources and human capital are important factors in stimulating significant R&D investment by foreign firms.

According to the study's research and examination of the literature, it was determined that there were 4 key manifest variants or observable variables related to *competitive advantage*. Scholars have studied these manifest variants or observable variables effects on *technology capability* from which the researchers have synthesized the research to include *automation production*, *production technology*, *design technology* and *technology development* in this study (GDI, 1994; Eckaus, 1991; Zahlan, 1990; Huang, 2011; Rasiah, 2004).

### *New Product Development*

Feng and Wang (2013) investigated the impacts of three types of supply chain involvement (SCI) on three types of new product development (NPD) performance from 214 Chinese manufacturing companies. It was discovered that internal involvement is positively associated with customer and supplier involvement. It was also found that three types of SCI influence three types of NPD performance differently. Specifically, internal involvement is important in improving NPD speed, while customer and supplier involvement have significant effects on NPD cost and NPD speed. Moreover, internal and customer

involvement enhance market performance indirectly, whereas supplier involvement improves market performance both directly and indirectly.

Trainor, Krush, & Agnihotri (2013) examined how a firm's behavioral tendencies, along with its existing business resources, contribute to the formation of new product development (NPD) capability using survey data from more than 150 US-based firms. Findings suggested that a firm's competency in marketing intelligence and its tendency to engage in partner-style relationships have both direct and interactive effects on NPD capability. This capability is further shown to positively relate to organizational performance, and this relationship is moderated by technological uncertainty. Tan (2001) analyzed the effects of supplier assessment, Just-In-Time, and quality management strategies on new product design and development from a survey of senior managers who are members of the American Production and Inventory Control Society in the United States. Results showed that supplier assessment and Just-In-Time strategies were correlated and affected the quality management strategy used, which in turn influenced the new product design and development strategy. The data also showed that the Just-In-Time strategy directly influenced the new product design and development strategy. Mikkola (2006) discussed the implications of platform management for new product development and sourcing strategies using a Danish hearing aid manufacturer as a case study. Analysis revealed the risk of single sourcing and raised the question, how buyers without leverage can become an interesting customer for large suppliers?

Lai, Chen, & Yang (2012) examined the effects of supply chain and third party involvement on product innovation performance on 208 Taiwanese firms. The concept of supply chain network was studied as the type of external member collaboration for firm new product development. The results indicated that external member involvement had a positive impact on product innovation performance.

According to the study's research and examination of the literature, it was determined that there were 3 key manifest variants or observable variables related to *competitive advantage*. Scholars have studied these manifest variants or observable variables effects on *New Product Development* from which the researchers have synthesized the research to include *time to market*, *engineering change request*, and *development cost* in this study (Trainor, Krush, & Agnihotri, 2013; Feng & Wang, 2013; Lai, C-S., Chen, C-S., & Yang, C-F., 2012; Tan, 2001; Mikkola, 2006; Mikkola & Skjøtt-Larsen, 2006).

### *Competitive Advantage*

Porter (2001) identified two basic types of competitive advantages consisting of cost advantage and differentiation advantage. A competitive advantage exists when the firm is able to deliver the same benefits as competitors but at a lower cost (cost advantage) or deliver benefits that exceed those of competing products (differentiation advantage). Thus, a competitive advantage enables the firm to create superior value for its customers and superior profits for itself.

Awwad, Al Khattab, and Anchor (2013) stated that competitive priorities included quality, cost, flexibility and delivery. In the research, the results of the data analysis indicated a significant relationship between competitive priorities and competitive advantage and suggested that recognizing and nurturing this relationship provides the master key for a firm to survive in a turbulent environment. Therefore, operational and marketing strategies should place emphasis on competitive priorities such as quality, cost, flexibility and delivery to achieve, develop and maintain competitive advantage.

Chang (2011), focused research on the relationships between corporate environmental ethics and competitive advantage, and concluded that companies should invest more resources

to enhance their environmental ethics. By so doing, this will help to improve their competitive advantage as well as driving green innovations.

This is consistent with Chen (2008) which showed that three types of green intellectual capital – green human capital, green structural capital, and green relational capital – had positive effects on competitive advantages of firms. Moreover, this study found that green relational capital was the most common among these three types of green intellectual capital, and the three types of green intellectual capital of Medium & Small Enterprises (SMEs) were all significantly less than those of large enterprises in the information and electronics industry in Taiwan. In sum, companies investing many resources and efforts in green intellectual capital could not only meet the trends of strict international environmental regulations and popular environmental consciousness of consumers, but also eventually obtain corporate competitive advantages.

Peng, Schroeder, & Shah (2011) examined the strategic contingency of plant improvement capability and innovation capability from 238 manufacturing plants and found that improvement capability and innovation capability are associated with different competitive priorities and also have varying impact on different operational performance dimensions. Ong, Ismail, Guan, & Goh, 2010 collected 356 survey results from Malaysian SMEs (small and medium-sized enterprises). Analysis suggested that flexibility in operations and adaptability to changes afford SMEs with a greater possibility to gain from unexpected changes and accidental discoveries. Furthermore, both entrepreneurship and luck play a significant role in influencing the competitive advantage of SMEs. Therefore, SMEs are encouraged to cultivate a flexible and adaptive organizational structure in order for it to benefit from both endogenous and exogenous luck.

According to the study's research and examination of the literature, it was determined that there were 4 key manifest variants or observable variables related to *competitive advantage*. Scholars have studied these manifest variants or observable variables effects on *competitive advantage* from which the researchers have synthesized the research to include *cost*, *quality*, *delivery*, and *flexibility* in this study (Porter, 2001; Awwad, Al Khattab, & Anchor, 2013; Chang, 2011; Peng, Schroeder, & Rachna, 2011; Chen, 2008; Ong, Ismail, Guan, & Goh, 2010).

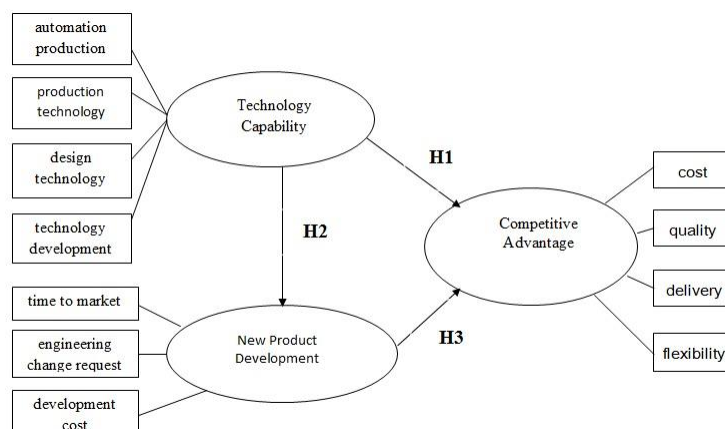
### Proposed conceptual framework

#### *Proposed Research Hypotheses*

H :1 Technology Capability has a direct influence on Competitive Advantage

H :2 Technology Capability has a direct influence New Product Development

H :3 New Product Development has a direct influence Competitive Advantage



*Figure 2 Conceptual Framework*

## **Methodology**

This research aims to study the structure of the factors influence the competitive advantage of enterprises in Thailand's electronics and hard-disk components industry. Therefore, researchers have determined following detailed steps of how to carry out the proposed research.

### *The approach used in the study*

For this study the researchers used both quantitative and qualitative research from both primary and secondary data. The researchers thus determined the following steps for this study:

### *Study of Secondary Data*

The researchers are reviewing the literature related to the electronics and hard-disk components industry. Thus far, research has been comprised of published research, textbooks, internet materials, media reports, and data which have been synthesized from the secondary data to develop a conceptual model for the variables that influence the competitive advantage of Thailand's electronics and hard disk drive components industry

### *Quantitative Research Methods*

Quantitative research will be performed using the primary data by collecting a questionnaire from the target sample. The questionnaire to be used to collect data is structured and written in a realistic, easy-to-understand format which is deemed to be reliable and reasonable. Further measurement and reliability validation will be undertaken as follows:

1. Questionnaire review will be conducted by academic scholars to validate the investigation questions and the use of rhetoric and the simplicity and comprehension of the questions.
2. During the questionnaire trial stage, questions and responses will be monitored so better clarity can be achieved. Questions will be updated as needed.
3. Perform data collection and statistical analysis

### *Qualitative Research Methods*

Qualitative research will involve confirming the model of the quantitative research. It is a collection of interviews with individuals who have been involved in the electronics and hard disk components industry, including executive directors, managers and department heads that have had a minimum of five years of experience.

### *Sample*

The sample used in this study was CEOs, executive directors, and managers responsible for the performance of their respective manufacturing enterprises in the electronics and hard-disk components industry in Thailand.

### *The sample size*

Schumacker and Lomax (2010) stated that Structural Equation Modeling (SEM) uses a variety of models to show the relationships between observed variables with the same basic goal of providing a quantitative test of a theoretical model hypothesized by a researcher with Meldrum (2010) further stating that a sample size smaller than 100 should not be used in SEM as it is unreliable. Therefore, using a factor of 20 for each of the 11 variables from the

research survey, it is anticipated that a total of 220 samples are adequate to assure a reliable sample size (Schumacker & Lomax, 2010).

To confirm the model of quantitative research, 10 in-depth interviews with those involved in innovation, production control and operations, including executive directors, managers and department heads that have had a minimum of five years of experience to confirm the quantitative research.

#### *Tools used in the research*

For this research, the measurement instrument or questionnaires utilized was prepared from the literature. A self-administered questionnaire (SAQ) is being used as it is exploratory in nature and serves as a starting point for other methodologies.

#### *Quality inspection tools used in the research*

Researchers will continue to monitor the quality of the instruments used in the research to be used as a measurement of quality. The entire content validity and reliability is divided into two stages.

1. The questionnaire will be created by the research team, and be peer-reviewed and tested by use of the content validity of item objective congruence index (IOC) by five experts in their respective fields. The IOC for each item is the summation of scores given by the experts divided by the number of experts. This ensures the quality of the questionnaire with any IOC score less than 0.05 being eliminated.
2. Checked by five experts in their fields including:

Management Engineering	1 individual
Production and Cost Control Management	2 individuals
Academic Management Scholars	2 individuals

#### *Data Collection*

*Primary data* is a collection of factors that influence Thailand's electronics and hard-disk components industry enterprises.

#### *Secondary data*

Secondary Data consists of studying the theories related to the research from various sources; including books, manuals, tutorials, articles, research papers, etc., which will be used to define the concepts and theories used in the study.

#### *Data analysis and statistics used*

Quantitative data analysis research will be conducted using statistical analysis as follows:

1. Descriptive statistics including frequency, percentages, means, and standard deviations will be used to demonstrate the profiles as well as rating scores and response rate. An analysis will be conducted using structural equation modeling (SEM) to determine the relationship of the factors influencing the competitive advantage of Thailand's electronics and hard-disk components industry enterprises.

#### *Qualitative data analysis*

To confirm the results of the quantitative analysis are credible and the findings reliable, the researchers will conduct interviews with those involved in product innovation such as executive directors, managers and department heads in manufacturing or operations that have had a minimum of five years of experience.

Afterwards, the researchers will proceed to interpret qualitative information, including classified information. According to Hancock, Windridge, and Ockleford (2007) data collection and analysis should proceed concurrently: in theory, data analysis should occur at the same time as data collection to allow researchers to refine the research question and data collection procedures in the light of new findings, but in reality, this is hard to achieve (e.g. because transcribing recorded interviews takes time, and analysis takes even more time). However it is important to review transcripts as they are transcribed and to undertake informal modification of prompt guides.

The idea that qualitative data is mainly ‘unstructured’ is useful, if this is taken not as a definition but rather as an imperative for analysis. Although unstructured data may not be classified, it can be classified and indeed one of the main aims of qualitative analysis is often to do just that (Dey, 1993).

## **Conclusion**

From a review of the literature, it was established that if engineering changes are underestimated, the impact on the project budget or time-to-market can be severe with even a relatively modest time delay greatly compromising the profit margins for large projects as well as a firm’s competitive advantage (Eger, Eckert, & Clarkson, 2007).

As was seen in the discussion on Seagate Technology’s investment in Thailand and its subsequent global leadership, competitive advantages for multinational firms comes from not relying only on wage levels and land resources but instead incentives from the country in which it is based, with the key to achieving this being the forming of industrial clusters (Amano, 2005).

Electronic components and hard disk drives manufacturers can achieve a competitive advantage by developing new products focusing on their time to market, engineering changes and development costs. Additionally, new product development results from strategic development, management efficiency and competitiveness which can lead to a competitive advantage. Technological capabilities consist of automated production, manufacturing technology, and design and technology development. These factors are the most immediate causes to competitiveness and contribute to the development of new products, which are intermediate variables that affect competitiveness as well.

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## **BUSINESS STRATEGY FORMULATION FOR INCREASING APPAREL INDUSTRY COMPETITIVENESS IN BANDUNG**

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### **Abstract**

Apparel is a part of TPT industry. With gross domestic product (GDP) esteemed at Rp.172.4 billion (US\$14.4 billion) in 2013. Textile and textile products (TPT) industry is one of the significant sectors in Indonesia. The textile and clothing (TPT) industry in Indonesia currently facing pressure from both domestic and foreign market, which in turn lowering its growth. This research is aimed to increasing apparel industry competitiveness in Bandung. The competitiveness is going to be analyzing using general analysis (pest analysis), porter 5 force, analysis of competitors, time series analysis and growth index to asses internal capability sector share analysis, value chain analysis, value added analysis, asset mapping, skills audit and stakeholder analysis is conducted. The result shows that Bandung have strength such as image as creative and fashionable city, abundant of natural and human resource and the presence of supporting industry. The weaknesses are the lack of innovation and data. On the external side, the greatest opportunity is the collaboration from all shareholder and the growth of e commerce. The threat comes from invasion of foreign goods especially from china. From four alternative strategy, two strategy is chosen. First strategy is make fashion tourism in Bandung and long tail business model. In addition, the second strategy is create agile supply chain. Two strategy is chosen because each strategy using different approach which is resource driven and offer driven. Business canvas model is used to explain about the business model for each strategy.

**Keywords:** *Indonesia - Tasikmalaya, Real Estate Development, Feasibility Study, Risk Management*

### **Introduction**

With gross domestic product (GDP) esteemed at Rp 172.4 billion (US\$14.4 billion) in 2013. Textile and textile products (TPT) industry is one of the significant sectors in Indonesia This sector also absorb quite significant labor with 2.9 million people, or 21.7 percent of the total labor absorption of non-oil and gas manufacturing industries according to Central Statistics Agency (BPS) data

The growth of the TPT industry in this year is decline with negative growth of 0.98% over the same period last year. It was below the growth of the manufacturing industry, which is 3.87%, and then the growth of Indonesia's total GDP of 4.71%.

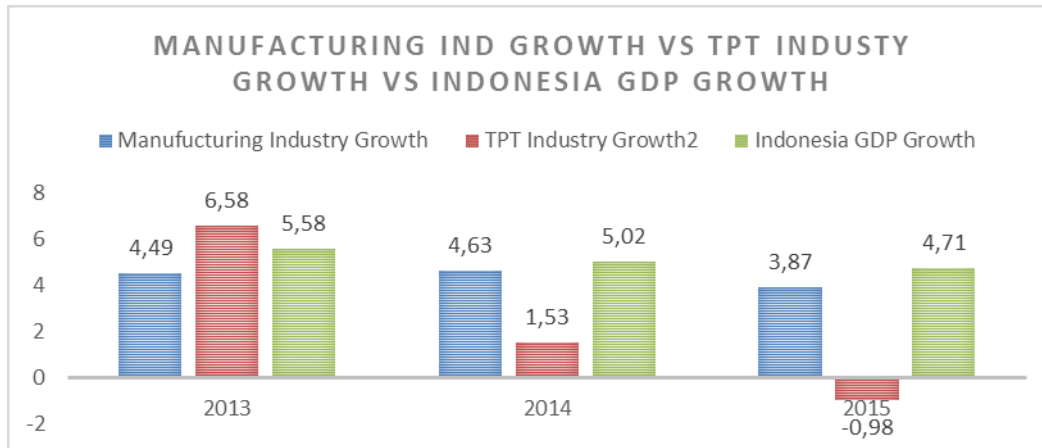


Figure 8 Comparison between Manufacturing, TPT and Indonesia GDP

Export sales accounting for about 63% of the total revenue from Indonesia's TPT Industry. Looking at this fact, global economic condition will affecting the performance of the TPT industry, especially US and Europe economy as the largest market for TPT export US economy is expected to improve in 2015. However, TPT exports is not expected to felt in any significant improvement because of this. Furthermore, there are still problem facing Indonesian TPT exports in domestic constraint that needed to be addressed such as, the dwelling time at ports and the lack of free trade agreement with other countries. Additionally, 60% of the TPT exports comes from garment products. These products have the Harmonized System (HS) codes of chapter 61 (articles of apparel, accessories, knitted or crochet), 62 (articles of apparel, accessories, not knitted or crochet), and 63 (other made textile articles, sets, worn clothing). Looking at the exports by country of destination, United States is the largest market for Indonesian TPT exports with (31.08%), followed by the EU (16.02%), Japan (9.60%), Turkey (5.10%), and ASEAN (6.90%).

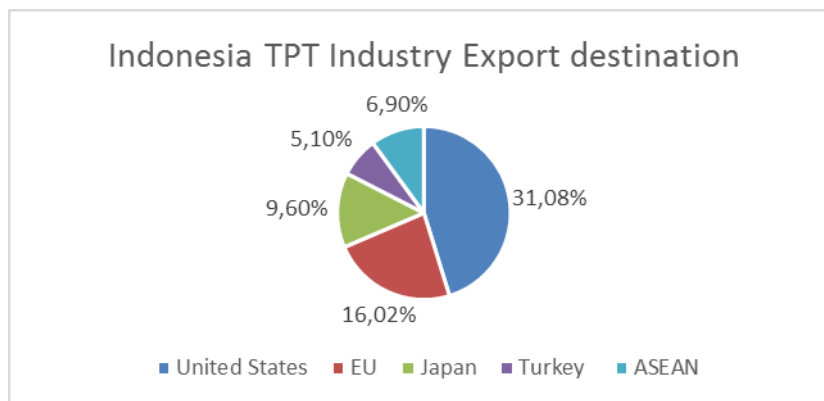


Figure 9 Indonesia TPT Industry Export destination

The majority of Indonesian TPT exports to US in 2014 are HS codes 61 and 62, which accounted for 47.07 % and 46.65% respectively of the total. It is similar to EU export, with the codes reversed, in which the HS codes 62 and 61 accounted for 41.67% and 31.84% respectively of the total.

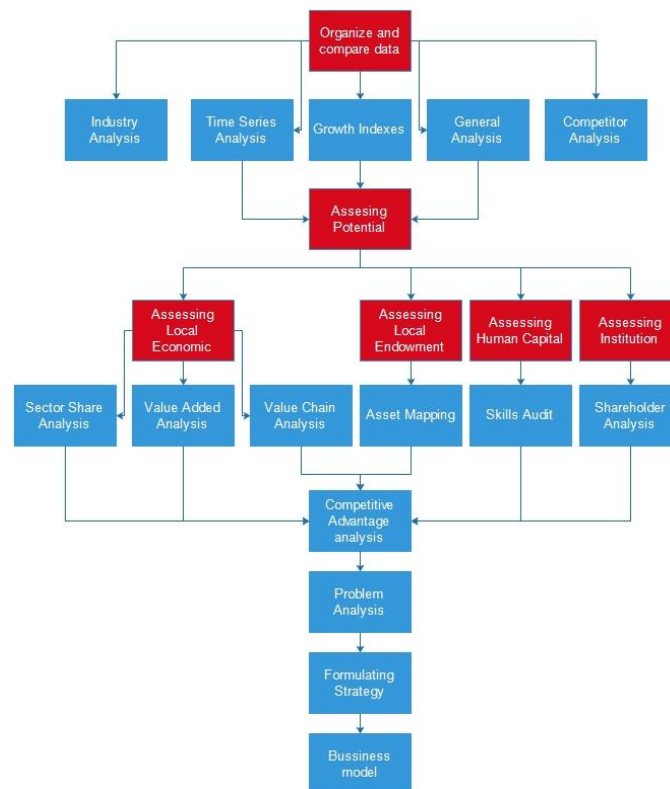
Facing pressure from both domestic and foreign market, growth in textile and clothing (TPT) industry in Indonesia is slowing. The slowing economic growth in the world, lead to decreasing demand in local and foreign market. To make matter worse, the declining demand is combine with increased production costs such as increased labor cost, the rising energy

prices such as, fuel and electricity. Price instabilities due to Rupiah devaluation and dependent to imported raw material. Moreover, imported products overflowing the market, mainly import comes from China and Korea. There also a problem facing Indonesian TPT exports in domestic constraint such as, the dwelling time at ports and the lack of free trade agreement with other countries. Besides that, Indonesia need to face competition with global player especially Vietnam, to fight for US and European markets. Production costs in Vietnam is lower than Indonesia, because Vietnam labor cost is cheaper. This situation is different compare with Indonesia at this time. The combination of the increased cost of raw materials, expensive fuel cost, the ever-growing cost of labor plus the weakening of the Rupiah, causing many companies face difficult time to compete. The increased production costs have caused industries, especially the textile industry, to lay off their employees.

For example, textile industry centers in four districts in the Regency of Bandung retrenched 6,000 textile factory workers during the period from January to May 2015. If the situation is not handled immediately, it will cause even worse effects and chain reaction. As much as tens of thousands or even hundreds of thousands of workers would lose their jobs if such layoffs were to take place across the island of Java. The ability of a region to innovate is a very important factor for a region to face the increasing pressure of global competition. The development of competitiveness must be based on the potential in the regions so that the theme of the development of an area should be based on the potential of the area. Determination of the innovation must be tailored to the strategic issues of the city, which will be the basis of city development direction to form an innovation system that is appropriate to the potential of the region.

### 1. Research Methodology

To analyze Bandung competitiveness in Apparel Industry describe as follow:



*Figure 10 Conceptual Framework*

Author uses outside in perspective to create the conceptual framework. Outside in perspective is used so that we can see the bigger picture before assessing the local economy. This framework is based on recommendation of journal in City alliance about local economic development. The competitiveness exploration is started by organizing and comparing data using General Environment Analysis, Industry Analysis, Competitor Analysis, Time Series Analysis, and Growth Index. Then author assesses the potential of Bandung in four themes, which is the Local Economy, Local Endowment, Human Capital and Institution. The choice of the theme is based on the competitive source of city, which is, Local endowments, Human resource, Local economic and Institution. After done assessing the potential of the city, Competitive Advantage Analysis is conducted to assess the local economy based on its potential to see advantage and challenge, and then use the output for SWOT and TOWS analysis. After that problem, analysis is conducted to identify core problem to be addressed in the strategic planning process.

The formulation strategy begins from creating strategy alternative using SWOT and TOWS analysis. From several alternative strategy, author choose the most suitable strategy to be implemented. Business canvas model is used to explain the business model of proposed strategy.

## 2. Business Issue Exploration

The idea is to makes apparel industry in Bandung is able to compete in global stage. To confirm that this idea is a right and attractive project, we need to first assess the current condition, choose the right business strategy, set correct targets, and understand the strength and weaknesses of Bandung apparel industry

### 3.1 External Analysis

#### 3.1.1 Industry analysis

Using the Porter 5 Forces, (Hitt I. H., 2011) this step analyses the five aspects of the Textile and Clothing Industry (TPT) industry in Bandung. Those aspects are Threat of Substitutes, Threat of New Entrants, Bargaining Power from Suppliers, Bargaining power of Buyer and Industry Rival.

**Threat of Substitutes** In Apparel Industry, the substitutes for apparel is branded label from Europe or cheap product from china. Because there is no real substitute for apparel/Clothing. Branded label from Europe and cheap product from Chinese is attractive in buyer perspective. The easiness to buy clothing online also increased their threat all of the substitutes have low switching cost. Therefore, the threat of substitute is high

**Threat of new entrants** or barrier to entry for new entrant need to overcome few factor. Economic of scale on apparel Industry could give benefit especially if they have modern and integrated supply chain. The strongest differentiation for apparel industry is the trademark design and their brand value in customer's eyes. The more integrated supply chain the more capital requirement will be needed. Apparel industry have low switching cost to switch to rival or newcomer. Apparel industry relies heavily on logistic. The incumbent may have a cost advantage that is hard to replicate by a newcomer Newcomers to apparel industry will have a significant barrier to entry if they join the high-tier market. Nevertheless, have a low barrier to entry to join low tier market.

**Industry Rivalry** Industry rivalry means the concentration of opposition among the competitors in the industry. Industry rivalry often occurs in the form of competing for the position by using several tactics (for example, price competition, advertising, and product introductions). The intensity of this rivalry tends to increase when companies either suffer competitive pressure or discover an opportunity to improve their position.

Bargaining power of suppliers, the existence of influential suppliers reduces potential profit in the industry. Because of inexpensive shipping costs and product nature, suppliers are sourced from around the world Apparel industry suppliers are the raw material provider, apparel manufacturers, design firm, distributor. Many players in this sector weaken their power. In addition, many firms employ strategy to have more than one supplier in order to decrease the suppliers' power even more

Bargaining power of Buyers the existence of powerful buyers decreasing the profit potential in an industry. Buyers increase competition within an industry by forcing down prices, bargaining for improved quality or more services, and playing competitors against each other. Buyers in this market vary in size from the international player to the individual retail customer. The majority of sales will be from a big player such as large fashion company etc. The big player can also easily switch without losing much cost. The individual retail customer has very little are one of the strong competitor in textile sector. Since Vietnam has joined the Trans-Pacific Partnership (TPP). The competition become fiercer because Vietnam already undergo negotiation for free trade agreement/FTA with the EU. This will make Vietnam get the access to the European market, a larger market than US. Led by US the TPP member is predicted will control 40 percent of the world market. financial power compared to any branded apparel player. However, individual customers can easily switch due to the many undifferentiated products offered by players and low costs involved/or it is difficult to maintain brand loyalty. Therefore, these two different buyer types – large firm and individual retail customers-experience similar levels of buying power. They have significant power.

### 3.1.2 Competitor Analysis

In average Indonesia is ranked in the middle for most factor Figure 4. The data is obtained in USAID report. Vietnam almost scores highest in all aspect indicating that Vietnam is seen as Indonesia's greatest competition. China is the runner up Vietnam

### 3.1.3 PEST Analysis

PEST Analysis is used to describe the four aspects of external environment. Those aspects can directly or indirectly affect apparel industry.

1. Political condition is important for business, in the past decade; a lot has change in the global supply chain of the Apparel Industry. There are 3 trigger that bought the changes:
  - the end of the Multi-Fiber Arrangement (MFA) in January 2005;
  - Consumer wants a new fashion with shorter cycle time; and
  - Increasing overall quality from consumers, multinational brands, and retailers

2. According to Global Competitive Report Indonesia is in efficiency driven phase .And Corruption, access to financing and inflation is the most problematic factor in Indonesia.
3. Indonesia was in a transition period of the structured productive population. In the period 2020- 2030, a decrease in the index (ratio) dependency Indonesia (which has been ongoing since 1970) will reach the lowest number. An important implication of this is the growing importance of employment in order to take maximum advantage of the productive population. More importantly, if the level of education is generally assumed to continue to improve, the actual productivity of the country's economy is in premium condition, where it would be very useful for acceleration and expansion of economic development.
4. Technological advancement especially Internet is what makes business landscape changed a lot. E commerce become a potential market place, Indonesia interinternet user reached 82 million people or 30% of Indonesian use Internet, But according to mc Kinsey only 7% of Internet user that already experience online shopping. So there still a large potential market.
5. As the world's largest archipelago nation, Indonesia has a region with a length of 5,200 km and 1,870 km wide reach. Its geographical location is also very strategic (have direct access to the largest market in the world) because Indonesia is passed by the Sea Lane of Communication (SLOC), the Strait of Malacca, where the line was ranked first in the global container shipping line. Based on data from the United Nations Environmental Programme (UNEP, 2009) there were 64 territorial waters of the Large Marine Ecosystem (LME) worldwide are compiled based on the level of fertility, productivity, and the effect of climate change on each LME. Indonesia has direct access to the 6 (six) LME region that have the potential of marine and fisheries sizeable, namely: LME 34-Bay of Bengal; LME 36-South China Sea; LME 37-Sulu-Celebes; LME 38-Indonesia seas; LME 39-Arafura-Gulf of Carpentaria; LME 45-North Australian Sea. Thus, an opportunity for Indonesia to develop as the trade hub is huge.

### 3.2 Internal Analysis

The internal analysis explores the resources, capabilities and core competencies of Textile and Clothing (TPT) Industry in Indonesia. Resources and capabilities are not inherently valuable, but they create value when the firm can use them to perform certain activities resulting in competitive advantage. Resources are bundled to create organizational capabilities. In turn, capabilities are the source of a firm's core competencies, which are the basis of competitive advantages

After conducting porter diamond analysis, Indonesia have certain advantage and challenge, which is:

Element	Advantage	Challenge
<b>Factor Condition</b>	<ul style="list-style-type: none"> <li>○ Good human resources,</li> <li>○ Have many sources of technology</li> <li>○ Have capital resources,</li> <li>○ Good infrastructure.</li> </ul>	<ul style="list-style-type: none"> <li>○ Misfit labor force</li> <li>○ dependent into imported raw material</li> </ul>
<b>Demand Condition</b>	<ul style="list-style-type: none"> <li>○ Healthy demand growth</li> </ul>	<ul style="list-style-type: none"> <li>○ Foreign Brand</li> </ul>

<b>Context for Strategy and Rivalry</b>	○ Have resource to make integrated value chain	○ Fierce Competition
<b>Related and Supporting Industries</b>	○ Many supporting and related industries	○ Need to increase integration from each industry to increased competitiveness

### 3.3 SWOT analysis

SWOT analysis is the overall evaluation of a company's strengths, weaknesses, opportunities, and threats. SWOT analysis can identify not only an organization's distinctive competencies from particular capabilities and resources possessed by the organization but also the superior way to identify the opportunities that an organization is not currently able to take advantage due to lack of appropriate resources.

<b>ASPEK</b>		<b>SWOT</b>	
<b>EKSTERNAL</b>	<b>OPPORTUNITY</b>		<b>THREAT</b>
<b>General Analysis</b> (Economy, politics, law, sociocultural, demographic, global (tourism, AEC), physical (infrastructure))	<ul style="list-style-type: none"> <li>• Collaboration between each shareholder</li> <li>• There is a law of the country quota restrictions</li> <li>• E-commerce growth</li> <li>• Bandung as a tourist destination</li> </ul>		<ul style="list-style-type: none"> <li>• Human resource leaving to other cities</li> <li>• Law and Politics: The existence of regulations that became inhibitors, particularly related to the licensing and port efficiency</li> </ul>
<b>Competitor Analysis</b>			<ul style="list-style-type: none"> <li>• Invasion of foreign goods, especially from China</li> </ul>
<b>INTERNAL</b>	<b>STRENGTH</b>		<b>WEAKNESS</b>
<b>Resources analysis:</b> <i>Tangible (financial, organization, technology, physical (infrastructure))</i>	Image as a city of fashion in Indonesia "Paris Van Java"		Lack of Innovation and data sharing
<i>Intangible (SDM, innovation, reputation)</i>	Image as a creative city		Downstream problem: lack of marketing and branding initiative for local product
<i>Intangible (SDM, innovation, reputation)</i>	Natural resources of Bandung and supporting Industries)		Miss match skill because of lack of institution and miss match curriculum
<i>Intangible (SDM, innovation, reputation)</i>	Have good source of human resource and have a lot of universities		Lack of domestic and foreign investment for research and infrastructure



ASPEK	SWOT	
	Creative culture, community and local unique arts (Sundanese)	Downstream problem: lack of Advance Labor Skill (Especially in Design)
<i>Value chain activity-industry dominant (primary, support),</i>	There is already a cooperation between actor in quadruple helix	Lack of Government Support to facilities' a shopping district
	There are many industries related to fashion industrial center such as (Footwear in Cibaduyut, shirt in Cigondewah, Knitting Industry, jeans etc.).	Upstream problem: Dependence to Import of Raw Material
	Tourism as core competence	

### **Result and Discussion**

By looking at the previous analysis, we can see the opportunity , threat, weakness and strength. Knowing this, the research has compile numerous strategy, those are:

1. Create creative fashion cluster and implemented long tail business model
2. Create agile supply chain to increase competitiveness
3. Create fashion tourism in Bandung with Sundanese as unique sales point
4. Deregulation

Below is the explanation for each proposed strategy:

Create creative fashion cluster and implemented long tail business model. Looking at the exponential growth of e-commerce and Bandung image as fashionable and creative city. Bandung can use this opportunity and strength to build creative fashion cluster. Sundanese as a famous culture also can be uniqueness and added value. Also looking at the presence of variation regional competitive product. Bandung can create its own platform to sell its own product along with long tail business model. Long tail business models are about selling many variations of the item at a same time: They focus on offering a large number of niche products, each of which sells relatively infrequently. Long Tail business models require low inventory costs and strong platforms to make niche content readily available to interested buyers. The idea is to collect all SME in Bandung into one place/ platform. With collaboration of the quadruple helix, and technology advancement. SME will reach a broader market. Using a curated fashion based on Bandung creativity will be a value added. It will encourage overcome data sharing the problem and stimulate investment.

*Create agile supply chain to increase competitiveness*

There has been an increasing interest in the design and implementation of agile supply chain strategies (Christopher, 2000) Fashion is one of the fast move goods in the world, so timing is an important factor. The focus in agile supply chain is responsiveness. The conservative supply chains not responsive enough to face fast moving nature of apparel/fashion Industry. The agile supply chain are faster and more responsive. Other differentiation between conservative and agile is, whereas conservative are forecast-driven and inventory-based. Agile supply chains are more information-based. However, the problem is, fashion market are unstable and hard to predict. It has been suggested (Harrison, Christopher, & van Hoek, 1999) that an agile supply chain should have certain characteristic, Such as:

- market sensitive – it have close connection to end –user
- virtual – depend on information from all supply chain partner
- network-based – its adaptive and use the strengths of specialist players
- process aligned– have many connection to all network member

Looking at Bandung strength such as Bandung natural resource, supporting industry, good human resource, collaboration in a quadruple helix with the support of many industry related presence. Bandung can make integrated supply chain, from upstream to downstream. From design, procurement of raw material, garment, logistic, and branding. Bandung has all necessary resource to build integrated supply chain. However, there are several challenge from the upstream problem: dependence to import raw material, and mismatch labor skill. But if Bandung can overcome such challenge it can counter-invasion of foreign goods and compete in Global level. Sritex in Solo is one of success story in Indonesia that success implemented integrated supply chain and become a global player.

#### *Create fashion tourism in Bandung with Sundanese as unique sales point*

Bandung is one of favorite tourist destination in Indonesia. With increasing visitor trend each year, isn't a surprise that tourism is one of core competence. Bandung can use this opportunity to create fashion tourism. Fashion tourism is a tourism that involve at least three major sector: Cultural tourism, Creative Tourism, and Shopping Tourism. There is no need for city to make new activity, its only need to diversify their economy and many city adopted this approach. Large city like New York conduct an event so that public will be interested to come to their city, e.g.; London fashion week. Bandung have creative culture, Sundanese culture and many shopping areas to make Bandung as one of fashion tourism destination in Indonesia. With many variety fashion item in Bandung, it's an interesting strategy to attract tourist and increase public awareness to the local brand at the same time. But there will be a certain challenge to overcame such as basic infrastructure, mismatch skill, lack of fashion district for SME. But if it was successfully implemented it will become new tourism activity and city point of difference and be Bandung driving force.

#### *Deregulation*

With fast-paced nature, speed is important. Even with integrated supply chain, it will not be optimal if port efficiency is still low. But Bandung don't have the power to change this other than ask help from Indonesia. Hence, Bandung cannot do much with this proposed strategy

Author choose 3 strategies to be implemented and combine 2 strategies. And then the proposed strategy is:

- Create creative fashion tourism and implementation of long tail business model.
- Create agile supply chain to create competitiveness

*Fashion tourism and Long tail strategy*

The core of this strategy is create a fashion tourism and collect all goods from SME in Bandung and makes ecommerce platform to sell it, also use a curated fashion so that it will have added value and unique value proposition.

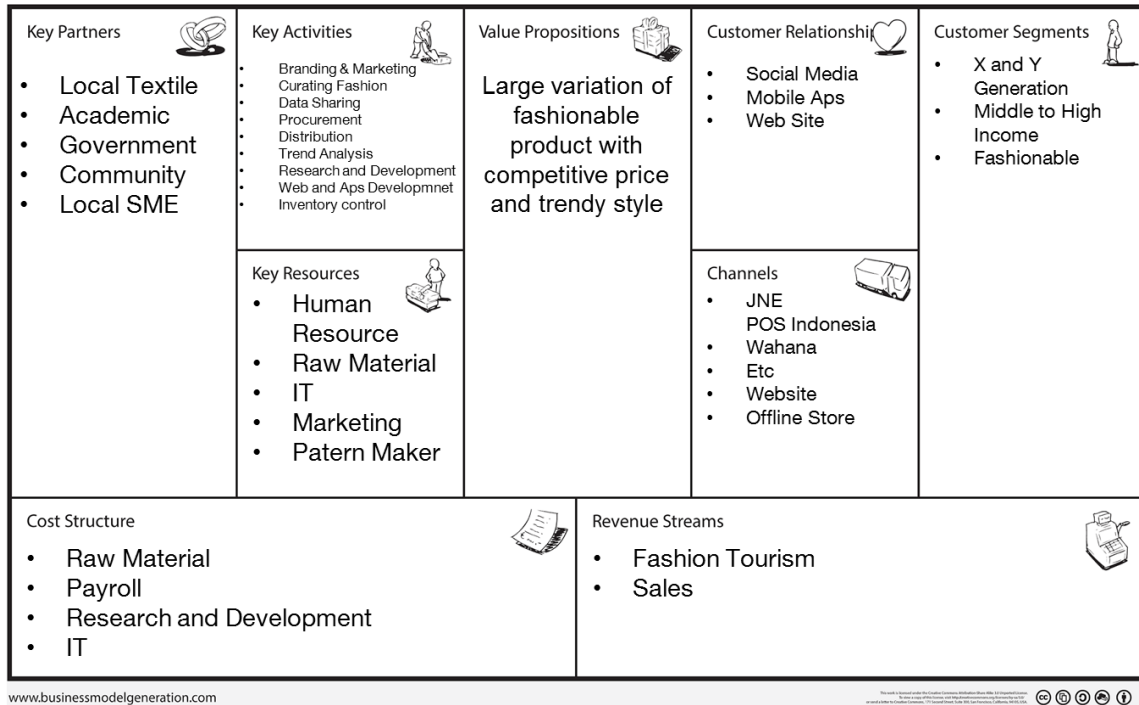


Figure 11 Fashion Tourism with long tail strategy Business Canvas Model

*Agile Supply Chain*

The core of this strategy is creating a holistic supply chain using the potential of integration of all related industry in Bandung. Many large apparel buyer using outsource to create their product, especially in cheap labor country such as China, Vietnam, and Cambodia. However, Indonesia is regarded as a high-quality producer high end and basic product, but Indonesia longer cycle time compare to china sometime become the important factor that prevent buyer to make it in Indonesia , if Indonesia can tackle this problem, Indonesia will get benefit From it. Most high-end buyers and large retailers will create their design in-house, the Indonesian apparel industry should be able to adapting designs, but at the same time should develop its own unique design. Also developing a new kind of clothing material.



Figure 12 Agile Supply Chain Business Canvas model

A firm must choose to perform different activities or performs activities differently to reposition itself differently from competitors. Firms create an activity map to show how they integrate the activities they perform. This strategy integrated activities is the source of is the foundation for the integrated cost leadership/differentiation strategy. The tight integration among each activities will be the key source of the competitiveness. As shown in Figure 10, this strategy have 6 fundamental activities that support this strategy such as—Using shared Platform, Agile Supply Chain, Collaboration between Quadruple Helix, Long Tail Business Model, Research and Development and Fashion Tourism.

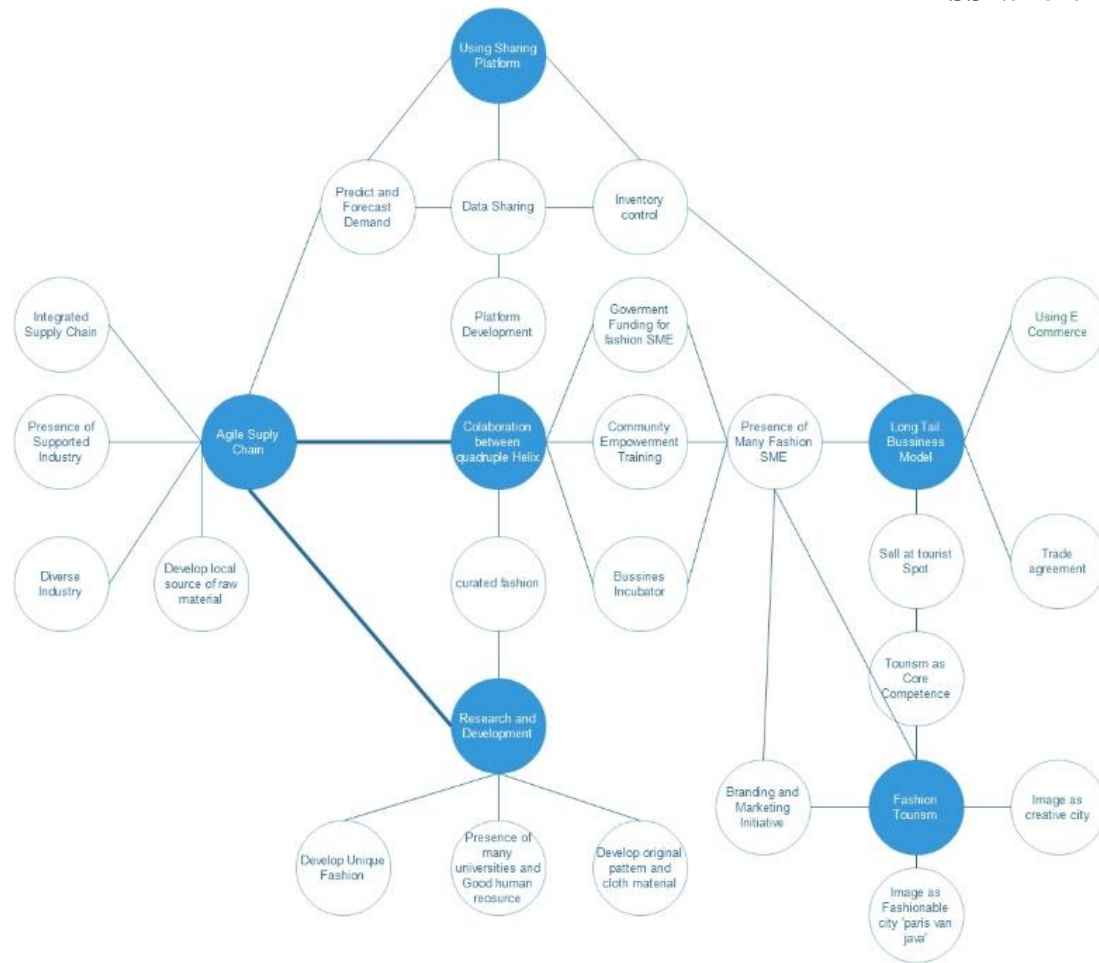


Figure 13 Activity Map

## Conclusion

Here is the conclusion that can be drawn from this research:

1. Based on looking at Bandung potential. Fashion cluster have the most potential to develop into regional competitive product. This subsector consists of a combination of convection and clothing sub-sector as well as handbags, leather & footwear. Looking at the strength of Bandung which is the cooperation between actor in quadruple helix Image as a city of fashion in Indonesia “Paris Van Java “and creative city. Abundant natural resources of Bandung, supporting Industries, good source of human resource, variety of fashion industrial center, creative culture, diverse community and tourism as core competence. Bandung can be a center of fashion in Indonesia. And with presence of strong textile and other supporting Industry. Bandung can be one stop solution for apparel manufacturing

2. To make use of Bandung potential at maximum effect, first Bandung must overcome some challenge. Textile supply chains compete on low cost, high quality, accurate delivery, and flexibility in variety and volume. And to become Fashion center of Indonesia, focused and consistent brand and image building should be performed. Some challenge face Bandung are Economic of scale, shortage of correct human resource, efficient and effective supply chain, lack of innovation and technology, need to increase collaboration between the quadruple actor, and need to develop the right platform to enable e commerce and integrated supply chain

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## INDIA'S ASPIRATIONS TO BECOME GLOBAL ENTREPRENEURSHIP ECONOMY

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### Abstract

This study investigate the factors which boost the spirit of entrepreneurship in Indian economy, The rate of growth of new businesses formation with its probability to run profitable is critical to India's aspirations to become global entrepreneurship economy. The success of entrepreneurship in any country has been the driver of GDP growth and employment generation. India has committed changes in policy making and supportive eco systems which encourages entrepreneurship and in line with this mission, Govt. of India has begun Make in India,, Digital India and Start up India campaign. There has been an attempt to find out the factors which boost entrepreneurship in the economy .Govt. should make policy formulation accordingly and create a eco system which encourages these factors of entrepreneurship. This is a review paper in which descriptive research has been used to find out the factors contributing boost to spirit and eco system for entrepreneurship. Secondary data has been used for literature review. The main factors which boost the spirit and eco-system for entrepreneurship has been classified in three factors a- Personal factors (ambition , Passion, family background, etc ) b- Business environment and c- Education .Government should keep these points in mind while making any policies to boost the spirit of entrepreneurship in economy. Findings are based on opinions of entrepreneurs based in North India and literature which is freely available ,Scope is limited to entrepreneurship and general management of business only ,No use of statistical tools , Research has been done by only two individuals not by a big team due to lack of resources.

**Keywords:** *Personal factors, entrepreneurship, education, eco system etc*

### Introduction

The term "Entrepreneur" is often used interchangeably with entrepreneurship. Entrepreneur is a creator whereas entrepreneurship is the creation. According to Zimmerer and Scarborough, entrepreneur is one who creates a new business in the face of risk and uncertainty for the purpose of achieving profit and growth by identifying significant opportunities and assembling the necessary resources to capitalize on them , whereas entrepreneurship is the tendency of a person to organize his own business and run it profitably, exploiting qualities of leadership ,decision-making and managerial caliber. According to John K. Howard Stevenson Entrepreneurship is the attempt to create value through recognition of business opportunity, the management of risk-taking appropriate to the opportunity, and through the communicative and management skills to mobilize human ,financial and material resources. The rate of entrepreneurship, a multidimensional concept including both the percentage of existing business owners in the labour force as well as the



start-up rate of new enterprises, varies substantially across countries and over periods of time. (Wennekers, Uhlaner, & Thurik, 2002)

Growth of entrepreneurship in India can be studied in three parts:

### 1.1-BEFORE 1850

This period of entrepreneurship has been characterized by following developments and progress. This time also called Vedic period when metal handicrafts were produced. People were organized into an economic & social system, the unit of which was the agricultural village i.e. village community (farmers, artisans, Brahmins, weavers, carpenters, goldsmiths etc). Some entrepreneurship existed among artisans in cities on banks of rivers, because rivers provided transportation facility. At this time there was weak communication and transportation facilities. There was a competition from highly developed European industry. Dupatta and dhotis of Ahmedabad, Silk-bordered clothes of Nagpur, shawls of Kashmir etc were famous products produced in country. Major commercial and economic development in India centered on the growth of the British private enterprise in Banking, insurance, steamships, plantations and coal mines.

### 1.2-1850-INDEPENDENCE

This period has witnessed progress in railways, railways were introduced in India in 1853 which successfully transformed Indian economy. The 'Swadeshi' campaign which began in 1905 emphasized the use of indigenous goods. The Indian mercantile class, along with Europeans, took advantage of the rapidly expanding trade and got engaged in highly lucrative trading. Up to 1915, Textile industry progressed by Parsis. After World War-1, Government of India (GOI) agreed to provide discriminating protection to certain industries, even requiring that companies receiving its benefits be registered in India with rupee capital and have a proportion of their directors as Indians. These measures helped in establishing and expanding the factory system in India in the 20th century. East India Company's arrival in India was the hidden consequence of manufacturing entrepreneurship.

### 1.3-POST-INDEPENDENCE

This period of entrepreneurship has witnessed momentum of growth in following order. First industrial policy in 1948 came into existence. Mixed economic system, distribution of economic powers in public and private sectors has been initiated by Govt. Basic industries were formulated in First & Second Five-year plans i.e. electrical & heavy machines tools industries, cement, paper, jute, cotton, industries etc. New industrial townships and industrial regions came up. One thousand small factories were set up. Third year plan focused on Automobiles, BHEL were established, 17000 small industries were set up. Fourth and fifth year plan witnessed growth in Steel, aluminum, fertilizers, petro products, engineering goods, etc. Sixth and Seven year plan witnessed focus and progress on computers, energy, electronics, exports of handicrafts, man made fiber. The eighth and ninth Plan highlighted small scale industries and these industries were freed from regulations and 821 items were reserved for small scale industries. Tenth plan focused on science and technology, increased flow of credit. The eleventh plan highlighted on MSME sector. In 1991 when Liberalization, Privatization and Globalization were the buzz words and this LPG marked the presence in form of economic reforms in Indian economy. In true sense the significant progress on Indian economy has been started after 1991. The Indian Government has now taken several steps to boost the spirit of entrepreneurship like Make in India, Digital India and Start up India campaign.

## **Literature review**

After studying last 50 year literature on entrepreneurship many factors have been identified and grouped into three main factors which are responsible for boost in the entrepreneurship spirit in country . The factors are a- Personal factors ( ambition ,passion, family background, Occurrence of events in one’s life) b- Business environment and c- Education

### **2.1-PERSONAL FACTORS**

Following personal factors have been identified by literature which are responsible for an individual to become entrepreneur.

#### **2.1.1- AMBITION**

The individual’s ambitions play a significant role in deciding whether one will opt for doing business or job. The individual who are ambitious is more likely to go for entrepreneurship. Entrepreneurs need to have plenty of self-confidence and be passionate about their projects – not just when starting up their own businesses but also when innovating within large corporations. The biggest difference which has been found between managers and entrepreneurs is that managers analyze a lot and entrepreneurs act a lot. Management executives spend a lot of time analyzing data and research before crafting a decision, “entrepreneurship is the opposite. People need to have the confidence to act and then learn from the outcomes.” (Santos, Filipe)

#### **2.1.2-PASSION**

The individual’s passion play a significant role in deciding whether one will opt for doing business or job. Without passion, there would be no entrepreneurs. But without a vision, there would be no passion. At the very core of the entrepreneurial spirit is the vision that drives you to produce the highest quality products and services. (Kristy, 2016).

#### **2.1.3- FAMILY BACKGROUND**

The family background has been found one of critical factor which works as a catalyst for entrepreneurship .The individual who belongs to business family is more likely to opt doing business .Family background and culture plays a significant role in one’s life and career. In India , the people who belongs to business family learn business from family and more likely to opt for business as their career.

#### **2.1.4-OCCURRENCE OF EVENTS IN ONE’S LIFE**

Sometimes situations force one individual to go for entrepreneurship. Most of people opt to do business if the bread earner of their family dies or loses the earning capacity which serves as the pull factor for entrepreneurship. Many people come into businesses because of these reasons. One go through many situations and get experiences by different events of his or her life and end up getting into business.

## **Business environment**

Following factors of business environment have been identified by literature which is responsible for creating an eco system conducive for entrepreneurship in country where individuals willingly opt to become entrepreneur.

### **3.1 –POLITICAL & LEGAL ENVIRONMENT**

Government's initiative in form of ease of doing business plays a significant contributor to boost entrepreneurship spirit of in the economy. The kind of infrastructure both digital and physical, liberalization in policy making for new start up businesses, incentives to entrepreneurs, ease in winding up of business are the key factors which contribute in enhancing the spirit of entrepreneurship. Latest campaign of Make in India, Star up India and Digital India run by Govt. on India is working as a catalyst for making a eco system which encourages entrepreneurship.

The most important obstacles faced by entrepreneurs include unfair competition, changes in taxation procedures, lack of financial resources and problems related to public order. Bureaucracy and corruption do not appear to represent significant barriers to entrepreneurship. Bitzenis & Nito (2005). Government should liberalize business policies and ease of doing business should be encouraged which has been done in India by current Government. The fruits of these initiatives will be reaped in coming future.

### 3.2-SOCIO-CULTURAL ENVIRONMENT

The kind of culture, traditions, custom, demographic variables also play a critical role in the economy with regard to entrepreneurship spirit among citizen. India is a young country where more than 50% population is between age 25-40, this is serving a boost to spirit of entrepreneurship in the economy. Many young start ups are coming in to business. There are some communities which are into business from generations to generations and it can be concluded socio cultural environment also decides entrepreneurship in the country.

#### *Education*

The kind of education, quality, and focus has been found key determinant which encourages entrepreneurship in any country. In India, majority of pass out students do not possess minimum employability skills. Education institutions can assist in breaking down the barriers which discourages the entrepreneurship spirit in economy. Business education has been found key factor which transform service to entrepreneurship economy. (Robertson, Collins, Medeira, & Slater, 2003) Management training is constantly seen as an effective way of providing small-medium size enterprises with the management expertise they require in order to develop and grow. According to Ibrahim & Soufani (2002) management training is constantly seen as an effective way of providing small-medium size enterprises with the management expertise they require in order to develop and grow. They found business sector suffers from a considerably high failure rate that is largely attributed to the lack of management skills and planning, which can potentially be improved by providing training and education in different business areas. According to Garavan & O'Connell (2006) a number of problems associated with entrepreneurship education and training programmes. The major problem relates to balance: too much of an emphasis on knowledge and not enough on competence; too much emphasis on information transfer learning methods and not enough on individual small group learning methods such as project teams, peer exchange, individual counseling and workshops. There is very little evaluation of the effectiveness of such programmes. There is a lack of evidence on how learning strategies influence the development of entrepreneurial competences and how these competences transfer into new venture formation. In India there is not a single University which only focus on entrepreneurship and provides eco system for it. Practical education in form of projects, internship should be encouraged and emphasis should be more on practical aspects instead of making the teaching & learning process theoretical, which is a case in India.

### **Conclusion**

The factors which encourages of Entrepreneurship has been classified into three categories 1-personal factors (Ambition, Passion, Family background, Events occurring in one's life), 2- Business environment ( Political & legal environment , Socio-cultural environment ) and 3-Education .Government should make such a eco system in the country which encourages such factors of entrepreneurship except personal factors.

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**CLEARING THE CONCEPTUAL AND MEASUREMENT CONFUSION BETWEEN  
ENDURING PRODUCT INVOLVEMENT AND PRODUCT IMPORTANCE: A  
CRITICAL REVIEW AND EMPIRICAL EVIDENCE**

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**Abstract**

Consumers' arousal and concern in the product is a reflection of its perceived self expressive and hedonic values, which are the main components of enduring product involvement. Many previous studies have confirmed the existence of these two components of enduring involvement and explained that most of the other components that were mentioned in past studies were either confused with involvement antecedents and behavioural outcomes, or were implied and included in the hedonic and self expressive dimensions of enduring involvement. Other misconceptions of the components of enduring involvement included the consideration of some situational and purchase decision factors as components of enduring involvement, as well as the adoption of the product importance concept as an equivalent or a component of enduring product involvement. The present study provides the theoretical and empirical evidences to prove that product importance is an outcome, rather than a component, of enduring product involvement.

**Keywords:** *Enduring Involvement, Product Importance, Discriminant Validity, Measurement Scale, Consumer Behavior, Hedonic Consumption, Self Expression.*

**Introduction**

The concept of involvement refers to the perception of personal relevance for an object, activity, or event, to the individual in terms of her/his basic values, goals, and self-concept (Bloch & Richins 1983, Blackwell, et al. 2001). Enduring product involvement is regarded as a dynamic construct that emerged due to socialization and symbolic influences endemic to the product class (Bloch, et al. 2009). Another common definition of enduring involvement refers to consumer's enduring perceptions of the importance of the product category based on the consumer's inherent needs, values, and interests (Mittal, 1995; Zaichkowsky, 1985). The primary problem in defining the involvement construct, according to Laaksonen (1994) was that numerous antecedents and consequences of involvement have been confused with involvement itself.

Researchers' understanding of the involvement construct was complicated by many theoretical and operational problems. For example, an early review by Costley (1988) indicated that previous research results have differed according to the definition of involvement used by researchers. The comparison of involvement effect sizes (among previous studies), on the dependent variables that were investigated, indicated that the effect of involvement was not consistent across the studies. Costley (1988) explained that this result was not surprising given the variety of conceptualizations of the involvement construct. Some of these conceptualizations of the previous involvement constructs were also reviewed by Higie & Feick (1989), who noticed that product interest and product importance along with several behavioural outcomes of involvement, were frequently referred to as "measuring dimensions" of involvement scales in some previous studies. Higie & Feick (1989) argued that using behavioural outcomes to measure enduring involvement is largely questionable.

Andrews et al (1990) also criticized the confusion about measuring the involvement construct in the literature and questioned the uni-dimensionality of some general product involvement measures (as used by Zaichkowsky 1985, 1987), and noticed that some involvement antecedents (e.g., risk) or consequences (e.g., consumption behaviour) were measured as product involvement constructs. In line with Higie & Feick (1989) earlier view, Andrews et al (1990) further confirmed the inappropriateness of inferring the level of involvement by measuring involvement antecedents or consequences. Rather, they stressed that measures tapping the state of involvement should be used. This opinion was later confirmed by O'Cass (1996) who also noticed that most of the involvement researchers inferred the concept of involvement from its proposed antecedents or consequences with no direct measure of the construct of involvement itself.

#### *Behavioural Consequences of Product Involvement*

Tigert, et al (1976) and Bloch (1981) assumed that people with enduring product involvement engage in ongoing product-related information search and transmission because of their ongoing interest and concern for the product or activity. Turnbull & Meenaghan (1980) suggested that opinion and advice giving occur when the continuous involvement with the product is put into the service of self-affirmation by the consumer, to reassure herself in front of significant others and to confirm her assessment of the product or service.

Goldsmith (1996) explained that when consumers are aroused by a product category in which they are interested, they pay more attention to information about that category, process the information more deeply, and have better memory of the information. Therefore, he agreed with Laaksonen (1994) that the "responses" in the response-based involvement approach, are the consequences of involvement rather than involvement itself. In Dholakia's (1998) study, enduring involvement caused higher levels of information seeking and opinion-leadership, and higher probability of continuous product-related information reception and acquisition. The results also indicated that the information-seeking behaviour of situationally involved consumers who are not enduringly involved is likely to temporarily imitate enduringly involved consumers. This later finding, in particular, came in line with an earlier explanation by Richins & Bloch (1986) that enduring and situational involvement could be distinguished only by the temporal duration because their behavioural outcomes are the same. However, Dholakia's (1998) results also indicated that while the level of information-search for such situationally involved consumers is high, the reasons underlying the search might be different. Situationally involved consumers may use information-search as a risk-reduction strategy while enduringly- involved consumers may obtain information for hedonic or recreational purposes or to develop expertise.

#### *The Components of Product Involvement*

Lastovicka & Gardner (1979) identified familiarity, commitment, and importance as the three factors of involvement. The self-expressive component of involvement was supported by Bloch's (1982) research which concluded that the magnitude of enduring involvement is positively related to the extent to which an individual perceives such involvement as a vehicle for self-expression or enhancement. Bloch (1982) argued that, consumers use enduring involvement as a vehicle for self-expression. He emphasized that being highly involved with a product that carries a symbolic meaning provides a way to project and enhance parts of one's self-image.

Park & Young (1983) identified two primary components underlying the involvement construct; the utilitarian component (functional attributes) and the value expressive component (aesthetics and expression of self-image). Zaichkowsky (1985) developed the personal involvement inventory (PII) scale, which was based on the uni-dimensional

conceptualization that involvement is an index of product/product importance that reflects its personal relevance. Contrary to the previous view, the empirical identification of the hedonic component and the symbolic (or the self-expressive) component of enduring product involvement was one of the major contributions of Mittal & Lee (1989) research which was in line with Higie & Feick (1989) view that emphasized the existence of both the self-expressive and hedonic components of enduring involvement.

Higie & Feick (1989) also discussed McQuarrie & Munson (1987) Revised Personal Involvement Inventory (RPII). Higie & Feick (1989) argued that the factor analysis reported by McQuarrie & Munson, which resulted in a three-factor solution (where the pleasure and self-expressive items loaded on one single factor) re-emphasizes the importance of distinguishing enduring involvement as a unique construct that is conceptually different from product importance and situational risk factors. Building on this view, Higie & Feick (1989) criticised Bloch, et al (1986) earlier study which measured enduring involvement using "product interest," "time spent thinking about product" and "average importance of the product to the performance of social and career roles".

Higie & Feick (1989) argued that product interest is related to the hedonic component of enduring involvement, whereas the importance of the product performance in social and career role is related to the self-image component of enduring involvement. Time spent thinking about the product, however, is a behavioural outcome, and the appropriateness of using behavioural outcomes to measure enduring involvement is questionable according to Higie & Feick (1989), who explained that behaviours such as time spent thinking or searching for information, can occur for reasons other than enduring involvement, like individual concerns with a pending or previous purchase. In sum, Higie & Feick (1989) concluded that previous studies of the enduring involvement construct fell short of adequately measuring its original motivating factors; the self-expressive and the hedonic components which are the only two components of enduring involvement.

#### *Enduring Product Involvement and Product Importance*

Bloch & Richins (1983) were the first to notice the confusion between product importance and product involvement, when they emphasized that perceived product importance and involvement refer to conceptually distinct phenomena, because importance is a perceptual judgment, and involvement is a feeling. Antil (1984) used the term product importance in a non-functional meaning to refer to enduring product involvement when he argued that the degree of involvement is equal to the level of perceived personal importance, which is determined by the psychological satisfaction the consumer gains from interacting with the product. Such perspective of product importance is obviously not related to product functionality or performance; alternatively, it refers exactly to the concept of enduring product involvement. Therefore, there is no need to use the term product importance in the first place.

In Zaichkowsky's (1987) study, the FCB model for product classification was used as a framework for testing the use of the PII (Zaichkowsky, 1985). The consistent misclassification, according to Zaichkowsky (1987), was in the product category of personal computers. Personal computers were perceived as high involvement products, and while they were expected to have a great thinking or cognitive component, they apparently were seen to have a great emotional or affective component by respondents. As a possible explanation Zaichkowsky (1987) suggested that the average student respondent viewed personal computers as an exciting, fascinating product category. However, Zaichkowsky (1987) did not provide an explanation why they might do so. The only viable explanation for Zaichkowsky (1987) finding might be reached through the application of Higie & Feick (1989) conception of involvement, instead of Zaichkowsky's (1987) product importance perception of involvement. Personal computers have high hedonic and self expressive value

and that is why they were perceived as high involvement products with a great affective component due to their self expressive and hedonic values which are purely emotional. The consistency of such misclassification, as reported by Zaichkowsky (1987), supports this explanation. Consumers see the product to be important because they are involved in it and not vice versa. Therefore, product importance is an outcome of product involvement and not an antecedent or even a component of it. Zaichkowsky's (1987) usage of product importance as an index of involvement led her to overpass the emotional component of personal computers involvement, and therefore consider such finding as misclassification with no convincing explanation.

In line with this opinion, Higie & Feick (1989) explained that product importance cannot be used in a measure of enduring involvement since it confounds the importance concept which is based on functional necessity. Higie & Feick (1989) argued that product interest is related to the hedonic component of enduring involvement, and that the importance of product performance in social and career role is related to the self-image component of enduring involvement. Indeed, if McQuire & Munson's (1992) interest component items (exciting/unexciting, dull/neat, boring/interesting, fun/not fun, appealing/unappealing) were compared with Higie & Feick's (1989) hedonic component items (interesting, fun, fascinating, exciting, and appealing), the conclusion would be clear that the interest component is already included in the hedonic component of product involvement.

Higie & Feick (1989) discussed the Personal Involvement Inventory (PII) generated by Zaichkowsky (1985), which taps attitude toward the product, product importance, and a hedonic component. They argued that because of the inclusion of the first two factors and the exclusion of the self-expression factor the PII should not be used to measure enduring involvement, but the hedonic items in PII, however, are useful in measuring one component of enduring involvement. Higie & Feick (1989) re-emphasized the need to develop and refine a reliable scale to measure the enduring involvement construct which is distinct from the product importance and risk factors.

Divine & Page (1994) argued that enduring involvement reflects an intrinsic interest in a product which motivates people to perform product related tasks because such activities are self-rewarding. Building on this logic, Divine, & Page (1994) emphasized that product importance is not at all consistent with enduring product involvement since there are many products that consumers consider important but not intrinsically interesting. Furthermore, the importance construct does not address the affective evaluative aspects typically associated with the enduring involvement construct.

In line with Antil's (1984) earlier work, Goldsmith (1996) explained that consumers describe products as important because they perceive them to be instrumental in achieving desired goals. Many products are thus important to consumers, but not all important products are also involving simply because they do not elicit excitement or interest in consumers. They explained that although enduringly involved consumers are motivated by their emotions, similar emotional responses might be triggered by other causes which operate in addition to involvement, but they should not be confused with involvement itself.

Dholakia (1998) further supported Antil's (1984) opinion, when he viewed enduring product involvement as a stable perception of importance resulting from the product's relatedness to the self-concept and identity. Dholakia (1998) explained that a product is perceived as causing enduring involvement when importance perceptions are based on the product's ability to intrinsically satisfy consumers' enduring needs, rather than on specific purchase or usage goals.

In sum, product importance was viewed from three different approaches. The first approach viewed product importance as a component of enduring product involvement (Zaichkowsky 1985, 1987; McQuarrie & Munson 1992). The second approach viewed



product importance as an equivalent to the level of personal relevance of products in the enduring product involvement construct (Antil 1984; Goldsmith 1996; Dholakia 1998). However, according to this view there is no real distinction between both constructs because they refer to the same phenomenon therefore, there is no practical need to use the term product importance to refer to an existing concept anyway. The third approach viewed product importance as a completely distinct and different concept from enduring product importance (Bloch & Richins 1983; Higie & Feick 1989; Divine & Page 1994). According to this view product importance is not consistent with the enduring product involvement construct and it does not address the affective component of enduring product involvement therefore, product importance is not a component of, nor an equivalent to, the enduring product involvement construct. In fact, according to this approach, product importance is seen as an outcome of enduring product involvement. Therefore, the current study is adopting the following hypotheses:

H1: Consumer's product importance is not a component of her/his enduring product involvement.

H2: Consumer's enduring product involvement has a positive direct effect on her/his product importance construct.

In order to investigate Higie & Feick's (1989) proposition that product importance is related to both hedonic and self-image components of enduring involvement, the current study aims to test the following hypothesis:

H3: The hedonic and self expressive components of consumer's enduring product involvement have a single and a simultaneous positive direct effect on her/his product importance construct.

### **Research methodology**

This study has chosen cars as a general product category to investigate. In line with Bloch's (1982) product selection recommendations for involvement research, cars were chosen because consumers typically are very familiar with them and because it is assumed that respondents would exhibit a relatively wide range of enduring involvement levels with respect to this product.

The sampling frame for this study consisted of university students in a private university in Kuwait. A convenient sample of 650 was drawn and a total of 516 usable questionnaires were retrieved in data collection which is considered to be an appropriate sample size according to Hair et al (1998) recommendations of 100 observations or larger and a minimum of 20 cases for each variable to factor analyze a sample.

#### *The Enduring Product Involvement Scale*

This study defines enduring product involvement as consumer's perceived level of continues self relevance of the product which is reflected by the product's hedonic and self expressive perceived value to the consumer. Higie and Feick (1989) developed the adopted scale of the study which included ten items or questions. The first five items constituted the hedonic factor, while the second five items constituted the self-expressive factor, of the enduring involvement scale. Higie and Feick (1989) have demonstrated the discriminant and predictive validity of their enduring involvement scale and its components. They have also reported a reliability Cronbach's alpha index of 0.89 for their enduring involvement scale items. This scale was later considered to be the most reflective of the enduring ivement construct according to Jain and Srinivasan (1990) who assessed all previous involvement

scales by replicating them and concluded that Higié and Feick’s (1989) enduring involvement scale accounted for the largest explained variance (77%) among all previous measuring scales. The first five items (the hedonic factor) of the enduring product involvement scale which was adopted from Higié & Feick (1989) is a semantic differential 5 point scale. Respondents were instructed to circle the corresponding number for each item that best describes their opinion about cars (for example; if they think that cars are ... Extremely interesting = ⑤ or Not at all interesting = ①) as shown in Table 1.

Table 1

<i>I think that cars are...</i>	<i>Extremely.....Not at all</i>				
1. Interesting	5	4	3	2	1
2. Fun	5	4	3	2	1
3. Fascinating	5	4	3	2	1
4. Exciting	5	4	3	2	1
5. Appealing	5	4	3	2	1

Table 1 The hedonic factor items of the enduring product involvement scale.

The second five items (the self expressive factor) of the enduring product involvement scale which was adopted from Higié & Feick (1989) is an interval Likert type 5 point scale. Respondents were instructed to indicate their opinion about each statements by marking (X or ✓) in the choice that corresponds to their level of agreement, or disagreement, with each of the statements shown in Table 2.

Table 2

<i>I think that my car...</i>	<i>Strongly agree</i>	<i>Agree</i>	<i>Neither agree nor disagree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
1. Portrays an image of me to others.	[ ]	[ ]	[ ]	[ ]	[ ]
2. Is part of my self-image.	[ ]	[ ]	[ ]	[ ]	[ ]
3. Tells others about me.	[ ]	[ ]	[ ]	[ ]	[ ]
4. Helps others to judge me.	[ ]	[ ]	[ ]	[ ]	[ ]
5. Tells me about a person.	[ ]	[ ]	[ ]	[ ]	[ ]

Table 2 The self expressive factor items of the enduring product involvement scale

*The Product Importance Scale*

The present study defines product importance as the level to which the product is perceived to be important to the consumer. The adopted scale of the study included five items or questions that were derived from McQuarrie & Munson’s (1992) revised product involvement inventory (RPPII) measure. The two sub-scales of product importance and product interest measures constituted the (RPPII) scale. The individual reliability index of the product importance sub-scale was not reported by the researchers. However, the overall Alpha indexes that were computed over the nine products included in their study ranged from 0.80 to 0.95 and the dimensionality of the importance sub-scale items were confirmed through exploratory factor analyses with varimax rotation. Discriminant validity of the importance sub-scale were demonstrated through significant correlation with the attitude measure (R = 0.74). Criterion

validity for the (RP11) as a whole, was demonstrated through the prediction of ten outcomes of involvement.

The product importance measure which was adopted from McQuarrie & Munson (1992) included five items in a semantic differential 5 point scale. Respondents were instructed to circle the corresponding number for each item that best describes their opinion about cars (For example; if they think that **cars** are certainly important = ⑤...or certainly unimportant = ①) as shown in Table 3.

I think that cars...				
➤ <i>Are Important</i> .....				<i>Unimportant</i>
5	4	3	2	1
➤ <i>Are Relevant</i> .....				<i>Irrelevant</i>
5	4	3	2	1
➤ <i>Mean a lot to me</i> .....				<i>Mean nothing to me</i>
5	4	3	2	1
➤ <i>Matter to me</i> .....				<i>Don't matter to me</i>
5	4	3	2	1
➤ <i>Of concern to me</i> .....				<i>Of no concern to me</i>
5	4	3	2	1

Table 3 The product importance scale items.

**Data analysis**

The first hypothesis of this research states that consumer’s product importance is not a component of her/his enduring product involvement. In order to prove this hypothesis, discriminant validity between both constructs should be established to confirm that product importance and enduring product involvement are completely distinct and different constructs. Discriminant validity between the two constructs is established in two different ways. Firstly, the ten items of enduring product involvement scale and the five items of product importance scale are submitted all together to varimax rotated factor analysis. Exploratory factor analysis produced a three factor solution explaining 75.8% of the variances, as Table 4 indicates.

Table 4: Factor analysis of the enduring product involvement and product importance items

Items	1	2	3
HED1			.832
HED2			.843
HED3			.725
HED4			.787
HED5			.722
SELF1		.764	
SELF2		.762	
SELF3		.835	
SELF4		.852	
SELF5		.790	
IMPRT1	.761		
IMPRT2	.728		
IMPRT3	.821		
IMPRT4	.841		

IMPRT5	.819

The results confirmed the difference between product importance and enduring product involvement constructs. All the items related to the self-expressive component of enduring product involvement highly loaded on the second factor and all the items related to the hedonic component of enduring product involvement highly loaded on the third factor, while all product importance items highly loaded on the first factor. Therefore, it is concluded that none of the components of enduring product involvement is included in, or can be measured by, any of the constituents of the product importance construct, and vice versa.

A second and stronger test of discriminant validity between the product importance and enduring product involvement constructs, as suggested by Fornell and Larcker (1981) and Chaudhuri (2000) is that the average variance extracted for each construct should be higher than the squared correlation between both constructs. The results indicate that the variance of the product importance construct is .777 and the variance for the enduring product involvement construct is .586 and the squared correlation between both constructs is .487 which proves that both constructs are theoretically and empirically different and distinct from each other. Therefore,  $H_1$  which states that consumer's product importance is not a component of her/his enduring product involvement is accepted.

The second hypothesis of this research states that consumer's enduring product involvement has a positive effect on her/his product importance construct. Regression analysis revealed that enduring product involvement had a positive effect on product importance, with positive coefficients ( $\beta = .698$  and  $b = 0.803$   $P = .000$ ) explaining about 49% (adjusted  $R^2 = .487$ ) of the product importance variance. The pure contribution of enduring product involvement to predict product importance was assessed through the partial correlation coefficient which was significant ( $R_p = .384$   $P = .000$ ) and indicated a positive pure direct effect of enduring product involvement on product importance. Therefore,  $H_2$  which states that consumer's enduring product involvement has a positive effect on her/his product importance construct is accepted.

The third hypothesis of this study states that both the hedonic and self expressive components of consumer's enduring product involvement have a single and a simultaneous positive direct effect on her/his product importance construct. Regression analysis revealed that the self expressive dimension of enduring product involvement, when entered alone into a simple regression equation, had a positive effect on product importance, with positive coefficients ( $\beta = .622$  and  $b = .659$ ,  $P = .000$ ) explaining about 39% (adjusted  $R^2 = .387$ ) of the product importance variance.

Similarly, when the hedonic dimension of enduring product involvement, was entered alone into a simple regression equation, it had a positive effect on product importance, with positive coefficients ( $\beta = .614$  and  $b = .609$ ,  $P = .000$ ) explaining about 38% (adjusted  $R^2 = .377$ ) of the product importance variance. Multiple regression analysis revealed the simultaneous positive effect of both dimensions of enduring product involvement on product importance. Together, both independent variables explained about 49% (adjusted  $R^2 = .488$ ) of the product importance variance, as table 5 indicates.

Table 5

Dependent Variable	Independent Variable	Unstandardized Coefficient	Standardized Coefficient	Sig.
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		s	s	
		B	Beta	
IMPORT	SELF	.428	.404	.000
NC	HED	.382	.385	.000

Table 5 Regression analysis for the effects of enduring product involvement components on product importance.

Multicollinearity between the independent variables was assessed through tolerance and VIF values. Tolerance value equalled 0.678 and VIF value equalled 1.474 which confirmed the non-existence of multicollinearity between the independent variables. The pure contribution of each independent variable to predict product importance was assessed through partial correlation. The partial correlation coefficient between the self expressive dimension of enduring product involvement and product importance was positive and significant ( $R_p = .242$   $P = .000$ ), and it was also positive and significant ( $R_p = .281$   $P = .000$ ) between the hedonic dimension of enduring product involvement and product importance. The results of data analysis confirm that both dimensions of enduring product involvement have pure direct (single and simultaneous) effect on product importance. Therefore, the third hypothesis is acceptable.

**Research conclusion**

The present study has critically reviewed previous research papers on enduring involvement and identified many previous studies that confused involvement components with its behavioural outcomes. The outcomes of involvement that were considered by some researchers as components included; importance (Rothschild & Ray 1974; Lastovicka & Gardner 1979; Parameswaran & Spinelli 1984; Zaichkowsky 1985; Jensen, et al 1989; and Jain & Srinivasan 1990), commitment (Rothschild & Ray 1974; Lastovicka & Gardner 1979; and Jensen, et al 1989), innovativeness (Tigert, et al 1976), interpersonal communications (Tigert, et al 1976; Bloch 1981), knowledgeability and familiarity (Tigert, et al 1976; Lastovicka & Gardner 1979; Parameswaran & Spinelli 1984; and Jensen, et al 1989), awareness (Tigert, et al 1976), reaction to change (Tigert, et al 1976), attachment (Bloch 1981), product preference (Jensen, et al 1989) and attitude (O’Cass 1996).

The current study provided theoretical explanation that is supported by empirical evidences to explain the relationship between enduring product involvement and product importance and to clear the measurement and conceptual confusion that existed between them in previous research. The present study has proved that product importance and product enduring involvement are two distinct and different concepts; therefore, product importance is not a component of enduring product involvement. This conclusion is in line with Bloch & Richins (1983) opinion that perceived product importance and involvement refer to conceptually distinct phenomena, and it is also in line with Higie and Feick (1989) statement that importance cannot be used as a measure of enduring involvement since it confounds the importance concept which is based on functional necessity. The results also support, Divine & Page (1994) point of view that importance construct does not address the affective evaluative aspects typically associated with the enduring involvement construct.

Such conclusions, however, does not support other researchers’ (Rothschild & Ray 1974; Lastovicka & Gardner 1979; Parameswaran & Spinelli 1984; and Jensen, et al 1989) argument that the importance construct is a component of involvement. The present study also proved that product importance is an outcome of enduring product involvement which supports Goldsmith (1996) explanation that all product categories that consumers find

involving, are important to these consumers precisely because they find these product categories interesting and exciting. The results of this study also refute Zaichkowsky's (1985) uni-dimensional conceptualization of involvement as an index of importance. Data analysis also revealed that both components of enduring product involvement, the hedonic and self-expressive, have simultaneous positive direct effects on product importance which supports Higie & Feick's (1989) opinion that both dimensions of enduring involvement produce product importance because of consumers' feelings of product interest and the social and career roles related to the product.

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**DIGITAL MUSIC PURCHASING INTENTION BY GENERATION-Y THAIS:  
A CONCEPTUAL PERSPECTIVE**

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**Abstract**

The global recording industry is passing through a new transition in the fast-evolving digital market place with music streaming a key component of this growth. Artists and entrepreneurs must embrace new ideas, business models and channels to accommodate the change. Globally in 2014 the digital music industry reached US\$6.85 billion in revenues but ownership and piracy issues are always stumbling blocks to the industry's sustainable growth. Entrepreneurs therefore need to adapt to changing consumption habits as digital music consumer habits are changing fast and digital music labels need to rethink their strategies to keep pace with new technology. In Thailand, those born between 1981 and 2000 are known as Generation-Y which is the largest consumer segment in the country with a lifetime spending potential of over USD \$5 trillion. Additionally, these Generation-Y digital music consumers are also the largest owners of smartphones within the population and some of the most connected individuals on earth. This study therefore aims to identify factors and methods that affect this huge markets' decision to purchase and download digital music.

**Keywords:** *attitude, idolatry, subjective norms, perceived behavioural control, SEM*

**Introduction**

Music is one of the most potent forces shaping culture, entertainment and technology today with the worldwide digital music industry in 2014 reaching US\$6.85 billion. For the first time in history digital revenues equaled physical sales at 46% each (IFPI, 2015) with an estimated 41 million people worldwide now paying for a music subscription service, up from 28 million in 2013. The global recording industry is passing through a new transition in the fast-evolving digital market place with music streaming a key component of this growth. Music subscription services are a major driver of digital growth, sustaining a sharp upward trend in recent years. For the first half of 2015 in the US, strong growth in revenues from streaming services offset declines in digital downloads and overall wholesale revenues increased 0.8% to \$2.3 billion on a year-over-year basis while with retail sales, the overall value decreased 0.5% to \$3.2 billion (RIAA, 2015).

Music markets are moving at different speeds with diverse trends in different countries. Asia saw revenues fall by 3.6 per cent in 2014 overall but there was strong growth in South Korea (+19.2%) and some smaller markets such as China (+5.6%), Indonesia (+16.3%), and Singapore (+4.7%). Japan saw digital revenues increase by 4.9 per cent, driven by strong subscription revenues, but the total music market declined by 5.5 per cent overall. India continues to underperform, with a market decline of 10.1 per cent (IFPI, 2015).

In Thailand, studies show that Thais to be some of the most connected consumers on earth. For countless generations Thai people have embraced music as a fundamental part of everyday life with today's music consumer enjoying a wide variety of different styles, devices and services to access it. INTAGE described the new digital lifestyle in Thailand as

the '5th element' of Thai daily life (INTAGE, 2014). In Thailand, INTAGE (2014) research also reveals that neither multi-screen usage behaviour nor the number of devices one owns is determined by age or generation, but rather by *lifestyle, values, and behaviour*.

Another study titled 'Generation Y' Leads the Way on Smartphones' stated that the Generation-Y users (born between 1981 and 2000) are the most likely age group to own smartphones (eMarketer, 2013). According to the Siam Commercial Bank Economic Intelligence Center (2015), this same Generation-Y is the largest consumer segment in the country and are the biggest generation ever (unlikely to ever be surpassed) with a spending potential rivalling that of Generation-X in 2015 having a lifetime spending potential of THB 160 trillion (USD \$5 trillion).

In all this excitement about young consumers that are technologically savvy with large expendable incomes, it would seem that the digital music industry has a bright and profitable future ahead of it. Unfortunately, there are some that would disagree as historically aberrant consumer behaviour costs firms millions of pounds a year, and the Internet has provided young techno-literate consumers with a new medium to exploit businesses (Freestone & Mitchell, 2004).

Past industry observers have also attributed the decline in music sales to several factors including a lack of "blockbuster" releases, competition from other media such as computer games for younger consumers, and the availability of free music on the Internet. By 2001, an estimated 30 million American adults—29 percent of all adults—had downloaded music files over the Internet (Graziano & Rainie, 2001).

Today research by Steele (2015) states in the title of a report *If You Think Piracy Is Decreasing, You Haven't Looked at the data...* that **file-sharing in North America has grown 44% from 2008 to 2014**. The report data also shows that globally in 2015 that 6, 090 petabytes (PB) of file sharing took place each month. One PB is equivalent to 1 million gigabytes or 1.6 million CDs which represent 117 billion CDs a year, which is an amazing statistic if true.

The data from the reporting however might be held suspect as the researcher is in the business of protecting artists' rights on the internet and collecting payments from people who are file-sharing music and movies without permission. There is also the assumption in the data reporting that file-sharing and piracy are the same but there is a debate raging as to the validity of this assumption. The report however is filled with extremely detailed and interesting data and by itself could be the topic of many more studies.

The U.S. Copyright Office (2015) also put out a report in February 2015 titled, *Copyright and the Music Marketplace* where regarding piracy, the editor stated, "Unlike in the Napster era, stakeholders now seem resigned to this marketplace condition and the perhaps irreversible impact it has had on the industry." It was also stated that piracy is a continuing challenge that depresses revenues for both legal music providers and rightsholders. RIAA—which abandoned its lawsuits against individual file-sharers several years ago—observed that piracy "certainly is in the background when you talk about whether digital music services are earning enough money or paying enough money, as competing against free remains a problem."

Steele (2015) summarizes the dilemma as "First, I think those that care about distribution of media without compensation on the internet have progressed from outrage to fatigue, then to resignation, and ultimately to acceptance and its cousin, denial." Ultimately however (quoting from the American science fiction drama show 'The X-Files') "the truth is out there", and thus a reason for the proposed research.

## Literature review

### *Idolatry*

Godin (2009) argues the Internet has ended mass marketing and revived a human social unit from the distant past: tribes. Founded on shared ideas and values, tribes give ordinary people the power to lead and make big change. Godin, who as an American marketer exited from the traditional use of the word 'tribe' to describe it as "a group of people connected to one another, connected to a leader, and connected to an idea" and went on to discuss how a fan base and a special interest group have a unified interest in something or someone (Godin, 2008). A fan base has one particular common factor that draws people to that group. It could be a person (or group of persons), an event, or a product such as digital music.

### *Worshipping*

Hyatt (2014) went on to discuss the hierarchy of fandom which was listed as 1) Superfans; 2) Engaged fans' and 3) Ambient fans. Superfans are the fans who are primarily **live audience** as they attend the artists' shows regularly and buy many things being offered (not just music, such as t-shirts). They have street teams and evangelize strongly on the artists' behalf. **Engaged Fans** are the **active online audience** who are newsletter subscribers, blog readers, video watchers, RSS subscribers, active social media engagers who frequently comment and engage with the artists on Facebook, Twitter, and other sites. **Ambient Fans** are the **passive online audience** which use social media such as Twitter, Facebook, MySpace, Last.fm, etc. but don't actively communicate with the artist and may not have even listened to the artists' music yet.

Giles (2000) explained the prevalence of celebrity idolization in modern societies as direct products of mass media and communications while adolescents often revering celebrities such as pop singers and sports figures (Greene & Adams-Price, 1990). This is consistent with Chiou, Huang & Lee (2005) which stated that 'idols' can take on the form of an athlete, actor, writer, singer or music artist and Raviv, Bar-Tal, Raviv, & Ben-Horin (1996) which studied the phenomenon of adolescents' idolization of pop singers. In the study by Raviv et al. (1996) it was discovered that in the three age groups of male and females between the ages of 10-17, the intensity of idolization and its behavioral manifestations decreases with age. It was also found that girls idolize singers more than boys and are more influenced by their idols.

Further research by Chiou et al. (2005) and Wang, Chen, Yang & Farn (2009) found that Idolatry affects the attitude of the fans and their willingness to support the artists by not downloading illegal or buying pirated goods. Wang et al. (2009) further stated that with regards to idolatry, analyses revealed that idolatry moderates the relationship between the intention to illegally download music and the intention to buy music. For teenagers with high idolatry, a higher music downloading intention results in a lower buying intention. One possible explanation is the price of music CDs.

### *Modelling*

Idolization of pop singers is based mostly on two important components: worship and modeling (Raviv et al., 1996). Modeling refers to the desire to be like an idol, which may involve imitation of idolized figures by copying their dress, hairstyle, speech, activities, etc. Adoration of musical personalities, which has for many years been actively fostered by

recording companies as a marketing tool, creates an atmosphere of idolatry: feelings of religious worship directed at ordinary humans (Riversong, 2008). According to the study's research and examination of the literature, it was determined that there were 3 key manifest variants or observable variables related to *idolatry*. Many scholars have studied these manifest variants or observable variables effects on *purchasing intention* from which the researchers have synthesized the research to include *identification*, *worshipping* and *modelling* in this study (Godin, 2009; Greene & Adams-Price, 1990; Hyatt, 2014; Giles, 2000; Chiou et al., 2005; Raviv et al., 1996; Wang et al., 2009; Riversong, 2008)

## Subjective norms

### *Social Pressure*

The theory of planned behaviour (TPB) by Ajzen (1985) stated that human behavior is caused by systemic cues which was based on an earlier theory of reasoned action (TRA) by Ajzen and Fishbein (1975), which was a model for the prediction of behavioral intention, spanning predictions of attitude and predictions of behavior. According to TRA (Ajzen & Fishbein, 1975) and TPB, subjective norms and attitude are independent variables with a significant causal relationship to intention and according to research by Liao, Liu, Lu and To (2008), attitude and subjective norms were confirmed as having a very significant influence on consumers' intention of purchasing digital products. This is consistent with additional studies by Chang (1998), Shepherd and O'Keefe (1984), and Al-Rafee and Cronan (2006) which also found that subjective norms influence attitudes to purchase digital music files.

### *Strength of referents*

Wong (2008) studied the social referents that group members turn to for judgments about knowledge importance, and the extent to which the relative influence of each referent depends on the group-level social network structure. The findings indicated that group members are more likely to have shared judgments with their cohesive and structurally equivalent referents within their advice network, and the strength of social influence from their cohesive and structurally equivalent referents is likely to depend on the advice network density at the group-level. However, there was no significant association in judgment similarity between group members and their central referents within the advice network. Overall, this study suggests that while social influence (in its most straightforward form) occurs between pairs of individuals, the strength of influence of a social referent is dependent on how social cues are distributed within the group's network structure.

Personal relevance refers to how significant the attitude is for the person and relates to self-interest, social identification and value. If an attitude has a high self-interest for a person (i.e. it is held by a group the person is a member of or would like to be a member of, and is related to a person's values), it is going to be extremely important (McLeod, 2014). As a consequence, the attitude will have a very strong influence upon a person's behavior. By contrast, an attitude will not be important to a person if it does not relate in any way to their life.

### *Motivation to comply*

When examining software piracy, Eining and Christensen (1991) reported that consequences were a significant influence on an individual's behavioral intention. This is consistent with Kreie and Cronan (1999) which proposed an end-user computing model for an ethical dilemma which determined that consequences influence ethical decision-making.

Their model studied the influence of societal environment, belief system, personal values, personal environment, professional environment, legal environment, business environment, moral obligation, and awareness of consequences on an individual's decision as to the behavior, in each case, being acceptable (ethical) or unacceptable (unethical). Ultimately, the study showed that influencing factors differ by case (i.e. situation).

According to the study's research and examination of the literature, it was determined that there were 3 key manifest variants or observable variables related to *subjective norms*. Many scholars have studied these manifest variants or observable variables effects on *purchasing intention* from which the researchers have synthesized the research to include *social pressure*, *strength of referents*, and *motivation to comply* in this study (Ajzen, 1985; Ajzen & Fishbein, 1975; Liao et al., 2008; Chang, 1998; Shepherd & O'Keefe, 1984; Al-Rafee & Cronan, 2006; Wong, 2008; McLeod, 2014; Eining & Christensen, 1991; Kreie & Cronan, 1999)

### *Attitude*

An attitude is "a relatively enduring organization of beliefs, feelings, and behavioral tendencies towards socially significant objects, groups, events or symbols" (Hogg, & Vaughan, 2005). Every attitude has three components that are represented in what is called the ABC model of attitudes: A for affective, B for behavioral and C for cognitive (Ostrom, 1969), which involves a person's belief / knowledge about an attitude object. For example: "I believe snakes are evil".

### *Cognitive and Affective*

To demonstrate that people might say one thing and do another, LaPiere (1934) accompanied a young Chinese couple in their travels across the United States and recorded whether they received service in restaurants and overnight accommodation in motels, hotels, and inns. From this very early study on attitudes, it was concluded that attitudes do not always predict behavior (Ajzen & Fishbein, 2005).

Cognitive and affective components of attitudes are not necessarily expressed in behavior. There is evidence that the cognitive and affective components of behavior do not always match with behavior (McLeod, 2014). Trafimow and Finlay (1996) stated that *intentions to perform most behaviors are more controlled by attitudes than by subjective norms*. A broad definition of perceived or subjective norm is the perceived social pressure to perform or not to perform the behavior in question (Ajzen, 1991). *Yet subjective norms typically account for a significant, albeit small, proportion of unique variance in intentions and those individual differences are associated with the strength of the collective self. Thus possible reasons for the attitude to download illegal, pirated music.*

### *Behaviour*

Attitude has been found to significantly affect an individual's intention to behave ethically or unethically (Fishbein & Ajzen, 1975; Ajzen & Fishbein, 1969, 1980; Ajzen, 1989, 1991; Leonard & Cronan, 2001). Therefore, understanding the dimensions of attitude will lead to the further understanding of the influences on ethical behavior intention (Leonard & Cronan, 2005) with many research studies having found a person's gender to play a role in explaining ethical behavioral attitude and intention. Attitude therefore is considered by many to be a crucial factor in the loss or generation of revenues for the music industry. When people question someone's attitude, they refer to beliefs and feelings related to a person or event and the resulting behavior. Taken together, favorable or unfavorable evaluative reactions—whether exhibited in beliefs, feelings, or inclinations to act—define a person's attitude toward something (Olson & Zanna, 1993). Ajzen and Fishbein (1975) has a view that

attitude is a reflection of that behavior. It also processes and measures the impact of attitude. The second is the implicit like or dislike, either positive or negative. This attitude is a key factor for the determination of behavior under any theory of reasoned action.

This research has several leading theories which applies to the music business, including factors that influence attitudes and purchase intention through online channels (Cheah, Phau, Chong, & Shimul, 2015). According to the study's research and examination of the literature, it was determined that there were 3 key manifest variants or observable variables related to *attitude*. Many scholars have studied these manifest variants or observable variables effects on *purchasing intention* from which the researchers have synthesized the research to include *cognitive*, *affective*, and *behaviour* in this study (Hogg & Vaughan, 2005; Ostrom, 1969; LaPiere, 1934; Ajzen & Fishbein, 1969, 1975, 1980, 2005; McLeod, 2014; Trafimow & Finlay, 1996; Ajzen, 1991; Fishbein & Ajzen, 1975; Ajzen, 1989, 1991; Leonard & Cronan, 2001, 2005; Olson & Zanna, 1993; Cheah et al., 2015).

## Perceived behavioural control

### *Controllability*

The theory of planned behavior is an extension of the theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) made necessary by the original model's limitations in dealing with behaviors over which people have incomplete volitional control. In the discussion about perceived behavioral control, Ajzen (1991) went on to state that the importance of actual behavioral control is self-evident: The resources and opportunities available to a person must to some extent dictate the likelihood of behavioral achievement. Of greater psychological interest than actual control, however, is the perception of behavioral control and its impact on intentions and actions. Perceived behavioral control plays an important part in the theory of planned behavior. In fact, the theory of planned behavior differs from the theory of reasoned action in its addition of perceived behavioral control.

Chiou (1998) investigated whether the relative influences of attitude, subjective norm, and perceived behavioral control on consumers' purchase intentions would be different when consumers possess different levels of product knowledge (subjective and objective) and attention to social comparison information (ATSCI). The results showed that the relative importance of attitude, subjective norm, and perceived behavioral control in the prediction of intention varies when consumers possess different subjective product knowledge or social information comparison disposition. As proposed by the theory of planned behavior, consumers' purchase intentions are affected not only by their attitudes, but also by their group's influences and their own perceived control. The relative strength of effects of these three factors on consumers' purchase intentions is expected to vary across behaviors and situations.

### *Self-Efficacy*

According to Ajzen (1991), the present view of perceived behavioral control is most compatible with Bandura's concept of perceived self-efficacy which "is concerned with judgments of how well one can execute courses of action required to deal with prospective situations" (Bandura, 1982). These investigations have shown that people's behavior is strongly influenced by their confidence in their ability to perform it (i.e., by perceived behavioral control). Self-efficacy beliefs can influence choice of activities, preparation for an activity, effort expended during performance, as well as thought patterns and emotional reactions. The theory of planned behavior places the construct of self-efficacy belief or perceived behavioral control within a more general framework of the relations among beliefs, attitudes, intentions, and behavior (Ajzen, 1991).

According to the study's research and examination of the literature, it was determined that there were 2 key manifest variants or observable variables related to *perceived behavioural control*. Many scholars have studied these manifest variants or observable variables effects on *purchasing intention* from which the researchers have synthesized the research to include *controllability* and *self-efficacy* in this study (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975; Chiou, 1998; Bandura, 1982; Ajzen, 1991).

## **Purchasing intention**

### *Likelihood of purchase*

According to the 2015 Digital Music Report (IFPI, 2015) the global recording industry is passing through a new transition in the fast-evolving digital marketplace. The key features of this evolution, driven by consumers, are the rapid growth of music streaming; a marked diversity of revenue streams and trends from one country to another and a continued evolution from traditional models of music ownership to the new fast-growing model of music access. From the study, key findings showed:

- The industry's digital revenues in 2014 increased 6.9% to \$6.85 billion
- In 2014, for the first time, the industry derived the same proportion of revenues from digital channels (46%) as physical format sales (46%).
- Revenues from music subscription revenues now make up 23% of digital revenues globally, up from only 18% in 2013.
- An estimated 41 million people worldwide now pay for a music subscription service, up from 28 million in 2013.

In research by Giletti (2012) on streaming, downloading and digital music consumption, it was stated that the rise in popularity of online download stores such as iTunes and streaming services has been a major factor in this music segment's growth. At the same time, rights holders have attempted to re-commodify a product that has been de-commodified through copyright infringement. Drawing from the theory of planned behavior, the study placed emphasis on the role of norms and attitudes in the formation of intentions to either purchase music or download it for free with the results indicating that a large portion of consumers are willing to pay for digital music but they are not encouraged by the threat of legal repercussions. The youngest consumers hold favorable attitudes towards illegal downloading which is grounded in a norm of copyright infringement and belief in the Internet as free. Finally, it was found that affinity for the recording artist serves to moderate intentions to download illegally.

### **Recommendation**

This is consistent with Ostrom and Lacobucci (1995) which stated that consumer satisfaction and repeated purchase intention have different structures. There are two dimensions in consumer satisfaction, cognitive and affective while repeated purchase intention has the additional dimension of behavior. Normally, consumers will make a repeat purchase when the purchased product or service works well or has the required qualities. Price is also an influential as it must be reasonable and consistent with the provided service and quality (Barsky & Labagh, 1992).

According to the study's research and examination of the literature, it was determined that there were 2 key manifest variants or observable variables related to *purchasing intention*. Many scholars have studied these manifest variants or observable variables effects on *purchasing intention* from which the researchers have synthesized the research to include

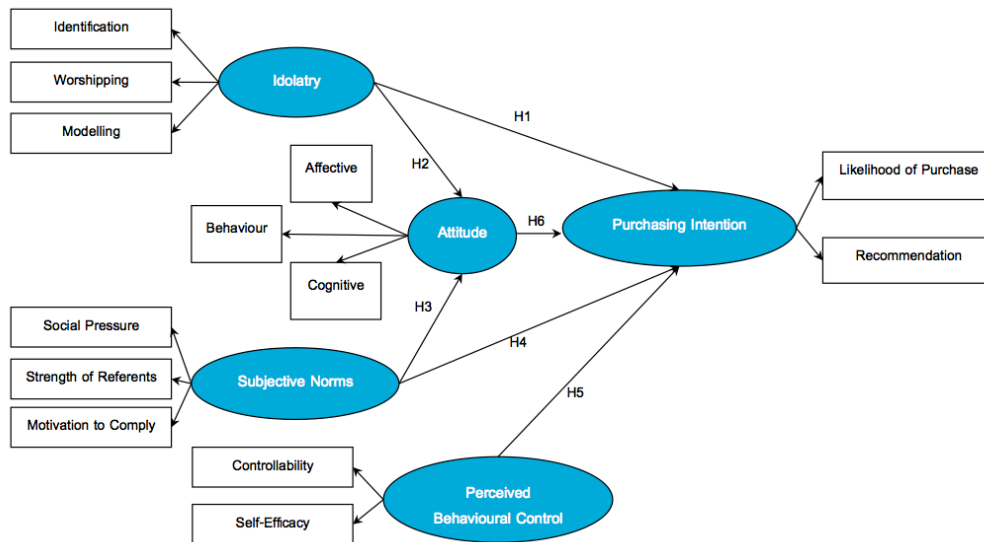
likelihood of purchase and recommendation in this study (IFP1, 2015; Giletti, 2012; [Ostrom & Lacobucci, 1995](#); [Barsky & Labagh, 1992](#)).

From the above conceptual review and development, the researchers have developed the following six hypotheses for the study:

PROPOSED RESEARCH HYPOTHESES MODEL

- H1: *Idolatry* has a direct influence on *Purchasing Intention*
- H2: *Idolatry* has a direct influence on *Attitude*
- H3: *Subjective Norms* has a direct influence on *Attitude*
- H4: *Subjective Norms* has a direct influence on *Purchasing Intention*
- H5 :*Perceived Behavioural Control* has a direct influence on *Purchasing Intention*
- H6 :*Attitude* has a direct influence on *Purchasing Intention*

PROPOSED CONCEPTUAL MODEL



**Methodology**

This research aims to model the structure of the factors that influence the willingness of ‘Y-Generation’ Thais to buy music in digital form. The researchers have therefore set out to determine the details and procedures of the methods as follows:

*Data Collection and Analysis*

For this research the researchers will use both quantitative and qualitative research from both primary and secondary data. The researchers will use the following steps for the study:

*Study of Secondary Data*

Secondary data will be comprised of published research, internet materials, media reports, and data which will be synthesized and analyzed. This secondary data will also be used for the development of the 13 variables and the structural equation model in understanding the variables that effect purchasing intention by Y-Generation digital music users.



### *The Quantitative Research*

Quantitative research will be performed from the primary data by collecting a questionnaire from the target sample of Thai 'Y' generation digital music users. The questionnaire used to collect the data will be structured and written in a realistic, easy-to-understand format which is deemed to be reliable and reasonable. The measurement instrument or questionnaires will utilize a 5-Point Likert Scale (Likert, 1972) as a tool for research. Further reliability validation will be undertaken as follows:

1. The review of the questionnaire will be conducted by 5 experts in their fields to validate the investigation questions and the use of rhetoric and the simplicity and comprehension of the questions.
2. During the question trial period, the questions will undergo a continual rigorous review and inspection for their clarity and ability to meet the objectives of the research.
3. Improvement of the questions for clarity and comprehension will be undertaken when there are any problems during the trial period.
4. Data collection and statistical analysis will be performed.

### *The Qualitative Research*

Qualitative research involves confirming the model of the quantitative research and for this research will be a collection of interviews with industry professionals involved in the music industry including 1 music industry executive, 1 label executive, 1 digital music download manager and 2 music industry scholars.

### *The Sample Size*

Schumaker and Lomax (2010) stated that structural equation modeling (SEM) uses a variety of models to show the relationships between observed variables with the goal being of providing a quantitative test of a theoretical model. The models developed using SEM can be tested to show how sets of variables define concepts and how they are related. The goal of SEM is to determine the extent to which the model is supported by the data that is gathered during research (Schumaker & Lomax, 2010) and since SEM is capable of statistically modeling and testing complex phenomena, it has therefore become the preferred method for confirming (or not) theoretical models, quantitatively.

Another very important consideration is the intended sample size with most authors recommending a sample size of at least 100 for good results generation (Schumaker & Lomax, 2010; Cunningham, 2008; Weston & Gore, 2006; Worthington & Whittaker, 2006). Meldrum (2010) further stated that a sample size smaller than 100 should not be used in SEM as it is unreliable. Therefore, based on the 13 variables of the model and with the use of a 20:1 ratio which is deemed to be highly reliable, a minimum of 260 Thai 'Y' generation digital music users are anticipated for the survey.

### *Research Tools*

Quality and content will be monitored with tools used in the research and as a measurement of quality. Both content validity and reliability will be assured by the 5 listed experts above in their respective fields with an evaluation index consistent with the content and the purpose of the research. Additionally, the index of Item-Objective Congruence (IOC) developed by [Rovinelli and Hambleton \(1977\)](#) will be employed to carry out the screening of questions to a group of 10 initially in the pilot study.

The IOC is a procedure used in test development for evaluating content validity at the item development stage. This measure is limited to the assessment of unidimensional items or items that measure specified composites of skills. The method prescribed by [Rovinelli and Hambleton \(1977\)](#) results in indices of item congruence in which experts rate the match between an item and several constructs assuming that the item taps only one of the constructs which is unbeknownst to the experts. The research will then proceed to select items that have an IOC index higher than 0.5, which will be considered acceptable.

#### *Data Analysis*

Descriptive statistics are used to describe the basic features of the data in a study which provides simple summaries about the sample and the measures and form the basis of virtually every quantitative analysis of data (Subong, 2005). For the proposed structural equation modeling, an analysis will be conducted on the frequency, percentage, mean and standard deviation as appropriate to determine the relationship of the factors that influence the purchasing intention of digital music by Thai Y-Generation consumers.

#### *Qualitative Data Analysis*

To confirm the results of the quantitative analysis, the researchers will conduct interviews with those involved with innovation and business management in the digital music industry and then to proceed to interpret the qualitative information.

#### **Conclusion**

From the literature review, it has been established that the intent to purchase digital music occurs because of consumers' idolatry and modeling of their music idols. Furthermore, due to subjective norms factors which influence others such as friends and family, the intent to purchase is also enforced. These two variables are speculated to have a direct and positive influence on the intent to purchase digital music by Generation-Y Thais. It should also affect the attitude, the intermediate variable that affects their willingness to purchase digital music.

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## CUSTOMERS' PERCEPTION OF TECHNOLOGY-ENABLED BANKING SERVICES IN INDIA

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### Abstract

Technology has the potential to provide the financial services at affordable cost to ensure the inclusive growth of the nation. It connects the unbanked section with the mainstream banking system. However, various studies in the past have focused on the factors that affect the acceptance of internet banking among customers. But very limited numbers of studies trace out the customers' perspective of technology-enabled banking services on an overall basis. The present study makes an effort to develop our understanding of the customers' inclination towards technology-enabled banking services. The main aspiration of the study is to come up with a first view of consumers' incisiveness of modern financial services delivery channels. The findings highlight the significant influence of age, occupation, income, education, availability of computer and internet facility on their usage of technology-enabled banking services. The research sheds light on different factors that encourage or discourage the respondents' use of technology-enabled services. For this purpose the data from a sample of 337 Indian bank customers was collected through a self-administered questionnaire. The results establish that perceived ease of use, convenience and accessibility, prior experience of customers with technology are the factors that influence the customers' perception regarding acceptability of modern financial services delivery channels.

**Keywords:** *Banking technology, Internet, Banking services, Customers' perception.*

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### Introduction

Since the last decade, the Indian banking industry has been demonstrating massive transformation owing to rapid technological advancements. These technological advancements have removed all the barriers in the way of introducing new products and services. Technology enabled financial services have potential to bank the unbanked masses at least possible cost. The financial institutions and banks are taking these advancements as a tool to outreach the underserved section of the society. Traditional financial services delivery channels are accompanied with these new technology-enabled services like ATM, mobile banking, internet banking, telephone banking, and electronic fund transfer (EFT) etc. to make a gradual change in the whole scenario. The cost of each transaction is reduced approximately to \$0.27 from \$1.07 (Nath et al., 2001). Technology-enabled distribution channels are not only significant in reducing the cost of transaction but also in retaining the existing customers (Ramayah et al., 2003).

According to the Global Findex database 2014, the bank account penetration is increased from 35% to 53% during last four years in India but at the same time the dormancy rate is also very high with 43%. This figure brings light to the fact that most of the account holders are holding an account just for the sake of formality. On practical ground they are disconnected from the mainstream banking system. At this point of time there is a dire need to

sketch out the customer's opinion towards technology-enabled banking services delivery channels. The present study is an attempt to ascertain the factors influencing the customers' attitude and perception towards technology-enabled banking services through extensive literature review and self-administered questionnaire. In developing economies, due to the presence of various resistant factors the acceptance rate is really low. There is a dire need for the collaboration among bank managers and IT managers to ensure the successful framing and implementation of IT strategies in developing countries (Aladwani 2001; Mahdi and Dowson, 2007). Customers hesitate to adopt these new products and services either due to the limited resources or lack of knowledge. The perception of consumers from developing countries towards new financial services delivery channels deserves special attention of researchers, academicians and policy makers. This paper explores the customers' perception by shedding light on the overall incisiveness measured on the basis of extensive literature review and questionnaire designed. Literature review helped in framing questionnaire covering the factors that encourage and discourage the consumers' adoption of innovative services and identifying the variables measuring demographic and attitudinal attributes of users and nonusers.

With a brief discussion about the role of banking technology in accessing the unbanked, the paper moves to the literature review section. The various core research papers were analysed to determine the factors influencing the customer's attitude and perception towards technological advancements in the banking sector. With the purpose to gain a deeper insight into the matter, literature measuring the banker's opinion regarding technology-enabled banking services is also explored. Next section of the paper presents research objective and research methodology followed by an analysis of the findings. Finally, the results are presented and paper concludes with details of major findings.

## **Literature review**

Banking has undergone tremendous changes due to the technological interventions in the industry. In banking sector technology is considered as a key driver of internal changes (Jayawardhena and Foley, 2000). Over the next decade, technology is expected to have a great impact on banking sector (Bednar et. al., 1995). The new financial services delivery channels are gaining attention of researchers, academicians and policy makers these days. Technology is playing a pivotal role in banking the unbanked. It becomes possible to provide banking services at the bottom of the pyramid through technology. An extensive literature is available on technological interventions in banking sector. On the basis of review, the recent literature is classified into three sections namely: changes influenced by IT in banking sector, customers' attributes and technology-enabled services, bankers' approach to technology-enabled banking services.

### *Changes influenced by IT in banking sector*

Traditional banking model was concerned with providing banking services to the consumers at bank branches only. Traditional banking model which was based on relationship establishment is facing a change in competition structure by offering internet based products and services. New financial services delivery channels have made it possible for community banks to expand the area of operations and markets (Acharya et al. 2006). Structural changes in retail banking industry are the result of growth of technological knowledge in the system. Changing regulatory framework and technological interventions have resulted into more competitive retail banking market (Consoli, 2005). Bank customer relationship has taken a new definition in lieu of personal contact with the customers. Put succinctly, Technology-enabled services have developed 'virtual relationship' between bank and customers (Harden, 2002).

Financial institutions are able to provide better services through technology-enabled delivery channels at lesser cost. An extensive research undertaken on the preferences of customers for financial services distribution channels have reported that modern technology enabled channels can provide the improved services at lesser cost. Howcroft et al. (2002) conducted a study on UK customers and reported that a mix of delivery channels is more preferable to the consumers than depending upon a single channel. Modern financial services delivery channels have significantly reduced the cost of transactions. Nath et al. (2001) observed with the introduction of new channel like ATM the transaction cost is reduced to \$0.27 from \$1.07. Jayawardhena and Foley (2000) reported the benefits of technology-enabled banking services to the banks as development of non-core businesses, reduced cost, increased customer base.

#### *Customers' attributes and Technology-enabled services*

Literature suggests that the attitude and perception towards a particular product or service are expected to develop over time and gets affected by various factors. Initially, researchers (Filotto et al., 1997; Davies et al., 1996; Rugimbana, 1995; Moutinho and Smith, 2000) focused on consumers' adoption of automated teller machines (ATM). Later on, the concern of researchers was shifted to exploring the potential of telephone banking (Howcroft et al., 2002) and PC banking (Mols, 1998; Hitt and Frei, 2002). Recent studies concentrates on investigating the consumers' adoption of internet banking and other technology-enabled banking services (e.g., Jo Black et al., 2001; Karjaluoto et al., 2002; Ramayah et al., 2003; Ibrahim et al., 2006; Singh and Kaur, 2013; Murari and Tater, 2014; Harris et al., 2016). Using 12 attitudinal attributes of consumers related to electronic banking Akinci et al. (2004) defined three groups of consumers namely: "speed seekers", "cautious users" and "exposed users". In the same line McPhail and Fogarty (2004) identified three groups of mature Australian consumers, on the basis of their frequency of using self-service technologies like ATMs, telephone banking, internet banking, and electronic fund transfer. These were "Users", "Med-High users" and "Non-users". Barczak et al. (1997) conducted a study in USA and shed light on the motives of consumers for using technology based banking services. They asserted that four motivational groups could be formed on the basis of attitude and behaviours of consumers towards banking innovations namely: "Security conscious", "Maximisers", "Instant gratification".

In UK Howcroft et al. (2002) found that lower fees and improved level of services are the most significant factors affecting the consumer attitude towards internet banking. However, recommendations by family, friends or newspaper are least important factors. Karjaluoto et al. (2002) added that consumers' demographics, prior experience of computer and technology, personal banking experience, reference group influence affect the consumer adoption of on-line banking and technology enabled services. Lee (2009) conducted a study on UK consumers, and reported that perceived risk which constitutes performance risk, social risk, financial risk, time risk and physical risk was the most resistant factor to adopt online banking.

He further argued that perceived benefit and usefulness were considerable factors positively affecting consumers' intention to use online banking. The parallel findings were reported by Ramayah et al. (2003) who conducted a study on receptiveness of internet banking by Malaysian customers and concluded that perceived ease of use and perceived usefulness are the significant variables explaining the consumers' intention to use technology-enabled banking services. Similarly, Wentzel et al. (2013) highlighted lack of education and knowledge about products & services, people's trust in technology enabled services as the resistant factors in adopting technology-enabled services in South Africa. In case of India,



Kaushik&Rehman (2015) asserted that perceived risk factor owing to the lack of knowledge about the availability& usefulness of self service banking technologies restrain customers to adopt technology-enabled services.Using the case of USA, Harris et al. (2016) emphasised the impact of age factor on consumer technology acceptance in banking sector. They asserted that young consumers prefer technology based services whereas older consumers show high value preposition for physical based banking. They further added that not only cognitive declines but cohortdifferences also have a significant impact on technology usage.

In another study in UK, Moutinho& Smith (2000) found that ease of banking and convenience were the predominant expectations of established bank customers. Laukkanen (2007) who compared the customers' value perception for internet and mobile banking and asserted that worth mentioning differences between the customer value perception for internet and mobile banking are concerned with location free service and display of device. Usability of devices and services is predominant for customers to make use of technology enabled services. Saythe (1999) inferred that in Australia, consumer intention to adopt internet banking is affected by variables like: ease of use, awareness of service, availability of infrastructure, resistance to change and system's insecurity. Lichtenstein et al., (2006) found that perception of convenience is important quality attribute rather than fear of security issue among Australian consumers. Apart from that the study observed the need for interactive and immediate support by banks to the consumers for making them familiar with technology enabled banking services. Singh and Kaur (2013) added that when it comes to talk about the customers' satisfaction towards e-banking services the predominant factors are: ease of use, reliability, convenient accessibility, security, low transaction cost and the time consumption.

#### *Bankers' approach to technology-enabled banking services*

Extensive research has already been done to investigate the customers' attitude and perception towards internet banking or innovative delivery channels. But there is paucity of studies determining the banks and bank managers' view on internet banking, EFTPOS(Electronic Fund Transfer Point of Sale), ATM etc. Using the case of US, Nath et al. (2001) asserted that internet banking was in its initial stage and a significant number of banks believed that their survival relies on offering internet base innovative services to the customers. In the same line Harden (2002) concluded that high street banks in UK were forced to introduce modern financial services delivery channels in order to face the competition. He further propounded that technology had redefined the nature of relationship between bank and customers and had become diluted. In another study, Malhotra and Singh (2007) conducted a study on commercial sector banks in India to investigate the determinants of internet banking adoption by banks. They argued that banks with low branch intensity, higher deposits, and private ownership were highly inclined towards adoption of new delivery channels to enhance their market share.

Based on the experience of USA, Acharya et al. (2006) claimed that traditional community banks were facing competition from large national banks due to the introduction of internet based banking services. The community banks were compelled to offer internet based products and services to take the competitive edge. Aladwani (2001) shed light on the drivers, expectations and development challenges of adopting online banking in Kuwait. He asserted that lack of internet specialists, change in internet technologies and top management support were the main issues to the development of online banking in Kuwait. In another study, Jayawardhena and Foley (2000) found that banks realised the immediate need to offer innovative products and services to consumers in order to satisfy the need of the consumers, get a competitive edge and to address the demands placed upon supply chains. Similarly, factor like perceived ease of use, social pressure, and national culture was considered as predominant factor to motivate bankers to use microcomputers in Nigeria (Anandarajan,

2000). Parallel to this, in a recent study Murari and Tater (2014) looked at the advantages of information technology for banks. These were: increased customer satisfaction, improved operational efficiency, reduced transaction time, and facilitating competitive edge in reducing the running cost by quick responses in delivery of services.

Table1: Summary of literature

Theme	Author/Year	Type of study	Source of data	Country	Focus area
Changes influenced by information technology in banking sector	<ul style="list-style-type: none"> <li>Morisi (1996)</li> </ul>	Theoretical	-----	USA	The author suggested that computer technology is essential to reduce the cost and take a competitive edge in the market. Technology has allowed the banks to provide more services with lesser employees.
	<ul style="list-style-type: none"> <li>Jayawardhena and Foley (2000)</li> </ul>	Theoretical	Banks' website	UK	The author opined that banking sector is subject to various internal and external forces in UK. Internet in particular is the key driver of internal changes that are taking place e.g. changes in delivery strategies of banks.
	<ul style="list-style-type: none"> <li>Consoli (2005)</li> </ul>	Theoretical	-----	UK	Research indicates that growth of technological knowledge in

					the system contribute to the structural changes in the banking industry in UK.
	<ul style="list-style-type: none"> <li>Acharya, Kagan, Sobol&amp;Kodepaka (2006)</li> </ul>	Empirical	Bank managers	USA	Technological interventions in banking industry have resulted into substantial increase in level of competition. At the same time, the use of internet has opened up new options for community banks in terms of products offered.
Customers' attributes & Technology-enabled services	<ul style="list-style-type: none"> <li>Barczak et al.(1997)</li> </ul>	Empirical	Bank customers	USA	Defines three groups of consumers on the basis of the motives of consumers about technology-enabled banking services namely: "Security Conscious", "Maximisers", and "Instant Gratification".
	<ul style="list-style-type: none"> <li>Saythe (1999)</li> </ul>	Empirical	Bank customers	Australia	Security concern and lack of awareness were defined as major hurdles in the

					way of adopting internet banking. Facilitating financial services over internet is suggested to be the part of customer service and distribution strategy.
<ul style="list-style-type: none"> <li>• Moutinho and Smith(2000)</li> </ul>	Empirical	Bank customers	UK	The study emphasised the importance of customers' perceptual outcomes while analysing the customers' satisfaction towards human and technology based financial services delivery channels. Ease of banking and convenience were reported as major expectation of customers.	
<ul style="list-style-type: none"> <li>• Howcroft et al.(2002)</li> </ul>	Empirical	Bank customers	UK	The author inferred that financial service consumers are not homogeneous in terms of their attitude towards online banking. Their attitude differs	

					as per the demographic and socio-economic profile. Lower fees and improved service quality are most influencing factors affecting the attitude of customers positively.
<ul style="list-style-type: none"> <li>• Karjaluoto et al.(2002)</li> </ul>	Empirical	Bank customers	Finland	The study provides evidence that online banking provides cheap, fast and easy services to the customers. It emphasise that prior experience with computer, technology and personal banking has an impact on customer's attitude towards internet based banking.	
<ul style="list-style-type: none"> <li>• Ramayaha et al.(2003)</li> </ul>	Empirical	Bank customers	Malaysia	Prior experience and external pressure were reported as external pressures influencing the consumers' intension. Perceived	

					usefulness was considered to be the better driver of intention to use internet banking instead of perceived ease of use.
	<ul style="list-style-type: none"> <li>Akinci (2004)</li> </ul>	Empirical	Bank customers	Turkey	The study brings light on the factors affecting the customers' adoption of internet banking. Three groups of customers are defined on the basis of their perception namely speed seekers, caution users, exposed users.
	<ul style="list-style-type: none"> <li>McPhail and Fogarty (2004)</li> </ul>	Empirical	University staff	Australia	The study explored the three segments of mature consumers' namely non users, low users and medium to high users. The non-users show innovation resistance which can be addressed by putting efforts and time. Users have tendency of discontinuance from one to

					another innovative technology enabled service.
	<ul style="list-style-type: none"> <li>Linchtenstein at al. (2006)</li> </ul>	Empirical	Bank customers	Australia	The study propound that convenience in terms of time saving is the main dominating factor influencing the customers attitude towards internet based banking services. The risk acceptance of the customers in Australia has gradually increased and they prefer convenience over risk and security issues.
	<ul style="list-style-type: none"> <li>Laukkanen (2007)</li> </ul>	Empirical	Bank customers	Finland	The study explored the various components of customer value perception for mobile banking and internet banking. It found that the customer don't prefer to rely upon single delivery channels but a mix of these channels.

	<ul style="list-style-type: none"> <li>• Lee (2008)</li> </ul>	Empirical	Bank customers	Taiwan	<p>The paper highlighted that demographic and socio-economic factors have a significant impact on willingness of customers to adopt technology enabled services. Perceived benefit, perceived usefulness and attitude have positive impact on intention to adopt technology.</p>
	<ul style="list-style-type: none"> <li>• Wentzel et al.(2013)</li> </ul>	Empirical	Bank customers	South Africa	<p>Author proposed an extended TAM model consisting of additional constructs: social factors, self- efficacy, fun, trust and task. Attitude was reported as the most important factor in the model followed by perceived ease of use on the flip side social factors and self-efficacy were least important factors.</p>



	<ul style="list-style-type: none"> <li>Harris et al. (2016)</li> </ul>	Empirical	Bank customers	USA	<p>The study sheds light on the impact of age factor on technology acceptance in banking sector. The paper concludes that young consumers are more comfortable with technology based services whereas older consumers show high value proposition for physical based banking.</p>
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**Objectives of the study**

The main aim of the study is to come up with the first view of customers’ incisiveness of modern financial services delivery channels. The study makes an effort to develop an understanding of the customers’ inclination towards technology enabled banking services. In particular, present study concentrates on:

- Identifying the factors that encourage and discourage the respondent’s use of technology enabled banking services.
- Understanding the impact of the demographic profile on customers’ perception regarding whether technology has made it easy for customers to access banking services or complicates it further.

**Research methodology**

The present study is based on primary data. A well-structured questionnaire was used to understand the perception of consumers towards technology enabled banking services and their preferences for different service delivery channels. The questionnaire was designed after an extensive review of the related literature (e.g., Ramayah et al., 2003; Poon, 2007; Nyangosi et al., 2009; among others). The data was collected through paper-based questionnaire as well as online survey questionnaire. For pilot testing, the questionnaire was forwarded to a group of 20 respondents through ‘Google forms’ and adequate changes were incorporated. Ambiguous statements were eliminated and some new variables were introduced after conducting reliability analysis. The questionnaire was administered to 380 consumers from the states of Punjab, Haryana and U.T. Chandigarh (India) during June-August 2016. 337

usable questionnaires were received (response rate of 88.68%), out of which 103 were collected through the online survey (Google forms) and 234 through paper-based questionnaire. Convenience- judgement sampling was used to select the respondents. The sample units were asked to mark their opinion regarding various statements on a five-point Likert scale ranging from 5-strongly agree to 1- strongly disagree. Negatively worded statements were reversely coded (Malhotra, 2004). To analyse the data statistical packages for social sciences (SPSS) 16.0 version was used.

### Sample profile

The sample for the study comprises the respondents (aged 18 years & above), who were using the technology enabled financial services. As the Table 2 depicts, majority of the respondents were male (60.5%). It is worth mentioning that predominant age group in the sample belong to 21-30 years (48%) and 31-40 years (24%), collectively comprises 72% of the total sample, as young people are more open to technological advancements and are more tech-savvy. Apart from that Table 2 shows that 53.4% customers were service class with moderate annual income (44%). Proportionally large chunk of respondents (76.8%) were highly educated with graduation degree or above.

Table 2: Demographics of the sample

Demographic characteristics	Respondent frequency	% frequency
<u>Gender</u>		
Male	204	60.5%
Female	133	39.5%
Total	337	100%
<u>Age</u>		
18-20 Years	20	5.9%
21-30 Years	162	48%
31-40 Years	81	24%
41-50 Years	47	13.9%
>50 Years	27	8%
Total	337	100%
<u>Occupation</u>		
Business/consultant/self-employed	41	12.2%
Service	180	53.4%
Student	86	25.5%
Home maker	19	5.6%
Agriculturalist	11	3.3%
Total	337	100%
<u>Annual Income</u>		
<2 lakh	108	32%
2-5 lakhs	150	44%
5-8 lakhs	62	18.4%
>8 lakhs	17	5%
Total	337	100%
<u>Education</u>		
Metric & above	18	5.3%
Senior secondary	60	17.8%

Graduate	112	33.2%
Post graduate	110	32.6%
Doctorate and above	37	11%
Total	337	100%
<u>Ownership of IT products</u>		
Computer/Laptop	266	78.9%
Internet	261	77.4%
Mobile phone	307	91.1%

### Analysis of findings

To analyse the impact of the demographic profile of the respondents on their perception regarding ability to utilize the technology-enabled banking services, one-way analysis of variance (ANOVA) technique is employed. The findings are presented in the table 3 below. The table clearly depicts that age, occupation, income level, education, availability of computer/laptop and internet is having a significant impact on the adoption rate. As young people are tech savvy and they are open to adapt new technologies. Consumers with high-income level are more likely to have the positive attitude towards technology enabled banking services (Howcroft et al., 2003; Lassar et al., 2005, Worthington, 2007). The educated people perceive it easier to use modern financial services delivery channels rather than the traditional banking system. With the availability of computer and internet, the likelihood of understanding and adopting the technology enabled services tends to increase. The parallel findings were reported by Zeffane and Cheek (1993), Poon (2008). On the flip side, gender and availability of mobile phones are insignificant factors; it means that gender and access to mobile phones does not make much difference in the opinion of the customers regarding technology acceptance.

Table 3: Relationship of demographic profile and perception

Items	F-value	Significance
Gender	2.308	0.130
Age	22.37	0.000*
Occupation	11.46	0.000*
Income	5.099	0.002*
Education	16.584	0.000*
Mobile phone availability	1.410	0.236
Computer/laptop availability	12.083	0.001*
Internet availability	17.642	0.000*

Note: \* denotes significance at  $p < 0.05$

### Factor analysis

To analyse the perception of the consumers that whether the technology has made it easy to access and operate the bank account or complicates it further, factor analysis technique of data reduction is used to come up with a significant factors. The respondents were asked to mark their opinion regarding the nine statements on a five-point Likert scale ranging from strongly agree (5) to strongly disagree (1).

### Reliability and validity of scale

Before applying the factor analysis on the set of data reliability of the whole scale is measured with the widely used measure of internal consistency i.e. Cronbach's alpha. The acceptable level of internal consistency is  $>0.70$  (Malhotra, 2004). The overall Cronbach's alpha of the 9 statements came out to be 0.731, which indicates the adequate internal consistency. The questionnaire was designed after an extensive review of related literature which certifies the content validity of the scale.

KMO test is used to measure the sample adequacy, the value greater than 0.50 is highly desirable. As the Table 4 depicts, the value of KMO came out to be 0.799 which shows that the sample is sufficiently enough for factor analysis. Bartlett's test is significant ( $P < 0.05$ ), which implies that there is a significant correlation between the variables.

Table 4: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.799
Bartlett's Test of Sphericity	Approx. Chi-Square	797.921
	Df	36
	Sig.	.000

Rotation of the factors was done with Varimax rotation method. The rotated component matrix makes the analysis and interpretation of the results much easier. The table reflects the values greater than 0.50 as the set criteria. The total variance explained by the three extracted factors was 61.72%. The three factors and their factor loading are displayed in Table 5 below.

Table 5: Extracted factors and the related variables

Factor	Statement	Factor loading
Ease of use	I feel confident of using electronic banking method for accessing my account.	0.880
	It is easy to understand and operate.	0.870
	I understand the functioning of computer, internet and mobile phone.	0.857
	Through technology it becomes possible to get complete control of account.	0.589
Convenience and	It is highly convenient to	0.830

accessibility	access banking services from anywhere.	
	Internet, computers and mobile phones are easily availability all the time.	0.610
	Technology enabled services are faster than traditional banking services.	0.578
Prior experience of technology	Due to limited knowledge ** about technology the chances of occurring an error are so high.	0.933

Note: \*\* statement negatively worded so reverse coding was done

In order to analyse the effectiveness of different financial services delivery channels, Friedman test was employed. The respondents were asked to rank six financial service delivery channels in such a way that the most preferred channel is to be assigned 1 and least preferred as 6. After using Friedman test on the set of data, the value of  $\chi^2$  came out to be 733.68 (p= 0.000). The result shows that respondents have a significant difference in their opinion about preferences for different service delivery channels.

As Table 6 shows ATM was the most preferred delivery channel and internet banking came at the second position after that Mobile banking was the third preference of respondents. Face to Face banking was the fourth preference of consumers which shows that consumers are more inclined towards the technology enabled banking services. Respondents found telephone banking and PC banking as the least preferred mode of accessing their bank account.

Table 6: Mean ranks of customers' preferences for financial services delivery channels

Delivery channels	Mean Rank
ATM	1.72
Telephone banking	4.77
PC banking	4.60
Face to face banking	3.83
Internet banking	2.57
Mobile banking	3.51

Factors that encourage and discourage the respondents' use of technology enabled banking services

With the purpose to get a clearer insight into the customers' attitude towards different financial services delivery channels, the factors that encourage and discourage the customers' use of technology enabled banking services were further investigated. The responses were analysed using Kendall's coefficient of concordance (W), to trace out that whether there is a significant difference in the frequencies.

Table 7: Mean ranks of the frequency of factors encouraging customers to use technology enabled banking.

Statements	Mean Rank
Lower fee	3.36
7days & 24 hours banking is possible through technology	3.54
Easy to get instant feedback of transactions	3.24
Friends and relatives encourage to use electronic banking channels	2.09
Using ATM, Internet banking improves social esteem	2.77

While analysing the factors encouraging the use of technology enabled banking services, the value of  $\chi^2$  came out to be 244.08 ( $p=0.000$ ) and Kendall's statistic (W) was 0.181. This shows a very low degree of association. It means customers perceived that all the factors are not equally important in encouraging the use of technology enabled banking services. Table 7 shows the mean ranks of the factors which encourage the use of technology enabled banking. 24 hours availability of banking services and lower fees were reported as the most encouraging factors closely followed by instant feedback of transactions. The least important factor that encourages the use was influence of family and friends (Howcroft et al., 2003).

Table 8: Mean ranks of the frequency of factors discouraging customers to use technology enabled banking.

Statements	Mean Rank
Security issue	4.29
Chances of occurring an error	3.03
Lack of internet facility and other essential technical equipment	3.38
Difficult to understand new technologies and procedures	2.78
Absence of face to face contact	3.48

Statements	Mean Rank
Security issue	4.29
Chances of occurring an error	3.03
Lack of internet facility and other essential technical equipment	3.38
Difficult to understand new technologies and procedures	2.78
Absence of face to face contact	3.48
Lack of training programs to educate the people	4.05

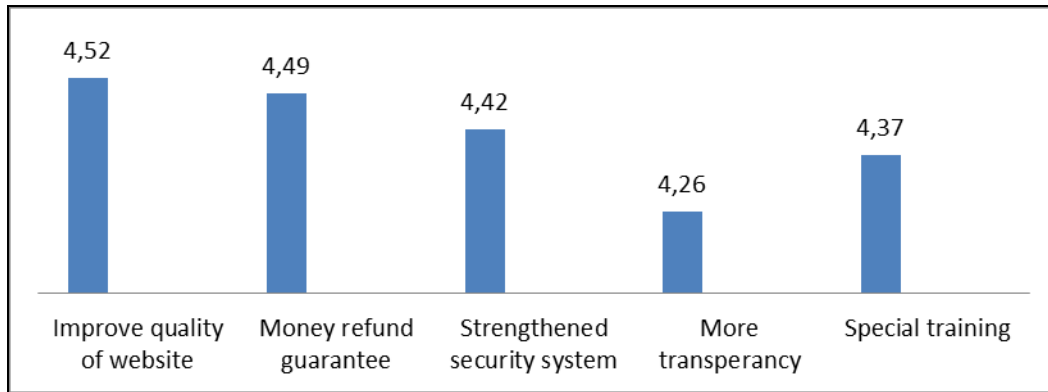
The Kendall's statistic (W) came out to be very low (0.130) and the value of  $\chi^2$  was 219.75 (p=0.000). Put it simply, there is significant differences in the opinion of customers regarding the different sort of problems being faced while using technology enabled banking. As Table 8 shows security issue and absence of face to face contact were reported as the most important concerns by the respondents closely followed by lack of internet facility and other essential equipment. However, more chances of occurring an error and difficulty in understanding new technologies and procedures were reported as the least important discouraging factors.

Table 9: Suggestions to build trust towards technology-enabled banking services

Suggestions	Mean Rank
Banks should improve the quality of its website	4.52
Money refund guarantee should be provided in case of fraud	4.49
Security system must be more strengthened	4.42
More transparency in transactions conducted with online traders must be provided	4.26
Special training should be provided to the customers about precautions while conducting a transaction through modern delivery channels	4.37

The above findings clearly depict the significance of technology in banking industry. The high inclination of customers towards technology enabled financial services makes it clear that the future of banking industry is strongly associated with technology. However, the developing trust of consumers towards the technology based banking system is the major concern. In the present study an effort was made to trace out the major concerns while adopting technology enabled services. The findings clearly show that consumers suggested improving the quality of the website and providing money refund guarantee in case of any fraud (Table 9).

Figure 1: Building trust towards technology enabled bank services



Consumers strongly believe in strengthening the security system of the banks. However, various efforts have been already done by the banking industry in India but still there is a need to strengthen the security system to reduce the frequency of frauds. Banks in India should impart regular special training sessions to encourage the use of technology enabled banking services. It was observed during study that most of the people felt hesitated to use the modern delivery channels due to the lack of knowledge and lack of prior experience with the technology.

### Managerial implications of the study

The results of the study will be extremely useful to the banks while framing policies and understanding the opinion of customers about technology enabled banking services. The study provides clear insights on the factors that matter for customers in India while using modern financial services delivery channels. The bank account penetration in India is increased from 35% to 53% during last four years but at the same time the dormancy rate is also very high with 43%(Global Findex Database 2014). This figure brings light to the fact that there is a great scope for making use of technology-enabled banking services to connect the unbanked section with the mainstream banking system.

Further, three main factors are identified in the study explaining that whether technology has made it easy or complicate the procedures for customers. The findings provide evidence that the perception of the consumers regarding the use of modern financial service delivery channels is not identical. The study highlights the need for understanding the different requirements of customers as per their demographic profile i.e. age, income and education. In the present study a significant relationship is observed between the demographic profile and perception of respondents regarding the use of modern financial service delivery channels. The study reported that the consumers, who are young, educated, and having high income find it easier to operate the account electronically. The old age and less educated consumers with low income find it hard to understand and operate the account electronically due to the lack of prior experience with the technology.

Ease of use is the most important factor that matters to the customers while using electronic banking. The bank managers and IT managers should focus on simplifying the procedures and improving the quality of the website so that, the customers with least or no prior experience can deal with the procedures confidently. The operating process should be more user-friendly and easy to understand. As the present study reports that 92.2% of the respondents owned mobile phones, banks should work in collaboration with mobile and telecommunication companies to connect the unbanked masses with the mainstream banking system.



## Conclusion

The outcomes of the study provide strong evidence to support the notion that banks should strengthen the security system to build the trust of customers towards technology-enabled banking services. Special training programmes should be initiated to educate the people about how to make use of these services. Majority of less educated and low income bank customers in India have pre-conceived notion that technology enabled banking services are difficult to understand (internet banking, mobile banking etc.) and less secure. In most of the cases the use of modern delivery channels is confined to the ATM only. There is a need to inculcate the confidence among people to use other technology enabled banking services also like internet banking, mobile banking and personal computer banking etc. IT managers in the banking sector should concentrate on simplifying the procedures and designing the websites keeping in view the requirement of different segments of customers.

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## EXPLORATION OF FACTORS HINDERING THE GROWTH OF 3PL MARKET IN SRI LANKA

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### Abstract

With the globalization of businesses and the consequent competitive pressures, all the companies are trying to deliver customized products all over the world quickly and on time. This has placed a number of demands on the logistics systems. While today world logistic industry is practicing up to 7PL, within a short span of time, Sri Lanka is still grappling with 3PL activities. Therefore, the intention of this research is to identify the challengers, barriers / factors hindering the growth of 3PL market in Sri Lanka to facilitate the growth of the industry to meet the world competition. According to the findings, customers are quite happy about their 3PL providers, but they are not highly satisfied as well as any high trust to the 3PL providers. Costs, lack of control, lack of coordination, lack of corporation are the main issues respectively that affect the growth of 3PL market in Sri Lanka. Inadequate capabilities are also a one of the problems. Lack of control and lack of coordination are the significant factors that diminish the satisfaction of customers and lack of control is the only significant factor that diminishes the trust of customers. Minimizing lead time between deliveries, adoption of new technology, handling no. of order channels multiplied by the number of delivery options and handling overstocks due to online sales, and adoption of new technology are considered as the future challengers in 3PL market in Sri Lanka.

**Key Words:** *logistics, 3PL, satisfaction, trust, hindering issues*

### Introduction

Over the last decades, the activity of logistics has tremendously evolved (Aldebert and Hudziak, 2012). Logistics is defined as: “a part of supply chain management that plans, implements, and controls the efficient, effective forward and reverses flow and storage of goods, services and related information between the point of origin and the point of consumption in order to meet customer's requirements.”(CSCMP, 2015). “Logistics management activities typically include inbound and outbound transportation management, fleet management, warehousing, materials handling, order fulfillment, logistics network design, inventory management, supply/demand planning, and management of third party logistics services providers” (CSCMP, 2015). It is widely accepted that the outsourcing of logistics services aims at enabling the creation of strategic and operational value such as inventory and logistics cost reduction, order fill rate and accuracy increase, and order cycle time reduction (Langley and Capgemini, 2010). For these reasons a majority of shippers, 64%, are increasingly using Third Party Logistics (3PLs) (Aldebert and Hudziak, 2012). According to the Council of Supply Chain Management professionals, Third Party Logistics (3PL) is defined as "a firm provides multiple logistics services for use by customers. Preferably, these services are integrated, or bundled together, by the provider. (Manzini et al, 2007). “Lying on a key East-West trade route and set close to India, Sri Lanka possesses the essential location advantage needed for it to develop into a key logistics hub in South Asia. Despite being a small economy, with a total trade amounting to about US\$31 billion in 2014

(Only 4% of India's US\$778 billion), the island state is an important transshipment hub in the region. It is a site where many shipping companies consolidate and deconsolidate cargo for transshipping to other destinations" (HKTDC, 2015). "World Shipping Council statistics show that the Port of Colombo, Sri Lanka's major container port on the west coast was the busiest port in South Asia in 2013, handling 4.31 million TEUs. This puts it ahead of India's largest container port, Jawaharlal Nehru (4.12 million TEUs in 2013). In the first 11 months of 2014, the Port of Colombo reported a steady growth of 4% in container traffic, according to the Sri Lanka Ports Authority (SLPA). Notably, transshipment volume grew far faster than domestic cargo business during the period, accounting for more than 75% of total container throughput" (HKTDC, 2015). But, while today world logistics industry is practicing 4PL, 5PL, and collaboration up to 7PL, within a short span of time, Sri Lanka is still grappling with 3PL, JIT (Just in Time), and VMI (Vendor Managed Inventory). Therefore, it is an essential requirement to identify the challengers, barriers / factors hindering the growth of 3PL market in Sri Lanka to facilitate the growth of the industry to meet the world competition. Further the objectives of the research are as follows:

- a. To measure the satisfaction, and trust levels of 3PL customers and suppliers in Sri Lanka.
- b. To identify existing hindering issues of 3PL market in Sri Lanka.
- c. To understand the most significant hindering issues and its' impact that diminish the satisfaction and trust of customers in 3PL market in Sri Lanka.
- d. To identify the future challengers faced by 3PL market in Sri Lanka.

## **Literature review**

### *Customer Satisfaction*

Customer satisfaction is defined as customer's overall or global judgment regarding the extent to which product or service performance matches expectations (Stank et al. 1999; Anderson and Sullivan, 1993). Customer satisfaction should be develop and maintain because customer satisfaction helps to reduce perceived risk, reduce transactions costs, increase customer loyalty and customer retention and thus impact on organizational performance (Bejou et al. 1996).

A global logistics study conducted by CGEY (2003), found that customers are satisfy with their 3PL providers and responded positively when questioned as to their intended use of 3PLs over the next 3 to 5 years(Langley, 2003). Chinese customers also showed high level of satisfaction on their logistics outsourced services (Huang, 2003). In a survey conducted in the Singaporean logistics industry found that over three-quarters (76.3%), of the users indicated that their firm's commitment to the contract services concept was moderate or extensive, while the remaining users indicated that their firms' commitment was limited or very limited. (Bhatnagar et.al.1999).

According to Gattorna, Ogulin, Selen (2004), customer satisfaction with LSPs is statistically significantly influenced by; having a signed contract with the LSP ( negatively impacted on customer satisfaction), concerns of customer quality provided by the LSP, and uncertainty about cultural fit of the organization with the LSP. Further according to their findings the most important explanatory variables were obstacles rated as important in implementing LSP services, such as coordination and integration between the company and the LSP, and LSP having insufficient understanding about the company's operations. Both factors rated negatively in terms of customer satisfaction.

### *Trust*

“Trust is a set of specific beliefs dealing mainly with the integrity (Trustee honesty and promise keeping), benevolence (trustee caring and motivation to act in the truster’s interest), competence (trustee’s ability to do what the truster needs) and predictability (trustee’s behavioral consistency) of a particular vendor” (Gefen et al. (1999, 2003)). According to Chenet et al. (2000), trust can be developed by having a good internal service quality within organizations and it plays a key role within service provision and is considered important in building relationships. Trust is considered to be of significant importance, not only for building relationships but also to maintain the relationships (Lagace 1991, Morgan and Hunt 1994, Oakes 1990). Termination of relationships is a loss for both parties. Hence, organizations purposely give attention and invest resources in building trust Ghijssen, Semeijn, and Wang, (2009).

### *Hindering Issues*

The design and implementation of 3PL relations appears to be problematic. Often-cited difficulties include lack of understanding of client’s supply chain needs (lack of coordination), lack of adequate expertise in specific products and markets, unrealistic customer expectations (lack of cooperation), inadequate description of services and service levels (lack of coordination), lack of logistics cost awareness by the client (cost) and lack of 3PL innovation (Ackerman, 1996; Ellram and Cooper, 1990; Wilding and Juriado, 2004).

The most often-cited problems are associated with 3PL partnerships are loss of control over the logistics function and loss of in-house capability and customer contact (Ellram and Cooper, 1990). Lack of responsiveness to customer needs is also cited as a problem of outsourcing (van, and Van, 1996). Further, many authors cite problems with respect to service performance, disruption to inbound flows, inadequate provider expertise, inadequate employee quality, sustained time and effort spent on logistics, loss of customer feedback and inability of 3PL providers to deal with special product needs and emergency circumstances (Ellram and Cooper, 1990; Gibson and Cook, 2001; Sink and Langley, 1997; Svensson, 2001; Van L., et al., 2000). Despite gaining access to logistics information systems (Rao et al., 1993), shippers appear to be dissatisfied with service provider’s IT capabilities and prefer to rely on in-house systems instead (Van L., et al., 2000).

### *Future Challengers*

Gupta, Singh and Suri, (2015) identified challenges faced by 3PL market in India as; Non industry status, The infrastructural bottlenecks, Behavioral complexities, Poor quality of logistics operations, Inefficient inspection Strategies, Increasing globalization, Low rate of technology adoption, and Skill Shortages. Zhang (2006) identified Poor infrastructure, Regulation issues and Finding qualified staff are as challenges in 3PL market in China. Further, Langley et. al. (2015), in the 19th annual third-party logistics study identified handling no. of order channels multiplied by the number of delivery options due to online sales, handling overstocks due to returned goods in online sales, minimizing lead time between deliveries, adoption of new technology are as future challenges in 3PL market.

## **Methodology**

The population of the study is considered as organizations those who are taking 3PL services in Sri Lanka. Sampling unit was taken as the respective managers of 3PL customer organizations. In order to select the respondents of Customers, Snowball sampling technique was used in this research study. In snowball sampling, 3PL companies were asked to identify their customers belong to the target population of interest. Fifty customers were taken as the

sample since, similar studies has used somewhat similar sample size in their studies. For an example; Ghijsen, Semeijn, and Wang, (2009) has used 76 valid questionnaires for their study. For the purpose of measuring satisfaction level, trust level, and to identifying hindering factors affecting the growth of 3PL market in Sri Lanka (In collecting quantitative primary data.), a standard questionnaire was used as the instrument. Before collecting data from the sample, a pre test was conducted using 10 respondents. This pre test was developed to discover any possible weaknesses in the questionnaire.

Consequently, in the final questionnaire, the researcher tried to eliminate the drawbacks identified in the pretest. The researcher conducted face to face interviews for the purpose of collecting qualitative primary data. Qualitative data was noted down and later the common wordings were listed by the researcher to interpret the explanations given by the respondents. In order to measure satisfaction, and trust measurements used by Ghijsen, Semeijn and Wang (2009) were used in this research. Lack of coordination was measured according to Gattorna, Ogulin and Selen (2004), Lack of cooperation was measured according to Lau and Zhang (2006), Cost of outsourcing was measured according to Jennings (2002), Inadequate capabilities of 3PL companies was measured according to Lau & Zhang (2006) Loss of control was measured according to Blumberg (1998), Lonsdale and Cox (2000), Embleton and Wright (1998) and Beaumont and Sohal (2004).

All the above dimensions of the study were measured in a 5-point Likert scale (1=strongly agree, 5=strongly disagree). As well as an open ended question was included to identify the specific factors hindering the growth of 3PL market in Sri Lankan context and to look into the factors in detail, in-depth interviews were conducted. The challengers identified in the literature review were given to respondents and asked to identify the challenges relevant to the Sri Lankan context and an open ended question was included in the questionnaire to identify any other challengers face by 3PL market in Sri Lanka. In addition to that, in order to explore the factors in detail, in-depth interviews were conducted. Further validity and reliability tests were conducted and removed the items which factor loading values are lower than 0.7.

### **Analysis and results**

In order to identify the levels of satisfaction, trust and hindering issues, mean values of the constructs were calculated. Then stepwise liner regression test was conducted to know the impact of hindering factors affecting the growth of 3PL market in Sri Lanka on satisfaction and trust. According to the Table 4.1, customers are quite happy about their 3PL providers because mean values are above the average. But they are not highly satisfied as well as no high trust and loyalty to the 3PL providers.

Table 4.1 - Mean Values of Satisfaction and Trust

	<b>Satisfaction</b>	<b>Trust</b>	
Mean	3.5946	3.390	
	50	50	
Std. Deviation	.35233	.5234	

Table 4.2 explains the mean values of the hindering issues that affect the growth of 3PL market in Sri Lanka. Mean values of Cost (X3), Lack of control (X5), Lack of coordination (X1), Lack of cooperation (X2) are above the average and therefore, these factors are the main issues respectively that affect the growth of 3PL market in Sri Lanka. The mean value of the inadequate capabilities (X4) is also at an average level.

Table 4.2- Mean values of the hindering issues

	X1	X2	X3	X4	X5
Mean	2.82	2.69	3.07	2.47	2.82
N	50	50	50	50	50
Std. Devi.	.69	.70	1.09	.826	.69

Further, according to the in depth interviews conducted with the customers, High labor turnover and high training cost, Lack of skills and knowledge, Lack of Industrial knowledge. Labor Unions (Trade union activities) and Political influences were identified as hindering issues that affect the growth of 3PL market in Sri Lanka. To identify the impact of hindering issues on satisfaction and Trust, step wise Liner regression analysis was conducted. According to Table 4.3 two models were extracted and the adjusted R square is strong in both models. Further, according to Table 4.4, both models are significant. Therefore, second model was considered as it has the highest adjusted R square.

Table 4.3- Model Summary (Customers satisfaction)

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. Error
1	.824 <sup>a</sup>	.679	.672	.20
2	.842 <sup>b</sup>	.709	.696	.19

a. Predictors: (Constant), lack. Control

b. Predictors: (Constant), lack. Control, lack. cooperation

According to the analysis lack of control and lack of cooperation are the significant factors ( $p < 0.05$ ) that diminish the satisfaction of customers in 3PL market in Sri Lanka. Lack of coordination, cost and inadequate capabilities have been excluded from the model since those variables are not significant ( $p > 0.05$ ).



Table 4.4 Significance of the models- customers' satisfaction

	Model	df	Mean Square	F	Sig.
1	Regression	1	4.12	101.31	.000 <sup>b</sup>
	Residual	48	.04		
	Total	49			
2	Regression	2	2.15	57.17	.000 <sup>c</sup>
	Residual	47	.03		
	Total	49			

a. Dependent Variable: satisfaction

b. Predictors: (Constant), lack. Control

Therefore following equation can be derived;  
Satisfaction = 5.194- 0.470 LC- 0.101 LCO  
LC= Lack of Control  
LCO= Lack of Corporation

According to the above equation of satisfaction, 5.194 is the constant of the equation. While holding lack of cooperation as constant, when lack of control increases by one unit, satisfaction will decrease by 0.47 units on average. As well as, while holding lack of control constant, when lack of cooperation increases by one unit, satisfaction will decrease by 0.101units on average. Lack of control and lack of corporation are the two main reasons affecting the satisfaction and both factors negatively affect the satisfaction.

Next, in order to identify the impact of hindering issues on customers trust, step wise regression analysis was conducted.

Table 4. 5 Model summary- Trust

Model	R	R <sup>2</sup>	Adj.R <sup>2</sup>	Std. Error
1	.895 <sup>a</sup>	.802	.797	.23

a. Predictors: (Constant), lack. control

According to Table 4.5, adjusted R square is strong in the extracted model . Further, the model is significant.

According to the analysis, lack of control is the only significant factors ( $p < 0.05$ ) that diminish the trust of customers in 3PL market in Sri Lanka. Lack of coordination, lack of cooperation, cost and inadequate capabilities have been excluded from the model since those factors are not significant ( $p > 0.05$ ).

Therefore following equation can be derived;

$$\text{Trust} = 5.295 - 0.674 \text{ LC}$$

LC= Lack of Control

According to the above equation of trust, 5.295 is the constant of the equation. When, lack of control increases by one unit, trust will be decreased by 0.67 units on average. Lack of control is the main reason affecting the trust and there is a negative impact from lack of control on trust.

According to the qualitative and quantitative data of the study, future challengers of the 3PL market in Sri Lanka was identified as; minimizing lead time between deliveries, adoption of new technology, handling number of order channels multiplied by the number of delivery options due to online sales according to the customers' point of view.

## **Conclusion**

### *Key findings*

In Sri Lanka, Customers of the 3PL companies are also quite happy about 3PL service providers. But the level of satisfaction, and trust towards the service providers are not considerably high. Further, Cost, lack of Control, Lack of coordination and lack of cooperation respectively were identified as main issues in 3PL market in Sri Lanka according to the customers' point of view. These findings are supported by the findings of previous research studies such as Ackerman, 1996; Ellram and Cooper, 1990; Wilding and Juriado, 2004. In addition to that, inadequate capabilities are also an area has to be considered and to pay attention. Ellram and Cooper, 1990; Gibson and Cook, 2001; Sink and Langley, 1997; Svensson, 2001; van Laarhoven et al., 2000 also identified this as one of the main issues in 3PL industry. High labour turnover and high training cost, Lack of skills and knowledge, Lack of industrial knowledge, Labour unions (Trade union activities) and Political influences also identified as problematic areas according to the qualitative study.

Apart from that, Lack of control and lack of coordination are the significant factors affecting the customer satisfaction. Lack of control is the only significant factor that diminishes the trust of customers in 3PL market in Sri Lanka. Minimize lead time between delivers, adaptation of new technology, handling number of order channels multiplied by the number of delivery options due to online sales are considered by the customers as the future challenges in 3PL market in Sri Lanka. The similar future challengers were identified in the 19th annual third-party logistics study as well.

### *Theoretical Implications*

The hindering factors for the growth of 3PL markets are somewhat common across the globe. But, according to the qualitative study of this research, it was able to identify few exceptional factors that hinder the growth of 3PL market in Sri Lanka. High labour turnover and high training cost, lack of skills and knowledge, lack of industrial knowledge, labour unions (Trade union activities) and political influences also identified as main problematic areas in addition to the general hindering issues common to the globe.

### *Managerial Implications*

The findings of the research are highly important to the decision makers in the industry. Especially providers of 3PL companies can implement necessary changes to provide a better service in order to make customers satisfy. High labour turnover and high training cost, lack of skills and knowledge, lack of industrial knowledge are few issues that providers can manage. According to the discussions had with customers, many trainees are hired for the jobs at less payment by the suppliers and they are not given proper training about the overall business performances of the organization. Therefore, by recruiting permanent employees to the companies and developing them and keeping them in the organization while rotating their jobs will help to enhance the level of business performances as well as to make customers satisfy about their services. Lack of coordination, lack of cooperation, lack of control can be addressed by employing well trained customer relationship managers both in customer organizations and provider organizations.

### *Further Research*

The rise of e-commerce has been impressive in the past decade. Its influence as a driving force of change in logistics is undeniable both within companies and within supply chains. It is therefore surprising that little attention has been paid to investigate and assess direct as well as indirect implications of e-commerce for Third party logistics industry. Hence, the influence of e-commerce and related information and communication technology (ICT) developments on third party logistics industry can take other paths that deserve further exploration. In addition to that lack of control was identified as one of the problems in 3PL industry. Therefore, further research could also address how managerial and balance of power issues are handled where both a 3PL and an in-house department manage logistics.

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**MODERATING EFFECT OF COMPETITIVE INTENSITY ON THE  
RELATIONSHIP BETWEEN KNOWLEDGE MANAGEMENT AND CUSTOMER  
SATISFACTION AMONG SELECTED HOTELS**

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**Abstract**

Customer satisfaction is deemed to be critical for all businesses. Knowledge Management (KM) has been regarded as an antecedent of customer satisfaction. The main objective of this study was to empirically test the moderating effect of competitive intensity on the relationship between KM and customer satisfaction among selected hotels in Kenya. The study employed explanatory research design and sampled 330 respondents. Respondents were selected using cluster sampling combined with simple random. Primary data was collected using a structured questionnaire. Hierarchical linear regression was used to test the research hypotheses. The results revealed a positive and significant effect on the relationship between KM and customer satisfaction. Additionally, competitive intensity had a significant moderating effect on the same relationship albeit negative. The study concludes that KM is an important determinant of customer satisfaction. The study recommends that hotel management should pursue to incorporate diverse KM practices in a competitive environment to enhance customer satisfaction.

**Key words:** *Customer Satisfaction, Knowledge Management, Competitive Intensity, Hotels*

**Introduction**

Customer satisfaction is one of the most important factors affecting service management, due to the influence of customer satisfaction on repeat purchases and word-of-mouth recommendations, customer satisfaction is deemed to be critical for all businesses (Yuksel and Yuksel, 2002). In this fast and dynamic environment, service providers can maintain their competitive advantage by delivering high quality services to their customers (Hu *et al.*, 2009). Satisfied customers can bring plenty of other advantages for the service providers as a ripple effect including loyalty to service provider, engagement in positive word-of-mouth promotion and paying premium prices (Amin *et al.*, 2013; Dominici and Guzzo, 2010; Kim and Lee, 2010; Ryu and Han, 2010). Therefore, customer satisfaction has caught considerable attention from the academicians and the practitioners (Hu *et al.*, 2009). The importance of customer satisfaction has been highlighted by many researchers and academicians all around the world. Satisfaction is an overall customer attitude or behavior towards a service provider or an emotional reaction towards the difference between what customers expect and what they receive regarding the fulfillment of some desire and goal (Hansemark and Albinson, 2004; Hoyer and MacInnis, 2001). The importance of customer satisfaction is paramount as it greatly influences customers' repurchases whereas dissatisfaction is seen as a primary reason for customers' intention to switch. Satisfied customers more likely share their experiences with other people around them.

KM has been regarded an antecedent of customer satisfaction (Emadzade *et al.*, 2012), which in turn results in customer retention (Zack *et al.*, 2009). Many firms consider that to act with efficacy in today's economy, it is imperative for them to become a knowledge-based organization. In this global economy, knowledge is the "king" (Garud and Kumaraswamy, 2002), and maybe that is the biggest competitive advantage of them all (Davenport and

Prusak, 2000). Organizations recognize KM as one of the major contributors of increase in their value and therefore they review their Customer Relationship Management (CRM) initiatives (Croteau and Li, 2003) to use in-depth and integrated KM for creating collective relationships with their customers (Boulding *et al.*, 2005; Croteau and Li, 2003; Parvatiyar and Sheth, 2001). With arrival of knowledge-based economy those organizations which successfully recognize, build and enhance their KM will be more successful and are considered as knowledge-enabled organizations (Rowley, 1999). These organizations segment their markets not only based on their products and services but also based on the amount of knowledge they can acquire from their customers (Zack, 2003).

KM is a great mechanism to customer support (Roy, 2013). It is a major driving force behind knowledge creation, development and growth for the benefits of quality improvement as well as a fundamental factor for an enterprise's success (Wiig, 2006). Boljanovic and Stankovic (2012) implied that KM is about acquiring knowledge with aim of achieving business goals and guarantee on the knowledge accessibility in the future. Ragab and Arisha (2013) and O'Dell *et al.* (1998) stated that KM is a strategy where the right knowledge is transferred to the right people at the right time which can help in putting up and sharing of the information for the purpose of enhancing customer satisfaction leading to improved performance. However studies on KM and customer satisfaction are limited in hotel industry.

To extend the literature further, this study tested the moderating effect of competitive intensity on KM and customer satisfaction relationship. Under conditions of increasing competition, predictability and certainty of an organization's performance diminishes. Therefore, amidst today's highly competitive environment, for a firm to achieve enhanced performance (customer satisfaction), it must continuously scan the environment in which it operates (Punpugdee, 2005). Porter (2004) noted that industries where the market has been largely saturated, companies realize they must compete intensely for those customers that are in the market. This means that firms must work to enhance loyalty as competitors work hard to "steal" customers. A firm's performance and survival are determined by the speed at which the firm develops knowledge-based competencies. Knowledge and intellectual capital are considered among the firm's knowledge-based competencies and, according to Nonaka (1994), the major competitive advantage of a firm lies in its knowledge. Firms competing in the knowledge-based economy can sustain their competitive advantage by harnessing their own unique knowledge and building their capability to learn faster than their competitors (Grant, 1996; Prusak, 2001). KM was conceptualized using the information reciprocity, information capture and information use as defined by Jayachandran (2005).

As Kenya focuses to be industrialized by 2030, research foresees the hotel industry as one of the sectors that will contribute greatly to the industrialization (Schulz and Omweri, 2012), the hotel industry has seen customer satisfaction as a key marketing tactic in differentiating itself from its competitors and therefore a heightened understanding of a guest preference and total worth will enhance a guest experience and maximize hotel revenue. The decline in world tourism has grossly affected hotel sales and posed a threat to hotel operators because Kenyan hotels largely depend on the International Tourism Market (Oketch *et al.*, 2010). Akama (2007) argues that in Kenya, there has been a declining income from agriculture and manufacturing sectors. As a result, Kenya has turned her attention to tourism as an intervention to the numerous economic problems, hence the need to improve on organization changes in hospitality industry. However, little attention has been paid to investigating how to improve customer satisfaction by enhancing KM, thus increasing customer retention in the hotel industry. Despite extensive research on KM and its consequences, there seem to lack empirical research examining these variables in the context of star rated hotels. In filling the gap, this study hypothesized that;

- Ho<sub>1a</sub>: Information reciprocity does not significantly affect customer satisfaction of selected hotels in Kenya
- Ho<sub>1b</sub>: Information capture does not significantly affect customer satisfaction of selected hotels in Kenya
- Ho<sub>1c</sub>: Information use does not significantly affect customer satisfaction of selected hotels in Kenya
- Ho<sub>2</sub>: Competitive intensity does not significantly moderate the relationship between KM and customer satisfaction of selected hotels in Kenya

### **Theoretical Framework**

The study will be guided by Resource- Based View (RBV) developed by Barney (1991). Since Knowledge based resource is “the essence of resource based perspective”, (Conner and Prahalad 1996). According to RBV, firms perform well and create value when they implement strategies that exploit their internal resources and capabilities. The theory suggests that knowledge is an organizational asset that enables sustainable competitive advantage in hyper-competitive environments. Resource-based theorists consider intellectual capital to be a firm's strategic resource. KM processes, including knowledge acquisition, knowledge conversion and knowledge application, were used in the study to enhance firm performance through customer satisfaction and to sustain competitive advantages. KM in firms is considered as the most strategically significant resource of the firm (Desouza and Awazu, 2006). This view considers a firm to be a "distributed knowledge system" composed of knowledge-holding employees, and this view holds that the firm's role is to coordinate the work of those employees so that they can create knowledge and value for the firm (Thorburn, 2000). Thus, resource based theory is deemed suitable in studying on KM on customer satisfaction moderated by competitive intensity.

### **Literature Review**

#### **1. Knowledge Management and Customer Satisfaction**

The current century is the era of knowledge economy, in which most firms possess knowledge that allows them to enhance customer satisfaction leading to firm performance. The Business Directory defines Knowledge Management (KM) as strategies and processes designed to identify, capture, structure, value, leverage and share an organization's intellectual assets to enhance its performance and competitiveness. It is based on capturing and documentation of individual explicit and tacit knowledge and its dissemination within the organization. Additionally, (Ngai *et al.*, 2009; Greve and Albers, 2006; Reinartz *et al.*, 2004) define KM as the study of the lifetime stages of customer relationship namely; initiation, maintenance, retention and termination. Further, Filemon and Uriarte (2008) defined KM as the broad process of locating, organizing, transferring, and using the information and expertise within an organization. These valuable information can be gathered through interactions with customers or from different touch points within the organization (Brohman *et al.*, 2003).

Growth and globalization, together with recent advances in information technology, have led to many firms to introduce sophisticated KM systems in order to create sustainable competitive advantage and thus enhance performance (Ofek and Sarvary, 2001). Furthermore, a rising number of management academicians and practitioners have asserted that KM now constitutes a key source of competitive advantage for organizations (Nahapiet and Ghosha, 1998; Teece, 1998). Brown and Duguid, (1998) and Grant, (1996) posits that this knowledge-based view of the firm of generating, establishing and using knowledge assets are the principles of firm activities. The efficiency in what they do in relation to competition determines their performance. Adhering to this advice, many organizations have launched key



KM programs. Needless to say that KM has become a significant subject (Dyer, 2000). Additionally, Zaied *et al.* (2012) investigated the role of KM in enhancing performance of some Egyptian organizations and found a significant relationship. Conversely, Kuo-Chung and Chin-Shan (2012) empirical study on the impact of CRM on firm performance in the context freight forwarder services results revealed that KM application on firms' financial performance was not supported. However, few studies have investigated the impact of KM dimension in the context of CRM (Jayachandran *et al.*, 2005; Lo, *et al.*, 2010) and more specifically its role in the hospitality context (Hallin and Marnburg, 2008; Shaw and William, 2009). This study seeks to examine how KM dimensions are likely to influence customer satisfaction coupled with the moderating effect of competitive intensity on that relationship.

## 2. Competitive Intensity

As competitiveness intensifies, Auh and Menguc (2005) proposes that the outcomes of a firm's performance will no longer be deterministic but stochastic as the performance is greatly influenced by the actions assumed by competitors. Consequently, predictability and certainty lessens as conditions of competitive intensity increases. When competition is minimal, firms can operate with their existing systems to fully capitalize on predictability of their own performance (Zuniga-Vicente and Vicente-Lorente, 2006). Further, Jaworski and Kohli (1993) indicate that when competition is low, companies can perform well without being market-oriented since customers do not have several alternatives to please their requirement. A company that is not market-oriented may loss its customers to competitors. Therefore, when competitive intensity increases, firms will have to adjust accordingly. In retaliation to competition, firms will have to employ risk-taking and proactive activities of bold learning and assessment to break out of price or promotion wars. This is corroborated by Zahra (1993), "when rivalry is fierce, companies must innovate both products and processes, explore new markets, find novel ways to compete and examine how they will differentiate themselves from competitor."

The hotel industry like any business sector, has to be highly competitive to be able to do well in the business environment. Subsequently, hotels use different methods to differentiate themselves from their competitors. The lower classified hotels identify themselves as offering "value for money" to their guests. The medium classified hotels focus more on the quality of products for example guest rooms, restaurants and location of the hotel. The high classified hotels differentiate themselves by offering superior products and customized services (Lo *et al.*, 2010). Largely, the moderating effect of competitive intensity is still unclear. On one hand, it may have a positive impact as it provides companies with creativeness and opportunities (Jermias, 2006). While on the other hand, it may reduce the positive impact of the innovative practices on performance due to the associated risk of failure (Garcia-Zamora *et al.*, 2013). Competitive intensity was measured using the six items scale adopted from Khandwalla (1972) and Jaworski and Kohli (1993) measures. Managers were asked to respond to the six items of: competition is cut-throat; there are many service promotion wars; competition for market share is intense; price competition is intense; there is a new competitor every day; competitors are relatively weak on a five-point scale.

## 3. Material and Methods

The survey was conducted among hotels in selected regions in Kenya with the main justification being that most classified hotel enterprises are well established. This study in line with positivism approach, which seeks to use existing theory to develop hypotheses that are tested and confirmed wholly, in part, or otherwise refuted leading to further development of theory to be tested with further research. This study employed an explanatory survey research design as it sought to describe and establish associations among key study variables. The target population was hotels listed as members of Kenya Association of Hotelkeepers and

Caterers (KAHC Directory 2014). Cluster and simple random sampling technique was used to select 136 hotels from the target population of 210 hotels in Kenya. Additionally, the study used multiple informants where three managers from each hotel were picked. The study mostly used primary data collected using questionnaire. For the purpose of determining the reliability of this study, Cronbach's alpha test was conducted on all the scales, using a 0.70 cut-off point. The study results indicated that the minimum required Alpha values of 0.70 were exceeded in all the cases, signifying that the instrument used was reliable. Data analysis was conducted using both descriptive and inferential statistics. Descriptive analysis was done using mean and standard deviation. The study hypotheses were tested in two stages using multiple regression analysis as modeled by Barron and Kenny (1986) where the significant level was set at 0.05. The null hypotheses were either rejected at  $p < 0.05$  level, or fail to reject at  $p > 0.05$  level.

### Analysis and Findings

The study assessed the distribution of KM along the various control variables (firm characteristics) which included; firm size, age, star rating, and ownership. The study used ANOVA to show the statistical differences of means among the firms' categories. This preliminary assessment was used to show the relevance of the demographic information (in categorical form) by comparing with the study variables, that is, KM. Managing knowledge effectively can greatly help an organization to have success in building better customer relationship leading to customer satisfaction which ultimately improves firm performance. The highest mean was evident with firms having between 301-400 employees (mean=4.57) and the lowest was that of firms having over 400 employees (mean=4.15). The relationship between KM and firm size was significant ( $F=6.007$ ;  $p < 0.05$ ). This infers that large firms are likely to have higher level of KM as compared to smaller firms. In relation to KM and firm age, the findings are statistically significant at  $p < 0.05$  level. The highest mean (mean=4.38) was realized by hotels that have operated for over 20 years. Such hotels have gathered useful information about their customers overtime hence they are able to satisfy their customers more effectively. Further, findings on KM and star rating showed that there was higher KM in 4 Star hotels (mean=4.3; S.D=0.49) and low KM in three star hotel (mean=3.96; S.D=0.47). There was significant difference of KM among different hotel classifications as supported by F value 14.01;  $p < 0.05$ ). This infers that the high star rated hotels possess higher level of KM. Consequently, the study can argue that levels of KM in hotels will depend on star rating. Further, findings in Table 1 revealed that the different levels of KM in hotels depends on hotel ownership (foreign ownership mean = 4.46; S.D=0.45, local ownership mean=4.20; S.D=0.49, family ownership mean = 4.04, S.D=0.05). The difference was statistically significant ( $F$  value=14.63;  $p < 0.05$ ). See Table I below.

**Table I Knowledge Management against Control Variables**

		N	M	SD	ANOVA (F value)	Sig.
Firm Size	1-100	164	4.19	0.45	6.007	0.000
	101-200	82	4.31	0.43		
	201-300	42	4.36	0.44		
	301-400	35	4.57	0.4		
	Above 400	7	4.15	0.43		
	Total	330	4.28	0.45		
Firm Age	1-5 years	82	4.33	0.43	4.015	0.003
	6-10 years	62	4.26	0.45		

	11-15 years	46	4.19	0.44		
	16-20 years	36	4.07	0.45		
	Over 20 years	104	4.38	0.45		
	Total	330	4.28	0.45		
Star Rating	3 star	81	3.96	0.464	14.011	0.000
	4 star	143	4.35	0.492		
	5 star	72	4.31	0.461		
	Other	34	4.05	0.447		
	Total	330	4.21	0.502		
Ownership	Foreign	69	4.46	0.454	14.63	0.000
	Local	176	4.2	0.489		
	Family	85	4.03	0.489		
	Total	330	4.21	0.502		

### 1. Descriptive Statistics of Study Constructs

KM consisted of seventeen items reflecting on KM practices. Managers were asked to provide information concerning their view towards KM practices in their hotels. Mean scale for the above items ranges from 4.59 – 4.09. This implies that KM is highly valued by hotels as they emphasize on developing strategies and processes designed to identify, capture, structure, value, leverage and share a firm’s intellectual assets to enhance customer satisfaction and competitiveness. The mean score for customer satisfaction ranges from 4.26 – 4.15 (Table 2). This infers that majority of the hotels experience better customers satisfaction each succeeding year, over the previous three years as compared to rivalry. Additionally, findings revealed that hotel competitors do not appear relatively weak ( $M=3.95$ ;  $SD=0.53$ ). This implies that competitive intensity was high among firms, that is, the business competitive environment that hotels are operating in is hostile. Exploratory Factor Analysis (EFA) was carried out to confirm the constructs underlying the data. Sample adequacy for each scale was tested using Kaiser-Meyer- Olkin (KMO). KMO of sampling adequacy value was calculated to predict if the data would likely factor well and if the sample was adequate for factor analysis. According to Hair *et al.* (2006) values  $>0.5$  are considered adequate for good factor analysis. The results revealed that all scales had values greater than the recommended 0.5 expect two items that provided blank spaces and were therefore excluded. (KMO for KM – 0.891; CI – 0.664; CS – 0.679) (Table II).

Table II Descriptive Analysis Results for variables

N=330	Mean	S.D	Loading	KMO	Cumu %
KM	4.21	0.5		0.891	52.626
We use customer information to customize our offers	4.54	0.539	0.646		
We use customer information to identify our best customers	4.44	0.641	0.796		
We use customer information to assess the lifetime value of our customers	4.45	0.593	0.808		
We use customer information to develop loyalty programs	4.46	0.614	0.665		
We use customer information to avoid unprofitable relationships	4.38	0.661	0.568		
We enable our customers to have interactive communications with us	4.09	0.762	0.7		
We provide our customers with multiple ways to connect with the organization	4.32	0.689	0.704		
We focus on communicating periodically with our customers	4.59	0.694	0.737		
We collect customers information on an on-going basis	4.49	0.619	0.706		
We capture customers information from internal sources within the organization	4.29	0.745	0.615		
We collect customer information using external sources	4.31	0.694	0.544		
The information collected from customers is updated in a timely fashion	4.43	0.602	0.569		
We use customer information to develop customer profile	4.34	0.685	0.532		
We use customer information to segment markets	4.26	0.784	0.691		
We use customer information to assess customer retention behavior	4.21	0.841	0.824		
Competitive Intensity	3.98	0.53		0.664	59.941
Competition in our industry is cut-throat	4.41	0.727	0.7		
There are many promotional wars in our industry	4.26	0.886	0.703		
Anything that one competitor can offer, others can match easily	3.95	1.039	0.633		
Price competition in our industry is intense	4.32	0.882	0.795		
Competition for market share in our industry is intense	4.46	0.719	0.752		
Our competitors do not appear relatively weak	3.56	1.079	0.907		
Customer Satisfactions	4.29	0.53		0.679	63.449
Guests comments on survey forms/online indicate likelihood to return	4.15	0.84	0.703		
Guests levels of complains are manageable	4.26	0.631	0.786		

Customers are satisfied with the services offered to them	4.22	0.628	0.74		
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2. Correlation Analysis

Pearson correlation examined the relationship between variables. All the associated sets of variables were significant at level 0.01. Similarly, all the hypothesized relationships developed were found to be statistically significant at level  $p \leq 0.01$ , suggesting satisfactory external validity of the measures. Specifically, significant and positive correlation exists between information reciprocity and customer satisfaction ( $r=0.401$ ;  $p \leq 0.01$ ), information capture and customer satisfaction ( $r=0.421$ ;  $p \leq 0.01$ ), information use and customer satisfaction ( $r=0.382$ ;  $p \leq 0.01$ ) and competitive intensity and customer satisfaction ( $r = 0.278$ ;  $p \leq 0.01$ ). See Table III below.

**Table III Correlation Analysis**

	Customer satisfaction	Information reciprocity	Information capture	Information use	Competitive intensity
Customer satisfaction	1				
Information reciprocity	.401**	1			
Information capture	.421**	.574**	1		
Information use	.382**	.445**	.601**	1	
Competitive intensity	.278**	.231**	.226**	.312**	1

\*\* Correlation is significant at the 0.01 level (2-tailed).

3. Effect of KM Dimensions on Customer Satisfaction

Hypothesis  $H_{01a}$  postulated that information reciprocity has no significant effect on customer satisfaction. This results found a positive and significant effect of information reciprocity on customer satisfaction ( $\beta=0.213$ ;  $p < 0.05$ ). Thus, the researcher rejects the hypothesis  $H_{01a}$ . This infers that customer satisfaction will increase by 0.213 when information reciprocity increases by one unit, suggesting that a rise in information reciprocity will lead to increase in customer satisfaction. Hypothesis  $H_{01b}$  postulated that information capture has no significant effect on customer satisfaction. This results found a positive and significant effect of information capture on customer satisfaction ( $\beta=0.196$ ;  $p < 0.05$ ). Hypothesis  $H_{01b}$  was rejected. This supposes that customer satisfaction increases by 0.196 when information capture increases by one unit, inferring that a rise in information capture will lead to increase in customer satisfaction. Hypothesis  $H_{01c}$  postulated that information use has no significant effect on customer satisfaction. This research finding indicated a positive and significant effect of information use on customer satisfaction ( $\beta=0.17$ ;  $p < 0.05$ ). This lead to hypothesis  $H_{01c}$  being rejected. This assumes that customer satisfaction increases by 0.17 when information use increases by one unit, inferring that a rise in information use will lead to increase in customer satisfaction. See Table IV below.

**Table IV Regression Analysis Results for direct effects**

	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	T	
(Constant)	1.796	0.253		7.098	0.000

Information reciprocity	0.229	0.064	0.213	3.555	0.000
Information capture	0.197	0.067	0.196	2.924	0.004
Information use	0.144	0.052	0.17	2.764	0.006
R Square	0.233				
Adjusted R Square	0.226				
F	33.006				
Sig.	.000				
Dependent Variable: Customer satisfaction					

4. Moderating effect of competitive intensity on relationship between KM and customer satisfaction

The adjusted R<sup>2</sup> value of 0.385 indicate that KM can account for 38.5% of the total variance in customer satisfaction. This infers that customer satisfaction in hotels is likely to be predicted by KM by 38.5%. The difference of 61.5% of the variance in customer satisfaction is probably explained by other variables. Hypothesis H<sub>02</sub> proposed that competitive intensity does not significantly moderate the relationship between KM and customer satisfaction in hotels. The results indicated a negative and significant moderating effect of competitive intensity on the relationship between KM and customer satisfaction ( $\beta=-0.18$ ;  $\rho<0.05$ ). Hence, the hypothesis H<sub>02</sub> was rejected. Nevertheless, the relationship between KM and customer satisfaction was weakened by competitive intensity. With every unit increase in competitive intensity, customer satisfaction is reduced by -0.18. This infers that effect of current KM practices on customer satisfaction will be less where there is high competition in the industry. This might be explained by the fact that most of the firms are likely to employ KM strategies such as using customer information to measure the lifetime worth of the client and customized offers when competition is intense. Hence, the firms will have a less competitive advantage (Table V).

**Table V Regression Results for Moderation**

	Beta (Std. Error)	Beta Std. Error	Beta Std. Error	Beta Std. Error
(Constant)	0.147 (0.291)*	0.254 (0411)**	0.268(0.109)**	0.34(0.04)*
Star rating	0.064 (0.033)	0.029 (0.027)	0.016 (0.027)	0.011 (0.027)
Firm age	-0.01(0.02)	0.015 (0.016)	0.019 (0.016)	0.021 (0.016)
Firm ownership	-0.16 (0.046)*	-0.02 (0.039)	-0.03 (0.038)	-0.03 (0.038)
Firm size	0.061 (0.03)	-0.05 (0.025)	-0.04 (0.025)	-0.04 (0.025)
KM		0.596 (0.051)**	0.538 (0.055)**	0.577 (0.077)**
CI			0.134 (0.049)*	0.183 (0.079)**
KM*CI				-0.18 (0.015)*
<i>R</i>	.203a	.596b	.608c	.609d
<i>R Square</i>	0.041	0.355	0.37	0.371
<i>Adjusted R Square</i>	0.03	0.345	0.358	0.358
<i>F</i>	3.51	35.72	31.63	27.17
<i>Sig.</i>	.008	.000	.000	.000

**Discussion, Conclusion and Recommendations**

Sub-Hypotheses H<sub>01a, b, c</sub> postulated that information reciprocity, information capture and information use has no significant effect on customer satisfaction respectively. The study

found a positive and significant effect of information reciprocity ( $\beta=0.213$ ;  $p<0.05$ ), information capture ( $\beta=0.196$ ;  $p<0.05$ ) and information use ( $\beta=0.17$ ;  $p<0.05$ ) on customer satisfaction individually. The three coefficients implies that with every unit increase in information reciprocity, information capture and information use, customer satisfaction will increase by 0.213, 0.196 and 0.17 respectively. KM constitutes a key source of customer satisfaction for organizations (Nahapiet and Ghosha, 1998; Teece, 1998). Additionally, this study results contend with those of Zaied *et al.* (2012), in that KM has a role in enhancing performance of firms. Related to the results, Ofek and Sarvary, (2001) echo that advancement in information technology has led to the advent of sophisticated KM systems that have enhanced customer satisfaction. Further, KM dimensions provide direction that assist manage customer information and interaction with clients in ways that enhance customer relationships performance (Jayachandran, 2005) as a result of achieving customer satisfaction and retaining current customers.

Hypothesis H<sub>2</sub> stated that competitive intensity does not significantly moderate the relationship between KM and customer satisfaction in hotels. The study findings indicated a negative and significant moderating effect of competitive intensity on the relationship between KM and customer satisfaction ( $\beta=-0.18$ ;  $p<0.05$ ). This infers that the presence of competitive intensity creates pressure for firms to enhance their KM practices, that is, most of the firms will likely adopt similar KM approaches hence affecting customer satisfaction in a similar manner. Since KM provides the critical issues of organizational variation, existence and competence in the face of increasingly competitiveness, there is need of managing it effectively (Hussain *et al.*, 2004). The negative results achieved in this study could imply that the appropriate KM practices (best practices) are not being implemented in the hotels in an intense competitive environment.

KM is acknowledged as an important tool for sustaining competitive advantage and improving customer satisfaction. Mostly, KM constitutes a key source of enhanced performance for hotels. Thus, managing knowledge effectively can greatly help hotels to build better customer relationships which will heighten customer satisfaction. Therefore, KM is one of the ways hotels can have a competitive edge over competitors. Particularly, the multiplicity of ways to communicate with customers provides the hotels with a wide selection of information which makes them remain competitive. Additionally, hotels can use customer information to identify best customers and assess their lifetime value.

The findings of this study further contribute to the understanding of KM and customer satisfaction in firms' by providing empirical evidence on how competitive intensity significantly moderates that relationship. In addition, the study findings revealed that the moderating effect of competitive intensity weakened the relationship between KM and customer satisfaction. This is a situation where there is intense price and market share competition in the industry. Since KM provides the critical issues of organizational variation, existence and competence in the face of an increasingly competitive environment, there is need of managing it effectively (Hussain *et al.*, 2004).

Based on the study findings that the current KM practices are less effective when there is high competitive intensity, firm management should come up with new or more advanced policies and practices of KM respectively in order to increase customer satisfaction in a competitive environment. Hotel management should explore the use of KM best practices that enables hotels to enjoy wide knowledge about their customers and market. It is therefore necessary for firms to enhance KM in order to explore and make use of new and existing knowledge about customers. Also, the firms should use customer information to assess the lifetime value of their customers. This information will also help the firms identify the best customers and to avoid unprofitable relationships.

With regard to areas of further research, this study recommends that work should be done in examining the moderating effect of other environmental factors such as market turbulence on the relationship between KM and customer satisfaction. Additionally, this study collected data from hotel managers which is self-reported and may be subject to bias. Therefore, to overcome this limitation, future studies could collect data from hotel guests or other stakeholders in the hotel industry in order to generate more reliable conclusions.

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## HEAD-HUNTER'S PERSPECTIVE: A MULTIDIMENSIONAL VIEW OF INTELLECTUAL CAPITAL

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### Abstract

Head-hunter developed human resources through improved intellectual capital. Intellectual capital is needed for head-hunters to achieve job satisfaction. The purpose of this study is to explore the relationships of trust, self-efficacy, intellectual capital and job satisfaction in head-hunter firms at Indonesia. There are 253 candidates for head-hunters services were selected for investigating the potential linkage among trust and self-efficacy aspects to contribute for intellectual capital in head-hunter processes. A structural equation model is used to analyze this model. A new conceptual model for intellectual capital is developed based on previous models in the literature. Trust and self-efficacy are the important antecedent of perception of intellectual capital for head-hunter processes. Findings from this study support that trust and self-efficacy have significant effect on intellectual capital. Intellectual capital has significant effect on job satisfaction. This finding integrates insights in intellectual capital framework into a generalization of the stakeholder satisfaction in head-hunter firms. Furthermore, this study suggest to head-hunter firms in order to develop human resources through improved intellectual capital to bring between candidates and clients that suit their needs.

**Keywords:** *head-hunter, intellectual capital, job satisfaction, self-efficacy, trust*

### Introduction

Executive search or called "head-hunter" becomes a profession respected by job seekers. Head-hunters generally provide job opportunities for "white collar" with criteria in the management level or above. The uniqueness of the head-hunters are in the habit of "piracy" of workers in a particular company by offering jobs that are considered to have a better chance at another company. The new position in companies that offered by head-hunters should be "tempting" or provide better value in the improvement of career or salary increase. Head-hunter firms generally have a database that contains a list and specifications of candidates who are the partners. Candidates have high quality and competence as a core business. Client as companies that need workers also become the main core business. Database candidates are become business asset is valuable for head-hunter firms. The more the database of candidates who have a high quality and competence of the opportunity in filling the needs of workers in client companies are also getting bigger. Head-hunter main task is to provide and give candidates as required by the client. Value criteria for candidates to be "appropriate" is not only the quality and competence, but also monitored the background, track record and its potential.

Head-hunter is a specialist company for executive job seekers to get qualified candidates and has the best credibility in the field that was involved. Head-hunter is an expert from the field of candidates looking for a job. Head-hunters will choose a candidate who has the advantages and decent offer to its clients. Through the power of its network,

head-hunters can bring potential employees with a company that is needed. Not just anyone who would be a candidate by hunter executives. When a person contacted by a head-hunter it means that toil in the works for this attention and interest to the head-hunter (Setiani, 2013). Economic growth is important but knowing exactly how the process of innovative grows the intellectual capital of a nation is just as important because the underlying theoretical basis may reveal deeper insights and has larger implications than the concrete outcome (Chew & Sharma, 2014). Intellectual capital uses and transforms resources in market outputs, drawing the line between success and failure. Success is achieved when the three intellectual capital's components work together that is the human capital, the structural or organizational capital and the customer capital (Izvercian et al., 2013). The culture of development is heavily reliant upon adaptability and the readiness to realize grow innovation, and creativity. The culture of a group is reflective of cohesion, teamwork, and morale as conduits that are meant to foster development, empowerment, and unwavering commitment to human resources (Asiaei & Jusoh, 2015). Intangible resources which are embedded in know-how and knowledge of manpower, databases, information technology, operating processes, customer relationship, brand, trust, and cultures (Andriessen, 2004). Management's focus on customer satisfaction is as a source of competitive advantage (Keiningham et al., 2014).

#### *Intellectual Capital In Global Perspective*

Sullivan (2000) describes intellectual capital as profit derived from knowledge. Intellectual capital as the totality of knowledge, translated into trademarks, processes and also brands (Roos et al., 1998). Intellectual capital as intellectual material consists of knowledge, information, intellectual property, experience that can be put to use to create wealth (Stewart, 1997). Bontis & Fitz-Enz (2002) explained intellectual capital is a vital resource for strategic marketing and business management and its quantification has great benefit as an internal management tool rather than an external communication to investors. Intellectual capital is intangible resources exist in the minds of men and embedded in organizational skills, corporate culture and behavior, there is no trading market, cannot be obtained through the market (Yongjun, 2013).

The aforesaid intellectual capital elements highlight the fact that there are distinctive knowledge- based assets which organizations could accumulate and exploit via human resources, structures, cultures, and external partners (Berry, 2004). Intellectual capital encourages value creation, which in turn leads to superior performance in today's knowledge-based economy (Tayles et al., 2007). Intellectual capital must behave as an active, performing living mechanism for the creation of innovation (Izvercian et al., 2013). Intellectual capital is a kind of enterprise resource build on the knowledge base, prominent features that can creative intelligence, enables enterprises to obtain sustainable competitive advantage mainly for the knowledge, technology, skills and experience (Yongjun, 2013).

Intellectual capital has able to create value (Yongjun, 2013). The development of intellectual capital is in line with strengthened ethics (Su, 2014). Intellectual capital as the holistic or meta-level capability of an enterprise to harmonize, orchestrate and deploy its knowledge resources to create value in pursuit of its future vision (Zigan et al., 2008). Intellectual capital can be classified into two major categories of human capital and structural capital, and structural capital can be further divided into two subcategories of organizational capital and customer capital (Edvinsson & Malone, 1997). Intellectual capital is difficult to imitate because form a unique and complex path (Yongjun, 2013).

#### *Structural Capital in Organization Development*

Structural capital refers to the particular knowledge possessed by an organization

including information system, processes, and data (Bontis, 1999). Izversian et al. (2013) described of structural capital consists of corporate culture (values or behavior criteria), organizational structure (responsibilities and control, operational process and organizational knowledge assets) and information system (support for cooperation and collaboration, availability and transmission of information). Structural capital deals with all kinds of knowledge deposits i.e. business intellects that derive from structure and information. Human capital develops structural capital. Although influenced by human capital, structural capital dependent on human capital exists objectively and independent of human capital (Roos et al., 1998).

Structural capital needs human capital for enabling enterprises to develop customer capital (Izvercian et al., 2013). Structural capital deals with the mechanism and structure of an enterprise that can help support employee in their quest for optimum intellectual performance, and the overall business performance can thereupon be achieved (Chen et al., 2004). Structural capital represented by the electronic network that transports information at a light speed through a company, so that it can react to the market faster than its rivals comprises knowledge assets that are company property: patents, copyrights and trademarks; processes, methodologies, models; documents and other knowledge artefacts, computer networks and software; administrative systems; and so forth (Stewart, 2003). This involves the people of the national embedding their knowledge into the structural capital of the nation through value creating activities such as innovation, and thereby improving this structural capital for future use (Chew & Sharma, 2014). Structural capital describes the codified knowledge bases that do not exist within the minds of Employees e.g. databases, filing cabinets, organizational routines (Bontis & Fitz-Enz, 2002).

#### *Relational Capital Development*

Relational capital is the concept of a living learning organization (Dewhurst, 2004). Relational capital refers to the knowledge and competencies available to organizations through the relational structure with external parties such as customers, suppliers, partners, and business affiliations (Cricelli & Grimaldi, 2010). Relational capital represents the relationships with relevant stakeholders (Izvercian et al., 2013). Customer capital considered relational capital represents the knowledge embedded in the organizational value chain, that is, the knowledge embedded in the relationships that the firm has with suppliers, customers and any entity outside the boundaries of the firm (Bontis & Fitz-Enz, 2002). Relational capital is external structure capital or external social capital (Youndt & Snell, 2004) Relational capital comprises of knowledge entrenched within the relationships an organization develops with its customers, suppliers, competitors, government bodies and trade associations (Bontis, 1999).

#### *Dynamic of Innovation Capital*

Innovation capital is the knowledge resources concerning business renewal and development such as intangible assets for developing new products or services and intellectual property (Edvinsson & Malone 1997). Innovation capital refers to any intangible part of anything, or anything that can create value by improving financial capital or intellectual capital (Roos et al., 1998). Innovation as the application of intellectual capital for the purpose of growth, and is hence the key process dimension in determining the wealth of nations (Chew & Sharma, 2014). Innovation can be described to as a process that combines tangible and intangible capabilities of a nation to generate desired outcomes. The innovative capability of an organization will is closely tied with the capabilities of these raw materials (Delgado-Verde et al., 2011). The role of innovation in the growth of the intellectual capital of the nation may lead to further initiatives such as useful frameworks,

analytical models or policy instruments to better estimate, create value, showcase or protect the intangible raw materials of innovation (Chew & Sharma, 2014).

The innovation capital includes primarily intellectual properties (Huang et al., 2007). This interplay of resources and processes sets the research impetus to investigate the role of innovation in the intellectual capital of a nation (Chew & Sharma, 2014). There are many ways to measure the intellectual capital of a nation such as a human development focus through educational and hygiene indicators but this research focuses on the innovation aspect (Bontis, 2004). The economic growth and the first two objectives seek to investigate and codify the roles of innovation in the growth of intellectual capital of a nation, which in turn drives economic growth (Chew & Sharma, 2014). It is necessary to have sufficient amounts of intellectual capital in a nation to drive innovation, learning, productivity and economic growth while also functioning as the bedrock and indicator in claiming its future national wealth (Lin & Edvinsson, 2011).

### *Trust In Complexity*

Trust is defined as the expectation that another individual or group will make a good faith effort to behave in accordance with commitments, both of explicit or implicit, be honest in whatever negotiations preceded those commitments, and not take excessive advantage of others even when the opportunity exists (Mangundjaya, 2015). Trust is deeply connected to successful team performance and has been declared a key component of successful and effective teams (Berry, 2011; Driskell & Salas, 1992). Trust is expected to be linked to the evolution of team structures and capable of bridging team developmental barriers (Rickards & Moger, 2000). Trust is a necessary asset for the successful performance of virtual teams (Morita & Burns, 2014). Trust is a psychological state that exists when you agree to make yourself vulnerable to another because you have positive expectations about how things are going to turn out (Rousseau et al., 1998). Trust is also one of the significant considerations that are taken into account in the context of a learning organization (Ferguson-Amores et al., 2005). Trust is a vital component of collaboration (Morita & Burns, 2014).

The identified trust building behaviors will be later converted into design features and interface design objects to be used in communication and collaboration systems that support the work of virtual teams (Morita & Burns, 2014). Trust has dimensions that are predictability, integrity, and benevolence (Darrrough, 2006). Indicators of trust included of repository functions, transparency, structural assurance to include guarantees of preservation and sustainability, and the effects of discipline and level of expertise (Yoon, 2014). Identified three dimension of trust consist of integrity, benevolence, and ability. Integrity refers to honesty and truthfulness. Benevolence means the trusted person has your interests at heart, even if yours aren't necessarily in line with theirs. Ability encompasses an individual's technical and interpersonal knowledge and skills (Robbin & Judge, 2013). The relationships, communities, cooperation, and mutual commitment that characterize social capital could not exist without a reasonable level of trust (Asiaei & Jusoh, 2015)

Trust creates an opportunity to deal with the complexity of the world by unloading parts of our responsibilities (Luhmann, 1979). Trust acts as a network that binds a team together, providing mechanisms for knowledge integration that move teams into effective collective minds (Weick & Roberts, 1993). The lack of trust between coworkers will curtail the sharing of private knowledge, which is indicative of the fact that the creation and subsequent development of intellectual capital is incumbent upon great levels of trust (Asiaei & Jusoh, 2015). Mayer et al. (1995) suggested three attributes of perceived trustworthiness: ability, benevolence, and integrity. Ability refers to the skills, competence, and characteristics of a trustee that are influential in a specific domain; benevolence is the belief of a trustor that a trustee wants to do good work for a trustor; and integrity is a trustor's perception that a trustee will adhere to principles acceptable to the trustor.

Trust is a key component of teamwork (Salas et al., 2008). Trust represents how much risk we are willing to accept in exchange for benefits from an interpersonal interaction (Luhmann, 1979; Mayer et al., 1995). Management should identify what kind of variables that can develop organizational trust, as organizational trust play important role in developing commitment to change (Mangundjaya, 2015). If the organization loses the trust of its personnel, they would consequently become less loyal, less motivated, and less productive (Pirson and Malhotra, 2008). Developing trust is still critical for virtual teams and represents one of the keystones of successful collaborations (Gibson & Cohen, 2003).

#### *Self-Efficacy Is a Key Concept*

Special self-efficacy refers to Bandura's conception on believing in performing specialized tasks successfully (Tai, 2006). A person's self-efficacy is that person's belief about his or her capabilities to perform a task. People with high self-efficacy believe that they can perform well on a specific task, whereas people with low self-efficacy tend to doubt their ability to perform a specific task (Griffin & Moorhead, 2013). Self-efficacy refers to an individual's belief that he or she is capable of performing a task (Robbins & Judge, 2013). Self-efficacy is defined as individuals' beliefs about their capabilities to produce designated levels of performance that affect their lives directly or indirectly (Bandura, 1986, 1995). Self-efficacy is a central construct in health interventions because of its ability to link belief, attitude, and behavior. Empirically, self-efficacy has been frequently documented as a most significant predictor of behavioral intentions and actual health behaviors (DiClemente et al., 1995).

Self-efficacy refers to an individual's conviction about his or her abilities to mobilize the motivation, cognitive resources, and courses of action needed to successfully execute a specific task within a given context (Stajkovic & Luthans, 1998). The self-efficacy process affects human functioning not only directly, but has an indirect impact on other determinants as well. The self-efficacy process starts before individuals select their choices and initiate their effort. First, people tend to weigh, evaluate, and integrate information about their perceived capabilities (Brown et al., 2001). Self-efficacy, the belief in one's ability to perform a certain task, is a key concept in explaining health-related behaviors (Bandura, 1986, 1995). Bandura argues that self-efficacy perceptions consist of three dimensions: magnitude, strength, and generality. Magnitude refers to the ordering of tasks by difficulty level. Individuals expecting a low magnitude task often feel more capable of performing the task than do those expecting a high-magnitude task. Strength refers to the probabilistic judgment of how certain one is of his/her ability to perform a specific task. Generality concerns the extent to which efficacy expectations about a specific situation can be generalized to other situations.

Self-efficacy is the belief that one can succeed even in the face of challenges and refers to one's judgments as to how effective one is likely to be in a particular situation



(Gibson, 2004). Individual employee's involvement in knowledge sharing is determined by their level of self-efficacy (Olowodunoye, 2015). Self-efficacy is an important motivational construct that influences individual choices, goals, emotional reactions, effort, coping and persistence. It refers to individuals' convictions about their abilities, and consequently an important set of cognitions is self-efficacy or beliefs about one's capacity to perform at designated levels (Stajkovic & Luthans, 1998).

Self-efficacy deals with employee's judgement of ability to organize and implement a certain course of action, which also determines the involvement of an individual employee in knowledge sharing behavior (Bandura, 1997). People with higher self-efficacy exert greater efforts to master skills and workplace challenges (Chowwen, 2012). Employees with high level of self-efficacy may be more prone and useful to the organization in sharing knowledge and this may assist in overcoming hoarding of knowledge in any organization (Olowodunoye, 2015). Higher self-efficacy tends to demonstrate higher level skill attainments, fostering increased self-efficacy in practitioners should result in stronger procedural skills and clinical reasoning (Bandura, 1986).

### *Job Satisfaction In Human Resources Management*

Job satisfaction is an important prerequisite for an effective performance, and given that the organizational climate arises from mutual efforts and relations of groups within the organization, manager and employees, it impresses the employee's behavior and their satisfaction level effectively (Hashemi & Sadeqi, 2016). Job satisfaction reflects the extent to which people find gratification or fulfillment in their work (Griffin & Moorhead, 2013). Job satisfaction is a key concept in management and organization that has an important role in motivation of employees and consequently increased efficiency (Hashemi & Sadeqi, 2016). Job satisfaction is the basic requirement of individual's attendance and work with the organization because it plays the critical role in increasing productivity, commitment to the organization, guaranteeing the physical and psychological health, boosting the morale of the individual (Mrugank & Ashwin, 2005). Kotler (2000) has defined consumer satisfaction as a consumer's feelings of either pleasure or disappointment resulting from a comparison between the perceived performance of a specific product or service and his or her expectations.

Job satisfaction is a key element when it comes to employee turnover (Griffeth et al., 2000). Employees with higher levels of job satisfaction are more committed to their organizations (Froese & Xiao, 2012). Employers to what they can to make sure their employees have a high enough level of job satisfaction (Thompson & Lane, 2014). Employee satisfaction represent the main principles of contemporary human resources management, since only through quality motivation systems can a company increase its competitive advantage and value (Hashemi & Sadeqi, 2016). Job satisfaction is important to employers is that overall job satisfaction tends to be one of the best predictors of employee turnover (Griffeth et al., 2000). Voluntary turnover of desirable employees is generally considered detrimental to an organization in terms of replacement costs and work disruption (Hellman, 1997).

### **Theoretical Framework & Hypotheses**

The most important of head-hunter services is candidates and clients. The success of head-hunter services is the most important factor which determines the success and survival of the business. Head-hunter requires internal capabilities in improving the competence including by strengthening intellectual capital. Intellectual capital can be tailored to the

needs of work involving candidates and clients. Head-hunter requires trust from both candidates and clients. Candidates entrust to a head-hunter to find a better job. Clients entrust head-hunters to find the employee in accordance with the required qualifications. Both are candidates and client would be satisfied if they can need each other and in accordance with qualification. Job satisfaction is not just for candidates and clients but also for head-hunters that already provide services in bringing together and facilitating both so get appropriate rewards.

Companies that use the services of head-hunters will spend a considerable cost to pay for search services qualified employees and related to the expectations of service users. Given the sizeable recruitment costs, most companies will use the services of a head-hunter if need employees with managerial level upwards or positions that are considered quite hard to come by and take a long time if you follow a regular recruitment process (Setiani, 2013).

The first base model for creating the conceptual model in this study is Bontis intellectual capital conceptualization (Bontis, 1999). In order to satisfy the desire for exploring a multidimensional view of intellectual capital, this study largely barrows the conceptualization introduced. In his model, two antecedent constructs, i.e. trust and culture, play a leading role as two supporting drivers behind the other intellectual capital dimensions. According to Bontis, the phenomenon of intellectual capital could be fallen into three components. As illustrated in Figure 1, each is reflected based on its essence, scope, parameter, and codification difficulty. Moreover, Bontis refers to the role of two drivers, namely trust and culture which can be considered for their influence on intellectual capital development.

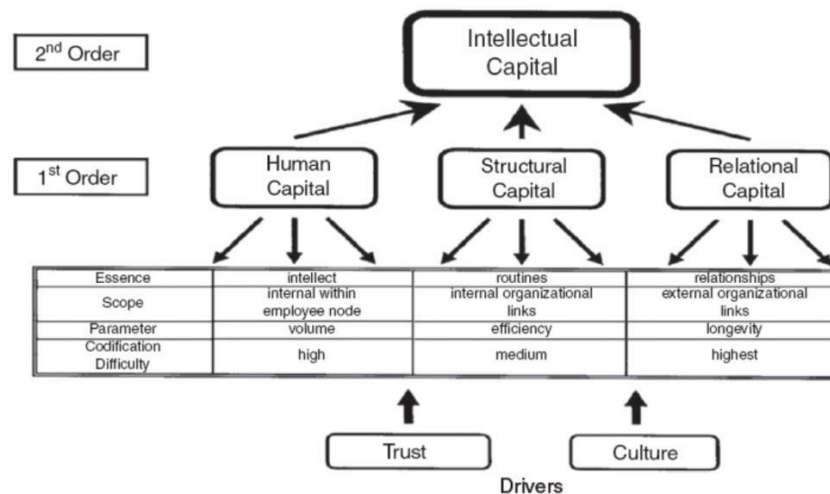


Figure 1 Intellectual capital conceptualization (Bontis, 1999).

Asiaei & Jusoh (2015) explained at intellectual capital theoretical model are created with added social capital indicator in independent variable and added organizational performance variable at dependent variable. They have suggested four fundamental dimensions which determine success of Iranian public listed companies as it is shown in figure 2. They study particularly employs contingency theory and tries to explicate the association between two contextual factors, namely organizational culture and trust as the two antecedent drivers and intellectual capital (Asiaei & Jusoh, 2015).

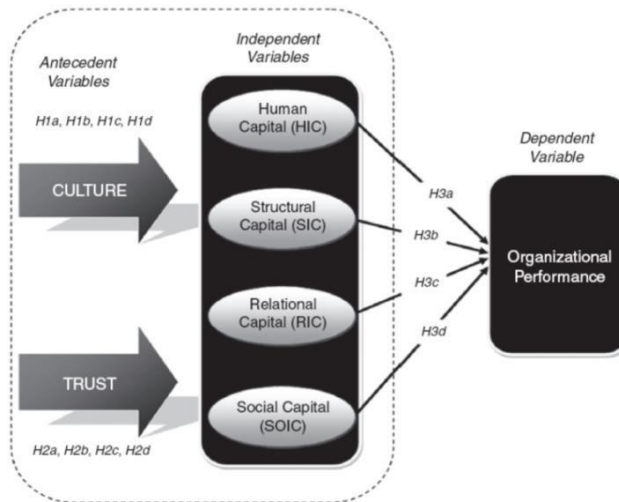


Figure 2 Intellectual capital theoretical models (Asiaei & Jusoh, 2015)

Izvercian et al. (2013) present the process of transforming customers into prosumers and integrating them into a successful innovation model and its show at figure 3. This model stipulates a win- win relationship. The company is innovating alongside its customers in a time and cost saving manner with a positive impact on its global image and the consumer has the satisfaction of being listened at, important for the society, contributing to the community and growing in personal value.

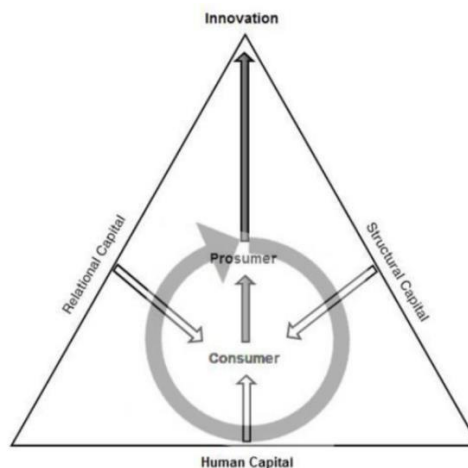


Figure 3 Prosumer transformation model for innovation (Izvercian et al., 2013)

The management of intellectual capital is heavily reliant upon trust (Isaac et al., 2010). Trust is imperative toward the promotion and creation of intellectual capital, due to the fact that the act of sharing tacit knowledge is critical toward the development of intellectual capital (Asiaei & Jusoh, 2015). Trust, whether between business and customers, business and supplier, between customers or internal trust, is deemed crucial to the expansion of a business’s intellectual capital (Isaac et al., 2010). Trust is a major determinant of all the intellectual capital components, namely human, structural, relational, and social capital (Asiaei & Jusoh, 2015).

H1: Trust has positive effect on intellectual capital

Self-efficacy is the central construct of social cognitive theory by Bandura and points to conceived capability of a person to perform a given action (Muris, 2003). Self-efficacy is emerged as an important motivational construct in human behavior study

especially at workplace (Shahrzad & Alavi, 2009). Self-efficacy is dependent on the individuals' sense of self control over the environment and their behavior (Zarbaksh, 2015). Self-efficacy is the beliefs people hold of their own competency in order to exercise control over events affecting their lives (Shams-Esfandabad, 2011).

H2: Self-efficacy has positive effect on intellectual capital

Intellectual capital measurement covers important non-financial contents such as customer satisfaction, innovation and human capital (Shamsudin & Yian, 2013). Managing people based on their human capital will allow an organization to optimize knowledge creation, whether of new product, ideas and services or of improvements in business processes (Jyotirmayee & Mishra, 2010). The resource-based-view accredits human capital as the most important type of resources a firm has (Pfeffer, 1994). Intellectual capital is considered as the combination of human, structural, innovation and cultural capital (Piri et al., 2013). Enterprise's intellectual capital has all the characteristics of the heterogeneity of resources consist of valuable, scarce and difficult to imitate, difficult to substitute (Yongjun, 2013). The significant roles of innovation in the intellectual capital of a nation, their impact on the growth of intellectual capital and identifying useful measures (Chew & Sharma, 2014).

H3: Intellectual capital has positive effect on job satisfaction

## **Research Method**

The main research questions are determining effect of trust and self-efficacy toward intellectual capital and have implication on job satisfaction in head-hunter firms. This research which is a descriptive cross-sectional research analyzing quantitative data collected by using a five point Likert scale. The final questionnaire comprised four variables included trust, self-efficacy, intellectual capital and job satisfaction. We decided to conduct our research more specifically in the job recruitment sectors especially in executive search. It's a sector in which job recruitments responsible initiatives are developed

and second, this research field helps us avoid the limitation of executive search experiments, since data are obtained in real condition of use.

Structural equation model is used to analyze the data and test the hypotheses of the theoretical model which has a multi-variable statistical method. Structural equation model is a statistical method which has been widely used due to measuring direct and indirect relationships between variables in a single model (Meydan & Şeşen, 2011). According to structural equation model, traditional methods are insufficient for correcting measurement errors (Byrne, 2010). Hair et al. (2010) has said that the size of the sample has to be large enough to be used in the data analysis by the application of the model equations with the structure and the distribution of data. The research model which is created by deriving the models in the literature is explained in conceptual framework section and seen in Figure 4.

Data was collected from 253 candidates in head-hunter firms. Simple random sampling was applied to the data collected from the surveyed population. Population consists of all of candidates in executive level at head-hunter firms in Indonesia. The data was collected from candidate in executive search through mailed questionnaires distributed through email. From the target sample of questioners, 275 questioners were completed, 22 were discarded as incomplete. Hence, the final response rate for sample was 84 percent. The sample of this study is 253 people who utilizing the services of company head-hunter in Indonesia. Data were gathered during the month of May 2016. To test the above hypotheses, we used the scales adopted from prior studies for the measurement of dimensions. We measured four dimensions by using 5 point Likert scales ranging from

strongly disagree to strongly agree. Structural equation modeling is used to analyze the data and test the hypotheses of the theoretical model which has a multi-variable statistical method. It tests whether the hypotheses of the model are statistically significant or not after determining the reliability and validity of Likert type ordinal scales. SPSS and Lisrel programs are used for analyzes.

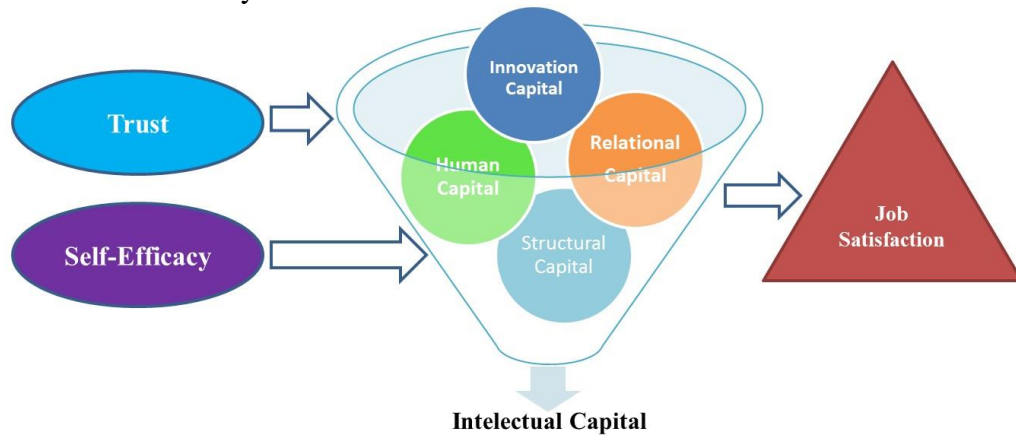


Figure 4 Head-hunter models in intellectual capital perspective

### Analysis and Result

Frequency distributions were obtained for all the personal data or classification variables. As presented in detail at table 1, respondents’ profiles are based on the organizations’ characteristics which consist of the type of gender, age, level of education and employment with the company (working experience). According to frequency distribution in head-hunter firm results, 66 % of the respondents are male, 74.7 % of them have university degree and 53 % of them are between 41-50 years old. This test shows the compatibility of the anticipated model and acquired a model. As shown in Table 1, demographic respondents which describes the condition of the respondents in this study.

**Table 1** Demographic respondents

Profile	Category	Frequency	%	
	Cumulative %			
Gender	Male	167	66	66
	Female	86	34	100
Age	Below 30 years	2	0.8	0.8
	31 – 40 years old	83	32.8	33.6
	41 – 50 years old	134	53	86.6
	Over 50 years old	34	13.4	100
Level of Education	Diploma	23	9.1	9.1
	Bachelor	189	74.7	83.8
	Masters	41	16.2	100
Years of working experience	< 1 year	24	9.5	9.5

(Employment with this	1 – 3 year	91	36	45.5
	3 – 5 year	77	30.4	75.9
	5 – 10 year	49	19.4	95.3
	Over 10 year	12	4.7	100

All the scales adopted by this study are from the literature. This study used the intellectual scales developed by Bontis (1999) and Asiaei & Jusoh (2015) to measure trust, human capital, structural capital and relational capital and the scales of innovation capital value developed by Izvercian et al. (2013) to measure innovation capital. Factor analysis was applied to four scale items of trust, self-efficacy, intellectual capital and two scales items of job satisfaction converged on their hypothesized with Eigenvalues all great than one and factor loading all greater than 0.5. The scale had a high degree of validity. Scale reliability was analyzed through computing the coefficients of Cronbach's alpha of the scales. As shown in the Table 2, all coefficients were greater than 0.7.

**Table 2** Scale Reliability

Indicators Alpha	Mean	SD	Total Correlation	Cronbach's
Integrity	10.435	1.337	0.379	0.811
Benevolence	13.233	1.706	0.442	0.806
Ability	13.972	1.737	0.583	0.796
Relationships	14.506	1.931	0.475	0.803
Belief	13.783	1.939	0.365	0.812
Attitude	16.968	2.370	0.296	0.821
Behavior	16.755	1.977	0.481	0.803
Persistence	14.047	1.724	0.363	0.811
Human capital	13.763	1.980	0.475	0.803
Structural capital	11.146	1.797	0.414	0.808
Relational capital	9.265	1.647	0.634	0.793
Innovation capital	9.514	1.941	0.439	0.806
Performance	9.470	1.639	0.431	0.807
Productivity	9.684	1.612	0.526	0.801

The compatibility of the model and the data are evaluated according to fit indices. CMIN/DF, CFI (the comparative fit index), IFI (the incremental fit index), RMSEA (the root-mean-square error of approximation) are the recognized scales in the literature (Akgün et al., 2014). Correlations among the variables should be verified to test mediator roles of the mediating variables (Baron & Kenny, 1986). First of all, CFA and reliability analysis were conducted in order to assess validity and reliability of the measures. CFA results indicated the model fits adequately: CMIN/DF = 3.848 ( $\chi^2 = 280.96$ , DF = 73), CFI = 0.89, AGFI = 0.80, GFI = 0.86, IFI = 0.89, RMSEA = 0.106.

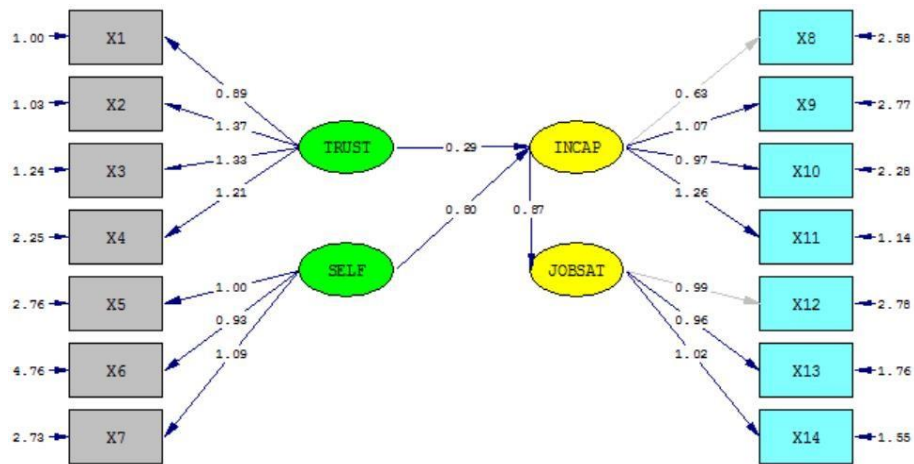


Figure 5 Structural Equations Modeling in Estimates

Effect of trust on intellectual capital is 0.31 and the value of t for this hypothesis is 3.70. Since the value of t is larger than 1.96, the null hypothesis is rejected, opposite hypothesis is accepted. The trust has significant and direct effect on intellectual capital. Therefore, whatever the trust is more attractive in terms of candidates and client, their intellectual capital, has the highest influence.

Effect of self-efficacy on intellectual capital is 0.58 and the value of t for this hypothesis is 5.52. Since the value of t is larger than 1.96, the null hypothesis is rejected, opposite hypothesis is accepted. The self-efficacy has significant and direct effect on intellectual capital. Therefore, whatever the self- efficacy is more attractive in terms of candidates and client, their intellectual capital, has the highest influence.

Effect of intellectual capital on job satisfaction is 0.64 and the value of t for this hypothesis is 5.65. Since the value of t is larger than 1.96, the null hypothesis is rejected, opposite hypothesis is accepted. The intellectual capital has significant and direct effect on job satisfaction. Therefore, whatever the intellectual capital is more attractive in terms of head-hunter, their job satisfaction, has the highest influence.

Table 3 SEM Interpretation

Hypothesis	Structural Relationship	Standard Coefficient	t-statistic	Contrast
H1	Trust → Intellectual capital	0.31	3.70	Accepted
H2	Self-efficacy → Intellectual capital	0.56	5.52	Accepted
H3	Intellectual capital → Job	0.64	5.65	Accepted

Significant at  $p < 0.05$

### Discussions and Conclusions

Models which were previously tested in the literature were utilized to create a new conceptual model to examine the effect of trust and self-efficacy toward intellectual capital and its impact on job satisfaction in head-hunter firms at Indonesia. A new conceptual model for intellectual capital is developed by including dimensions of the tested previous models. Trust and self-efficacy are the important antecedent of perception of intellectual capital for head-hunter processes. Thus, this paper focused on the effect of intellectual capital on head-hunter firms. The effect of intellectual capital has been modeled through

job satisfaction in the literature. Some models included trust and self-efficacy toward intellectual capital as mediator to examine this effect. Therefore, the research model suggests that trust and self-efficacy toward intellectual capital and its impact on job satisfaction play mediator roles on the effect of head-hunter firms in this paper. Job satisfaction affects the health of staff, their efficiencies, labor relationships in the organization and the organization's overall efficiency (Getahun et al., 2016). No company can last for long without satisfied customers (Keiningham et al., 2014).

The findings significantly the fact that trust and self-efficacy plays a leading part in relation to intellectual capital development within head-hunter firm in Indonesia. It is statistically proved that trust, self-efficacy and intellectual capital play mediator roles on the effect of job satisfaction as a result of the analysis. This result shows that trust and self-efficacy have significant effect on intellectual capital. Intellectual capital has significant effect on job satisfaction. Trust is imperative toward the promotion and creation of intellectual capital, due to the fact that the act of sharing tacit knowledge is critical toward the development of intellectual capital (Asiaei & Jusoh, 2015). The creation and subsequent development of intellectual capital is incumbent upon great levels of trust (Asiaei & Jusoh, 2015). An individual with high levels of self-efficacy not only have a greater commitment to the organization, but also a higher level of job satisfaction (Luthans et al., 2006). Employees had higher self-efficacy which was found to be a predictor of future performance and skill development (Harrison et al., 1997). The right amount of self-efficacy is said to instigate sufficient effort which in turn will produce desirable health and satisfaction outcomes (Stajkovic & Luthans, 1998).

This study suggests to head-hunter firms in order to develop human resources through improved intellectual capital. Intellectual capital is needed for head-hunters to achieve job satisfaction for clients as well as for candidates. Job satisfaction for clients means that clients get satisfaction by getting workers as required by candidates. Job satisfaction for the candidates is part of its success in getting a new job as needed. Finally, the main function of head-hunter is to bring between candidates and clients that suit their needs. This finding integrates insights in intellectual capital framework into a generalization of the stakeholder satisfaction in head-hunter firms. Identifying behaviors that lead to increased trust will have significant impact on team management and team design (Gibson & Cohen, 2003; Salas et al., 2008). Play the function of intellectual capital that value creation and drive business growth (Yongjun, 2013).

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## CILOLOHAN EDUTOWN TOWNHOUSE FINANCIAL FEASIBILITY STUDY USING DISCOUNTED CASH FLOW AND REAL OPTION METHODS

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### Abstract

In the city of Tasikmalaya, where the population is around 700 thousand people, and the annual growth of 1.4% and a backlog of housing around 6000 houses. Tasikmalaya has the capability and potential to have a real estate development. This research is aimed to assist PT. XYZ to make a feasibility study of the intended project by giving options of alternate numbers and types of unit constructed, and the timing of the project started. The feasibility study is going to be analyzing using DCF analysis, with the criteria of Net Present Value (NPV), Internal Rate of Return (IRR), and Payback Period (PBP). , - Return of Equity (ROE) and Return of Investment (ROI) and the methods of Real Option of delaying the project as a method to be compared with. The result shows that option 4 is the most suitable and profitable. Option 4 (delay) composition type of unit is 34 small units and 17 big units, and expected to be built in the year 2019, thus delaying the project 3 years. Another recommendation is to fund the project by the help of a loan so that the WACC or discount rate for the project is reduced, thus giving the NPV of IDR 5.326.929.851,-, IRR of 97.8%, and PBP of 0.81 year (9 months 26 days). This result is also supported by the real option analysis using Black-Scholes formulation, in which the call value the option 4 (delay) give is 2.381.841.983 which have a higher call value than option 3 (delay).

**Keywords:** *Indonesia - Tasikmalaya, Real Estate Development, Feasibility Study, Risk Management*

### Introduction

Even though the residential business has good prospect, in order to justify the benefit, a feasibility study must be conducted because large sums are at stake in order for this project to run. The primary motivation for investing in the company is the responsibility to make sure that the company is able to achieve expectation of returning the investors original capital plus the desired return on their invested capital (Bierman, 2007).

Feasibility study function to analyze the project whether it is technically feasible and economically beneficial in the future, is feasible within the estimated cost, and will be profitable, to evaluate the value of capital resulting from investment performance within a specified period. Feasibility study measures some values that will be determined to indicate whether or not a project should be undertaken.

The city of Tasikmalaya with the population of 700 thousand lives, an annual growth of 1.4% each year, and a backlog of 6000 housing in 2015 means that the location is very suitable as a investment in real estate development. The area projected for this feasibility study is located in the main street of Cilolohan in the city of Tasikmalaya with an area of 4550 sqm, where the plan to build the public facility is 1820 sqm. With the projected housing will be divided into common living houses, or dorm-houses. This paper is to evaluate the feasibility of the project, and to make sure that the company gets the best strategy to take. This research also broadens a suggestion about the concept of the townhouse based on other ideas. In order to evaluate the project, this research also suggests the idea of delaying the project, the main reason for this is because the government project of a highway that connect Bandung – Cileunyi – Tasikmalaya that will be implemented later. In summary this paper is made to assess which option is the best one that could give the optimal benefit and payback period. Below is the option that the company currently has:

Option 1: 34 Big Units and start at the year mid – 2016

### **Research Methodology**

To analyze Cilolohan Edutown Townhouse study case, the method that will be used is Discounted Cash Flow and Real Option Methods. The necessary data used in this research is qualitative and quantitative data in the form of primary data and secondary data. In accordance with the method of study in-depth case study, the primary data performed with the variety of ways: interviews, historical, and observation. Secondary data were obtained by collecting documents and literature.

### **Business Issue Exploration**

The idea behind this project is that, with the current increase of middle class economy in Indonesia, this could be the sign for bigger potential customers. To confirm that this idea is a right and attractive project, we need to first assess the current condition, choose the right business strategy, set correct targets, and understand the strength and weaknesses of all that have connection with this project. After we analyze these, we need to analyze its financial, this is in order to provide the optimal revenue to the owner, and also get the certainty of the project. In analyzing this project, the author will employ both Discounted Cash Flow (DCF) and Real Option valuation methods.

Changing circumstances and their timings are best appraised using discounted cash flow (DCF) analysis with discounting and compounding. Real option valuation theory also extensively employs DCF modeling with discounting and compounding. The major difference for real option is to explicitly address the uncertainty in decision making after the valuation date. Conversely, conventional appraisal using direct capitalization or traditional DCF analysis does not explicitly address the uncertainty of possible scenario and result, and it also

assumes the decision makers are passive after the appraisal, and throughout the analysis period. Conventional appraisal does not analyze the probability of, and the cash flow from, each option. Thus traditional DCF analysis is said to be deterministic, while real option analysis is said to be probabilistic. (Pomykacz, MAI, and Olmstead, 2013)

Overall, in doing the feasibility study, the methods will be calculated and considered are as follows:

1. Net Present Value (NPV)
2. Internal Rate of Return (IRR)
3. Payback Period (PBP)
4. Return on Investment (ROI)
5. Return on Equity (ROE)

In analysing the the strategy, this research will identify business issue, identify industry analysis using Porter's Five Forces, and identify external and internal factor using SWOT analysis. Industry analysis the research help informed the research about the condition of industry the project is going to take, and which forces out of five that stated have the biggest impact.

By looking at the previous analysis, the research can estimate the condition and risk the project is facing, thus the research can help company choose the best strategy for the project. The project itself is expected to start at the mid of 2016, but the company is willing to hear the suggestion of delaying the project, with the terms that the increase of value in project is higher than previous.

Knowing this, the research has compile numerous strategy, those are:

1. The first plan is to build a townhouse with 34 units with the type of 90/78, priced at IDR 550.000.000,- this strategy relied on fewer unit but with larger units. (Option 1)
2. The second plan is to build 34 smaller units (type 45/39) that price around IDR 275.000.000,- this strategy relied on the terms of anchor, where the idea is to make a community before the development target its profit. (Option 2)
3. The third plan is to delay the project until 2019, but the composition of the project is the same as Option 1. (Option 3)
4. The fourth plan is to delay the project until 2019, but the composition of the project is the same as Option 2. (Option 4)

By comparing the strategies above, this research can give an overview of the project to the company, the research will be conduct using 2 method, the first is using DCF analysis, while the other is using Black Scholes Formulation. the overview of DCF analysis will be shown in the form of NPV, IRR, PBP, and ROE/ROI, while the real option analysis to delay is using the conventional DCF analysis and Black Scholes Formulation as a comparison, which will show us the value of the option of delaying the project.



**Result and Discussion**

*4.1 DCF and Real Option Analysis*

In order the company can choose the right strategy, the research for the business solution will be split into 3 parts, the first one is conducting the calculation for the current DCF analysis for Option 1 and Option 2, the data will of the calculation is given from the company, and that the estimated sales and growth is based on interview with the competitors. After conducting the current DCF analysis, further analysis is conducted, which is calculating the project with the delay option, in this case option 1 and 2 will be delayed until year 2019. Where again the estimated growth will be based on news and interview with competitor of the same industry. And also the delay is conducted also using Black – Scholes - Merton Formula as a comparison to see the result of which option gives the best value.

The second part is to compare the result of all option using DCF analysis, where the result of these option are:

**Table 4.1 Discounted Cash Flow Comparison Table**

Description	NPV	IRR	PBP	ROI	ROE
OPTION 1	OPTIMISTIC	1,052,589,614	30.0%	2.02	22.2%
	MOST LIKELY	(1,382,800,270)	10.9%	5.15	16.5%
	PESIMISTIC	(3,561,117,059)	2.4%	8.55	4.7%
OPTION 2	OPTIMISTIC	2,035,234,979	47.5%	1.29	27.6%
	MOST LIKELY	(634,205,880)	14.1%	3.60	16.5%
	PESIMISTIC	(2,738,404,860)	1.8%	8.65	2.3%
OPTION 3	OPTIMISTIC	4,038,309,907	73.5%	1.38	62.0%
	MOST LIKELY	1,758,474,817	30.1%	4.40	57.2%
	PESIMISTIC	(1,123,866,393)	12.7%	7.13	30.7%
OPTION 4	OPTIMISTIC	4,260,350,793	97.8%	0.81	62.3%
	MOST LIKELY	2,115,772,712	36.3%	1.87	55.0%
	PESIMISTIC	(435,998,862)	15.7%	4.90	29.9%

The acceptable project is the one with the positive NPV, and if the condition of all the strategy is positive, then the company should choose the highest NPV (Damodaran, 2015). From the result compile in table 4.1 we can see that the highest NPV is given by option 4, where the strategy is to make the composition of the project with 34 small units and 17 big units, and delay the project till 2019, to wait for the highway project to complete.

The other method in finding the best decision for the strategy is by using black scholes merton formula, the formula is put into the option 1 and 2 with the negative NPV of the intended project, in this case option 1 and 2 that gives the first negative NPV is in the most likely scenario, thus we try to delay the project with black scholes merton to see whether the result of the option changes if the options are delay.

**Table 4.2 Black Scholes Comparison Table**

Comparison of Black Scholes Result		
Description	Option 3	Option 4
Value of Call	2,075,794,800	2,381,841,983
Value of Put	3,748,230,576	3,401,369,260

The result of option 1 and 2 that is delayed by using black scholes merton, show the value of call of 2.075.794.800 for the option 1 and 2.381.841.983 for option 2. This means that delaying the project by 3 years and make the composition the same as option 2 makes a bigger value, thus option 4 is more recommended.

The research also try to see if theres a change in the beta could it affect the WACC which in the end affect the feasibility of a project. Table 4.3 show the result:

Table 4.3 Net Present Value (Comparison of Different Capital Structure)

Net Present Value			
DESCRIPTION		Without Loan	With Loan
		18.63%	14.42%
OPTION 1	OPTIMISTIC	1,052,589,614	1,535,857,259
	MOST LIKELY	(1,382,800,270)	(697,709,385)
	PESSIMISTIC	(3,561,117,059)	(2,983,903,903)
OPTION 2	OPTIMISTIC	2,035,234,979	2,471,150,742
	MOST LIKELY	(634,205,880)	(53,830,670)
	PESSIMISTIC	(2,738,404,860)	(2,281,925,025)
OPTION 3	OPTIMISTIC	4,038,309,907	5,185,960,819
	MOST LIKELY	1,758,474,817	2,986,542,017
	PESSIMISTIC	(1,123,866,393)	(422,163,240)
OPTION 4	OPTIMISTIC	4,260,350,793	5,326,929,851
	MOST LIKELY	2,115,772,712	3,226,329,442
	PESSIMISTIC	(435,998,862)	241,114,305

As seen in the Table 4.3 we can see that that by decreasing the WACC from 18.63% to 14.42% we can increase the NPV of the project, this means that the project is recommended to be funded not only from private investment, but also loan from the bank. While the equity is fixed for the nominal of Rp. 4.550.000.000,- or 65% of the capital, the research suggest to loan for the rest of the investment which is 35% or Rp. 2.450.000.000,- Which will give us the new NPV of Rp. 5.326.929.851,- on option 4 optimistic.

#### 4.2 Sensitivity Analysis

There are also several variables that influences the sensitivity of NPV and IRR of this options. These variables are Price, Cost, WACC, and Inflation. Looking at the Figure 4.1, Figure 4.2, Figure 4.3, and Figure 4.4, where in order to see whether which one is the most sensitive the data is changed by 20%/-20%. Looking at the result, the cost increase is the most sensitive and most influencing towards the NPV and IRR of the project. While the second variables that influences the NPV is the discount rate of the project and the variable that affect IRR is in its price. The Figure 4.1, Figure 4.2, Figure 4.3 and Figure 4.4 also show that by decreasing the inflation, WACC, and the cost for the project, it could increase its NPV and IRR, this mean that these three variables show negative correlation with NPV and IRR

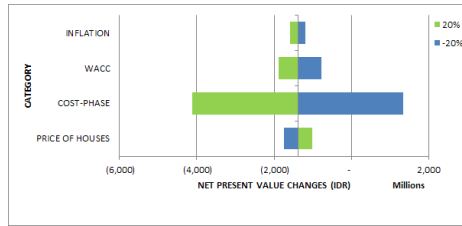


Figure 4.1 NPV Sensitivity Analysis – Tornado Chart (IDR)

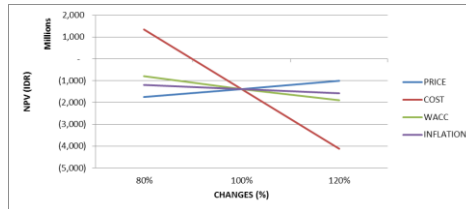


Figure 4.2 NPV Sensitivity Analysis – Spider Chart (IDR)

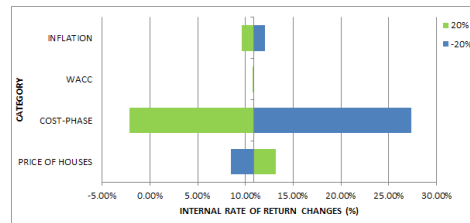


Figure 4.3 IRR Sensitivity Analysis – Tornado Chart (%)

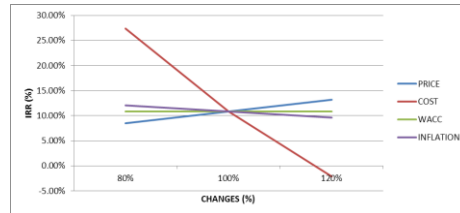


Figure 4.4 IRR Sensitivity Analysis – Spider Chart (%)

#### *4.3 Risk Analysis*

The last part is to explore and mitigate the risk that surrounding the project, with the minimum amount of risk management, the company should more or less aware of the risk that may or may not affect the project, thus by doing this risk management the company can choose the right action for the risks.

These are the risks that have been identified in the project:

##### *Political Risk*

The risk of politic includes the risk in the legal caused by the politic. There are two main risks in the political risk, those are:

##### *Regulations of Housing (Risk 1)*

With the current change in the regulation of KPR, the development of many developers is having big changes, such as the way they built the unit, and their financing. In the last couple of years, financing by KPR can be done even when the unit is still a concept, but now according to Surat Edaran Ekstern Nomor 15/40/DKMP, the bank cannot give KPR/loan to consumer to buy unit that is not tangible, this means that now the unit of the house must first be built by the developer before they can be sold to the consumer. Because of this if the company found out that the project is not within the regulation then that means the license for the project will be provoked.

##### *The Highway project is Halted (Risk 2)*

The main idea for option 3 and 4 is the fact, that the highway project in Tasikmalaya is going to be completed in 2019 (estimated), by default the assumption of growth increase in the year 2019 and above will be demolished if the project is halted.

Mitigation:

##### *Risk 1*

The company should succumb to the regulation, by doing this, even though the cost is higher, the risk of halting the project because of legal reason will be avoided.(Avoid)

##### *Risk 2*

Even when the highway project is halted, the continuation project of this town house is unaffected, because the project's feasibility doesn't necessarily need the highway project to run. (Retain)

##### *Market Risk*

The market risk is the risk that occurs because of macro factors, these mean that these factors are out of reach of the company. This type of risk is uncontrollable by default.

##### *Decreasing buying power (Risk 3)*

The decrease buying power of consumer can affect the project very high because a house is commodities that have a quite high price, the buying power of a consumer greatly affect the project.

Mitigation:

##### *Risk 3*

Because the risk is influence factor is the macro economy of Indonesia in which affecting the business activities in this country, this mean that this is not only affecting this project specific, instead it affect all other competitor even industry

*Competition Risk (Risk 4)*

The risk of competition is highly related to the strategy development of a company, because the threat of the competitor is affected by the way the strategy of a company facing the other competitors. The fact about the new highway in Tasikmalaya, will surely attract many competitor that try to make the same development (Risk 4). The main point the company currently have is, that they have already acquired the best position for the development, thus the project is within reach, and they have already acquired the land in minimal value.

Mitigation:

Risk 4

The increase number of competitor is thing that will happen whether the company like it or not, thus by looking at this the only thing the company can do is by control the probability, this mean instead do anything extreme, a company can only compete healthily or because they have already a lot of experience in Tasikmalaya, the company can secure best location in Tasikmalaya

*Operational Risk*

Operation risk is a risk that occurs because of a failure in the internal process of the company, these process can be relate to their process itself, people, technology, and even its system. To identify the risk in the operational, these are the main risk in operational risks.

Delay in construction process (Risk 5)

The delay of a unit to be built in the process of the project can occur, these risk usually happen because of the people behind the project is failing or not catching up to the target.

Lack of quality in the unit (Risk 6)

The quality of a unit sometimes deteriorate because of many variables, some of these are people, or force majeure.

Mitigation:

Risk 5

The delay of the construction can heavily influence the project this is because the company's operational cost and reputation is heavily affected by the time of the project. The longer the construction the bigger cost the company must pay, thus the best way to mitigate the risk is by transferring it. Transferring this risk can be done by making a contract with the local contractor and set the deadline of the project in the contract, thus the delay of the project become the responsibility of the local contractor.

Risk 6

The bad quality of each unit can only affect the reputation of the company, this because the impact cannot be seen within period of project, instead this risk can only be seen in 4-10 years of the unit build. Thus the risk is recommended to be only retained.

*Financial Risk*

Increase cost of unit because of inflation. This risk is one of the risks that may help or jeopardize the profit margin of the project the cost of unit in the project is highly affected by the cost or price of material to build each unit. This mean that a unit can be expensive or cheaper based on the cost of each unit.

*Over budget in the operating cost (Risk 7)*

The projected cost each year is assumed increase annually, but the increase rate of the cost is hardly forecast, the main variables that affect the cost is related to inflation and gas price. The main cost of each unit is based on material used in the building, thus by the increase of inflation and gas price, the price of a material will change accordingly.

Mitigation:

Risk 7

One of the risk that the company worries is the over budget of cost, this risk can be mitigate by transferring it to local contractor, the condition is the same as risk 5, thus this risk can be mitigate properly.

**Conclusion**

According to the feasibility study using DCF analysis, and Black-Scholes-Merton analysis, the research conclude that option 4 with 35% of the initial investment by loan, is the best strategy to choose. The result of the strategy give the highest NPV of Rp. 5.326.929.851,- IRR of 97.8%. and Payback Period of 9 Months and 26 Days, even though it is delayed by 3 years.

APPENDIX

Appendix 1. Discounted Cash Flow Analysis Result

Net Present Value							
DESCRIPTION		Without Loan	With Loan				
		18.63%	14.42%				
OPTION 1	OPTIMISTIC	1,052,589,614	1,535,857,259				
	MOST LIKELY	(1,382,800,270)	(697,709,385)				
	PESSIMISTIC	(3,561,117,059)	(2,983,903,903)				
OPTION 2	OPTIMISTIC	2,035,234,979	2,471,150,742				
	MOST LIKELY	(634,205,880)	(53,830,670)				
	PESSIMISTIC	(2,738,404,860)	(2,281,925,025)				
OPTION 3	OPTIMISTIC	4,038,309,907	5,185,960,819				
	MOST LIKELY	1,758,474,817	2,986,542,017				
	PESSIMISTIC	(1,123,866,393)	(422,163,240)				
OPTION 4	OPTIMISTIC	4,260,350,793	5,326,929,851				
	MOST LIKELY	2,115,772,712	3,226,329,442				
	PESSIMISTIC	(435,998,862)	241,114,305				
Description	NPV	IRR	PBP	ROI	ROE		
OPTION 1	OPTIMISTIC	1,052,589,614	30.0%	2.02	22.2%	22.2%	
	MOST LIKELY	(1,382,800,270)	10.9%	5.15	16.5%	16.5%	
	PESSIMISTIC	(3,561,117,059)	2.4%	8.55	4.7%	4.7%	
OPTION 2	OPTIMISTIC	2,035,234,979	47.5%	1.29	27.6%	27.6%	
	MOST LIKELY	(634,205,880)	14.1%	3.60	16.5%	16.5%	
	PESSIMISTIC	(2,738,404,860)	1.8%	8.65	2.3%	2.3%	
OPTION 3	OPTIMISTIC	4,038,309,907	73.5%	1.38	62.0%	62.0%	
	MOST LIKELY	1,758,474,817	30.1%	4.40	57.2%	57.2%	
	PESSIMISTIC	(1,123,866,393)	12.7%	7.13	30.7%	30.7%	
OPTION 4	OPTIMISTIC	4,260,350,793	97.8%	0.81	62.3%	62.3%	
	MOST LIKELY	2,115,772,712	36.3%	1.87	55.0%	55.0%	
	PESSIMISTIC	(435,998,862)	15.7%	4.90	29.9%	29.9%	

Appendix 2. Payback Period Calculation

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Option 1								
Optimistic			Most Likely			Pessimistic		
0	(4,984,300,000)	(4,984,300,000)	-	(5,817,550,000)	(5,817,550,000)	-	(5,817,550,000)	(5,817,550,000)
1	1,869,000,000	(3,115,300,000)	1	(338,250,000)	(6,155,800,000)	1	(1,355,750,000)	(7,173,300,000)
2	3,053,647,500	(61,652,500)	2	2,854,225,000	(3,301,575,000)	2	1,721,500,000	(5,451,800,000)
3	3,825,433,400	3,763,780,900	3	(421,609,425)	(3,723,184,425)	3	1,795,805,000	(3,655,995,000)
4			4	3,267,802,203	(455,382,223)	4	(1,808,843,037)	(5,464,838,037)
5			5	(113,383,855)	(568,766,077)	5	1,953,175,945	(3,511,662,093)
6			6	3,741,306,742	3,172,540,664	6	2,036,415,986	(1,475,246,107)
7			7			7	(2,010,202,673)	(3,485,448,780)
8			8			8	2,212,441,118	(1,273,007,662)
9			9			9	2,305,399,577	1,032,391,915
PBP	0.02		PBP	0.15		PBP	0.55	

Option 2								
Optimistic			Most Likely			Pessimistic		
-	(4,628,450,000)	(4,628,450,000)	-	(5,863,450,000)	(5,863,450,000)	-	(5,863,450,000)	(5,863,450,000)
1	3,888,750,000	(739,700,000)	1	811,375,000	(5,052,075,000)	1	(711,875,000)	(6,575,325,000)
2	2,583,730,000	1,844,030,000	2	4,215,131,250	(836,943,750)	2	2,521,543,750	(4,053,781,250)
3	2,586,941,675	4,430,971,675	3	(378,355,103)	(1,215,298,853)	3	2,983,400,750	(1,070,380,500)
4			4	2,010,944,836	795,645,983	4	(1,780,930,456)	(2,851,310,956)
5			5	(751,374,489)	44,271,494	5	1,234,886,948	(1,616,424,007)
6			6	3,012,909,032	3,057,180,526	6	1,283,127,410	(333,296,598)
7			7			7	(1,990,907,925)	(2,324,204,522)
8			8			8	1,384,015,754	(940,188,768)
9			9			9	1,436,673,701	496,484,932
PBP	0.29		PBP	0.60		PBP	0.65	

Option 3								
Optimistic			Most Likely			Pessimistic		
-	(5,599,110,070)	(5,599,110,070)	-	(6,660,512,995)	(6,660,512,995)	-	(6,660,512,995)	(6,660,512,995)
1	3,288,216,167	(2,310,893,903)	1	(162,492,795)	(6,823,005,790)	1	(1,681,135,497)	(8,341,648,492)
2	6,129,708,329	3,818,814,426	2	4,167,551,349	(2,655,454,441)	2	2,213,917,195	(6,127,731,298)
3	8,702,935,011	12,521,749,437	3	414,929,981	(2,240,524,460)	3	2,456,937,048	(3,670,794,250)
4			4	5,658,830,996	3,418,306,536	4	(1,892,461,253)	(5,563,255,503)
5			5	2,161,270,415	5,579,576,951	5	3,023,112,193	(2,540,143,310)
6			6	7,652,384,034	13,231,960,985	6	3,351,918,807	811,775,497
7			7			7	(1,347,655,912)	(535,880,415)
8			8			8	4,117,341,412	3,581,460,997
9			9			9	4,561,533,551	8,142,994,548
PBP	0.38		PBP	0.40		PBP	0.13	

Option 4								
Optimistic			Most Likely			Pessimistic		
-	(5,155,892,405)	(5,155,892,405)	-	(6,713,063,905)	(6,713,063,905)	-	(6,713,063,905)	(6,713,063,905)
1	6,386,628,516	1,230,736,111	1	1,422,161,864	(5,290,902,041)	1	(909,263,811)	(7,622,327,716)
2	4,309,611,418	5,540,347,530	2	6,114,304,604	823,402,563	2	3,233,382,316	(4,388,945,399)
3	6,381,686,516	11,922,034,046	3	470,235,586	1,293,638,149	3	4,175,510,905	(213,434,494)
4			4	3,579,960,269	4,873,598,418	4	(1,696,352,394)	(1,909,786,888)
5			5	854,201,444	5,727,799,862	5	2,112,777,678	202,990,790
6			6	6,266,736,415	11,994,536,277	6	2,348,563,685	2,551,554,475
7			7			7	(1,201,482,077)	1,350,072,398
8			8			8	2,898,667,741	4,248,740,139
9			9			9	3,218,558,163	7,467,298,301
PBP	0.81		PBP	0.87		PBP	0.90	

Appendix 3. Result Calculation for NPV, IRR, PBP, ROI, ROE

Net Present Value Comparison				
Description	OPTION 1	OPTION 2	OPTION 3 (2019)	OPTION 4 (2019)
OPTIMISTIC	1,052,589,614	2,035,234,979	4,038,309,907	4,260,350,793
MOST LIKELY	(1,382,800,270)	(634,205,880)	1,758,474,817	2,115,772,712
PESSIMISTIC	(3,561,117,059)	(2,738,404,860)	(1,123,866,393)	(435,998,862)
INTERNAL RATE OF RETURN (IRR)				
Description	OPTION 1	OPTION 2	OPTION 3	OPTION 4
OPTIMISTIC	30.0%	47.5%	73.5%	97.8%
MOST LIKELY	10.9%	14.1%	30.1%	36.3%
PESSIMISTIC	2.4%	1.8%	12.7%	15.7%
RETURN ON INVESTMENT (ROI)				
Description	OPTION 1	OPTION 2	OPTION 3	OPTION 4
OPTIMISTIC	22.2%	27.6%	62.0%	62.3%
MOST LIKELY	16.5%	16.5%	57.2%	55.0%
PESSIMISTIC	4.7%	2.3%	30.7%	29.9%
RETURN ON EQUITY (ROE)				
Description	OPTION 1	OPTION 2	OPTION 3	OPTION 4
OPTIMISTIC	22.2%	27.6%	62.0%	62.3%
MOST LIKELY	16.5%	16.5%	57.2%	55.0%
PESSIMISTIC	4.7%	2.3%	30.7%	29.9%
PAYBACK PERIOD				
Description	OPTION 1	OPTION 2	OPTION 3 (2019)	OPTION 4 (2019)
OPTIMISTIC	2.02	1.29	1.38	0.81
MOST LIKELY	5.15	3.60	4.40	1.87
PESSIMISTIC	8.55	8.65	7.13	4.90

OPTION 4 BLACK SCHOLES									
		2019	2019	2020	2021	2022	2023	2024	2025
COST WITHOUT OP			(6,464,735,095.00)	(3,268,720,984.75)	(264,125,396.02)	(3,784,435,207.36)	(302,397,165.90)	(4,745,887,153.73)	(346,214,515.24)
PV COST WITHOUT OP COST (2019)	EX	\$13,971,501,839.05	\$6,464,735,095.00	\$2,755,391,540.71	\$187,681,342.11	\$2,266,822,334.27	\$152,686,132.61	\$2,019,969,237.17	\$124,216,157.18
		2016	2019	2020	2021	2022	2023	2024	2025
PV of CASHFLOW (2016)	P	\$9,737,900,916.97	\$3,989,713,049.99	\$82,050,157.05	(\$1,773,934,561.00)	(\$148,882,200.52)	(\$1,711,614,722.48)	(\$551,061,062.71)	(\$1,644,745,477.32)
		2019	2019	2020	2021	2022	2023	2024	2025
COST WITHOUT OP			(6,517,286,005.00)	(4,171,424,545)	(363,254,344)	(2,786,870,289)	(211,602,980)	(3,555,200,189)	(294,239,383)
PV COST WITHOUT OP COST (2019)	EX	\$13,686,626,820.71	\$6,517,286,005.00	\$3,516,331,910.46	\$258,120,059.21	\$1,669,295,275.90	\$106,842,405.45	\$1,513,182,842.53	\$105,568,322.17
		2016	2019	2020	2021	2022	2023	2024	2025
PV of CASHFLOW (2016)	P	\$10,158,155,839.76	\$4,021,191,563.97	(\$718,115,560.06)	(\$2,602,577,711.91)	(\$168,726,560.89)	(\$1,082,823,061.23)	(\$217,796,510.88)	(\$1,346,924,870.80)

Appendix



4. Real Option – Black Scholes Formula Methods

VOLATILITY USING 39.63% - STANDARD DEVIATION - R.E.I.T (DAMODARAN)			
Black Scholes Merton		Black Scholes Merton	
OPT 3 - Most Likely		OPT 4 - Most Likely	
<b>Input Data</b>			
Current Market Value of Property (P)	9,737,900,917	Current Market Value of Property (P)	10,158,155,840
Exercise Price of Option - Cost of Initial Invest. (EX)	13,971,501,839	Exercise Price of Option (EX)	13,686,626,821
Number of periods to Exercise in years (t)	3	Number of periods to Exercise in years (t)	3
Compounded Risk-Free Interest Rate (rf)	6.75%	Compounded Risk-Free Interest Rate (rf)	6.75%
Standard Deviation (annualized $\sigma$ )	39.63%	Standard Deviation (annualized $\sigma$ )	39.63%
<b>Output Data</b>			
Present Value of Exercise Price (PV(EX))	11410336693.5457	Present Value of Exercise Price (PV(EX))	11177683116.8413
$\sigma \cdot t^{.5}$	0.6864	$\sigma \cdot t^{.5}$	0.6864
d1	0.1123	d1	0.2039
d2	-0.5741	d2	-0.4825
Delta N(d1) Normal Cumulative Density Function	0.5447	Delta N(d1) Normal Cumulative Density Function	0.5808
Bank Loan N(d2)*PV(EX)	3228523768.0517	Bank Loan N(d2)*PV(EX)	3517732100.5172
<b>Value of Call</b>		<b>Value of Call</b>	
2,075,794,800		2,381,841,983	
<b>Value of Put</b>		<b>Value of Put</b>	
3,748,230,576		3,401,369,260	

Appendix 5. Sensitivity Analysis Calculation

PRICE CHANGES	80%	100%	120%
PRICE GROWTH	5.60%	7.00%	8.40%
Discount Rate	18.63%	18.63%	18.63%
NPV	(1,744,070,356.29)	(1,382,800,270)	(1,009,318,456.59)
IRR	8.48%	10.87%	13.16%
COST CHANGES	80%	100%	120%
Discount Rate	18.63%	18.63%	18.63%
NPV	1,345,063,604.96	(1,382,800,270)	(3,446,291,520.62)
IRR	27.36%	10.87%	1.06%
WACC CHANGES	80%	100%	120%
Discount Rate	14.90%	18.63%	22.36%
NPV	(783,706,748.66)	(1,382,800,270)	(1,886,514,614.18)
IRR	10.87%	10.87%	10.87%
INFLATION CHANGES	80%	100%	120%
INFLATION	5.60%	7.00%	8.40%
Discount Rate	14.90%	18.63%	22.36%
NPV	(1,188,504,473.58)	(1,382,800,270)	(1,583,201,817.74)
IRR	12.06%	10.87%	9.59%

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## OWNERSHIP STRUCTURE AND FINANCIAL PERFORMANCE OF ISLAMIC BANK IN INDONESIA

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### Abstract

This study aims to provide empirical evidence about the influence of ownership structure on financial performance of sharia banks in Indonesia. Ownership structure in this study consisted of ownership concentration and type of ownership. Ownership concentration is proxied by the largest number of shareholders and three largest number of shareholders, while the type of ownership is proxied by government ownership, institutional ownership, family ownership, foreign ownership. Financial performance in this study was measured by Return on Assets (ROA) and Return on Equity (ROE). This study uses multiple linear regression analysis. Number of samples were used in the study are 56 Sharia Commercial Banks in observation period 2009-2014. Samples were obtained by using purposive sampling method. The results of this study showed positive influence of ownership concentration on bank's financial performance. The results also show that there are positive influence between institutional ownership and family ownership on bank's financial performance, while government ownership negatively affect bank's financial performance. On the other hand, there is no influence of foreign ownership on bank's financial performance.

**Keywords:** *ownership structure, financial performance, return on asset, return on equity.*

### Introduction

The system of capitalism and socialism are the economic systems that are evolving today (Triyanti, 2008). The nature of the system since the beginning has been unfair or discriminatory, because it tends to side the owners of capital alone (Farihah, 2014). It is certainly contrary to the principles of Islam. Economy in Islam should be able to provide welfare for the whole community, providing a sense of justice, solidarity and kinship and able to provide the widest opportunity for every business (Apipudin, 2015). In response, it would require the financial institution that adheres to Islamic economic system that is able to achieve these goals. One of the financial institutions in question are Islamic banks.

The development of Islamic bank in Indonesia has begun over 15 years ago. The high enthusiasm of the people to use the Islamic bank services causes the founding of many more Islamic banks. Even many conventional banks expand their businesses by opening sharia division. Up to 2015 there have been 12 Public Islamic Banks or Bank Umum Syariah (BUS) founded. The flourishing Islamic Banks makes the competition among Islamic Banks inevitable. The positive impact of this, it motivates banks to race to be the best, while the negative impact is that if they lose the competition, it will hamper the development of the banks themselves (Safitri, 2015). Efforts which can be done by Islamic banks to survive in the high competition among others is to improve their financial performance.

In the research of Wahyudi dan Pawesti (2006) it is explained that the ownership structure can affect the running of the company which in the end takes effect on the company's performance. The same thing is stated by Hastuti (2005) that the financial performance can be affected by ownership structure, that is, whether the ownership is

concentrated or not. Issues regarding ownership structure which affect company performance has been widely studied. Some researchers who conducted concentrated ownership and company performance among others: Zouari dan Taktak (2014); Arouri, Hossain, Muttakin (2014); Douma, George, and Kabin (2006); Prabowo dan Simpson (2011); Zeitun and Tian (2007).

Zouari dan Taktak (2014) conducted a research about the effect of ownership concentration on Islamic bank financial performance, the result showed that there was no effect of concentrated ownership on the financial performance of Islamic bank. The Islamic bank performance precisely depends on the type of ownership concentration. Government and family owned banks showed positive and significant impacts on the performance of the banks for the research model. However, there is a negative relationship between institutional ownership and bank performance as well as foreign ownership.

The different result was shown by research of Zeitun and Tian (2007). They found a positive effect of ownership concentration on corporate performance as measured by ROA and ROE. They also found a negative effect of government ownership on company's performance. The result was supported by the statement of Kautsar and Fajar (2012) that the corporate performance could be improved by reducing the proportion of government ownership.

Research of Arouri et al (2014), which uses 58 banks in the GCC countries (Gulf Cooperation Council) during the period of 2010 as a sample in the study also showed different results. The study found that the structure of institutional ownership has a positive effect on company performance.

Different results were indicated by Douma et al (2006) who studied the effect of foreign ownership on corporate performance in India. The study showed positive effect of foreign ownership on firm performance.

Research conducted by Prabowo and Simpson (2011) showed that there was a negative effect on the performance of family ownership of companies in Indonesia. Family ownership is actually detrimental to the performance of the company when the family is involved in management decisions.

## **Literature review**

### *Financial Performance*

According to Mustafa and Handayani (2014) financial performance is a picture of the condition of a company that is analyzed through financial analysis tools that can be used to determine good or poor financial condition of a company which can then describe the performance of a company within a certain period. Ratio analysis is done to conduct an assessment of the financial performance and the potential or ability of a company (Muqorobin dan Nasir, 2009). Fred (in Lahonda, Ilat, Tirayoh, 2014) suggested that financial ratios are often used in measuring the financial performance of companies one of which is a profitability ratio. Profitability is the company's ability to generate profits of several ratios as follows (Faisol, 2007):

- a. *Return on Asset (ROA)*, is the ratio used to measure the ability of a bank's management in the gain (profit) as a whole.
- b. *Return on Equity (ROE)*, is the ratio between net income with their own capital.
- c. *Net Profit Margin (NPM)*, is the ratio of the use of bank profit rate compared to income received from operations.

### *Agency Theory*

Agency theory was first popularized by Jensen and Meckling in 1976. The theory holds that an agency relationship arises when there is one or more persons, called the principal, hires someone else, which is referred to as agent, to perform services and delegate decision-making authority to the agent. Separation of ownership and control in large companies causing problems in alignment of interests between shareholders with management, which leads to agency problems (Jensen and Meckling, 1976). Conflicts of interest may affect the future performance of the company (Setiawan, in Wiranata and Nugrahanti, 2013). The ownership structure is often regarded as an important instrument for corporate governance to resolve conflicts of interest between shareholders and managers (Hu and Izumida, 2008). Further more Hu and Izumida (2008) states that the concentration of ownership has the potential to limit the agency problem, and then it can result in improved performance of the company.

#### *Islamic Bank*

According to Regulation No. 21 of 2008 concerning Islamic Banking Article 1, Bank Syariah is a bank running their business based on Sharia principles and based on the type, it consists of Islamic Banks (BUS) and Bank Rakyat Syariah Financing (BPRS). BUS is an Islamic bank whose activities provide services in payment traffic, while the BPRS is an Islamic bank whose activities do not provide services in payment traffic (Act No. 21 of 2008). Under article 2 of Regulation No. 21 In 2008, Islamic banking should be based on Islamic principles, economic democracy, and the principle of prudence. Islamic principles are the principles of Islamic law in banking activities by the fatwa issued by the agency that has the authority in setting the fatwa in the field of Sharia (Regulation No. 21 of 2008).

#### *Company Size*

Company size is a value that indicates the size of the company (Butar dan Sudarsi, 2012). The size of the company is divided into three categories: large companies (large firm), medium companies (medium size) and small companies (small firm) (Machfoedz, in Suwito and Herawaty, 2005). Indriani (in Daniati and Suhairi, 2006) explains that the company which has big total asset shows the company has already reached maturity, where cash flows and business prospects are good.

#### *Leverage*

Leverage is the ratio between debt and assets which indicates what portion of the assets is used to secure the loan (Butar dan Sudarsi, 2012). Leverage describes the company's ability to pay for all long-term and short-term liabilities or if it continues to rise in liquidation (Schipper, in Marwata, 2001). The lower the leverage ratio will increase profits, so the greater the creditors guarantee for repayment of loans given by the company (Fahmi, in Hendri, 2015).

#### *Capital Adequacy Ratio*

Capital Adequacy Ratio (CAR) as an indicator of the ability of banks to offset a decline in its assets as a result of bank losses caused by risky assets with its capital adequacy (Margaretha and Zai, 2013). The greater CAR the bank has, the bigger the bank's profits is, or in other words, the smaller the risk of a bank, the greater profits will be obtained by the bank (Kuncoro and Suhardjono, 2002).

#### *Ownership Structure*

According to Wu (2003), the ownership structure can be defined as the ratio of shares owned by different shareholders. The ownership structure falls into two forms, namely

concentrated or mixed. The ownership structure is said to be concentrated if a majority of shares are owned by several major shareholders, while the structure of the mixture involves diffusion of ownership among the different shareholders such as governments, businesses, individuals, foreign companies and others (Parveen and Siddique, 2014). Corporate ownership structure in East Asia, including Indonesia, are found tend to be concentrated (Claessens et al, 2000).

Concentration of ownership can improve performance by reducing monitoring costs (Shleifer and Vishny, in Zeitun and Tian, 2007). Ownership concentrated by the institutions will facilitate control that will enhance the performance of the company (Hastuti, 2005). Research conducted by the Zeitun and Tian (2007) found a positive effect of ownership concentration on corporate performance as measured using accounting measures ROA and ROE. Similar results were shown by Musnadi (in Yendrawati and Nugroho, 2012) which conducts research on corporate ownership structure as a corporate mechanism governance, and its impact on financial performance. The results showed that the largest concentrated holdings has a positive effect on the company's financial performance.

**H<sub>1</sub> : Concentration of ownership has positive influence on the financial performance of Islamic Banks.**

#### *Ownership Types*

Thomsen and Pedersen (2000) divides into four different types of ownership, ie the government, institutions, family, and foreigners.

##### a. Government Ownership

Government (state) ownership is the shares held directly by the government or by a government agency (Zeitun dan Tian, 2007). Winata (2012) explains that the banking company in Indonesia, the government's stake in the bank whose shares are partly or wholly owned by the government, namely the category of state-owned banks (SOEs) and local government-owned bank (BPD).

##### b. Institutional Ownership

Ownership by the institution is the proportion of the company's shares owned by the institution or institutions such as insurance companies, banks, investment companies and other institutional ownership (Tarjo, 2008). According to Veronica and Bachtiar (2005) institutional ownership is ownership of company shares by financial institutions, such as insurance companies, banks, pension funds, and asset management.

##### c. Family Ownership

La Porta et al (in Rebecca and Siregar, 2013) defines family ownership as ownership of individual and the ownership of the closed companies (above 5%), which is not a public company, state, or financial institutions. Anderson, Satta, and David (2003) states that the family represents a group of large shareholders who could potentially have a unique incentive structure, great strength of the company, and a strong motive to manage certain companies.

##### d. Foreign Ownership

Machmud and Djakman (2008) states that foreign ownership is the ownership of the shares owned by multinational companies. According to Wiranata and Nugrahanti (2013) foreign ownership is a proportion of the company's common stock owned by an individual, corporation, government as well as the status of its parts abroad or individuals, legal entities, governments that do not originate from Indonesia.

Thomsen and Pedersen (2000) states that the effect of the concentration of ownership varies by type of ownership concentration, specifically the type of government ownership, foreigners, families, and institutions. Research conducted by Zori and Taktak

(2014) and Zeitun and Tian (2007) found that each type of ownership had a different effect on the bank's financial performance.

**H<sub>2</sub> : Type of ownership affects the financial performance of Islamic Banks.**

According to Kauthar and Fajar (2012) a reduction in the proportion of state ownership can improve the performance of the company. The statement was supported by Zeitun and Tian (2007) who found a negative influence on the financial performance of government ownership. That's because the government's focus is more on social benefits rather than on profit.

**H<sub>2a</sub> : Government ownership negatively affects the financial performance of Islamic Banks.**

Institutional shareholders are more profit oriented and may have more incentive to monitor the company (Zeitun and Tian, 2007). Results of research conducted by Arouri et al (2014) proved that institutional ownership had a positive effect on company performance.

**H<sub>2b</sub> : Institutional ownership have a positive influence on the financial performance of Islamic Banks.**

Family relationships can improve supervision, which in turn will generate better corporate performance (Arouri et al, 2014). Zouari and Taktak study (2014) showed that family ownership had a positive impact on the performance of banks.

**H<sub>2c</sub> : Family ownership has positive influence on the financial performance of Islamic Banks.**

The increasing number of foreigners who invest their shares in the company will increase the performance of these companies, for foreigners who have invested their shares have the management systems, technology and innovation, expertise and good marketing can bring a positive influence for the company (Wiranata and Nugrahanti, 2013). The results of the study Douma et al (2006) showed that foreign ownership has positive effect on financial performance.

**H<sub>2d</sub> : Foreign ownership has a positive influence on the financial performance of Islamic Banks.**

## **Research methods**

The population used for this study are all Islamic Banks listed on the Financial Services Authority (FSA) in 2009-2014. Selection of the samples for research is done using purposive sampling technique. Purposive sampling technique sampling methods tailored to the specific criteria (Sekaran and Bougie, 2010). The criteria used in determining the sample is as follows:

Islamic Banks listed on the Financial Services Authority 2009-2014.

1. Islamic Banks which published its annual report in the range 2009-2014.
2. Islamic Banks that did not experience a loss in the period.

The data used in this research is secondary data, in the form of annual reports of Islamic Banks, published in the official website of each bank. In addition, the official website of the Financial Services Authority (FSA) is also used to determine Islamic Banks which were registered during 2009-2014.

## Operational Definition and Measurement of Variables

### 1. Financial Performance

With reference to research conducted by Taktak and Zouari (2014), the measurement of financial performance is proxied by two indicators of the bank's financial performance, the ROA and ROE.

#### 1. Return on Asset (ROA)

ROA is the ratio of earnings before interest and taxes (EBIT) to total assets of the company, calculated using the following formula (Safitri, 2015):

$$\text{ROA} = \frac{\text{Profit before tax}}{\text{average total asset}} \times 100\%$$

#### 2. Return on Equity (ROE)

ROE is a profitability ratio that indicates the ratio between profit with bank capital, this ratio shows the percentage rate that can be generated (Riyadi, in Thamrin, wiyati, Oemar, 2015). ROE is calculated using the formula :

$$\text{ROE} = \frac{\text{profit after tax}}{\text{average equity}} \times 100\%$$

### 2. Ownership Concentration

Measurement of concentration of ownership followed Zouari and Taktak (2014) in their study, namely:

1. C1, the percentage of shares owned by the largest shareholder.
2. C3, the percentage of shares owned by the three largest shareholders

### 3. Ownership Type

Measurement of ownership types is described by using dummy variables. To categorize the largest shareholder (controlling owner), four dummy variables are used, like in the research conducted by Taktak and Zouari (2014).

1. GOV, given the value of 1 if the largest shareholder is the government, and 0 otherwise.
2. INST, given the value of 1 if the largest shareholders were financial institution investors, and 0 otherwise.
3. FAM, given the value of 1 if the largest shareholder is family investor and 0 otherwise.
4. FORG, given the value of 1 if there are foreign shareholders, although not the majority, and 0 otherwise.

### 4. Company Size

This study uses the size of the company according to Crutchley and Hansen (in Nuringasih, 2005) by using the natural log of total assets.

$$\text{Size} = \text{Ln} (\text{Total Asset})$$

### 5. Leverage

Leverage indicates what portion of the assets used to secure the loan, obtained from the ratio between debt and assets (Butar and Sudarsi, 2012).

$$\text{Leverage} = \frac{\text{total liabilities}}{\text{total assets}}$$

### 6. Capital Adequacy Ratio (CAR)

CAR is the ratio of the amount of capital and the amount Weighted Assets Ratio (RWA) are formulated with (Safitri, 2015):



$$\text{CAR} = \frac{\text{BANK CAPITAL}}{\text{TOTAL RWA}} \times 100\%$$

### Hypothesis testing

Hypothesis testing is done by using multiple regression analysis. Multiple regression equation to test the hypothesis in this study are:

$$\text{ROA} = \alpha + \beta_1 \text{C1} + \beta_2 \text{C3} + \beta_3 \text{GOV} + \beta_4 \text{INST} + \beta_5 \text{FAM} + \beta_6 \text{FORG} + \beta_7 \text{SIZE} + \beta_8 \text{LEV} + \beta_9 \text{CAR} + \varepsilon$$

$$\text{ROE} = \alpha + \beta_1 \text{C1} + \beta_2 \text{C3} + \beta_3 \text{GOV} + \beta_4 \text{INST} + \beta_5 \text{FAM} + \beta_6 \text{FORG} + \beta_7 \text{SIZE} + \beta_8 \text{LEV} + \beta_9 \text{CAR} + \varepsilon$$

Information:

ROA	=	<i>Return on Asset</i>
ROE	=	<i>Return on Equity</i>
C1	=	Largest Number of Shareholders
C3	=	Number of Three Largest Shareholder
GOV	=	Government ownership
INST	=	Institutional ownership
FAM	=	Family Ownership
FORG	=	Foreign Ownership
SIZE	=	Company Size
LEV	=	<i>Leverage</i>
CAR	=	<i>Capital Adequacy Ratio</i>
$\alpha$	=	constants
$\beta$	=	Regression coefficients
$\varepsilon$	=	Error

### Data analysis and discussion

#### *Data Description*

The population used in this study are all Islamic Banks (BUS) registered with the Financial Services Authority (FSA) in 2009-2014. The sample selection for the study is based on predetermined criteria in the previous chapter. Based on these criteria, there are as many as 56 BUS during 2009-2014 were selected as the study sample.

#### *Descriptive statistics*

Based on Table in the attachment, the financial performance as measured by ROA has the lowest value of 0.08 with the highest value is 5.49. BUS which has the lowest ROA is BRI Syariah in 2014, while BUS with the highest ROA is Victoria Islamic Bank in 2011. The average value of ROA at 1.402 with a standard deviation of 1.124. Measurement of performance through ROE has the lowest value of 0.39, which is experienced by BRI Syariah 2014. The highest ROE owned by Bank Syariah Mega Indonesia in 2012 is 35.01. The average value of ROE amounted to 8.525 and the value of the standard deviation is equal to 7.457.

The average value for C1 is 43.044 with a standard deviation of 14.793. BUS which has the highest score largest shareholder is Bank Syariah Mandiri in 2009 amounted to 66.76%, while the lowest value of 22.17% owned by BCA Syariah in 2010. C3 has an average value of 65.951 and 18.458 standard deviation value. Bank Syariah Bukopin in 2012 had a value of the three largest shareholders other than the most minor, ie 42.01%. For the highest number three largest shareholders is owned by BRI Syariah in 2011 amounted to 98.95%.

GOV average value of 0.3750 means that the BUS is 37.5% owned by the government. GOV standard deviation is 0.48850. Variable INST has the highest average value compared to other dummy variables, namely 0.4286, means BUS 42.86% is owned by institutions, with a standard deviation value of 0.49935. Furthermore, to the variable FAM has an average value of 0.1964 means BUS 19.64% is owned by the family. FAM standard deviation value of 0.40089. Recently, variable FORG has an average value of 0.6786 means that 67.86% BUS in Indonesia are foreign investors in the composition of its shareholders. Standard deviation value for FORG is 0.471. From these results it can be seen that the majority of BUS in Indonesia are owned by the institution.

This study uses three control variables, namely size, leverage, and CAR. The size of the company is measured by the total assets of the bank has an average value of Rp 13,657,371,450,000.00 while the standard deviation value is Rp 18,139,659,430,000.00. BUS which has the biggest size is Bank Syariah Mandiri in 2014 with total assets of USD 66,942,422,000,000.00. Victoria Islamic Bank in the year 2011 is the smallest BUS with total assets of Rp 642,026,000,000.00. The lowest value for leverage was 2.78, which is owned by Bank Panin Syariah in 2011. For a record high of 41.19 was held by Bank Syariah Bukopin in 2009. The average value of leverage is 19.0972 with the standard deviation value of 7.56544. Last control variables, CAR had an average value of 23.7041 and a standard deviation value of 16.63916. Bank Syariah Mandiri in 2010 had the lowest value of CAR of 10.6. Highest value CAR of 76.39 was held by BCA Syariah in the same year.

### Classic assumption test

#### *Normality test*

In Table 3 and Table 4 in the appendix shows that the two values Asymp. Sig. more than 0.05. The results show that the data are normally distributed, both for ROA and ROE.

#### *Multicollinearity test*

According to Table 5 and Table 6 in the appendix, all the variables have the tolerance value above 0.10 and VIF not more than 10 so that all of the variables used in the regression model do not contain multicollinearity.

#### *Heteroskedasticity test*

Figure 1 and Figure 2 in the appendix show that the dots randomly and evenly spread above and below the number 0 on the Y axis and do not form a particular pattern. This indicates that the data did not experience heteroscedasticity.

#### *Autocollinearity test*

According to Table 7 and Table 8, it can be seen that both the value Asymp. Sig. is more than 0.05. The results showed that the regression model is free from autocorrelation.

### Hypothesis testing

Table 9 and Table 10 shows the results of hypothesis testing with multiple linear regression analysis in nine different models. All models is a summary or the final result of the model one to eight. Thus, the model for one to eight is the explanation of all models. Based on the table above, the regression equation can be written in this study as follows:

$$ROA = -0,029 + 0,047C1 + 0,004C3 - 1,173GOV + 1,454INST + 1,173FAM + 0,399FORG - 0,149SIZE - 0,009LEV + 0,022CAR$$

$$ROE = -27,204 + 0,317C1 + 0,081C3 - 9,218GOV + 9,050INST + 9,218FAM - 2,765 + 1,124SIZE - 0,153LEV - 0,076CAR$$

#### *Coefficient of Determination Test*

In all models in Table 9 it is stated adjusted R Square of 0.335. It shows that 33.5% of financial performance variables proxied by the ROA can be explained by the six variables that exist (C1, C3, GOV, INST, FAM, and FORG). While the balance of 66.5% is explained by

other variables that are outside the regression model. For Table 4.10, adjusted R Square value is stated at 0.334. It shows that 33.4% of financial performance variables that proxy with ROE can be explained by the six variables that exist (C1, C3, GOV, INST, FAM, and FORG). While the balance of 66.6% is explained by other variables that are outside the regression model.

**Significant Simultaneous Test (Test F)**

Simultaneous Significant test results in Table 9 is expressed by F value of 4.460 with a significance value is below the 0.01 confidence level. Based on these results it can be concluded that the regression model used in the study is fit and it can be said that the concentration of ownership (C1 and C3) and the type of ownership (GOV, INST, FAM, FORG) jointly have a significant impact on the financial performance proxied by ROA. For Table 10, simultaneous significant test results is expressed by F value of 4.460 with a significance value below the 0.01 confidence level. Based on these results it can be concluded that the regression model used in the study is fit and it can be said that the concentration of ownership (C1 and C3) and the type of ownership (GOV, INST, FAM, forG) jointly have a significant impact on the financial performance proxied by ROE.

**1. Partial Significant test (t test)**

**1. Hypotesis 1**

The hypothesis 1 states that the concentration of ownership has a positive effect on the financial performance of Islamic Banks. According to Table 9, the variable C1 has a regression coefficient of 0.047 with a significance value below 0.01.

2. For Table 10, variable C1 has a regression coefficient of 0.317 with a significance value below 0.01. From the two results we can conclude that the hypothesis (H1) is supported. Although variable C3 on both tables have a significance value above 0.05, the concentration of ownership has been fairly represented by the variable C1 so that H1 can be supported.

**3. Hypotesis 2a**

Hypothesis two a states that government ownership has a negative effect on the financial performance of Islamic Banks. According to Table 4.9, GOV variable has a regression coefficient of -1.173 with a significance value below 0.05. For Table 10, GOV variable has a regression coefficient of -9.218 with a significance value below 0.05. From both results it can be concluded that the hypothesis of 2a (H2a) is supported.

**4. Hypotesis 2b**

Hypothesis two b states that institutional ownership has positive influence on the financial performance of Islamic Banks. According to Table 9, variable INST has a regression coefficient of 1.454 with a significance value below 0.01. For Table 10, variable INST has a regression coefficient of 9.050 with a significance value below 0.01. From both results it can be concluded that the hypothesis of 2b (H2b) is supported.

**5. Hypotesis 2c**

Hypothesis two c states that family ownership has positive influence on the financial performance of Islamic Banks. According to Table 9, variable FAM has a regression coefficient of 1.173 with a significance value below 0.05. For Table 4.10, variable FAM has a regression coefficient of 9.218 with a significance value below 0.05. From both results it can be concluded that the hypothesis of 2c (H2C) is supported.

**6. Hypotesis 2d**

Hypothesis two d states that foreign ownership has positive influence on the financial performance of Islamic Banks. According to Table 9, FORG variable has a regression coefficient of 0.399 with a significance value above 0.05. For Table 10, FORG variable has a regression coefficient of -2.765 with a significance value above 0.05. From both results it can be concluded that the hypothesis of two d (H2d) is not supported.

## Discussion

### Effect of Ownership Concentration against Islamic Banks Financial Performance

Based on the results of hypothesis testing showed that the significant value for the variable C1, both the ROA and ROE, is under 0.01, but the significance value for the variable C3 is above 0.05. The results reveal that the concentration of ownership (especially C1) has positive effect on the financial performance of Islamic Banks. This finding is consistent with the results of Zeitun and Tian (2007) who found a positive effect of the concentration of ownership of the company's financial performance. According to Shleifer and Vishny (in Zeitun and Tian, 2007) concentrated ownership can improve performance by lowering the cost of monitoring and provide better management control. So, the more concentrated the ownership of a bank, the better the performance will be.

### The effect of Ownership Type on Financial Performance of Islamic Banks

Based on the results of hypothesis testing showed that significant value to a variable type of GOV, INST, and FAM ownership are under 0.05. The results reveals that a type of ownership has an influence on the financial performance of Islamic Banks.

### Effect of Government Ownership type against Islamic Banks Financial Performance

Based on the results of hypothesis testing showed that the value of the variable GOV significance for both the ROA and ROE, was under 0.05. GOV has a regression coefficient - of -1.173 on the ROA and -9.218 on the ROE. The results reveals that the type of government ownership has a negative influence on the financial performance of Islamic Banks. These findings concur with those of Zeitun and Tian (2007) who found a negative influence on the financial performance of government ownership. These results are reinforced by the statement Kauthar and Fajar (2012) which states that a reduction in the proportion of state ownership can improve the performance of the company. Marciano (2008) stated that the government corporation controlled by bureaucrats have goals that are based on political interests and not for the welfare of society and the company itself. The government or the bureaucrats have an interest in social and political, rather than think of to improve the performance of the company (Shen and Lin, 2009). Therefore, the performance of the bank owned by the government tend to be lower than that of the bank which is not a government ownership.

### Effect of Ownership Type of Financial Institutions on the Performance of the Islamic Banks

Based on the results of hypothesis testing showed that the value of the variable INST significance for both the ROA and ROE, was under 0.01. INST has a regression coefficient 1.454 in ROA and 9.050 in ROE. The results reveals that a type of ownership institution have a positive influence on the financial performance of Islamic Banks. These findings concur with those of Arouri et al (2014) who found that institutional ownership positively affects financial performance. That's because institutional shareholders are more profit oriented (Zeitun and Tian, 2007). Hastuti (2005) states that the ownership which is concentrated by the institutions will facilitate control that will increase the company's performance.

### Effect of Family Ownership type against Islamic Banks Financial Performance

Based on the results of hypothesis testing showed that the significant value for the variable FAM, both the ROA and ROE, was under 0.05. FAM has a regression coefficient 9.218 on ROA and 1.173 on the ROE. The results reveals that the type of family ownership has a positive influence on the financial performance of Islamic Banks. These findings concur with those of Arouri et al (2014) as well as Zouari and Taktak (2014) who found a positive influence on the financial performance of family ownership. According Arouri et al (2014), family relations can improve supervision, which in turn will generate better corporate performance. On the other hand, these results do not correspond with the research Prabowo

and Simpson (2011) who found that family ownership negatively affect the company's performance.

#### Effects of Foreign Ownership type against Islamic Banks Financial Performance

Based on the results of hypothesis testing showed that the value of the variable FORG significance for both the ROA and ROE, was above 0.05. Of the nine existing models in each performance measurement, FORG significant only in one model, the model two on the ROA and model three on ROE. The results reveals that foreign ownership does not affect the financial performance of Islamic Banks. This finding is consistent with research of Zeitun and Tian (2007) which found no effect of foreign ownership on the company's performance. These results could be due to foreign owners have not been able to encourage the adoption of good corporate governance and strict supervision of all activities of the company. Besides, the foreign investors merely voicing their interests only, and have not been able to be a good influence in operational terms (Atmaja and Wibowo, 2015).

### Conclusion

This study aims to determine the effect of ownership structure proxied by the concentration of ownership and the type of ownership of the financial performance of Islamic Banks. Measurement of concentration of ownership using a number of the largest shareholders (C1) and the three largest shareholders (C3), while the type of ownership is measured by four dummy variables, namely: government ownership (GOV), institutional ownership (INST), family ownership (FAM) and foreign ownership (FORG). Financial performance is measured by ROA and ROE. In addition, this study uses three variables: firm size, leverage, and CAR.

Based on the results of multiple linear regression analysis that has been done, it can be concluded that the first, variable concentrations of ownership (C1) has positive effect on financial performance BUS. In other words, the more concentrated the ownership of a bank, it will bring a good impact on the performance of the bank, meaning that the bank's performance will be better. That's because the concentrated ownership provides better management oversight so as to improve performance.

Second, government ownership variables (GOV) negatively affect the financial performance of BUS. That is, banks whose shares are largely owned by the government, their performance tends to be lower compared with the bank whose government ownership proportion is small. That's because the government has a purpose that is based on social and political interests rather than thinking to improve company performance.

Third, institutional ownership variable (INST) has positive effect on financial performance of BUS. Unlike the government, institutional shareholders are more profit oriented. Therefore, the more the proportion of institutional ownership in a bank then the better the performance of the bank is.

Third, family ownership variables (FAM) have positive influence on the financial performance of BUS. Family shareholders usually has enormous power over the company. It can improve the control so that later can produce a better performance of the company.

Fourth, foreign ownership variable (FORG) has no effect on the financial performance of BUS. In other words, whether or not there are foreign shareholders in a bank, it will not give any influence on the performance of the bank.

### Limitation

Some of the limitations that can be found in this study are as follows:

1. This study uses only Islamic Banks as the object so that the number of samples used is fairly limited, it is because the number of Islamic Banks in Indonesia is still limited.
2. Measurement of variables government ownership, institutional ownership, family ownership and foreign ownership in this research is simply by using dummy variables

that the influence of the type of ownership and financial performance less than the maximum.

As for suggestions that may be submitted for further consideration for subsequent research are as follows:

1. For their next study, it is suggested to take the object of research not only Islamic Banks, but also coupled with other Islamic financial institutions, such as Sharia Business Unit.
2. Measurement of variables government ownership, institutional ownership, family ownership and foreign ownership is suggested using the percentage of ownership so that the influence of the type of ownership and financial performance can be known to the fullest.

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**Appendix**  
**Descriptive Statistic**

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	56	0,08	5,49	1,402	1,124
ROE	56	0,39	35,01	8,525	7,457
C1	56	22,17	66,76	43,044	14,793
C3	56	42,01	98,95	65,951	18,458
GOV	56	0,00	1,00	0,3750	0,48850
INST	56	0,00	1,00	0,4286	0,49935
FAM	56	0,00	1,00	0,1964	0,40089
FORG	56	0,00	1,00	0,6786	0,47125
SIZE	56	642026,0 0	66942422,00	13657371,45	18139659,43
LEV	56	2,78	41,19	19,0972	7,56544
CAR	56	10,60	76,39	23,7041	16,63916
Valid N	56				

**Normality (ROA)**

		Unstandardized Residual
N		56
Normal Parameters <sup>a,b</sup>	Mean	0,0000000
	Std. Deviation	0,84748238

Most Extreme Differences	Absolute	0,110
	Positive	0,110
	Negative	-0,069
Kolmogorov-Smirnov Z		0,824

**Normality(ROE)**

		Unstandardized Residual
N		56
Normal Parameters <sup>a,b</sup>	Mean	0,0000000
	Std. Deviation	5,62735303
Most Extreme Differences	Absolute	0,089
	Positive	0,089
	Negative	-0,074
Kolmogorov-Smirnov Z		0,665
Asymp. Sig. (2-tailed)		0,768

**Multicollinearity(ROA)**

Model	Collinearity Statistics	
	Tolerance	VIF
C1	0,295	3,385
C3	0,310	3,230
GOV	0,212	4,710
INST	0,355	2,817
FAM	0,315	3,172
FORG	0,210	4,764
SIZE	0,387	2,585
LEV	0,658	1,521
CAR	0,469	2,133

**Multicollinearity (ROE)**

Model	Collinearity Statistics	
	Tolerance	VIF
C1	0,295	3,385
C3	0,310	3,230
GOV	0,212	4,710
INST	0,355	2,817
FAM	0,315	3,172
FORG	0,210	4,764
SIZE	0,387	2,585
LEV	0,658	1,521
CAR	0,469	2,133

**Autocorrelation(ROA)**

	Unstandardized Residual
--	-------------------------

Test Value <sup>a</sup>	0,06581
Cases < Test Value	28
Cases >= Test Value	28
Total Cases	56
Number of Runs	28
Z	-0,270
Asymp. Sig. (2-tailed)	0,787

**Autocorrelation (ROE)**

	Unstandardized Residual
Test Value <sup>a</sup>	0,13051
Cases < Test Value	28
Cases >= Test Value	28
Total Cases	56
Number of Runs	32
Z	0,809
Asymp. Sig. (2-tailed)	0,418

**Hypothesis Testing (ROA)**

	Model								
	1	2	3	4	5	6	7	8	All
C1	0,019***	0,044*	0,051*	0,014					0,047*
C3					0,006	0,018	0,012	0,002	0,004
GOV		-1,346*				-0,822**			-1,173**
INST			1,131*				0,345		1,454*
FAM				0,504				0,754	1,173**
FORG	0,305	0,668***	-0,296	0,709	0,345	0,451	0,108	0,960	0,399
SIZE	-0,114	-0,144	-0,104	-0,129	-0,058	-0,066	-0,045	-0,095	-0,149
LEV	0,008	-0,004	-0,015	0,013	0,015	0,010	0,010	0,021	-0,009
CAR	0,029**	0,020***	0,029*	0,026**	0,029**	0,025**	0,029**	0,024**	0,022***
Constant	1,340	1,384	0,184	1,368	0,733	0,502	0,191	0,953	-0,029
F value	3,691*	6,091*	4,921*	3,195*	3,025**	3,544*	2,693**	2,904**	4,460*
Adj R <sup>2</sup>	0,197	0,357	0,300	0,193	0,155	0,217	0,156	0,172	0,335

\* Sig in 1%; \*\* sig in 5%; \*\*\* sig in 10%

**Hypothesis Testing (ROE)**

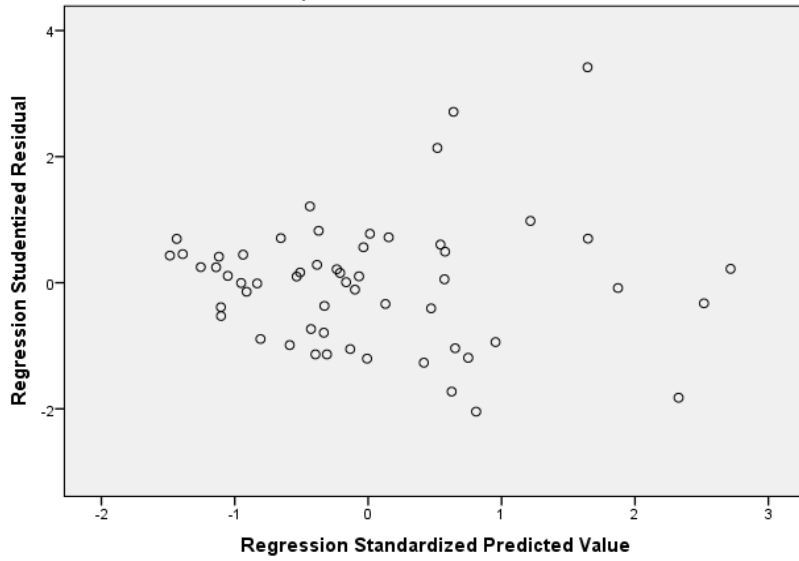
	Model								
	1	2	3	4	5	6	7	8	All
C1	0,189**	0,351*	0,363*	0,144***					0,317*
C3					0,112	0,183**	0,133	0,081	0,081
GOV		-8,560*				-5,004***			-9,218**
INST			6,192**				1,130		9,050*
FAM				5,032				7,006***	9,218**
FORG	-3,984	-1,678	-7,275*	0,046	-4,720	-4,078	-5,497	0,996	-2,765
SIZE	1,551	1,361	1,602	1,398	1,836	1,787	1,880	1,492	1,124
LEV	-0,060	-0,133	-0,183	-0,003	-0,014	-0,041	-0,030	0,047	-0,153
CAR	-0,025	-0,078	-0,026	-0,056	-0,018	-0,043	-0,016	-0,062	-0,076
Constant	-19,460	-19,181	-25,790	-19,184	-23,693	-25,098	-25,469	-21,650	-27,204
F value	3,752*	5,861*	4,309*	3,485*	2,693**	3,041**	2,250***	3,039**	4,442*
Adj R <sup>2</sup>	0,200	0,347	0,265	0,213	0,133	0,182	0,120	0,182	0,334

\* Sig in 1%; \*\* sig in 5%; \*\*\* sig in 10%

### Heteroscedastic(ROA)

Scatterplot

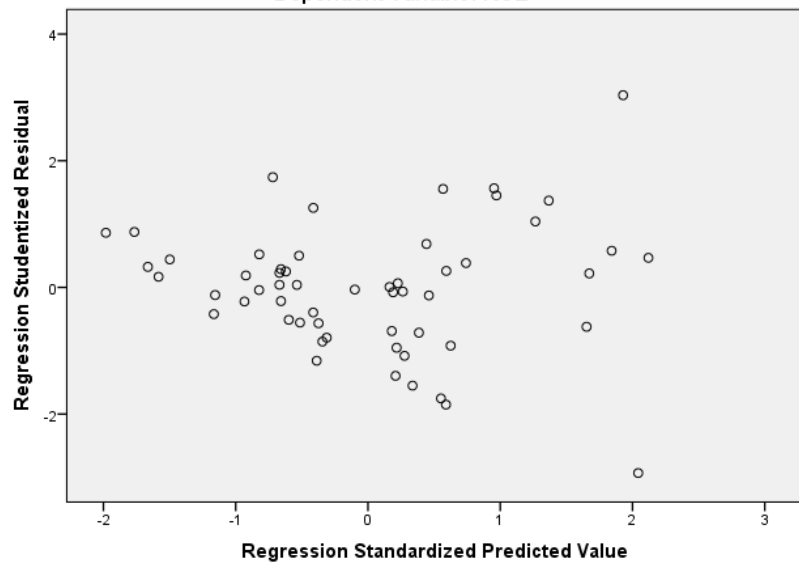
Dependent Variable: ROA



### Heteroscedastic(ROE)

Scatterplot

Dependent Variable: ROE



**BUSINESS STRATEGY FORMULATION FOR HOTEL TAMAN MANGKUBUMI  
INDAH TASIKMALAYA**

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**Abstract**

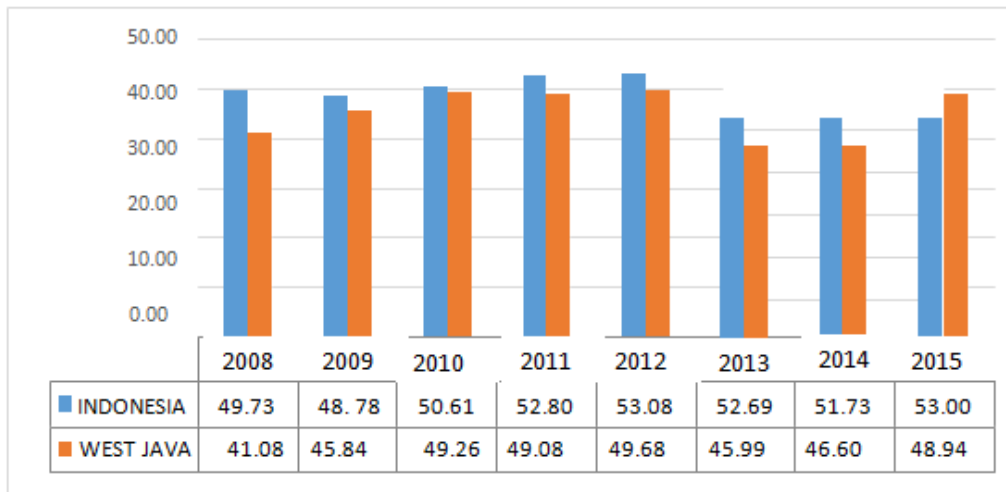
Hotel Taman Mangkubumi Indah is a company that has been established since 1978. Theoretical approach taken to solve business issues is to use industry external porter 5 force, pest analysis, analysis of competitors, and internal exploration capability (capabilities), resources (resources), the value (value), the ability of the core (core competencies), value chain analysis and business modeling canvas from internal sources. Then collected SWOT approach.

The process begins with the search for solutions TOWS analysis. Then strengthened with internal-external evaluation matrix with the corporate directional strategy, then business strategy is differentiation and functional strategy in the field of marketing, operational, human resource development, financial and on the field of information technology. Then the solution shown on business canvas model.

The implementation section, included the cost and financial projection, timeline for 4 years until 2019. To achieve the projected targets the management given a balance scorecard from the consumer perspective, internal business learning and growth and financial perspective.

**Introduction**

Hotel Taman Mangkubumi Indah (HTMI) is located in Tasikmalaya, West Java. It is established in 1978. At that time, HTMI is the first Tasikmalaya's resort hotel and own the Olympic size swimming pool with natural spring water resource as well. The area including the recreational site are up to 10 hectare. At the earlier day, the main segment of HTMI is leisure tourism especially international tourist who usually have a road trip from Jakarta to Yogyakarta and spend a night in HTMI. This segment is potential because of its location within Garut – Tasikmalaya road which offers beautiful scenery of rice field. In addition, it is located in the same road which passes Kampung Naga, a traditional and cultural village tourism destination. HTMI also targets the nearby tourists, who seek for vacation such as culinary enjoyment, karaoke or simply a natural resort enjoyment. Regular tourist is characterized by number of room they rent, short term stay and the meal preference outside the hotel. While MICE customer is characterized by the number of person, preference to buy catering package 3 to 5 times a day, preference in renting convention hall, and the length of stay in a long period.



*Figure 2 Occupancy rate of Hotel Taman Mangkubumi Indah*

The main MICE customers are government agencies who annually conduct a training or meeting for a long time. The agency comes from local Tasikmalaya government or several divisions of the West Java Provincial Government. Because this occasion is considered as government related project, a tender procedure must be conducted. Winning this tender during this phase is very crucial to ensure they pick HTMI service to conduct event. Luckily, HTMI have cost advantage and its location is not in the centre of the city. Thus, the price offered is considerably lower than its rival. In addition, HTMI offers joyful resort atmosphere and adequate meeting hall for training. HTMI keeps targeting this segment for more than 10 years. This targeting has proved to be profitable, especially in Tasikmalaya's tourism circumstance. By 2011, HTMI built new hall to increase its capacity and thus increase the number of training class rooms within the new hall. More over HTMI have SPJP (Surat Pertanggung Jawaban ke Pemerintahan) that ensure the administration for government internal audit is clear and wont be problem on upcoming year. This license is rare and only few hotel in the City of Tasikmalaya own it.

Customer segment in hospitality industry is divided into 4 segments:

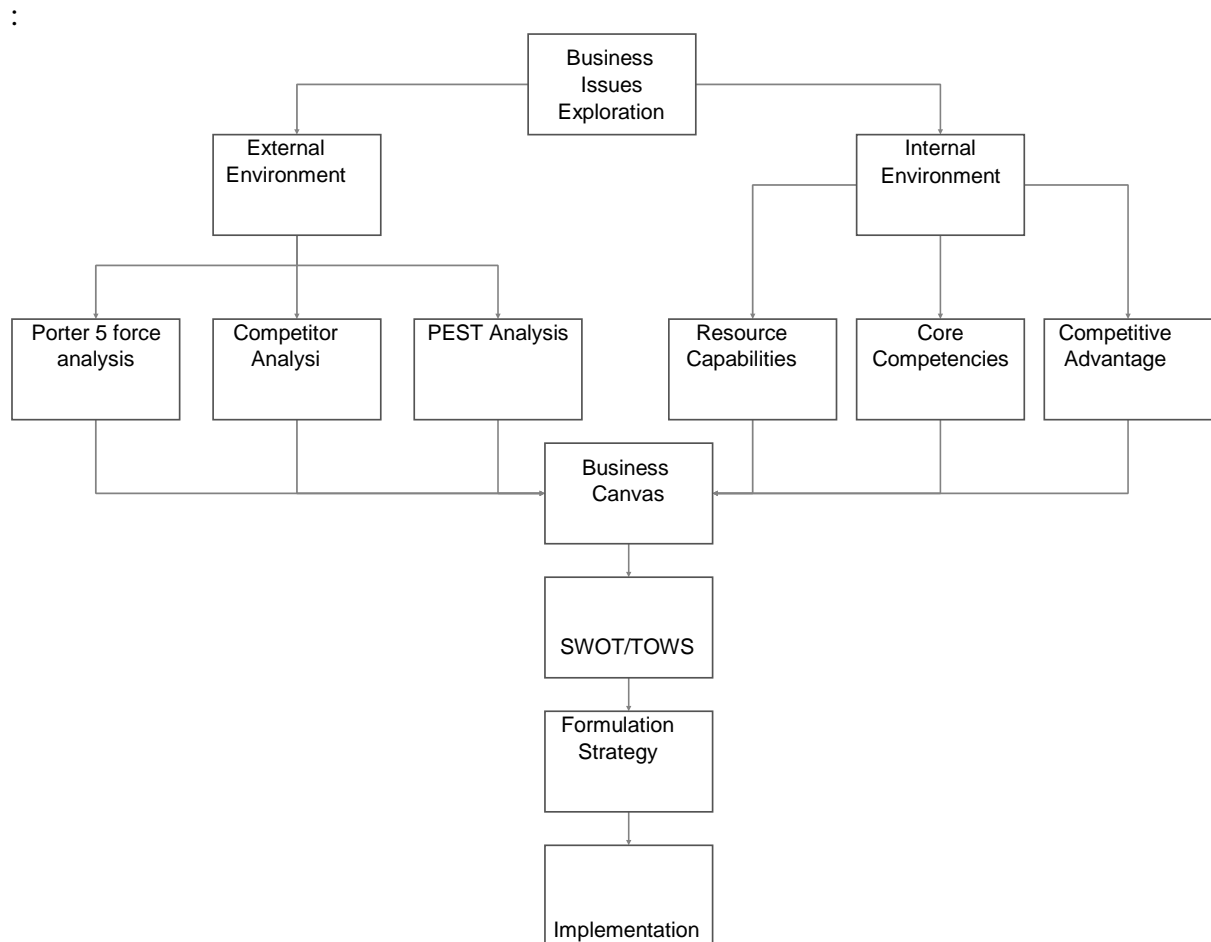
1. Traveler Segment: this is the customer who have a road trip and need a place to take a break and rest during the trip.
2. Tourist Segment: this is the customer who search for entertainment and leisure the City of Tasikmalaya and nearby city. They are on vacation and look for a place to spend the night or to rest. This segment also looks for entertainment within the hotel environment itself.
3. Business Segment: this is the customer who is on business trip, usually need resting place, and a meeting place.
4. Special interest: this segment come to Tasikmalaya for special need, such as seeking healthcare, visiting their relative, visiting their child on nearby boarding school / *pesantren*.
5. Meeting Incentive Convention and Exhibition segment: this segment rents a convention hall to conduct an event or big event. The rent period can be short term (hourly) or long term (monthly).

HTMI have run its business since 1978. Now, HTMI faces some challenges to sustain their business. There are 5 businesses issues in HTMI that need to be resolved Declining Net Income in the past 5 years. Declining of HTMI occupancy rate, HTMI is too

dependent to MICE customer segment, New and existing competitors in the same industry and Old building and facility and a least optimal asset utilization

*Business Exploration*

Conceptual Framework is an analytical tool to organize the ideas to solve the problem encountered in the company. The conceptual framework of Hotel Taman Mangkubumi Indah Strategy formulation is described as follows



**Figure 3 Conceptual Frame Work**

The business explorations are started by finding the external environment issues using, porter 5 forces, competitor analysis, and Political, Economic, Social and Technology analysis. Then the internal business issues are found by analysing the core competencies, resource capabilities, and competitive advantage. After the External and Internal Analysis have completed, then the findings are implemented into business canvas model to show the overview of business process.

The formulation strategy of chapter 3 begins from SWOT and TOWS, then followed by formulation of the strategy using corporate strategy, Functional Strategy and Business Strategy analysis and the implementation plan begin in chapter 4.

*External Environment*

The External Environment view objective is to find the current condition of the industry. Therefore, Porter 5 Forces, PEST Analysis and Competitor analysis are used.



*Industry Analysis*

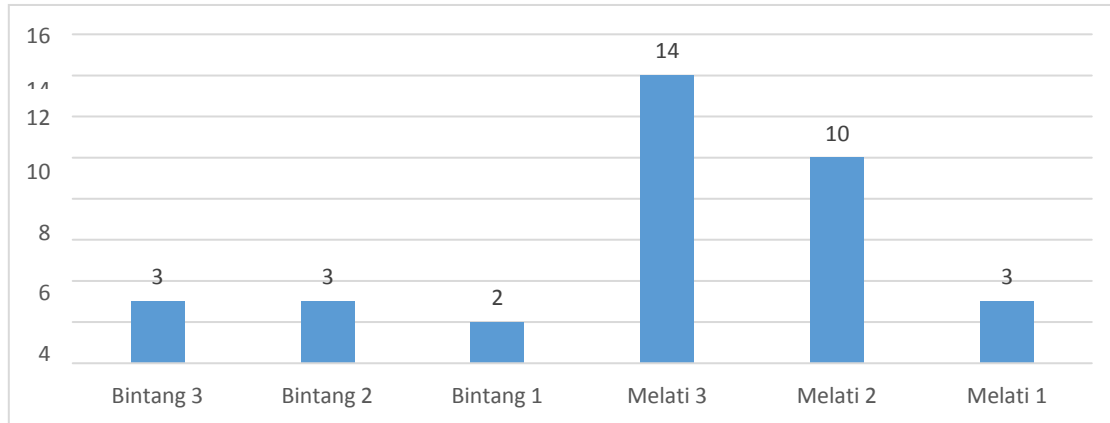
Using the Porter 5 Forces, (Hitt, 2011) this step analyses the five aspects of the Hotel industry in Tasikmalaya. Those aspects are Threat of Substitutes, Threat of New Entrants, Bargaining Power from Suppliers, Bargaining power of Buyer and Industry Rival.

1. **Threat of Substitutes** In Hotel Industry in Tasikmalaya, the substitutes for Hotel with 2-star rank are Losmen/Motel, Hostel, “Melati” grade hotel and 1-star hotel. Those are cheaper alternatives but with lower quality compared to 2-star hotel. The 3-star hotels are the direct substitutes that threaten 2-star hotel. Although they are more expensive, these hotels offer better service quality and capability.  
**Threat of new entrants** or barrier to entry for new entrant need to overcome few factor. Incumbent and Large chain hotel may have economic of scale advantage that need to overcome by new entrants, product differentiation such as location, facility target segment that hard to replicated. The capital needed to build hotel facility and its license also high, especially for high- end hotel. The real switching cost is cost for looking new hotel, extra cost for transportation if necessary and loss of loyalty program. The access to distribution channel often controlled by incumbent, yet many online channel offer easier access for new comer. Government have power to control the new hotel license, yet until 2016 in the city of Tasikmalaya still no moratorium for opening hotel.
2. **Industry Rivalry** means the intensity of competition among the competitors in the industry. The competitor in 2 star and above hotel is unbalance, newer or recently renovated incumbent hotel dominated the market. Incumbent with strategic location can still gain market share. Hotel industry in the City of Tasikmalaya is growing, yet the tourism industry growth slower. The accomodation demands are come from business, traveler and special interest especially from nearby city that doesn't have good hotel. The ideal occupancy rate for a hotel is higher than 60%. Each rival with 2 star and above, differentiate from its facility, price, service and location. The lower segment hotel have weaker differentiation. Higher grade hotel cannot lower their price to the lower segment hotel, to protect the competition, yet unofficial deal may still happen especially on mice segment. The exit barrier come from its high capital to build and its license, its cost for terminate employee, high quality hotel industry may attract business man to choose the city as based operational. Without it, may reduce the city business activity. Hotel with large chain or operate on other industry may fear the termination will impact its other business. Government may not interference on bankruptcy because hotel industry not a labor intensive industry.
3. **Bargaining power of suppliers** Hotel industry suppliers are: Food ingredient supplier mainly from local market, the seller is plenty and have low bargaining power. The supplier is less concentrated than the Hotel industry. Hotel can easily switch to other supplier. Hotel appliances such as soap, shampoo, toothpaste, etc. the supplier are also plenty. Every year they propose their product, so hotel can pick the best offer. The sole supplier for Water is supplied by PT PDAM, Electricity by PT PLN and communication and internet by PT Telkom, there is still no substitute for this commodity.
4. **Bargaining power of Buyers** the bargaining power of buyer is medium to high. MICE segment has high bargaining position since they are booked on large volume. Regular customer has low bargaining power, yet from the increase use of internet, they can become opinion leader spreading positive or negative reputation towards the business. They also can switch to competitor easily

*Competitor Analysis*

In 2015, there are 2197 hotels in Indonesia. West Java has the biggest number of hotel in Indonesia that are 283 hotels, followed by Bali with 281 hotels available.

The average growth of West Java Hotel Industry is 9.46%. In 2009, there are 165 hotels and grown to 283 hotels in 2015. West Java is the third largest tourism industry in Indonesia, just below DKI Jakarta and Bali. The Hotel industry is a complement industry for tourism. Therefore, the market in West Java is very huge.



**Figure 4 Hotel industry in Tasikmalaya**

Hotel Taman Mangkubumi Indah is classified as two-star hotel. HTMI’s direct competitors are those with 1 to 3-star hotels, which have roughly same room, facility and similar target segment. Yet none of the competitor can classified themselves as resort hotel as HTMI. The competitor are : The Santika Hotel, Mahkota Graha Hotel, Harmoni Hotel, Ramayana Hotel

*Political, Economic, Social, and Technology analysis*

PEST Analysis is used to describe the four aspects of external environment. Those aspects can directly or indirectly affect Hotel Industry.

1. Political condition is important for business, in 2014 was the period of presidential election in Indonesia. This situation brought uncertainty for business regulation and safety affecting tourism and investment. Government institution also had to reduce their activity affecting hotel industry occupancy. At the end of 2014, Surat Edaran (SE) Nomor 10/2011 and SE Nomor 13/2014 tentang Gerakan Hidup Sederhana by Menteri Pendayagunaan Aparatur Negara dan Reformasi Birokrasi Yuddy Chrisnandi commanded government institution to skimp and forbid a meeting in private hotel. This regulation hit the MICE segment of hotel industry followed by major protest held by hotel association
2. Economical Indonesian macro-economic conditions have major role to the customer spending behavior. US dollar to Rupiah enhanced rates, Bank Indonesia Rate and Indonesian Economic Growth rate Since 2012 Indonesian rupiah value to US\$ has decreased from below Rp 10.000 to over Rp14.000 at its peak in 2015. This number was the weakest value since Indonesia national crisis in 1998. Fortunately, starting from the end of 2015 to 2016, the Rupiah grew stronger and reached just over Rp 13.100. This should positively affects the customer spending decision.
3. Social Demographic Indonesia consists of 237.641.326 people which then considered as the fourth highest population in the World. 3.5% of the earth population is Indonesian
4. Technology As the information technology rise, nowadays customer can find and book hotel in the other region right only using their fingertip. They can read the hotel description, location, facility, price, booked and review through website or social media. They can compare few destination hotels to decide which one is the best to choose. This

technology brings huge benefit to the customer in deciding their hotel preferences. They also can deliver complement or complain in the review board available in the websites or social media.

### 1.2 Internal Environment Analysis

The internal analysis explores the resources, capabilities and core competencies of Hotel Taman Mangkubumi Indah. Resources and capabilities are not inherently valuable, but they create value when the firm can use them to perform certain activities resulting in competitive advantage. Resources are bundled to create organizational capabilities. In turn, capabilities are the source of a firm's core competencies, which are the basis of competitive advantages

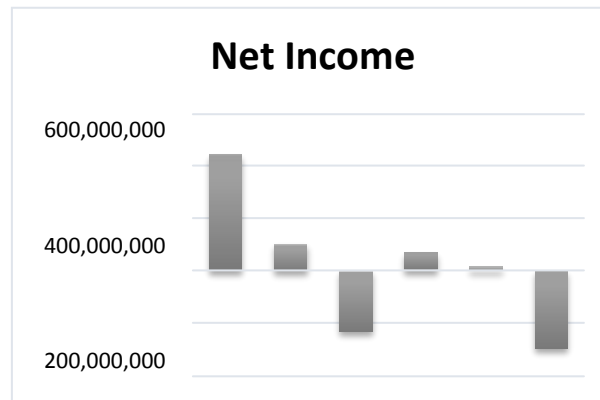


Figure 5 Net income of Hotel Taman Mangkubumi Indah

The net income is Rp 442.386.670 then decreasing to minus (231.055.662) at 2012 due building of a new class room. At that time the revenue still stable at Rp 2.878.581.593. At the end 2014 *Surat Edaran* (SE) Nomor 10/2011 and SE Nomor 13/2014 about *Gerakan Hidup Sederhana* by *Mentri Pendayagunaan Aparatur Negara dan Reformasi Birokrasi* Yuddy Chrisnandi, that forbid government instution to conduct an event in hotel decrease the revenue of HTMI to Rp 2.250.374.650 and the net income to the lowest point at minus Rp 296.103.979. In the early 2015 the regulation have been repealed yet most instution already exclude conduct an event in hotel on their yearly spending plan.

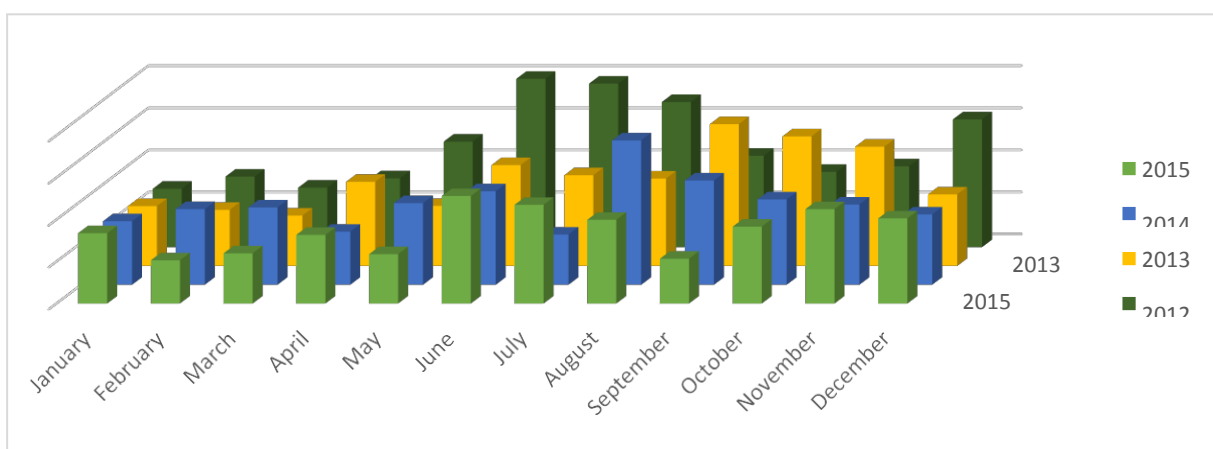


Figure 6 Occupancy Rate of Hotel Taman Mangkubumi Indah Tasikmalaya

In the case of Hotel Taman Mangkubumi Indah Tasikmalaya (HTMI), generally, its occupancy rate is declining along 2012 until 2015. Compared to 2013 in the same month, the rate in September 2014 has shown a declining rate and getting worse in November when government decided to forbid government conducting an event in hotel. Even the law has been repealed though most institution already created a 2015 spending budget plan which exclude holding events in hotel. Therefore, the effect felt through 2015 which become lowest occupancy in the last 4 years.

**Table 1 SWOT analysis**

<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>Have a total of 10 Hectares and only 30% area has been developed</li> <li>One of the oldest incumbent since 1978</li> <li>Have 35 room, 4 classrooms and 1 convention room</li> <li>Have 5 Swimming pool</li> <li>Natural Environment as the main differentiation to rival</li> <li>Fresh water spring</li> <li>Located on the main road between City of Tasikmalaya to the Capital of Kabupaten Tasikmalaya, Singaparna</li> <li>Hotel Taman Mangkubumi Indah has SPJP (Surat pertanggung Jawaban kePemerintahan) to ensure safe transaction with government institution</li> </ul>	<p><b>Weakness</b></p> <ul style="list-style-type: none"> <li>Old Building and facility</li> <li>Weak supervising and control to the employee</li> <li>Lack of innovation and ability to generate idea</li> <li>Far from city center and commercial area</li> <li>Low utilization of modern technology</li> <li>Low Marketing effort for walk-in, tourist or regular guest.</li> <li>Out of total 10actre of area, less than 10% is a rent to PT KAI</li> <li>Decline of financial performance</li> </ul>
<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>West Java is number three of the highest tourist destination in Indonesia after DKI Jakarta and Bali.</li> <li>There is no big hotel on Neighbor city such as Singaparna, Ciamis, Banjar</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>Many big chain hotel entering Tasikmalaya hotel industry.</li> <li>Several incumbents renovated their facility.</li> <li>Higher grade hotel 3 star and higher lower their price to 2-star hotel territory to increase their occupancy.</li> </ul>
<p>Tasikmalaya remains the center of business activity on east priangan, make it have high potential market</p> <p>Highway that connect Tasikmalaya and Bandung targeted to be done on 2020, it is predicted will increase the economic, business and tourism in Tasikmalaya</p> <p>Transportation, and Dry port industry in Tasikmalaya growth exponentially.</p> <p>High traffic on jalan Tasikmalaya - Singaparna</p> <p>City of Tasikmalaya hotel occupancy in average is higher than 80% per month, dominated on MICE and business segment.</p>	<p>West Java has the most hotel with star rank in Indonesia. Bali is close second</p>

SWOT analysis is the overall evaluation of a company’s strengths, weaknesses, opportunities, and threats. SWOT analysis can identify not only an organization’s distinctive competencies

from particular capabilities and resources possessed by the organization but also the superior way to identify the opportunities that an organization is not currently able to take advantage due to lack of appropriate resources.

*Business Solution*

Based on the Internal and External environment, the directional strategies are created. The tool used for the analyze is an internal-external matrix. This matrix is based on two dimensions, the IFE (internal Factor Evaluation) for the X - Axis and EFE (External Factor Evaluation for the Y-Axis. IFE and EFE factor will be counted as weight and rating. The weight column filled with a score from 0.0 to

1.0 (most important) based on a factor that impacts the Hotel Taman Mangkubumi Indah. The weight determined by AHP (analytical Hierarchy Process) to aid in complex decision making to set a correct priority and consistency on decision maker evaluation.

**Table 2 Internal Factor Evaluation**

	Internal Factor	Weight	Rating	Weighted Score
<b>Strengths</b>				
1	Have a total of 10 Hectare area	0.064	2	0.128
2	Established since 1978	0.05	2	0.1
3	Natural Environment	0.078	4	0.312
4	Have 34 room, 4 class room and 1 convention room	0.073	4	0.292
5	Have 5 Swimming pool	0.021	3	0.063
6	Fresh water spring	0.066	4	0.264
7	Located on main road	0.076	2	0.152
8	Have SPJ certification	0.06	4	0.24
<b>Weakness</b>				
9	Old Building and facility	0.077	1	0.077
10	Weak supervising and control to the employee	0.074	2	0.148
11	Far from city center and commercial area	0.038	2	0.076
12	Lack of innovation and ability to generate idea	0.055	2	0.11
13	Low utilization of modern technology	0.061	2	0.122
14	Low Marketing effort for walk-in or regular	0.044	2	0.088
15	Out of total 10 Hectare of area, less than 10% is rent to PT KAI	0.075	1	0.075
16	Decline of financial performance	0.088	3	0.264
<b>Total score</b>		<b>1</b>		<b>2.511</b>

Table 3 External Factor Evaluation

No	External Factor	Weight	Rating	Weighted Score
<b>Opportunities</b>				
1	West java is indonesia #3 tourist destination	0.119	2	0.238
2	No big hotel on The Neighbour city	0.093	3	0.279
3	Tasikmalaya is the center of business activity on east Priangan	0.075	4	0.3
4	Toll/Highway Tasikmalaya - Bandung	0.059	2	0.118
5	Tasikmalaya base of Transportation and Dry port industry.	0.061	2	0.122
6	High Traffic of the road	0.103	2	0.206
7	Occupancy of Tasikmalaya hotel up to 80% per month	0.073	1	0.073
<b>Threats</b>				
1	Many big chain hotel entering Tasikmalaya hotel industry.	0.12	1	0.12
2	Several incumbent renovated their facility.	0.114	1	0.114
3	Higher-grade hotel 3 star and higher lower their price to 2-star hotel territory to increase their occupancy.	0.099	3	0.297
4	West java has the most hotel with star rank in Indonesia. Bali is close second	0.084	2	0.168
<b>Total</b>		<b>1</b>		<b>2.035</b>

Hotel Taman Mangkubumi indah currently have 2.511 IFE score and 2.035 on EFE score. Therefore the company IE Matrix position is on cell V. The best Directional strategy is to hold and maintain by using market penetration and product development.

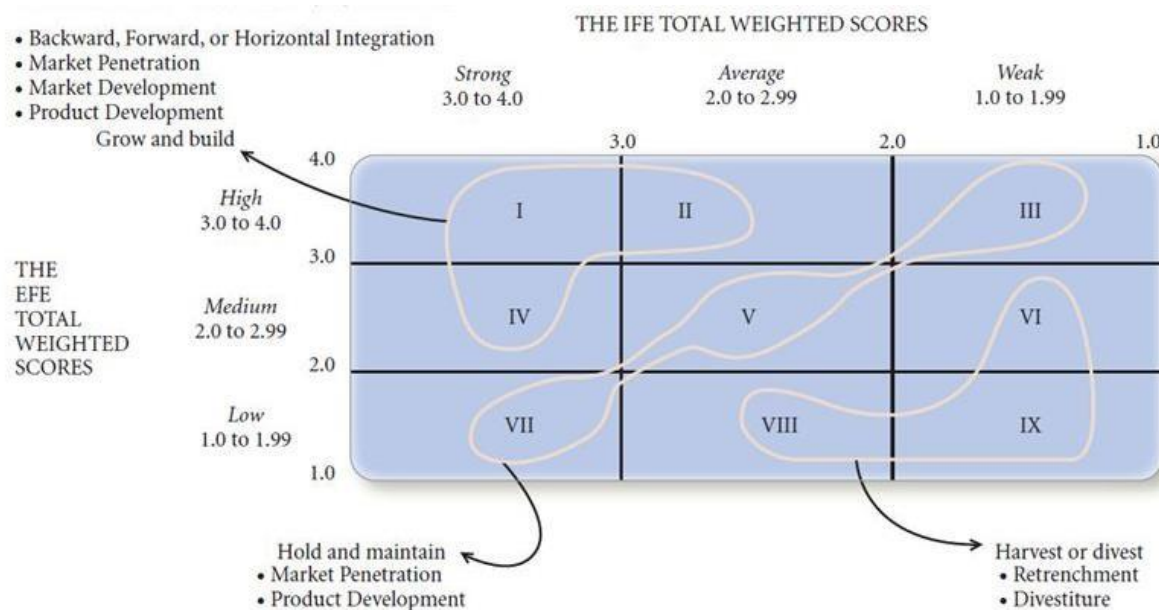
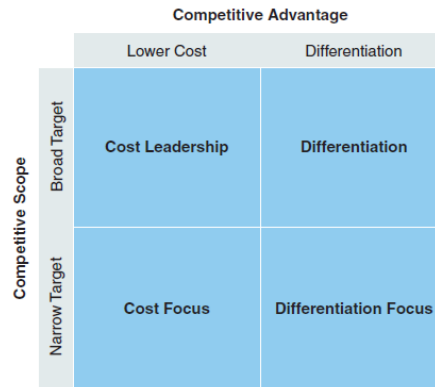


Figure 7 IE matrix

Hotel Taman Mangkubumi Indah can provide a unique and superior value to the customer using **differentiation strategy**. Natural environment and Recreational Park are the main weapons of Hotel Taman Mangkubumi Indah. Then HTMI must position themselves as a resort hotel to boost its unique differentiation. Resort Hotel term, mean that the hotel can provide an array of amenities and typically includes entertainment and recreational activities. This is can serve as a barrier to entry since it's hard to imitate by competitor because of the limited natural land in Tasikmalaya



*Figure 8 Porters Generic Competitive Strategie*

*Functional Strategy*

Functional Strategy is the approach a functional area takes to achieve corporate and business unit objectives and strategies by maximizing resource productivity. It is concerned with developing and nurturing a distinctive competence to provide a company or business unit with a competitive advantage

- **Marketing Strategy** Create dedicate marketing division, New STP target Traveler, Tourist, Business and special interest segment as well as retain mice segment, new Marketing Mix 7p of Hotel Taman Mangkubumi Indah, utilize modern channel such online booking and advertising.
- **Financial Strategy** Modernization of financial reporting document, converting an asset to correct value and providing tools for invoice reporting and finance reporting, hire an independent auditor to ensure the integrity of the income statement.
- **Operation Strategy** step by step renovation and facelift of Hotel Taman Mangkubumi Indah, Increase productivity on the PT KAI land, Park redesign with new modern concept, New entertainment and leisure facility, Build 46 new room to increase hotel capacity,
- **Human Resource Strategy** increase the Human resource quality by training and recruiting a new employee, The training for a select HTMI employees are financial accounting, marketing especially internet marketing and communication. Supervisor, such as security and quality control are preferred for those with a short-term contract and replaced regularly. . An employee on the strategic position that prone of stealing, such as front office, cashier gatekeeper, need to be rotated regularly. Rule and punishment for offender need to be strict and uphold to make sure the offender won't repeated again
- **Information Technology Strategy** investment on Hotel Management software to tidy up the transaction report and minimalize loss. Each room must be equipped with RFID card electronic lock. The gate barrier needs to be replaced with electronic barrier counter. Television and WIFI Internet need more improvement

**Business implementation**

Business Strategy implementation shows the total of activities and choices required for the execution of a strategic plan. Hotel Taman Mangkubumi Indah needs to invest in implementing some action plant. Some of the activities are free and can be implemented easily. The other require a relatively big investment. Some of the activities also need a yearly or monthly budget, other only need once for several years such as for renovation or new facility

Activities	Function	2016	2017	2018	2019
Marketing Division (per month)	Marketing	Rp 1.600.000	Rp 1.600.000	Rp 1.600.000	Rp 1.600.000
IT adv & Online Booking		Rp 500.000	Rp 500.000	Rp 500.000	Rp 500.000
Promotion		-	-	-	-
Public Relation		-	-	-	-
Sales & Partnership		-	-	-	-
Physical Adv		Rp 4.500.000	-	-	-
Front looks Hotel Renovation	Operation		Rp 850,000,000 340m <sup>2</sup>	-	-
Front looks Recreation area Renovation				Rp 112.500.000 50m <sup>2</sup>	
Front looks Joglo area Renovation				Rp 272.000.000 121m <sup>2</sup>	
Park Re-Design			-	Rp 300.000.000	-
Fishing Arcade		Rp 2.000.000	-	-	-
Female swimming pool			-	Rp 400.000.000	-
New Room			-	-	Rp 1,683,000 3 Floor of 374m <sup>2</sup>
TV				Rp 20.000.000	
Microbus		Rp 200.000.000			
Music collection		Rp 100.000	Rp 100.000	Rp 100.000	Rp 100.000



<b>Finance Training</b>	Human Resource	Rp 2.000.000	-	-	-
<b>Marketing Training</b>		Rp 2.000.000	-	-	-
<b>Hotel Management Software</b>		Rp 22.500.000	-	-	-
<b>Room Access Key</b>	Information Technology	Rp 44,200,000 for 34 room	-	-	Rp 59,800,000 For 46 room
<b>Room Power Switch</b>		Rp 10,200,000 for 34 room	-	-	Rp 13.800.000 for 46 room
<b>Barrier Ticket Counter</b>		Rp 13.000.000	-	-	-
<b>Finance Software</b>	Finance	Rp 22.500.000	-	-	-
<b>Independent Auditor</b>		Rp 2.000.000	Rp 2.000.000	Rp 2.000.000	Rp 2.000.000
<b>Total</b>		Rp 325.000.000	Rp 850.100.000	Rp 1,084,600,000	Rp 1,756,700,000

The income projection of Hotel Taman Mangkubumi until 2019. In the first year the operation strategy which focused on how to minimize the leak made by employee, which include invest on room access door, room power switch, gate barrier and software management, plus the marketing strategy should increase the hotel occupancy rate to 50%, at the next year it will increase to 60% then 80% at 2019. The recreation park also increases by 30% by 2016 and goes to 65% by 2019. The other business unit such as restaurant and joglo restaurant also gain proporsional increase.

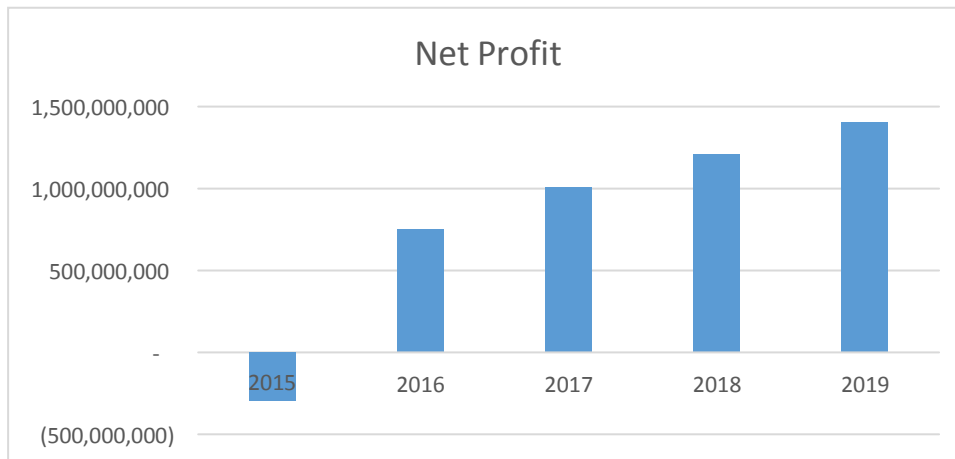


Figure 9 Projected Net Profit 2015 – 2019

*Balance score card perspective*

Balance Scorecard concept developed by Robert S Kaplan and David P. Norton, which star from 1990. Balance Scorecard is a management system to manage strategy implementation and evaluate performance, the strategic objective for hotel taman mangkubumi indah is as follow

Strategic Objective	Key Indicator	Performance	Strategic Action Plan	Person in charge
<b>Customer perspective</b>				
Improving Customer Value	Average Occupancy >60% per month	Marketing Online Advertising	strategy, Online Advertising	Owner & Manager in charge.
Ensure Customer Satisfaction	Online rating positive Customer satisfaction average 85% > positive	85% > positive	Online service via web physical service, advertising	
<b>Internal Business Process Perspective</b>				
Operational Efficiency	Product Service Quality Less than 1% error on reporting accuracy 1% > transaction loss 95% employee average	Innovation (create Operation (Delivery After Sales	Process (product) Process (product) Process	Front Office, Room Boy, House keeper, Marketing.
<b>Learning and Growth Capability</b>				
Capability and competency	95% Employee training attendance. 20% growth of employee productivity	Training (Marketing Finance)	Program and	Owner and Manager in- charge.
<b>Financial</b>				

Net profit growth	Net profit Growth 10% per year Margin 24%> Return on Equity 22%> Return on Asset 22%>	Financial develop new revenue source, Cost optimization	Audit, Owner and Manager in- charge. Cost control,
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**Table 5 Strategic Objective for Hotel Taman Mangkubumi Indah**

**Conclusion**

Conclusion of the research are:

1. The best corporate directional strategy is to hold and maintain by using market penetration and product development.
2. Hotel Taman Mangkubumi Indah best use Differentiation Business Strategy because it has natural resort environment as strong point of difference that hard to imitate by competitor.
3. Hotel Taman Mangkubumi Indah need to consider to do strategic alliance with other hotel in the shape of mutual service consortium (tourism point of interest), Licensing agreement (Franchising) or for alternative plan a Joint venture (Joint hotel operation) with big chain hotel.
4. Functional Strategy of Hotel Taman Mangkubumi Indah need to improve marketing, operational, finance, human resource and technological aspect of the company
5. The balance scorecard is used to evaluate performance and the strategic objective of HTMI. from the consumer perspective with occupancy rates above 60% and a satisfaction rating of over 85%, internal business with error and loss less than 1%, learning and growth by 20% increase in employee performance, and financial perspective with net profit growth of 10% per year
6. The projected occupancy rate should increase to 50% at first year (2016) and 80% at fort year (2019). The net margin increase to 21.9% at 2016 and 27% at 2019.

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## IMPACT OF REVERSE LOGISTICS ON PERCEIVED CUSTOMER VALUE IN MOBILE SMART PHONE INDUSTRY SRI LANKA

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### Abstract

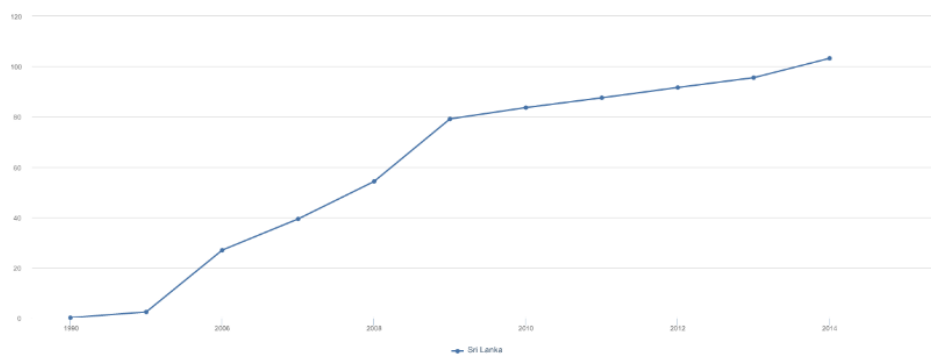
Purpose of this study was to examine the nature of relationship between reverse logistics efforts of the smart phone industry and its impact on perceived customer value in Sri Lanka. Research design was based on positivism ontology with the deduction framework. Literature review was done to find out a conceptual framework comprising two dimensions reverse logistics and perceived customer value. Hypotheses were developed consequently to prove correlation among main dimensions. Statistical analysis was based on P value and T-test done through SPSS. Findings of the Study concluded the main form of reverse logistics activities practiced in industry as repairing and refurbishing while recycling and remanufacturing was recorded less than 10 % of total reverse logistics efforts. Study also found out that there is a strong relationship between some reverse logistic activities and perceived customer value. Main limitation was the scope as the mobile penetration is very high in Sri Lanka. Therefore the time and resources were not sufficient to probe all the subcultures across the island . The study was able to prove a conceptual framework on reverse logistics and customer satisfaction. Further, critical success factors on reverse logistics were also diagnosed from the research findings..

**Keywords** - *Mobile phone industry, Repair, perceived value, reverse scheduling, distribution management, Advertising value, consumer behavior*

### Introduction

Global mobile penetration would reach 70% in 2019, making this industry one of the largest in the world. China along has more than 1.2 Billion mobile users while India is expecting to hit billion users mark in 2019. Euro region remains to be the area with highest mobile penetration outreaching North American continent by greater margins. However, Asia pacific region would record the highest number of mobile users in 2017 with an estimated value of 2.9 Billion users (Statista, 2013, para.1).According to the World Bank data Sri Lanka has surpassed 100% penetration limit as per 2015.

Figure 01: Mobile penetration in Sri Lanka



Source: World development indicator 2016

According to United Nations, ICT is one of the basic needs in the contemporary society. Hence every government should facilitate the mobile communication industry. Kenyan E-PESA case is a classic example that shows how mobile phones can improve financial markets of an economy with just simple adjustments in the business process. Today more than 17% of the Kenyan population use this facility to remit money with lower cost (UNDP: HDR, 2009, p.74). According to an industrial magazine more than 1.9 Billion people are now actively using mobile money services, while the number of users from developing countries continue to increase. Many non-banking and underbanked population from these developing countries are now using financial platforms in their day today life paving the way to improvement in financial markets and economic conditions. The report further points out that total value addition from mobile ecosystem was 3.1 trillion in 2015. Industry attractiveness also appears to be high as the net investment on this sector is on a growing trend with US Dollars 900 is expected to flow in 2020 (Association GSM, 2016, p.4). Despite the larger market size and increasing investments, phone industry has reached its maturity consequently. According to International Data Corporation the expected growth rate would reduce to 3.1% in 2016 from 10.5% in 2015. A significant drop in the sales value of the mobile phones. Further the report claims that traditional logistic methods will be replaced with new online based channeling system paving the way to create high level of competition among Original Equipment Manufacturers. Further the report claims that due to market saturation and the increased bargaining power of the customers competition in the industry would increase (IDC, 2016, para.1-10). Similar Ideas was shared by Kenney & Pon (2009) were they argued that industry competitive levels are increasing despite the growth potential, and the customer satisfaction would be a difficult thing to accomplish. According to an industrial research more than 1.2 Billion phones were sold every year. In year 2010 return rate of the phones where 8% or 96 million phones. Average market value of those phones would be ranging from 35%-75% of the original value. If the original value of a phone is \$150 average resell value of the defective phones would be \$82.5. Report further explains that for a million returned phones there would be reclaimable metal value of \$2.8 Million (Greve & Davis, 2011, p.8). Hence it can be argued that the phone industry product returns represents high percentage of the original manufactured amount and also the recycle efforts of original equipment manufacturers are high due to the high scrap value of the phones.

#### The Role of Customer Perception on smart phone industry

A research finding explains that perception meltdown of Nokia brand in Smart phone industry among high tech community had the irrevocable impact on their brand name, also paved the way to the success of Apple brand that was praised by the same community (Gray, Gonzalez & Darling, 2011, pp.240-255). According to Bahn et al., (2007) the product color features and functionality plays a critical role in satisfying a mobile phone customers. Further, in another research researcher it was found that the perception is one of the main reason for customer satisfaction in phone business. However, the products attributes and its functionality is said to have a major impact on creating a positive brand perception in the minds of the consumers (p.305-313). Kotler & Armstrong has identified that quality attributes will create a positive perception on the consumers' mind which will be converted in to a purchase decision (Armstrong, 2005, p.581). According to Suki (2007) the light features of the phone like quality of the pictures and the sound will be a determinant factor for the brand perception (pp.350-365). In another research it was found out that perception of customers on the product attributes will increase the purchase behavior of the consumers (Zhang, Zhou & Rau, 2010, pp.1-8). Hence, analyzing the previous research data it is proved that customer perception on mobile & smart phones bares a greater impact on the revenue in this industry.

*Significance of the study*

Logistic activities represents 7%-10% of the United State economy. However, the total cost of reverse logistics was around 35 Billion US Dollars. Further, this research claims that exact figure cannot be derived as the companies do not want to reveal their cost of failure (Rogers & Tibben-Lembke, 1998, p.20). While product quality and attributes are considered as the main reason, many phone manufacturers try to maintain those qualitative aspects with high after sale services and efficient reverse logistics practices. According to Suppiah (2015) aftermarket repair services are provided by most of the phone manufacturers. Also their supply chain management systems are design to include such reverse logistic activities in their respective processors (p.8). According to Shuang Li et.al. (2012) efficient reverse logistic practices would reduce the total cost, minimize the cycle time and maximize the customer satisfaction (p.2). Despite these efforts smart phone industry remains to be an industry with high defect rates. Industrial research acknowledge that iPhone 4 had an initial rejection rate of 2.1% without counting accidental malfunctions which represents 75% of the product failures during the first 12 months. Total smart phone failure rate is average of 16.9% of total products (Squaretrade, 2010, para.1). According to a logistic company in Canada smartphone has the highest return rate among fast moving electrical items. Based on their data more than 18million smart phones were returned last year. Further source claims that it was an additional burden on the supply chain system of those companies (genco, 2016, para.4). Hence it can be argued that due to high return rate importance on efficient reverse logistics practices has increased in smart phone industry. Further, many research findings claimed that customer perceived value has a direct impact on customer satisfaction and repurchase intention of the products. Therefore it is important to see the relationship between effectiveness of reverse logistics and the perceived customer value.

**Objectives**

01. To identify the reverse logistic practices utilized by the smartphone industry Sri Lanka.
02. To measure the effectiveness of reverse logistic practices utilized by smartphone industry Sri Lanka.
03. To identify the relationship between customers perceived value and the reverse logistic practices of the smart phone industry Sri Lanka.
04. To recommend suitable strategies for developing a proper reverse logistic system for smart phone industry in Sri Lanka.

**Literature review**

Reverse logistics is defined by Zuluaga (2005) as the process of planning, implementing and controlling the transfer of information and products from point of consumption to the point of origin (p.11). Another industry analysis explains that average reverse logistic cost of a manufacturer is 9%-15% of the total revenue (Greve & Davis, 2011, p.8).

*Reverse Logistics, Forward Logistics and Design For Disassembly*

Among many strategies used in the logistic management field reverse logistics and forward logistics are the main strategies that are used by many companies. Reverse logistics defer from the forward logistic practices in many ways. One of the differences is that the push strategy of forward logistics, while reverse logistic focuses on both push and pull both strategies. Also the forward logistic system would only concern about the end consumer while reverse logistics concern about the suppliers and intermediaries at the same time. Further one of the main success factor for reverse logistics is that the design for Disassembly,

were the product design process concerns about possible repair or replacement (Zuluaga, 2005, p.21). In another similar research done on phone industry it was found out that the Design for Disassembly can be effectively used to reduce the defects rate and also the strategies like using durable material and using proper QR coding system for product components (Long et al. 2016). Hence it can be argued that the Design for Disassembly can improve the efficiency of the reverse logistics practices.

#### *Return Lead-Time Management*

Das & Chowdhury (2012) explained that a reverse logistic system of the company should be designed to minimize the lead time of re-production process by standardizing the production tasks and reducing the skill requirement of the process. Lieckens & Vandaele (2007) argues that increase in lead time of reverse logistics process would increase the uncertainty of the process. Research findings further prove that the product lead time is a direct function of the efficiency of that process (pp.395-414). Further in another research it is argued that lead time on reverse logistics would increase the consumer lead time and estimated pipeline time resulting in an increase in the total cost (Cannella, Bruccoleri & Framinan, 2016, pp.35-49). In another research it was found out that supply chain of production oriented businesses are directly influenced by the return lead time. Further study claims that the reverse logistic lead time would have a direct impact on the environmental cost (Bogataj & Grubbström, 2011, pp.395-402). The literature implies that lead time of reverse logistics would directly influence the efficiency of the reverse logistic system.

#### *Design For Disassembly.*

Design for disassembly is a strategy used by specialist in life cycle engineering. Moreover the research data proves that this tool can be mainly used in the recycle process of the products. This would enhance the serviceability of those products and the end of life objectives such as recycling & reuse (Desai & Mital, 2003, pp.265-281). However Sodhi & Knight argues that longer the disassembly process takes lessor the profits. Further, study highlights the importance of involving in bulk recycling to get maximum advantage from such recycling practices (Sodhi & Knight, 1998, pp.115-118). According to Güngör (2005) Design for disassembly practices would make the products more maintenance friendly and easy to recycle. Further the report highlights the importance of doing disassembling in a nondestructive manner saving the cost and minimizing the environmental impact. Most of the literature suggest that the remanufacturing and recycling process can be enhanced and efficient with proper utility of design for disassembly practices.

#### *Infrastructure and The Top Management Commitment For Reverse Logistics*

Chines study claims that lack of infrastructure is one of the main barriers in the reverse logistics efforts of chines manufacturing sector. Further the report claims that chines lack of investment on recycling techniques, non-availability of cost effective methods are the main course of this issue (Abdulrahman, Gunasekaran & Subramaniana, 2012, pp.460-471). Assavapokee & Wongthatsanekorn (2011) explained that product recovery system should render the support from all the logistic resources and chains of the organization. Further the study reveals that government pressure on waste management has increased the significance of effective product recovery system. Moreover, the study has identified statistical coexistence among the infrastructure availability and the and the efficiency of product recovery process of the organizations (pp.129-140). In a study conducted in Brazil it was identified that most parts of the developing world suffers from the condition of “deficient logistic infrastructure” hence the efficient use of infrastructure is far from reality.



As a result, the recycling effort and the remanufacturing efforts would be significantly mitigated, undervalued and underperformed. The study further reveals that part of the problem is that manufacturers resistance to improve the proper product recovery system (Bouzon et.al, 2016, pp.182-197). However Konga et al. (2015) argues that by improving IT infrastructure recycling efforts and product recovery process can be enhanced. Further the study reveals that this improvements will bring about benefits like reduction in remanufacturing time and the lead time with reduction of total cost of the remanufacturing process (pp.51-65). Hazen et.al, (2015) claims that committed management practices would increase the information and knowledge flow to various parties in the organization and would improve the controllability through goal setting and motivation(pp.160-170).Another related study on electrical battery manufacturing industry, reveals that by creating accurate reporting system the top management focus and commitment can be attracted towards reverse logistic management. According to the study with amalgamation of balance score card to improve and analyze the reverse logistic system would improve the overall management effort on further improving the recycling process hence making the process accurate(Bansia, Jayson & Agrawal,2014,pp.1419-1427).According to the literature reviewed most of the research findings claim the notion that proper use of infrastructure would benefit the organizations operation process, recycling and product recovery process while not having such infrastructural benefits was said to have a mitigating impact on the reverse logistics practices. Further, management attitude and commitment is said to have a positive impact on the recycling and product recovery process, as it would improve the resource allocation, information flow and guidance on achieving the reverse logistics goals. However the all the reviewed studies had the gap of not relating the infrastructure improvement and management commitment impact on the customer perceived value.

#### *Customer Expected Lead-Time.*

According to Altendorfer & Minner (2015) with proper communication at the sales point or service contact point it is possible to influence the customer expectation of the service. Further the study reveals that any production process should be designed based on the expected customer lead time and those standards need to be communicated to the consumer directly. Moreover the study argues that probability of acceptance is correlated with the lead time required (pp.555-565).Another study found out that the expected lead time is related with the customers cost benefit analysis on the brand (Sohn, Jeon & Han, 2015,pp.2015). Hsieh & Liu (2010) argues that if the expected lead time is higher the total cost of recycling and reprocessing is high. However the study reveals that reducing the quality parameters would increase the sales hence total benefit would increase despite the increase in the cost of penalty (pp.517-527).Further most of the studies were not linking the customer expected lead time on the reverse logistic practices although findings related to cost minimization ,increase in sales were highlighted . Therefore it can be argued that there is a literature GAP in identifying the correlation between reverse logistic practices and customer expected value. Hence the study would focus on identifying and fill that gap through research findings.

#### *Customer Perceived Value*

Customer perceived value is a different concept to the customer satisfaction, the main difference being pre and post purchase occurrence, where satisfaction is universally agreed to happen post purchase and post evaluated manner, perception can happen in many stages of the purchasing cycle including the pre purchase stage as a result. Moreover, it can be concluded that a perception about a product would be generated without any consumption experience (Sweeney &Soutar ,2001,pp.203-220). Another related study argues that the

perceived value of the customers are heterogeneous and need to be addressed in crafting a better strategy (Floh et, 2010, 974-982). Another study conducted in Australia on you mobile phone users has confirmed that perception of the mobile phone brand among peers and the public has a direct impact on their preference and selection of mobile phone brand. Further the study argues that this perception has direct influence on the group behavior (Walsh .et, 2010, pp.333-342). Floh et. Has tested the multidimensional scale including fictional, loyal, economic, social and emotional value that are identified as the components of the customer perceived value (pp.974-982).In another research the use of quality is used to map the components of perceived value (Miao,2014,pp.4820-4834). According to Sweeneya & Soutarb (2001) multidimensional scale is a useful scale to determine factor analysis and in-depth analysis. However a narrow analysis on a concept or a behavior pattern can be measured with single scale or likert scale (203,220). However the study is focused on identifying a relationship between customer perceived value and reverse logistics. Therefore there is no need to analyze and comprehend the customer perception in this study. Instead the concept is used to identify the relationship between another set of variables.

#### *Overall Conclusion On Literature*

Despite many efforts to identify the cost effectiveness, sales and other benefits there was no clear literature linking the customer perception with the reverse logistic efforts of organizations. However the efficiency of reverse logistics will be dependent upon commonly discussed factors like top management commitment, infrastructure, return lead-time and design for disassembly.

#### **Methodology**

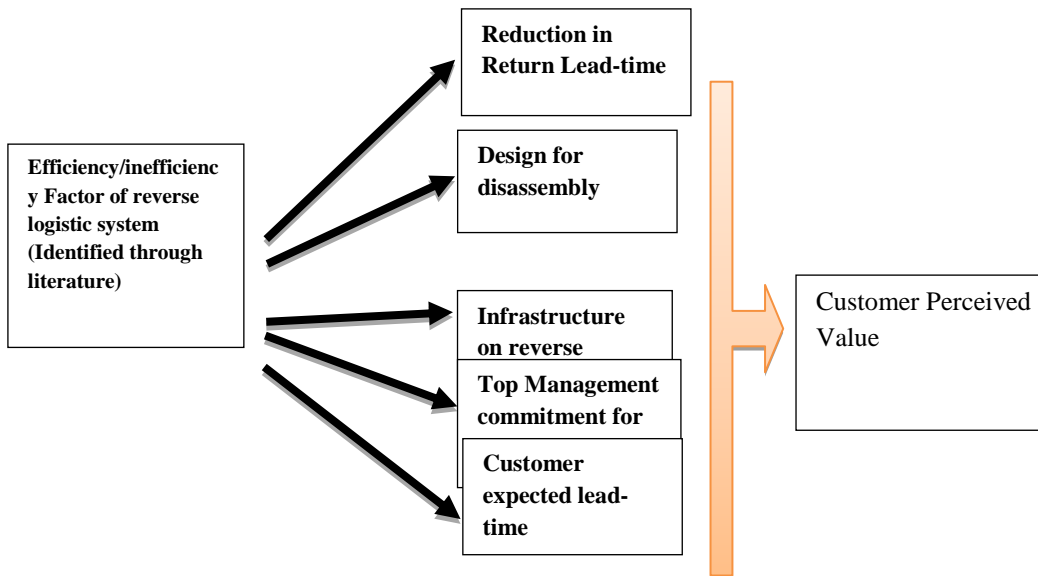
Research methodology is dependent upon the intention of the research and the ontology of the research, however the positive ontology is always catered with quantitative approach while the data gathered would be quantifiable. Further it enables the study to develop and measure a possible correlation among some variables(Wang,2010,pp.2-4).According to Boynton, Greenhalgh (2004) quantitative research process requires tools like survey questions that would generate numerical data, where those data would be tested mathematically with hypothesizes ultimately (pp.1312-1315). However the process of this research would be the same as suggested since the intention of the study is to show a relationship between reverse logistics and the customer perceived value to prove that relationship statistical information need to be gathered hence the study approach is qualitative approach with set of hypothesizes created to identify the relationship as mentioned.

#### *Sampling Method & Sample Size*

Sample size should be significant enough to represent the target population of the research. Hence the accuracy of the smaller sample size is lesser compared to that of a larger sample. Further, bigger the sample higher accuracy in generalizing the findings on the target population (Yuan et. al, 2012, pp. 1206–1219). However in a study done on meta-experiment stream has found out that many researches use the sample size of 100 and frequently to generalize a larger population despite the theoretical methods to tally the actual population with sample size. Further the report claimed that the all of the studies have accurately proven the research objectives (Tavernier et, al, pp.1371-1382). However the study focuses on companies reverse logistic efforts verses the customer perceived value. Mainly two different samples were collected 500 customers from 50 different phone dealers and franchises in Colombo region. Each customers corresponding dealers/franchises reverse logistic efficiency will be mapped. Therefore the correlation is mapped with customer and the reverse logistic variables identified in the literature review, not the individual service provider. Therefore two

samples can have tallying output. According to Cochran, (1977) when the homogeneity of the total population is high it is easy to use random sampling. However when the subgroup characters are vivid among each other, then a clear strata is required to collect data from those distinct groups (pp.01-442). Further the pilot survey done for twenty customers have revealed that the perception towards recycled product and the expected service do not change from age, gender, and region. Therefore a heterogeneous assumption can be utilized to form the random sampling method for the study.

Figure 1. Conceptual Framework of the study



Source: Literature review

This conceptual framework is tested in the study, while following hypothesis were tested to prove the created conceptual framework.

H1: There is a positive relationship between reduction in return lead time and customer perceived value.

H2: There is a positive relationship between Design for disassembly and customer perceived value.

H3: There is a positive relationship between Infrastructure on reverse logistics and customer perceived value.

H4: There is a positive relationship between top management commitment on reverse logistics and the customer perceived value.

H5: There is a positive relationship between customer expected lead time and the customer perceived value.

Above variables will be tested in the following regression

$$CP = \beta_0 + \beta_1 R + \beta_2 D + \beta_3 I + \beta_4 T + \beta_5 C + E_1$$

CP= Perceived customer value.  
 R= Reduction in Return Lead-time  
 D= Design for disassembly  
 I= Infrastructure on reverse logistics  
 T= Top Management commitment for reverse logistics  
 C= Customer expected lead-time  
 E<sub>1</sub> =Standard error

**Findings of the study**

Initial analysis of the study involved identifying Bivariate Correlation of individual independent variable with the dependent variable. In the second step the proven variables will be tested for the regression.

Table 01:Correlation of Customer Perceived value & Reduction In lead time

			Customer Perceived value	Reduction in Return Lead-time
Customer perceived value	Pearson Correlation		1	.845**
	Sig. (2-tailed)			.000
	N		500	500
Reduction in Return Lead-time	Pearson Correlation		.845**	1
	Sig. (2-tailed)		.000	
	N		500	500

\*\* . Correlation is significant at the 0.01 level (2-tailed) - Source: Research Data

As indicated in the table there is a strong relationship between reduction in lead time of recycled products and the Customer perceived value. With the high significance level the relationship can be interpreted as valid. Therefore it can be concluded that the Hypothesis H1 is proven beyond reasonable doubt with statistical prove.

Table 02:Correlation of Infrastructure on reverse logistics & Customer Perceived Value

			Customer Perceived value	Infrastructure on reverse logistics
Customer perceived value	Pearson Correlation		1	.937**
	Sig. (2-tailed)			.000
	N		500	500
Infrastructure on reverse logistics	Pearson Correlation		.937**	1
	Sig. (2-tailed)		.000	
	N		500	500

\*\* . Correlation is significant at the 0.01 level (2-tailed). Source: Research Data

According to this table when the reverse logistics system is highly enabled with required infrastructure system the perceived customer value will increase. Hence it can be concluded that the H3 is proven with evidence.

Table 03: Relationship between Top Management commitment & Customer perceived value

		Customer Perceived value	Top Management commitment
Customer perceived value	Pearson Correlation	1	.798**
	Sig. (2-tailed)		.000
	N	500	500
Top Management commitment	Pearson Correlation	.798**	1
	Sig. (2-tailed)	.000	
	N	500	500

\*\* . Correlation is significant at the 0.01 level (2-tailed). Source: Research Data

Although the significance is not high as other two variables there is a strong positive correlation with top management commitment and customer perceived value. Further the significance is validated with high value proving the validity of the relationship. Moreover, according to this analysis hypothesis H4 is proven with statistical confidence.

Table 04: Relationship Between Customer expected Lead time & Customer perceived value

		Customer Perceived value	Customer expected lead-time
Customer Perceived value	Pearson Correlation	1	.816**
	Sig. (2-tailed)		.000
	N	500	500
Customer expected lead-time	Pearson Correlation	.816**	1
	Sig. (2-tailed)	.000	
	N	500	500

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Source: Research Data

When expected lead times of customers are high delays in replacing products will be tolerated paving the way for the company to maintain the high customer perceived value position. Further the Hypothesis H5 is therefore proven with this statistic.

Table 05: Relationship between Design for Disassembly and customer perceived value

		Customer Perceived value	Design for disassembly
Customer Perceived value	Pearson Correlation	1	.530**
	Sig. (2-tailed)		.064
	N	500	50
Design for disassembly	Pearson Correlation	.530**	1
	Sig. (2-tailed)	.064	
	N	500	500

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Source: Research Data

In the relationship the significance level is high the person correlation value is below the expected reliable level. Hence this variable cannot be considered as independent variable in this equation. And the hypothesis H2 is disproved and the null hypothesis is proved.

The Model Test

Table 06: Regression Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.189	.184		1.028	.000
1 Customer expected lead-time	.412	.241	.275	1.709	.000
Reduction in Return Lead-time	.400	.277	.269	1.742	.000
Infrastructure on reverse logistics	.523	.375	.363	1.995	.000
Top Management commitment	.084	.228	.056	1.368	.000

Dependent Variable: Customer Perceived value

Source: Research Data

According to this analysis the regression values represents acceptable significance level and the t values are tallying with the P values significance identified. Therefore the regression can be written as

$$CP = \beta_0 + \beta_1R + \beta_2D + \beta_3I + \beta_4T + \beta_5 C + E_1$$

New regression

$$CP = \beta_0 + \beta_1R + \beta_2D + \beta_3I + \beta_4T + \beta_5 C + E_1$$

$$CP = 0.189 + 0.4R + 0.52I + 0.8T + 0.4C + E_1$$

**Discussion**

The study has proven four hypothesizes out of the total five hypothesizes. And the model is successful with a minor amendment. However the rejected hypothesize namely the “Design for disassembly” remained to be a prominent consideration factor in the production engineering community despite the research result. When analyzing the qualitative feedback given by the interviewees on the subject matter most of the customers are not concerned about the internal process of disassembling even though they had prior knowledge on it. Especially the phones like iPhones takes lot of time to disassemble vs another budget smart phone. Customers are more concerned on the lead-time, and their delivery, further it is possible to find a relationship between lead time and the Design for dissemble in future researches. Further according to direct agents and franchise the top management commitment is under focused area for the reverse logistics practices.

Most of the Original Equipment Manufacturers response is considered to be slow although the local partners processing speed is high. Most of the technical experts reveals that this is due to their heavy R&D focus on quality assurance, where the R&D try to minimize the product failures while the technological advancement on recycling and product replacing technology is less prioritized. Further the customer expected lead-time is also a unique variable in this study. According to the study results higher the customer expected lead time lower the chances for customer dissatisfaction. Allowing the businesses to increase their possibility to improve or sustain the customer perceived value. Moreover, in a detailed analysis on the same matter has revealed that most of the customers who had long and lengthy expected lead time were using branded phones. Most consumer justified it by relating the complexity, genuinity and the uniqueness of the product. Respondent mentioned that their tolerance level is high due to those reasons and they expect it to be little time consuming than other phone brands. However another factor that would contribute the “customer expected lead time” is the perception on the Culprit of phone failure. If consumers believe the phone failure is due to their misuse then the customer expected lead-time is high. However these qualitative facts were not included in this model to be tested statistically.

### Conclusion

The study was able to successfully identify a relationship between reverse logistics and the customer perceived value. Further, based on the data analyzed the customer perceived value can be a function of main four elements of efficient reverse logistics system, namely Customer expected lead-time, Reduction in Return Lead-time, Infrastructure on reverse logistics, Top Management commitment. Moreover study has disproved Hypothesis H2 by proving the null hypothesis. Moreover, most of the literature findings and the research findings are parallel.

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**EXPROPRIATION BY THE CONTROLLING SHAREHOLDERS ON FIRM VALUE  
IN THE CONTEXT OF INDONESIA: CORPORATE GOVERNANCE AS  
MODERATING VARIABLE**

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**Abstract**

This research discusses the influence of cash flow right, control right and cash flow right leverage on firm value. This research also discusses the influence of independent commissioners and independent directors as moderating variables of cash flow right leverage on firm value. Firm size and profitability are also included in this study as control variables. The research has 83 public corporations as research sample. All of the firms kept on the list during observation period that is from 2007 until 2010. Cash flow right and control right of the controlling shareholders can be shown by investigating ownership structure of public corporations by using ultimate ownership. The result of statistical test indicates that cash flow right is the dominant variable influencing firm value. The result shows that cash flow right has a positive effect on firm value, indicating that firm value increases as cash flow right of the controlling shareholder increases. Other variables are inconsistent when tested by using moderating variable or by adding control variables. Firm size has negative effect on firm value, and profitability has positive effect on firm value.

**Keywords:** *cash flow right, control right, cash flow right leverage, expropriation, firm value, Indonesia.*

**Introduction**

This study examines three issues related to the cash flow right, control right, and the deviation of the cash flow right from the control right on the firm value. The first issue in this study is the concentration of cash flow right and the implication on firm value. Cash flow right is incentive for controlling shareholders to avoid expropriation action. The controlling shareholders have strong incentive to monitor managers in maximizing firm value if they have significant cash flow right. The effect of increasing and decreasing in firm value would also affect the controlling shareholders. In line with this, La Porta et al. (1999) suggest that the incentive and ability of the controlling shareholders to expropriate are limited by financial incentive. The source of financial incentive here is the cash flow right of the controlling shareholders. This cash flow right is emphasized by Jensen dan Meckling (1976) by stating that the concentration of ownership has positive impact on firm value (La Porta et al., 2002).

The second issue in this study is the effect of control right on firm value. The concentration of high control right in the hands of controlling shareholders reflects the strong influence of the controlling shareholders on the policies and decisions that will be taken by the company. High control right will negatively effect firm value. Fan dan Wong (2002) confirm that the credibility of financial information decreases when the controlling shareholders exercise control right. The decreasing credibility or quality of financial information will reduce firm value. La Porta et al. (2002) state that this control right has been stressed by Shleifer dan Vishny (1997), focusing on the negative effect of ownership concentration on firm value. Shleifer dan Vishny (1997) state that when the private benefit

over the control exerted is high, the majority of shareholders will endeavor to allocate company's resources to generate the benefits.

The third issue of this study is the cash flow right leverage and the implication on firm value. In a concentrated ownership, the controlling shareholders make several efforts to improve the control right beyond the cash flow right. The separation between these two rights raises the possibility of expropriation on the minority shareholders. Agency conflict will be higher when the cash flow right leverage is in the hands of the controlling shareholders. However, the ability of the controlling shareholders to expropriate is expected to decrease if there is corporate governance in the company. The practice of corporate governance is characterized either by the presence of independent commissioners or independent directors who will give pressure to the controlling shareholders for not doing expropriation because there are many parties oversee their actions. Mitton (2002) examines 398 companies from Indonesia, Korea, Malaysia, Philippines, and Thailand, with various levels of company and ownership structure. This study states that corporate governance is a means to protect minority shareholders from expropriation (takeover) done by the controlling shareholders. Juniarti (2015) finds that the majority shareholder entrenchment causes negative effects which utilizes a large capacity to undertake actions for personal gain at the expense of minority shareholders.

The empirical evidence shows that ownership concentration of public companies prevails in nearly all countries (Jensen dan Meckling, 1976; Shleifer dan Vishny, 1997; La Porta et al., 1999; Claessens et al., 2000; Faccio dan Lang, 2002; Lemmons dan Lins 2003; Yeh et al., 2003; Yurtoglu, 2003; Khrisnamurti et al., 2005; Siregar, 2008). The controlling shareholders have control right beyond cash flow right, so the controlling shareholders are able to effectively influence management policies even to determine management policies. One of these research results is found by Claessens et al. (2000) examining 2980 companies in 9 countries in East and Southeast Asia, including Indonesia. They conclude that most of the sample is the companies concentrated by family ownership and the cash flow right acquired by the controlling shareholders is able to improve firm performance. However, the conflicting research result is found by Siregar (2008) stating that control right of the controlling shareholders and cash flow right leverage do not negatively affect firm value. This is because the layer and ownership chain of public companies are deep and complex. The deep layer of ownership makes investors difficult to know the controlling shareholders of a public company, so the possibility of control right concentration is higher. The worst is the expropriation might not be detected by investors.

Because there is inconsistency of the results in the previous studies, the results of this study are expected to provide a better picture of the phenomenon of expropriation by the controlling shareholders. Indonesian public companies are the right setting because the ownership concentration is high and the protection on minority shareholders is still weak. Agency problem encountered in the concentrated ownership firm is a conflict between the controlling shareholders with minority shareholders. The agency conflict arises when the controlling shareholders have excessive control over company's policy to do expropriation for their own benefit. Involving the practice of corporate governance to moderate the relationship between cash flow right leverage and firm value, this research seeks empirical evidence regarding the existence of expropriation action carried out by the controlling shareholders.

## Literature review and hypotheses development

### *The effect of the cash flow on firm value*

Financial incentives may limit the willingness of controlling shareholders to obtain private benefits over control through expropriation. An important source of financial incentive for the controlling shareholders is cash flow right. Expropriation is expensive to do, therefore, the high cash flow right should minimize the expropriation action. This cash flow right is emphasized by Jensen dan Meckling (1976) and evidenced by La Porta et al. (1999), stating that the ownership concentration has a positive influence on firm value.

Based on the argument of positive incentive effect (PIE), the effect of cash flow right on firm value is based on the size of financial impact that will be felt by the controlling shareholders for the expropriation action done to the company. If the negative impact of declining firm value is large for the controlling shareholders, the controlling shareholders will not be motivated to do expropriation. Therefore, the controlling shareholders who have a high cash flow right are more motivated to not to expropriate. The controlling shareholders will monitor the performance of management in order to increase firm value and avoid expropriation action. Because expropriation has a bigger impact on the controlling shareholders, it is too expensive for them to expropriate (Claessens et al., 2000). The cash flow right is a financial incentive for the controlling shareholders, motivating them to maximize firm value by monitoring managers' actions so that the agency problem can be reduced. Based on the description above, it can be hypothesized as follows:

*Hypothesis 1: Cash flow right of the controlling shareholders positively affects firm value.*

### *The effect of control right on firm value*

The effect of control right on firm value is based on the argument of negative entrenchment effect (NEE), stating that the control right concentration of the controlling shareholders negatively affects firm value. With a high control right, the controlling shareholders have power to influence and participate in determining management policies that will benefit their position so that the controlling shareholders can obtain private benefits over the control. If private benefits over the control is large, the controlling shareholders will seek to allocate company's resources to generate private benefits. If the controlling shareholders are able to effectively control the company, the policy they take tends to result in the expropriation on the minority shareholders.

Claessens et al. (2000) and Claessens et al. (2002) find that the controlling shareholders of Asian public companies tend to use control right for personal interests. The greater the control right is, the lower the firm value becomes. This is because the act of expropriation to obtain private benefits over control unconsciously tends to decrease firm value. If outside investors believe that expropriation has been done by the controlling shareholders, they will value company's stock price lower. Based on the above explanation, the alternative hypothesis is hypothesized as follows:

*Hypothesis 2: Control right of the controlling shareholders negatively affects firm value.*

### *The effect of cash flow right leverage on firm value*

The effect of cash flow right leverage on firm value is based on NEE argument stating that ownership concentration negatively affects firm value. Cash flow right leverage describes the agency problem that occurs in the company between the controlling shareholders and the minority shareholders. The high cash flow right shows the high agency

problem. The excessive control right over the cash flow indicates the power of controlling shareholders to control the company and perform expropriation.

La Porta et al. (1999) and Claessens et al. (2000) show that there is conflict of interest between the controlling shareholders and the minority shareholders. When the controlling shareholders control the company through their control right, they tend to generate expropriation policy on the minority shareholders. This kind of business is not attractive to the minority shareholders so they undervalue the company. Yeh et al. (2003) state that the deviation of cash flow right from the control right (cash flow right leverage) and stock collateralization by the controlling shareholders are two important variables in measuring expropriation on the minority shareholders. This conclusion is supported by empirical evidence saying that the two measures negatively affect firm value, consistent with the NEE argument. However, Siregar (2008) proves that despite the high ownership concentration, cash flow right leverage does not negatively affect firm value. This is because the layer of ownership and chain of ownership in Indonesian public companies are very deep and complex. So, it is difficult to know the controlling shareholders in the company. As a result, investors are not aware of the possibility of the increasing control right by the controlling shareholders to perform expropriation. Besides, they also keep valuing the company high. Based on this explanation, the alternative hypothesis is hypothesized as follows:

*Hypothesis 3: cash flow right leverage of the controlling shareholders negatively affect firm value.*

*The effect of cash flow right leverage on firm value with corporate governance as a moderating variable*

Claessens et al. (2000) state that the weak legal protection to minority shareholders (investors) makes the controlling shareholder increase their control right beyond their ownership in the company. Legal protection and weak corporate governance make the controlling shareholders more interested in expropriating in order to obtain private benefit over control. This is in line with the research of Yurtoglu (2003) stating that with better protection on the minority shareholders will result in higher firm value. The protection here is corporate governance. In their study, Khrisnamurti et al. (2005) state that creating legal environment requires government involvement. Legal environment supports the creation of corporate governance so the expropriation action on minority shareholders may be reduced. Corporate governance has been absolutely necessary for the company because this role is so important in detecting and preventing the counter-productive action of any individual. Corporate governance practice applied in a company is generally characterized by the presence of independent commissioners and independent directors. The existence of independent directors or independent directors within the company provides objectivity effect in doing execution and making decision. This will limit the movement of controlling shareholders to exercise control right in setting company's policy. The monitoring carried out by independent directors will provide effective management for the company so the company's goal can be attained, that is to maximize shareholders' wealth. The shareholders here are not only the controlling shareholders but also minority shareholders. The presence of independent parties in company's management will be able to balance condition, making every management's policy not only beneficial for one party but also for all. Based on the description above, the alternative hypotheses are hypothesized as follows:

*Hypothesis 4: the presence of independent commissioners in the company tends to decrease the effect of cash flow right leverage on firm value.*

*Hypothesis 5: the presence of independent directors in the company tends to decrease the effect of cash flow right leverage on firm value.*

**Methods**

The sample in this research is public companies listed in Indonesia Stock Exchange (BEI) for period of four years, i.e. from 2007 to 2010. Public companies used here are not limited by specific industry group so it is easy to explore every chain of ownership. Sampling technique used is purposive sampling, i.e. sampling based on certain criteria so that data analysis results can be used to answer research questions.

The criteria that must be met are as follows: 1) public companies/issuers were registered in BEI and kept in the list during the observation period that is from 2007 to 2010, they must not experience delisting either, 2) public companies/issuers published their full annual financial statements for the period ending December 31, 2007 and 2010, 3) public companies/issuers applied good governance characterized by the presence of independent commissioners and independent directors, 4) public companies had a complete ultimate ownership structure and can be traced by the controlling shareholders, 5) public companies had a complete data with respect to the variables needed in this research. Based on these criteria, the sample taken is 83 companies.

The dependent variable in this study is firm value. It is the amount that investors are willing to pay for the company, or this also means the investors' perception on the company associated by the stock price. The proxy of firm value used in this study is the ratio of price to book value. The share price meant here is public company's stock price at end of period (closing price). And the book value of company is the total book value available in Balance Sheet. The use of firm value proxy refers to La Porta et al. (2002).

The independent variables in this study consist of: cash flow right, control right, and cash flow right leverage. Cash flow right is financial claim of the controlling shareholders on the company (La Porta et al., 1999; Claessens et al., 2002). The cash flow right consists of direct cash flow right and indirect cash flow right. Control right is voting right to participate in making firm's important decision (La Porta et al., 1999). Control right includes direct control right and indirect control right. Cash flow right leverage is a deviation/ difference in cash flow right from control right owned by the controlling shareholders by using various increasing mechanisms (Siregar, 2008). The bigger the difference between cash flow right and control right is, the higher the increase of shareholder control beyond the cash flow becomes. The cash flow right leverage indicates the possibility of expropriation by the controlling shareholders on minority shareholders. In this study, cash flow right leverage describes the reduction of cash flow right from control right (La Porta et al., 2002).

Moderating variable in this research is corporate governance consisting the presence of independent commissioners and independent directors. The presence of independent commissioners within the company indicates objectivity of company's policy so expropriation can be avoided. The existence of an independent commissioner is indicated by calculating the composition of independent directors compared to the total number of board of commissioners in the company. The second moderating variable is independent directors. The presence of independent director in board of director will make the management become objective and effective. The presence of independent director variable is indicated by finding the composition of the independent director compared to the total number of board members in the company.

The control variable in this study is firm size and profitability. As the scale is quite large, the probability of agency conflict in larger companies is relatively higher than smaller ones. Claessens et al. (2002) find that the size of company negatively affects firm value. In this study, firm size is proxied by the logarithm of total assets. Profitability variable is one of the important variables in evaluating company's performance. The better the performance of company is, the better the firm's value in the eyes of investors becomes. Profitability shows

the availability of internal funds in the company. The proxy of profitability variable used in this study is the ratio return on assets. This measurement refers to Siregar (2008).

According to the research issues elaborated in problem formulation, namely cash flow right, control right, and cash flow right leverage on firm value, the hypothesis testing can be done by estimating full model and partial model. The full model in this study consists of the following equations:

$$FV_{it} = \alpha_0 + \beta_1CFR_{it} + \beta_2CR_{it} + \beta_3CFRL_{it} + \beta_4CFRL_{it} * KOM_{it} + \beta_5CFRL_{it} * DIR_{it} + \beta_6SIZE_{it} + \beta_7ROA_{it} (Model 1)$$

$$FV_{it} = \alpha_0 + \beta_1CFR_{it} + \beta_2CR_{it} + \beta_3CFRL_{it} + \beta_6SIZE_{it} + \beta_7ROA_{it} (Model 2)$$

$$FV_{it} = \alpha_0 + \beta_1CFR_{it} + \beta_2CR_{it} + \beta_3CFRL_{it} + \beta_4CFRL_{it} * KOM_{it} + \beta_5CFRL_{it} * DIR_{it} (Model 3)$$

$$FV_{it} = \alpha_0 + \beta_1CFR_{it} + \beta_2CR_{it} + \beta_3CFRL_{it} (Model 4)$$

While for the partial model, the hypothesis testing is done by estimating the following equations:

$$FV_{it} = \alpha_0 + \beta_1CFR_{it} (Model 5)$$

$$FV_{it} = \alpha_0 + \beta_1CFR_{it} + \beta_6SIZE_{it} + \beta_7ROA_{it} (Model 6)$$

$$FV_{it} = \alpha_0 + \beta_2CR_{it} (Model 7)$$

$$FV_{it} = \alpha_0 + \beta_2CR_{it} + \beta_6SIZE_{it} + \beta_7ROA_{it} (Model 8)$$

$$FV_{it} = \alpha_0 + \beta_3CFRL_{it} (Model 9)$$

$$FV_{it} = \alpha_0 + \beta_3CFRL_{it} + \beta_6SIZE_{it} + \beta_7ROA_{it} (Model 10)$$

$$FV_{it} = \alpha_0 + \beta_3CFRL_{it} + \beta_4CFRL_{it} * KOM_{it} + \beta_5CFRL_{it} * DIR_{it} (Model 11)$$

$$FV_{it} = \alpha_0 + \beta_3CFRL_{it} + \beta_4CFRL_{it} * KOM_{it} (Model 12)$$

$$FV_{it} = \alpha_0 + \beta_3CFRL_{it} + \beta_5CFRL_{it} * DIR_{it} (Model 13)$$

Where:

- FV = firm value proxied by price to book value
- CFR = cash flow received by the controlling shareholders
- CR = control right owned by the controlling shareholders
- CFRL = indicator of expropriation by the controlling shareholders
- KOM = composition of independent commissioners of public companies indicating corporate governance
- DIR = composition of independent directors of public companies indicating corporate governance
- SIZE = firm size
- ROA = company's ability to manage assets held in generating net income

### Results and discussion

The estimation result of the full model testing is shown in Table 1 as follows:

**Table 13 The estimation result of the full model testing**

Coefficient	Expected sign	Model 1	Model 2	Model 3	Model 4
$\beta_1$	(+)	0.116217	0.112451*	0.128734	0.129806**
$\beta_2$	(-)	-0.007607	-0.003565	-0.018250	-0.019085
$\beta_3$	(-)	0.000094	0.000046	0.000241	0.000217
$\beta_4$	(+)	-0.015658		-0.016744	
$\beta_5$	(+)	0.020156		0.012288	
$\beta_6$	(-)	0.039885	0.045784		
$\beta_7$	(+)	0.041152*	0.043694*		
$R^2$		0.147889	0.147713	0.140300	0.140220
Adj $R^2$		0.129479	0.134641	0.127114	0.132356

\*Significant at the 0.10 level, \*\*Significant at the 0.05 level, \*\*\*Significant at the 0.01 level

Partial testing was done by estimating model 5 until model 13, as shown in Table 2.

**Table 14 The estimation result of the partial testing**

Coefficient	Expected sign	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12	Model 13
$\beta_1$	(+)	0.112236***	0.109084***							
$\beta_2$	(-)			0.085540***	0.084271***					
$\beta_3$	(-)					-0.000596	-0.000456	0.000667	0.000694	-0.000415
$\beta_4$	(+)							-0.204664	-0.183582	
$\beta_5$	(+)							0.027320		-0.028257
$\beta_6$	(-)		0.047987		0.164082		0.243253			
$\beta_7$	(+)		0.043915*		0.060922**		0.056977**			
$R^2$		0.139876	0.147704	0.089364	0.107075	0.004440	0.023706	0.011754	0.011407	0.004909
Adj $R^2$		0.137269	0.139909	0.086604	0.098908	0.001423	0.014776	0.002715	0.005398	0.001141

\*Significant at the 0.10 level, \*\*Significant at the 0.05 level, \*\*\*Significant at the 0.01 level

Cash flow right of the controlling shareholders is financial claim received by the controlling shareholders on the company. Based on the PIE (positive incentive effect) argument, the controlling shareholders will not take expropriation action on the minority shareholders because they are the party who will suffer the most from the firm value decrease resulted from expropriation action. The bigger the concentration of cash flow right held by the controlling shareholders is, the more financial claim (financial incentive) received by the controlling shareholders becomes. The amount of financial claim received by the controlling shareholders requires them to avoid expropriation action which tends to lower firm value. In fact, they should take decision which will improve firm value. This study is in line with the PIE argument. Besides, there are also some other studies that support this PIE argument, among them are Claessens et al. (2002), Mitton (2002), Yurtoglu (2003), dan Siregar (2008).

In the condition where the concentration of cash flow right owned by the controlling shareholders is high, the impact of an increase or decrease in firm value on the company's controlling shareholders is also high. So, the controlling shareholders are motivated to not expropriate, because without even doing it they still get many benefits from the high cash flow right held. Such condition is the implication of a positive influence of cash flow right on firm value. The concentration of high cash flow right is used by the controlling shareholders to align the interests between the controlling shareholders and minority shareholders. If the right of minority shareholders is protected from the possibility of expropriation action by the



controlling shareholders, they would be willing to hand over their funds to public companies. This will push up the price of securities, especially the stock prices of public companies which subsequently have a positive impact on the increasing firm value. Besides, foreign investors will believe that there is no expropriation action within the company so they will value company's stock higher.

The research data show that the concentration of control right owned by the controlling shareholders is quite high. There are two common mechanisms used to improve the control right, namely the pyramid ownership and cross ownership. Through these mechanisms, the controlling shareholders may increase their ownership in public companies without knowing of investors and public in general. According to the assumption of the NEE theory (negative entrenchment effect), the high concentration of control right will make the control of company's policy-makers fully in the hands of controlling shareholders. So, the controlling shareholders have the discretion to determine the company's policies that might only benefit them alone, or in other words, the controlling shareholders are free to expropriate on the minority shareholders. As a result, foreign investors will undervalue the shares of public companies causing a decline in firm value.

However, the prediction of NEE theory is supported in this study. The research result proves that in Indonesia, control right of the controlling shareholders positively affects firm value. This indicates that, in Indonesia, although the control right owned by the controlling shareholders is high, the firm value still can be increased. There is possibility that the controlling shareholders act professionally so that with their control right, they prefer to keep increasing firm value. The findings in this study are in line with research of Siregar (2008). If the research data were investigated further, some indications were found making hypothesis 2 not supported. First, the structural pattern of public companies' ownership in Indonesia is profound and complex, forming many layers of ownership, chains of ownership and paths of ownership. The pattern of ownership structure of public companies tends to have branches. Between a public company and other public companies there is stock ownership's binding.

The second reason is investors do not know for sure the possibility of increasing control right by the controlling shareholders. This is because investors only know company's ownership structure based on the concept of immediate ownership as listed in annual report of public companies. Based on the concept of immediate ownership, investors will only know the size of the cash flow received by shareholders, without knowing the amount of control right owned by shareholders. So, investors do not have knowledge to assess whether there has been expropriation action or not in the company. This is in line with that expressed by Siregar (2008) stating that investors do not have information about the possibility of expropriation and investors do not know at all who the ultimate owners of public companies are. The third reason is the secrecy of the controlling shareholders who are very well preserved. It is based on the difficulty to obtain overall data of the controlling shareholders of public companies. This happens simply because public companies do not want their secret known by society, especially regarding the ultimate owners of the companies. Besides, they want to always maintain the image.

The high control right held by the controlling shareholders allows expropriation action on the minority shareholders. Expropriation action is indicated by cash flow right leverage, showing the potential use of private benefits over control. By obtaining private benefits over company's resources, the controlling shareholders have opportunity to increase their wealth without worrying that it has a direct impact for them. This condition does not correspond to the real situation, where the findings in this study indicate that the cash flow right leverage does not affect firm value. The findings of this study are consistent with Siregar (2008). The presence of cash flow right leverage is an indicator of expropriation action done by the controlling shareholders on minority shareholders. The high control right

leads the controlling shareholders have opportunity to acquire a large private benefits on public companies. Expropriation tends to encourage controlling shareholders to adopt policies that only benefit them. However, this condition does not occur in Indonesia. Although there has been indication of expropriation by the controlling shareholders, the firm value is not affected. The results of this study are not in line with the prediction of NEE (negative entrenchment effects) theory stating that the high control right by the controlling shareholders trigger them to expropriate though it would affect firm value. The value of public companies in Indonesia remains high although there is any indication of expropriation action done by the controlling shareholders.

According to applicable legislation, a public company is obliged to apply good corporate governance (GCG). The concept of good corporate governance emphasizes that GCG may hinder the possibility of agency conflict, prevent expropriation and increase firm value. The roles of independent commissioners and independent directors are needed to perform supervise and assessment objectively. This paper reveals that independent commissioners were proven to be unable in increasing firm value and decreasing the effect of expropriation, indicated by the presence of cash flow right leverage. This result is in line with Bozec dan Bozec (2007) proving that when the company ownership is concentrated, the role of GCG becomes not effective. The indicator of public firm applying GCG is the presence of audit committee, independent commissioners and independent directors. Even though the presence of independent directors in Indonesia has met GCG regulation, the role of independent directors has not been able to influence expropriation action and change firm value.

The similar condition happens to the role of independent directors in moderating the relationship between cash flow right leverage on firm value. Empirical evidence proves that the presence of independent directors statistically has no influence on cash flow right leverage and firm value. This result is in line with Bozec dan Bozec (2007) stating that when the company ownership is more concentrated, the role of corporate governance becomes not effective. The presence of independent directors indicates that there is corporate governance, but this has no significant influence on firm value. The board of directors as policy makers are deemed not optimum in increasing firm value. It can be said that the application of GCG in Indonesian public firms has not been optimal. This result also indicates that investors or business practitioners tend to be now aware of the importance of corporate governance and how this can minimize the possibility of agency conflict, expropriation, and fraud which may decrease firm value.

In the test involving control variable, either firm size or profitability, it is found that these two control variables influence firm value. When tested with full model, control variable of firm size affects firm value negatively. The negative effect of firm size on firm value is based on the assumption that the larger the company is, the larger the agency conflict becomes. Investors or business practitioners tend to be careful, keeping eyes on the possibility of agency conflict and tend to value the firm value low. This result is in line with Claessens et al. (2002) and Siregar (2008) finding negative effect of firm size on firm value. The control variable of profitability proxied by ROA has empirically positive and significant influence on firm value. The larger the firm's profitability is, the better the performance becomes. Investors and business practitioners observing the profitability growth tend to give high value to the high-profitability firms. Yeh et al. (2003) and Siregar (2008) are in line with finding in this research proving the similar evidence regarding the positive influence of profitability on firm value.

## **Conclusion**

The high cash flow right shown by the financial claim received by the controlling shareholders has positive and significant influence on firm value. This means that the larger the cash flow right is, the larger the firm value will be. The empirical result in this research has proven to support PIE (positive incentive effect) theory stating that the high cash flow right tends to make controlling shareholders keep and maintain firm value. This is because they are the party who will suffer the most if firm value decreases and will benefit the most if the firm value increases. When interacted with other independent variables (control right and cash flow right leverage), control variable and moderating variable, the variable of cash flow right still shows positive influence on firm value, or it can be said that the variable of cash flow right is the most dominant variable in explaining the variable of firm value.

The control right owned by the controlling shareholders in Indonesia is quite high. Empirical results show that partially, the variable of control right has negative and significant influence on firm value and so hypothesis 2 is supported. Thus, the theory of NEE (negative entrenchment effect) can be proven, i.e. the large control right owned by the controlling shareholders gives them opportunity to make decisions that benefit themselves. This will in turn decrease firm value. Other empirical results show that when the variable of control right is interacted with other independent variables (cash flow right and cash flow right leverage), moderating variable and control variable, the variable of control right has positive influence but not significant statistically. This indicates that when there is cash flow right, corporate governance and control variable, the negative influence and control right decrease and tend to be dominated by cash flow right.

Cash flow right leverage indicates that expropriation happens to a public firm, done by the controlling shareholders. Partially, empirical results show that cash flow right leverage has no influence on firm value. In other words, hypothesis 3 stating cash flow right leverage has positive influence on firm value, is not supported. When the variable of cash flow right leverage is interacted with other independent variables, moderating variable and control variable, it has no influence on firm value.

The presence of independent commissioners is predicted to decrease the influence of cash flow right leverage on firm value. Empirical result in this study proves that the presence of independent commissioners has not been able to fully minimize the chance of expropriation. Thus the presence of independent commissioners is not able to push cash flow right leverage and influence firm value. It is because the performance of independent commissioners in Indonesian public firms is not optimum, implying that the chance to do expropriation still exists. Therefore, this research does not support hypothesis 4.

The presence of independent directors is predicted to lower the influence of cash flow right on firm value. Empirical result in this study shows that the presence of independent directors has not been able to fully minimize the chance of expropriation. The presence of independent directors has not been able to push cash flow right leverage and influence firm value. Even in some equations, the variable of independent directors tends to increase the variable of cash flow right leverage. This is because the performance of independent directors in Indonesian public firms is not optimum, implying the opportunity to practice expropriation also still exists. Independent directors are voted not based on regulation or constitution but based the relationship closeness with the company's owners. Thus, this research does not support hypothesis 5.

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**DETERMINANTS OF ENTERPRISE RISK MANAGEMENT (ERM) AND THE  
IMPACT OF ERM ON FIRMS' PERFORMANCE: AN EMPIRICAL ANALYSIS OF  
INDONESIA'S PUBLIC LISTED BANKING FIRMS**

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**Abstract**

*Objectives:* This paper examines the influential factors of potential adoption of ERM and the impact of ERM adoption on the public listed banking firms' performances in Indonesia during 2009-2015. *Methodology:* We use logistic regression to test four potential factors as the driving forces behind the potential adoption of ERM and linear regression to test the impact of ERM on firms' performances. *Findings:* Our result suggests that firms with greater size, having more institutional ownership, and being part of Multinational Company are more likely to adopt ERM, while the implementation of ERM has no significant impact on the firms' performance. *Novelty:* Little empirical research has been conducted on the topic, especially in developing economies like Indonesia. This study will broaden the scope of literature by providing novel empirical evidence.

**Keywords** - *Enterprise Risk Management (ERM), Public Listed Banking Firms, Firms' Perform*

## **Introduction**

Liberalization has made the economics becoming more complex and volatile, so that the risk faced by economic agents arising (Adiningsih, 2012). Reliable risk management is one of the core competencies that should be conducted by management to create value of a company. Unlike the traditional “silo-based” approach, the Enterprise Risk Management (ERM) enables firms to manage risk through an integrated approach. Despite the heightened interest in ERM by academics and practitioners, empirical evidence regarding the determinants of these programs is lacking, especially in the emerging country like Indonesia. Previous study regarding this topic has been conducted by Liebenberg & Hoyt (2003) which found that firms with high financial leverage tends to implement ERM in their risk oversight. The research was supported by Golshan & Rasid (2012) who concluded that firms with higher financial leverage and with a Big Four auditors are more likely to have a form of an ERM framework in place. This research study focuses on one of the quickest developing economies, namely Indonesia, as known as Southeast Asia’s largest economy (World Bank, 2016). Throughout this study, the determinants of potential adoption of ERM will be identified. The effectiveness of risk management is crucial in the banking companies to support decision-making by balancing the tradeoff between risk and expected return in a more precise way in order to improve the company’s performance (Mohammed & Knapkova, 2016). Beasley & Frigo (2010) explains one of the ERM framework, namely The Return Driven Strategy, which is an effective tool in integrating strategic objectives and risk management which facilitate firms to be able to respond risk more effectively and increase potential return, hence it may create value of a company. The second model was built to test the impact of the ERM adoption on public listed banking firms’ financial performance in Indonesia.

## **Literature review and hypotheses**

Risk is an integral part of the business. Risk management is a continuous, forward-looking process that is an important part of business and technical management processes. If traditional risk management enabled managers to manage risk separately and was oriented only at protection against the risk of negative impacts, now under the ERM system, all the risks are managed as a single strategic enterprise-wide integrated systems and further it may improve the decision process with respect to strategic and operational developments (Fraser & Simkins, 2010). Enterprise Risk Management (ERM) is defined as the process, effected by an entity’s board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manager risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives (COSO, 2004).

ERM framework is integrated into the parent organization's strategy, operational policies, as well as practical applications, as shown in the picture below :

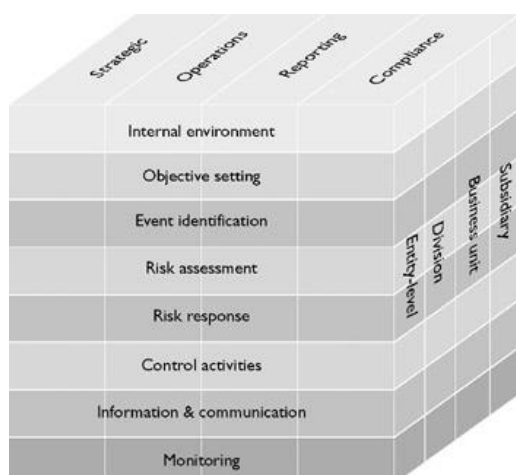


Figure 1 - ERM Integrated Framework (COSO, 2014)

The influencing factors in ERM adoption used in this research are discussed below :

### *Stock price volatility*

Volatility of stock price, which is the fluctuations in a company's stock price movement, regarded as a form of uncertainty in the company's performance. High volatility made investors leave the market to sell assets to minimize investment risk (Situmeang, 2015). Conversely, a low stock price volatility illustrates the relatively stable company's financial performance, hence gives a positive signal to investors (Nair, Rustambekov, McShane, & Fainshmidt, 2014). Therefore, the company management sees the need to implement ERM in order to stabilize the company's stock price movements. Nevertheless, the research of Liebenberg & Hoyt (2003) and Golshan & Rasid (2012) have not found the significant influence of stock price volatility on the potential adoption of ERM.

H1: Firms with higher stock price volatility are more likely to adopt ERM

### *Firm size*

Large companies' business activities as well as the types of transactions are more diverse and more complex than the smaller size company. Risks faced by large enterprises are also more diverse than the possibility of the risk borne by small firms (Wasis, 1992). Additionally, larger firms are able to dedicate greater resources on more diversified alternative investments (Beasley, Clune, & Hermanson, 2005 in Golshan & Rasid, 2012). Consistent with these theories, Hoyt, Moore, & Liebenberg (2008) found that firm size has a positive significant influence on the implementation of ERM in US Insurers.

H2: Larger firms are more likely to implement ERM

### *Institutional Ownership*

As today's business are becoming more complex, the demands of shareholders on corporate disclosure are also increasingly intense, especially about the nature and level of risks faced by the company. Institutional shareholders, with the magnitude of the portion of ownership of shares owned, relatively has a greater influence than the individual shareholders and can give more impetus in the implementation of ERM in the company to ensure that the risks remain within tolerable limits of owners (Liebenberg & Hoyt, 2003). This factor has been investigated by Hoyt, Moore, & Liebenberg (2008) and Golshan & Rasid (2012). Only the first has concluded the significant influence of this factor.

H3: Firms with higher percentage of institutional ownership are more likely to adopt ERM

#### *Firm as part of The Multinational Company*

Multinational companies (MNC) faced the risk arising from changes in exchange rates since there are differences in currency used in each country where the unit of the company operates, as well as country risk due to the diverse government regulations in each country (Huo, 2013). The risk will potentially reduce the income which will affect the company's profitability as well as the overall condition of the company. Therefore, ERM is needed to anticipate the risks associated with the economic policy differences between countries and the risk of exchange rate movements.

H4: Firms as part of the Multinational Company are more likely to adopt ERM

The ultimate purpose of the ERM's implementation is to maximize the shareholders' wealth in an ethical manner. The Return Driven Strategy, one of the ERM framework, is an effective tool in integrating the company's strategic objectives with risk management objectives (Beasley & Frigo, 2010). The method enables the management to respond to the risk more effectively, thus increasing potential return of the firm. Toneguzzo (2010) adds that the company's resource allocation based on risk can maximize the probability of gaining the return and achieve the business objectives. Therefore, effective implementation of ERM can increase the company's financial performance, hence it can increase firms' ROA (*Return on Assets*), as the measurement of how efficient management of the company utilizes assets to generate income (Ross, Westerfield, & Jordan, 2013).

H5: Firms which implement ERM under their risk management have a higher ROA

Anderson (2008) in Mohammed and Knapkova (2016) states that the application of ERM can stabilize earnings. The stability of earnings indicates the firms have good performance thus creating demand for the company's stock. Resources in the form of such investments can be allocated to develop operational and technologies, hence will improve the company's performance. Liebenberg and Hoyt (2003) also noted that good risk management will enable the management of the company to improve the efficiency of capital, therefore firms are expected to operate more optimally and at the end will increase the profit. Therefore, the implementation of ERM will enhance the company's ROE, which indicate how the stockholders fared during the year (Ross, Westerfield, & Jordan, 2013).

H6: Firms which implement ERM under their risk management have a higher ROE

#### **Methodology**

In this research, the sample was derived from the banking firms which listed in Bursa Efek Indonesia (BEI) during 2009-2015. By the time this study was conducted, there are totally 26 banking firms listed in BEI. Then the samples will be eliminated using 2 criteria as mentioned below:

- a. Firms must publish their annual report and financial report regularly during the period 2008-2015
  - b. The company's stock price data is fully available during the period 2008-2015
- By following the above criteria, the final sample resulted in totally 16 firms.

The necessary data are collected from several relevant information providers. The company's annual report and financial statement are collected from [idx.co.id](http://idx.co.id), [icamels.id](http://icamels.id), financial data from Bloomberg Terminal, closing stock price from [yahoofinance.com](http://yahoofinance.com).



The research will follow the steps as shown in the figure below:

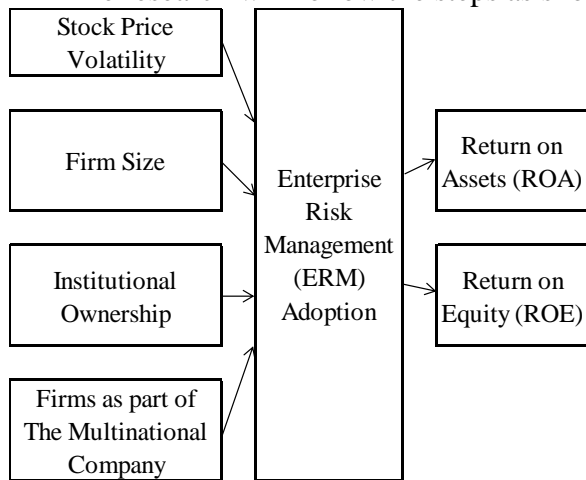


Figure 2 – Conceptual Framework

As for the logistic regression equation for the research model 1 is :

$$\ln \frac{P(ERM_t)}{1-P(ERM_t)} = \beta_0 + \beta_1 \text{vol}_{t-1} + \beta_2 \text{size}_{t-1} + \beta_3 \text{inst}_{t-1} + \beta_4 \text{mnc}_{t-1}$$

and the linear regression equations for the second and third models are :

$$ROA_t = \beta_0 + \beta_1 ERM_t$$

$$ROE_t = \beta_0 + \beta_1 ERM_t$$

The measurements used for the variables included in this research are presented in table 1:

Table 1 – Variables Definition and Measurement

Variables	Definition	Measurement
Stock Price Volatility (Vol)	movement of stock prices measured by the root of the difference of squares weekly stock price with the average price of the stock divided by the number of observations	$S = \sqrt{\frac{\sum_{i=1}^n (X_i - \bar{X})^2}{n - 1}}$

Firm Size (Size)	logarithm of the total assets of the company	Firm Size = Log Total Assets
Institutional Ownership (Inst)	the percentage of shares owned by institutions and	Inst = (number of shares owned by institutions / number of outstanding
Firms as part of the Multinational Company (MNC)	whether or not the company's operating business units located in other countries	0 = firm has no business unit located in other country, 1 = firm has business unit located in other country
Enterprise Risk Management (ERM)	ERM implementation in a banking services firm	0 = firms didn't mention "Enterprise Risk Management" in their annual report, 1 = firms mentioned "Enterprise Risk Management" in their annual report
Return on Assets (ROA)	the ratio between net income and total assets of the company in the same period	ROA = net income / total assets
Return on Equity (ROE)	the ratio between net profit and total equity of companies in the same period	ROE = net income / total equity

### Findings and discussion

Table 2 presents the result of the descriptive statistics of model 1.  
**Table 2 - Descriptive Statistics of Logistic Regression Model**

Variables	Mean	Max	Min	St. Dev.	N
ERM	0.5238	1	0	0.50183	105
VOL	203.5473	1495.55	0	306.746	105
SIZE	13.4512	14.93	12.13	0.82252	105
INST	0.7142	0.98	0.06	0.25127	105
MNC	0.3143	1	0	0.46646	105

The number of data is 105 in accordance with the total observations firms (15 sample firms) times number of periods (2009-2015). The mean, maximum value, minimum value, and standard deviation of variables used in the first model, are presented in table 2.

The model was first tested whether it has fitted or not using Hosmer and Lemeshow Test. The result of Goodness of Fit (GOF) test along with Nagelke R Square are shown in table 3:  
**Table 3 – Hosmer & Lemeshow and Nagelkerke R Square Test**

Sig. Value of Hosmer and Lemeshow Test	0.279*
Nagelkerke R Square	0.358

*\*Significant difference of means at 5% level*

The p-value of Hosmer and Lemeshow test results in 0.279, which exceed the confidence of interval ( $\alpha$ ) of 5%. It can be concluded that the model was feasible according to the GOF

criteria. The independent variables are able to explain their influence to the probability of the dependent variable as big as 35.8%.

Omnibus test was conducted in order to test the influence of all independent variables simultaneously to the dependent variable. The result is attached in table 4:

Table 4 – Result of Omnibus Test of Model Coefficients

Sig. Value of Omnibus Test of Model Coefficients	0.000*
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*\*Significant difference of means at 5% level*

The significant value of the Omnibus test is less than the significance level of 5%. It can be inferred that at least one variable of stock price volatility, firm size, institutional ownership, and firm as part of the Multinational Company is having a significant influence in the adoption of ERM, therefore the logistic regression model is feasible.

The result of the logistic regression test is presented in table 5:

Table 5 – Result of Logistic Regression

Variables	Coefficient (β)	Wald	Sig.	Exp (β)
Constant	-21.797			
Vol	-0.001	1.445	0.229	0.999
Size	1.193	8.845	0.003*	3.298
Inst	6.148	12.268	0.000*	467.859
MNC	2.412	10.521	0.001*	11.156

*\*Significant difference of means at 5% level*

Based on the result in the table above, there are three contributing factors to ERM implementation, which are the firm size, institutional ownership, and firm as part of the Multinational Company. For each significant contributing factor, the relationship to potential ERM adoption is positive. It can be concluded that potential adoption of ERM is positively associated with being larger firms, having more institutional ownership proportions in the composition of firm’s shareholder, and being part of the Multinational Company. In fact, as the size of the firm increased, the more complex the business activity run by the firm, hence the risk associated with it will be more diverse and threatening as well. Therefore, the implementation of good risk management through the ERM framework can be seen as the effort of the company to mitigate the risk and also show the commitment to the existing debtholders and shareholders.

Meanwhile, the influence of institutions in the adoption of ERM is consistent with the research of Hoyt, Moore, & Liebenberg (2008) which concluded that institutions, with the huge proportions of the firm’s ownership, are relatively more influential than individual shareholders and are able to exert greater pressure for the adoption of an ERM. This statement is suitable with the data from public listed banking firms in Indonesia, where the average percentage of institutional ownership in Indonesia is around 64.67-71.82%. ERM is applied to help managers control risk to be within the risk appetite of this dominant shareholders.

Lastly, the adoption of ERM is driven by the characteristic of the firm as the part of Multinational Company. Such firms must consider many financial factors that do not directly affect purely domestic firms. These include foreign exchange rates, differing interest rates from country to country, complex accounting methods for foreign operations, foreign tax

rates, and foreign government intervention (Ross, Westerfield, & Jaffe, 2010). Therefore, ERM is needed to help managers to encounter the risk and transform it into the opportunity to gain.

Table 6 presents the descriptive statistics of linear regression model (second and third models):

Table 6 – Descriptive Statistics of Linear Regression Model

Variables	Mean	Max	Min	St. Dev.	N
ERM	0.5238	1	0	0.50183	105
ROA	0.0128	0.03	-0.01	0.00968	105
ROE	0.1174	0.28	-0.14	0.08516	105

The number of data is 105 in accordance with the total observations firms (15 sample firms) times number of periods (2009-2015).

Table 7 contains the data processing result of the classical assumption test for the second and third model. Since both models are using the simple linear regression, there are only 3 classical assumptions to be fulfilled, which are normality test, heteroscedasticity test, and autocollinearity test.

Table 7 – Classical Assumption Test Result

Test	ROA Model	ROE Model
Asymp. Sig. (2-tailed)		
One-Sample Kolmogorov-Smirnov Test	0.743	0.911
Sig. Value of Glejser Test	0.653	0.660
Durbin-Watson Statistics	0.541	0.567

The result of classical assumption tests are:

- a. Data included in both ROA model and ROE model are normally distributed, since the significant value is more than confidence interval of 5%.
- b. There is not a heteroscedasticity problem in both models (significant values are greater than confidence interval of 5%).
- c. Statistic value of Durbin-Watson for both models have positive autocorrelation.

According to Gujarati (2004), the data having inconsistencies with the characteristics of the classical assumptions can still be used in the calculation, considering the OLS also produces a bias value. Therefore, no treatment is applied in the data.

Table 8 discussed about the t-test result of linear regression for the second and third model.

Table 8 – Result of Second and Third Model using Linear Regression

**ROA MODEL**

Variables	Coefficients	t	Sig.
Constant	0.013	9.282	0.000
ERM	0.000	0.064	0.949

Dependent Variable: ROA

**ROE MODEL**

Variables	Coefficients	t	Sig.
Constant	0.120	9.954	0.000

ERM	-0.006	-0.339	0.735
Dependent Variable: ROE			

The p-values of ERM are 0.949 and 0.735 for each dependent variable, ROA and ROE consecutively. Both are greater than the confidence interval (5%) therefore the result suggests that implementation of ERM does not have significant influence on banking firms' performance in Indonesia, measured by ROA and ROE.

There are at least 2 reasons to explain this insignificance. First, the impact of ERM implementation can be observed in the long term, when firms have implemented ERM thoroughly within the firms' internal environment and communicated to all lines of management. In that case, we assume that firms are able to mitigate and adjust the risk, according to be within its risk appetite. This will lead firms to increase its cash flow and create competitive advantage in the long term. Since many banking firms had just applied ERM between 2014-2015, the expected results can not be observed in the period of observation.

Secondly, we can conclude that investors pay less attention to the ERM implementation as one of the considerable factors in making investment. Investors are more likely to consider other factors, such as the firm size and *leverage*(Sanjaya & Linawati, 2015).

The third reason is because firms that implement ERM in Indonesia is still very limited. Moreover, the level of implementation of risk management by companies in Indonesia is still low compared to other countries. Of the five levels of risk management level according to AON(2010), Indonesia is still at level 1 and 2, which is the level of initiation and involving. Association of Risk Management Practitioner(ARMP) stated that the high cost of obtaining the certificate of risk management processes, constrain the implementation of comprehensive risk management in a company(Bangun, 2011). These facts indicate that risk management has not been considered as a fundamental requirement companies in Indonesia. The managers of the firms have not maximized the potency in ERM to increase the value of the firm for the stakeholders' sake. Therefore, there is no significant influence of ERM implementation on the public listed banking firms' performance in Indonesia.

## **Conclusion**

The main objective of this study was to identify the influential factors that encourage the implementation of ERM among banking firms in Indonesia. The result suggests that firm size, institutional ownership, and firm as part of the multinational company are the driven factors of ERM adoption. On the other hand, the result of this study also concluded that implementation of ERM has no significant impact on banking firms' performance, measured by ROA and ROE.

This study indicates that firms should consider to improve governance of their risk management, especially in the implementation of ERM, in order to maximize the potential of ERM that will increase firms' performance simultaneously and achieve its objectives.

It is recommended that the future research can use more specific measurements for ERM variables, such as how well firms implement elements of ERM in its risk management, to gain more insight into ERM implementation in firms. Moreover, the future research should consider including other variables that have an impact on the firm's performance and also extend the period of observation.

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**ECONOMIC ENHANCEMENT OF BIO OIL PRODUCTION DERIVED FROM  
*STERCULIA FOETIDA* LINN**

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**Abstract**

*Sterculia foetida* L. capable of generating 40% oil, but to produce a high yield oil production needs to be done the selection process. The selection process of this plant with the data analysis techniques that include an analysis of the correlation of Pearson, you traffic analysis against a variable is bound (the weight of seeds/plant and yield in oil) and analysis of the coefficient of determination to determine the degree of influence on the variables. The results show that the character of the result components are very effective as the selection criteria directly to suspect heavy seeds/trees in a row is the nature of the number of secondary branches (37.211%), the character of the amount of fruit/rungs (14.756%), number of seeds/locus (14.284%) and weight of 100 seeds (11.009%), so oil yield can produce 4.893 – 22.716 litres oil/ha/season, that can enhancement economy production..

**Keywords:** *Sterculia foetida* L., Analysis technique, bio-oil

**Introduction**

Indonesia is one of the countries with a dense population, so the demand for energy is high enough from year to year. It (Sugiyono, 2015) led to final energy consumption increased from 221.33 million (SBM) in 1990 into a 489.01 million SBM in 2003 or increased by 6.3% per year. Based on the type of energy, the largest consumption of fuel (BBM). Circumstances encourage man looking for new sources of energy as an alternative energy renewable nature to meet the needs.

The alternative energy that renewable can be derived from plants that have relatively high oil content. One of them is *Sterculia foetida* L. These plants have an oil content of 40% of the seeds, but if performed purification again can reach 75%. So the potential oil yield far more than the fruit of the *Ricinus communis* only 35-45%. So, *Sterculia foetida* L seed becomed alternative materials as biofuels (BBN), because in addition to produce lubricating oil can also be used as biodiesel (solar oil substitute). But it has not been balanced with the strategy of getting a *Sterculia foetida* L have high productivity and high oil yield.

Therefore, these problems can be obtained by performing a selection to find out the degree of keeratan the nature of each correlation, with results that can contribute to the improvement of the nature component of the results. The results of the exploration of what research shows that plants have high genetic diversity seen from the appearance of the phenotype. High phenotype distinction makes it possible to do the selection towards the improvement of the nature.

The purpose of this research is to know the nature of the relationships between the components of the result so that it can be determined as the selection criteria directly or indirectly in order to repair the component nature of billowing crops potentially high-yield and results. The benefits of the research is to know the nature of the relationships between

keeratan/characters component results and direct influence as well as the influence of direct which will not be used as selection criteria appropriate to get potentially billowing plants results and high oil yield.

## Materials and Methods

### *Plant Materials:*

*Sterculia foetida* L. plants are collected from five province at Central Java and then placed at plant breeding laboratorium

As for the location of research and observations set out samples presented on Table 1.

Table 1. Location research and Sample

City	Region	Village
Karang Anyar	Tasik Madu, Karang Anyar, Jaten	Karangmojo, Karangwuni, Derman, Kodokan, Ngaliyan, Biblis, Lalung, Jati, Ngetal, Jetak
Boyolali	Sawit, Kebon Bimo, Banyudono, Nogosari	Tegalmuncal, Klabang, Kendal Gede, Tlatar, Jagoan, Gatak Malangan, Tagung, Mbadan, Pojok, Bulu
Sukoharjo	Mojolaban, Sukoharjo, Grgol, Bendosari	Pancuran, Cangkol, Ngambak, Lipuro, Nderso, Palur, Triyangan, Macanan, Temulus, Pondok, Minggiran
Wonogiri	Selogiri, Wonogiri	Krisak, Bulak, Brajan, Nambangan, Kaloran, Gerdu, Gebang Wetan, Mblimbing
Klaten	Ceper, Trucuk, Bayat, Delanggu	Kurung, Karang Dempel, Kalikebo, Planggu, Jetis,



### *Design research*

The main approach used in this study is to see the relationship between the nature of the functional components of the results against the results and yield in oil. This type of research is a research survey.

Primary data is taken from the sample to be *Sterculia foetida* L. accession, while secondary data taken through direct interview to the elders of the village and gatekeeper of the Tomb, while data agroekology information from relevant agencies in this Department of agriculture and the Office of your local city irrigation.

The population of the research was that plants accession which grows naturally obtained from results of exploration. The technique of sampling done in a proportional cluster random sampling techniques. Sampling is chosen based on the plant's habitat group and done randomly (random). The grouping based on the spread of accession its relic research. To minimize the diversity, then the sample observations set 10 accessions each region sehingga retrieved 50 sample accession set out as the sample observations.

### *Variable observation*

The variables observed in this study are:

- The Number of Primary Branches  
Counting the number of primary branches did to know a large number of primary branches. The number of primary branches who observed as the sample is 40%.
- The Number of Secondary Branches  
Counting the number of secondary branches carried out to know a large number of secondary branches. The number of secondary branches who observed as the sample is 20%
- The Number of Fruits/rungs  
Counting the number of fruit/rungs do to know a large number of fruit/rungs. While the amount of fruit that is calculated from the branch which provided the sample observations
- The Number of Locus/fruits  
Counting the number of locus/fruit performed to know a large number of locus/fruit. While the number of locus that counted was the branch of the sample observations
- Weight /Fruits  
Calculating weight/fruit did to know the weight/fruit
- The Number of Seeds/Locus  
Counting the number of seeds/locus performed to find out the number of seeds/locus
- Weight 100 seeds  
Weighing the weight of seeds is done by taking a billowing seeds has matured as much perfect 100 seeds by using digital scales
- Weight Seeds/trees  
Calculating the weight of seeds/plant based on a comparison of mathematical determination of sample to produce accurate data. The weight of the seed/tree can be calculated/predicted by knowing the number of primary branches, secondary branches, the total number of fruit/rungs, number of seeds/locus and the weight of 100 seeds
- Oil Yield

The oil yield is knowable by doing the extraction of the seeds of billowing and performed in the laboratory of Soil Biology Faculty of Agriculture University Sebelas Maret Surakarta.

*Research Data Analysis*

Statistical analysis used in this study are:

- Analysis of the Correlation
- Analysis of Fingerprints Cross/Path Analysis
- Coefficient Analysis

while the software that is used to analyze the data was SPSS version 16.

**Results and Discussion**

From the results of observations made concerning in the yield potential and yield analysis of oil, *Sterculia foetida* L. plants have a high potential to be developed as a source of energy-producing biofuel crops.

The results of the observation and calculation of the fruit that was conducted in november 2009, billowing plants productivity ranged from 179 – 831 kg dried seed/tree/season. According to sources from the elders of the village and the tomb of the gatekeeper where the plant was located, billowing plants bear fruit throughout the year and the harvest could be 2-3 times/year. Assuming the planting distance 10 x 15 m, plant population among the 66-67 trees/ha, then the crop productivity ranged between 11.993-55.677 kg of dry seeds/ha/season. While the yield in oil among 55 – 80%. If the average oil yield in 68% and core levels of 60%, then every hectare of land can produce 4.893 – 22.716 litres oil/ha/season. Besides the resulting oil plants geared to its economic value so that the lubricating oil is higher.

*Correlation Between Character*

*Correlation Between Character of The Result Components*

The results of the research data analysis with pearson correlation analysis technique is retrieved the value of the correlation between the character of the components of the results is presented in Table 2.

Table 2. Phenotypic correlation between character of the result components

Character	X <sub>1</sub>	X <sub>2</sub>	X <sub>3</sub>	X <sub>4</sub>	X <sub>5</sub>	X <sub>6</sub>	X <sub>7</sub>
X <sub>1</sub>	.	0.777**	0.156	-0.064	0.167	0.011	-0.173
X <sub>2</sub>	0.777**	.	0.222	-0.181	0.164	-0.100	-0.152
X <sub>3</sub>	0.156	0.222	.	-0.573**	0.173	-0.296*	0.201
X <sub>4</sub>	-0.064	-0.181	-0.573**	.	-0.070	0.178	-0.155
X <sub>5</sub>	0.167	0.164	0.173	-0.070	.	0.020	-0.135
X <sub>6</sub>	0.011	-0.100	-0.296*	0.178	0.020	.	-0.100
X <sub>7</sub>	-0.173	-0.152	0.201	-0.155	-0.135	-0.100	.

Notes:

\* = Correlation significant on  $\alpha = 0.05$

\*\* = Correlation significant on  $\alpha = 0.01$

X<sub>1</sub> = Number of Primary Branches

X<sub>2</sub> = Number of Secondary Branches

X<sub>3</sub> = Number of fruits/rungs

X<sub>4</sub> = Number of locus/fruits

- X<sub>5</sub> = Number of Seeds/locus
- X<sub>6</sub> = Weight Fruit
- X<sub>7</sub> = Weight 100 seeds

From 7 character of the result components observed show that properties that have the strongest correlation is the character of the number of primary branches with the nature of the number of secondary branches ( $r_{12} = 0.777^{**}$ ). Allegedly an increasing number of primary branches will increase the number of secondary branches. The nature of the amount of fruit/rungs with number of loci/fruit has a very strong correlation ( $r_{34} = -0.573^{**}$ ) that indicates that an increasing number of fruit/rungs will lower the number of locus/fruit. The characte of the amount of fruit/rungs with a heavy fruit has a pretty strong correlation ( $r_{36} = -0.296^*$ ) who showing that an increasing number of fruit/rungs will lose weight/fruit. Whereas on other traits showed a strong correlation.

*Correlation Between Character of The Result Components Toward Weight Seeds/trees*

The results of the research data analysis with pearson correlation analysis technique is retrieved the value of the correlation between the components of the results against the weight of seeds/trees are presented in Table 3.

Table 3. Correlatinn phenotypic between the result components toward weight seeds/trees

Observed properties	Coefisien corelasi
Number of Primary Branches	0.342*
Number of Secondary Branches	0.563**
Number of Fruit/Rungs	0.543**
Number of Lucos/Fruits	-0.407**
Number of Seed/Locus	0.419**
Weight/fruits	-0.132 <sup>tn</sup>
Weight 100 seeds	0.308*

Notes:

\* = Correlation significant on  $\alpha = 0.05$

\*\* = Correlation significant on  $\alpha = 0.01$

Table 3 shows that the correlation phenotypic between character of the result components of the against the weight of the seed/tree is positive and negative. Results of correlation that indicates a positive correlation coefficient value is significant is the nature of the number of secondary branches ( $r_{2y_1} = 0.563^{**}$ ), the nature of the amount of fruit/rungs ( $r_{3y_1} = 0.543^{**}$ ) and the number of seeds/locus ( $r_{5y_1} = 1.806^{**}$ ) and the correlation of the correlation coefficients that indicate the real positive is the nature of the number of primary branches ( $r_{1y_1} = 0.342^*$ ) and the weight of 100 seeds ( $r_{7y_1} = 0.308^*$ ). While the results of correlation coefficients that indicate the negative correlation is significant is the nature of the number of loci/fruit ( $r_{4y_1} = -0.475^{**}$ ), whereas the nature of weight/negative correlation indicates the fruit is not real ( $r_{6y_1} = 0.132^{tn}$ ).

*Correlation Between Character of the Results Components Against Oil Yield*

From the results of the research data analysis with pearson correlation analysis technique is retrieved the value of the correlation between the nature of the components of the results against the oil yield is presented in Table 4.

Table 4. Correlation between character of the result components against the oil yield

Observed properties	Coefisien corelasi
Number of Primary Branches	0.383*
Number of Secondary Branches	0.329**
Number of Fruit/Rungs	0.124 <sup>tn</sup>
Number of Lucos/Fruits	-0.037 <sup>tn</sup>
Number of Seed/Locus	0.039 <sup>tn</sup>
Weight/fruits	0.175 *
Weight 100 seeds	-0.458*
Weight Seed/tree	-0.027 <sup>tn</sup>

Notes:

\* = Correlation significant on  $\alpha = 0.05$

\*\* = Correlation significant on  $\alpha = 0.01$

Table 4 shows that the correlation phenotypic between character of the components of the results against the oil yield is positive and negative. From some of the properties of the components of the observed results that have a positive correlation with yield in oil is significant is character of the number of primary branches ( $r_{1y_2} = 0.383^{**}$ ) and the correlation with the number of secondary branches correlated positive real ( $r_{2y_2} = 0.329^*$ ), whereas the correlation with the character of the amount of fruit/rungs ( $r_{3y_2} = 0.124^{tn}$ ), number of seeds/locus ( $r_{5y_2} = 0.039^{tn}$ ) and the nature of weight/fruit ( $r_{6y_2} = 0.175^{tn}$ ) is positively unreal.

The character of the result components are very real negative correlated with yield in oil is heavy character of 100 seeds ( $r_{7y_2} = -0.458^{**}$ ). While on the nature of the number of locus/fruit and seed weight of nature/trees correlated negatively with no real yield in oil is indicated by the value of the coefficient of korelasinya ( $r_{8y_2} = -0.027^{tn}$ ). The correlation indicates that both the nature of no relation to the size and weight of seeds/plant does not affect the yield of oil.

Big nothingness of values correlation between seed yield components with a weight/tree and yield above is indicated by the coefficient of phenotypic correlations between the observed properties is simply to know the degree of keeratan relations, which actually is still influenced by other properties/variables so that the real cause is not yet known. According to Dewey and Lu (1959) is the difference between correlation coefficient analysis and analysis of traffic going from the fact that in a simple method of measuring the correlation keeratan reciprocal relations regardless of the cause, whereas with cross-analysis method of direct influence of the independent variables are not against non-free can be known, not its direct influence as well. While according to Sastrosupadi (2003), the question of the correlation of the degree of keeratan would like to find relations 2 or more variables, whereas in the analysis of cross-correlation coefficient, the total can be broken down into the influence of direct and indirect influence.

#### *The Analysis of Fingerprints Cross*

#### *The Analysis of Fingerprints Cross Between The Result Components Against The Weight Seed/Tree*

Table 5. Direct and indirect influence for the character number of the primary branch ( $X_1$ ), the number of secondary branches ( $X_2$ ), the amount of fruit/rungs ( $X_3$ ), the number of

locus/fruit ( $X_4$ ), number of seeds/locus ( $X_5$ ), the weight of the fruit ( $X_6$ ), and the weight of 100 seeds ( $X_7$ ) against the weight of the seed/tree

Free Variable	Direct Influence	Indirect Influence Variables							Coefficient Correlation
		$X_1$	$X_2$	$X_3$	$X_4$	$X_5$	$X_6$	$X_7$	
$X_1$	-0.2140	.	0.5128	0.0424	0.0049	0.0569	0.0006	-0.0618	0.3420
$X_2$	0.6600	-0.1663	.	0.0604	0.0139	0.0559	-0.0059	-0.0543	0.5638
$X_3$	0.2720	-0.0334	0.1465	.	0.0441	0.0590	-0.0175	0.0718	0.5425
$X_4$	-0.0770	0.0137	-0.1195	-0.1559	.	-0.0239	0.0105	-0.0553	-0.4073
$X_5$	0.3410	-0.0357	0.1082	0.0471	0.0054	.	0.0012	-0.0482	0.4189
$X_6$	0.0590	-0.0024	-0.0660	-0.0805	-0.0137	0.0068	.	-0.0357	-0.1325
$X_7$	0.3570	0.0370	-0.1003	0.0547	0.0119	-0.0460	-0.0059	.	0.3084

Based on the analysis in table 5 can be seen that the direct influence of the largest components of the nature of positive results against the weight of the seed/tree row indicated by the direct influence of the nature of the number of secondary branches ( $P_{2y_1} = 0.6600$ ), the character of the weight of 100 seeds ( $P_{7y_1} = 0.3570$ ), number of seeds/trait locus ( $P_{5y_1} = 0.3410$ ), the character of the amount of fruit/rungs ( $P_{3y_1} = 0.2720$ ), and the weight of the fruit ( $P_{6y_1} = 0.0590$ ), but its influence is very small. Direct influence is shown by the negative nature of the number of primary branches ( $0.2140 = -P_{1y_1}$ ), and the nature of the number of locus/fruit ( $P_{2y_1} = -0.0770$ ).

To know his little big donations variable character of the components of the results against the weight of the seed/tree, then with yout traffic analysis can be determined by determining the coefficients of each of the components against the weight of the seed/tree will be more profitable and retrieved a picture more precisely to the instructions of the selection. The magnitude of the total donations to each of the variables are free through all tracks against the weight of the seed/tree can be seen in Table 6.

Table 6. Total donations to each of the variables are free through all tracks against the weight of the seed/tree

No	The Observed Properties	$R^2$ (%)
1.	Number of Primary Branches	( $P_{1y_1}r_{1y_1}$ ) 7.3188
2.	Number of Secondary Branches	( $P_{2y_1}r_{2y_1}$ ) 37.2108
3.	Number Fruit/Rungs	( $P_{3y_1}r_{3y_1}$ ) 14.7560
4.	Number locus/fruit	( $P_{4y_1}r_{4y_1}$ ) 3.1362

5.	Number Seed/Locus	(P <sub>5y<sub>1</sub>r<sub>5y<sub>1</sub></sub>)</sub>	14.2840
6.	Weight/Fruit	(P <sub>6y<sub>1</sub>r<sub>6y<sub>1</sub></sub>)</sub>	0.7817
7.	Weight 100 seeds	(P <sub>7y<sub>1</sub>r<sub>7y<sub>1</sub></sub>)</sub>	11.0090
	Residual	(ry <sub>1</sub> <sup>2</sup> )	11.5035
The total range of the weight of the seed/tree			100.000

From the results of the analysis of fingerprints and the analysis of the coefficient of determination to find out the magnitude of the total donations (R<sub>2</sub>) of each component of the results against the weight of the seed/tree, which had a direct influence of the most powerful in a row is the nature of the amount of the secondary branch, the nature of the amount of fruit/seed amount of properties, rungs/locus, the nature of the weight of 100 seeds and number of primary branches. While the nature of the number of loci/fruit/fruit weight and total donations through the direct influence of these small properties.

*The Analysis of Fingerprints Cross Between Components Against Oil Yield Results*

Table 7. Direct and indirect influence for the character number of the primary branch (X<sub>1</sub>), the number of secondary branches (X<sub>2</sub>), the amount of fruit/rungs (X<sub>3</sub>), the number of locus/fruit (X<sub>4</sub>), number of seeds/locus (X<sub>5</sub>), the weight of the fruit (X<sub>6</sub>), and the weight of 100 seeds (X<sub>7</sub>) against the oil yield

Fre Variabl e	Direct Influen ce	Indirect Influence Variable							Coffesient Correlatio n
		X <sub>1</sub>	X <sub>2</sub>	X <sub>3</sub>	X <sub>4</sub>	X <sub>5</sub>	X <sub>6</sub>	X <sub>7</sub>	
X <sub>1</sub>	0.2310	.	0.0521	0.0407	-0.0015	-	0.0023	0.078	0.3829
						0.019 9		2	
X <sub>2</sub>	0.0670	0.1795	.	0.0579	-0.0043	-	-0.0210	0.068	0.3283
						0.019 5		7	
X <sub>3</sub>	0.2610	0.0360	0.0149	.	-0.0138	-	-0.0622	-	0.1246
						0.020 6		0.090 9	
X <sub>4</sub>	0.0240	-0.0148	-0.0121	-0.1496	.	0.008 3	0.0374	0.070 1	-0.0367
X <sub>5</sub>	-0.1190	0.0386	0.0110	0.0452	-0.0017	.	0.0042	0.061 0	0.0393
X <sub>6</sub>	0.2100	0.0025	-0.0067	-0.0773	0.0043	-	.	-0.100	0.0452
						0.002 4			
X <sub>7</sub>	-0.4520	-0.0400	-0.0102	0.0525	-0.0037	0.016 1	-0.0210	.	-0.4583

Based on the analysis in table 7 can be seen that the direct influence of the largest components of nature negative results against the weight of the seed/tree row indicated by the direct influence of the nature of the weight of 100 seeds (P<sub>7y<sub>2</sub></sub> = -0.4520), and the number of seeds/locus (P<sub>5y<sub>2</sub></sub> = -0.1190). Direct positive influence then successively shown by direct influence the nature of the amount of fruit/rungs (P<sub>3y<sub>2</sub></sub> = 0.2610), the number of primary

branches ( $P_{1y_2} = 0.2310$ ), the nature of the weight of the fruit ( $P_{6y_2} = 0.2100$ ), the nature of the number of secondary branches ( $P_{2y_2} = 0.0670$ ), and the nature of the number of loci/fruit ( $P_{4y_2} = 0.0240$ ).

Table 8. Total donations to each of the variables are free through all tracks against yield oil

No	The Observed Properties	$R^2$ (%)
1.	Number of Primary Branches ( $P_{1y_1}r_{1y_1}$ )	8.8449
2.	Number of Secondary Branches ( $P_{2y_1}r_{2y_1}$ )	2.1996
3.	Number Fruit/Rungs ( $P_{3y_1}r_{3y_1}$ )	3.2521
4.	Number locus/fruit ( $P_{4y_1}r_{4y_1}$ )	0.0880
5.	Number Seed/Locus ( $P_{5y_1}r_{5y_1}$ )	0.4676
6.	Weight/Fruit ( $P_{6y_1}r_{6y_1}$ )	0.9492
7.	Weight 100 seeds ( $P_{7y_1}r_{7y_1}$ )	20.7151
	Residual ( $ry_1^2$ )	63.4835
	The total range of the weight of the seed/tree	100.000

From the results of the analysis of fingerprints and the analysis of the coefficient determination to find out the magnitude of the total donations ( $R_2$ ) of each component of the results against yield oil, which has the most powerful direct influence in a row is a weight of 100 seeds, the nature and properties of the number of primary branches number of fruit/rungs. While the nature of the amount of the secondary branch, the nature of weight/fruit, nature of the number of seeds/locus and number of loci/large fruit contribution total through the direct influence of the nature of such small value.

By studying the coefficient of correlation between multiple properties on plants, can be used for examining keeratan relationships between complex traits with specific properties. But it can not be used to make the conclusion effectively because the information is limited, regardless of the complex dependencies among the attributes (Board, et al., 1997). Analysis of the relationship between a trait with other properties using the correlation coefficient analysis can be efficiently used if there are no other variables mempengaruhnya. The use of analysis in solving the coefficients of correlation can know how the direct and indirect influences and shows the relative importance of a component against the character.

In the *Sterculia foetida* L plants information and references about the genetic, morphological, agronomic, cultivation system is still very limited and results of research like this has not been done, so much to get a comparison get the difficulty.

## Conclusion

In this research, conclude that:

- Character of the result components are very effective as the selection criteria directly to suspect heavy seeds/trees in a row is the character of the number of secondary branches (37.211%), the nature of the amount of fruit/rungs (14.756%), number of seeds/locus (14.284%) and weight of 100 seeds (11.009%).
- Character of the components of the result are very effective as the selection criteria directly to suspect the oil yield in a row is a weight of 100 seeds (20,715%) and primary branches number of properties (8.845%), whereas the selection criteria not properties directly on a number of secondary branches through the properties of the number of primary branches (2.199%).

- Oil yield can produce 4.893 – 22.716 litres oil/ha/season, so can enhancement economi production.

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### **Author's Contributions**

All authors equally contributed in the preparation, development and publication of this manuscript.

### **Ethics**

This article is original research paper. The corresponding author confirms that all of the other authors have read and approved the manuscript and no ethical issues involved after the publication of this manuscript.

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## THE FACTORS AFFECTING CAPITAL ADEQUACY RATIO IN INDONESIA ISLAMIC BANKS

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### Abstract

The banking industry as other business units need to be managed properly to be able to make a profit and sustainable, however, the banking industry still refers to the rules from the regulators. One of them is in term of Capital Adequacy Ratio. Indonesia is one country with a population predominantly Moslem, thus this research will be conducted on the Islamic bank in Indonesia. Previous studies on Capital Adequacy Ratio is usually done by analyzing the internal factors that influence it, but in this study will be coupled with macro factors. The dependent variables of this research is Capital Adequacy Ratio while independent variables consist of Internal factors, Profitability/ROA, Deposit Structure/DEP, Asset Quality/ NPF, Liquidity/FDR, and Operational Efficiency/OEOI, Size Bank/SIZE and External Factors (Inflation Rate/IR). This conceptual paper is to investigate the factors influence the CAR, both factors internal and external and what factors are the most dominant influence.

**Keywords** : *Capital Adequacy Ratio (CAR), Internal factors, external factors*

### Introduction

The banking industry is one of the business units that need to be managed properly and yet still refers to the rules set by the regulator. At the end of the estuary of the banking business, both conventional and Islamic banks must perform well as a company, and the important thing in this industry is the management of capital adequacy ratio (CAR) in the risk sector of banking industry. Capital is a mean to finance income-producing assets and the protector of stability. From the point of view of efficiency and return, capital are part of bank funding sources that can be used directly to purchase assets and also to raise other funds. From the viewpoint of stability, the bank's capital act as a protector to absorb the shock of the loss of business and maintain solvency, to the benefits received by customers and other stakeholders.

Capital Adequacy Ratio is one of the important concept in banking which measures the amount of a bank's capital in relation to the amount of its risk weighted credit exposures. With this study the authors wanted to fill the void in the context of the present study is to see Islamic banking strategy in the management of the fulfillment of capital (CAR) not only from the internal side but also includes influences from the external side.

The ability of banks to maintain liquidity affected the efficiency of the bank's risk management in creating a foundation in business activities as well as bank must choose the level of risk and profit ratios the best. The bank's risk can impact effect on operational costs and ultimately impact the Capital Adequacy Ratio (CAR) of a bank (Jasiene, M., 2012). Kweme (2003), noted the importance of capital adequacy for banking business activities. This means that banks will be able to absorb the liquidity risk in the market, if it has a capital adequacy ratio (CAR).

To encourage the prudent management of the risks associated with the structure of the balance sheet, the authorities in most countries introduce specific capital adequacy requirements. At the end of year 1980, Basel Committee on Banking Supervision lead in developing capital adequacy standards-based risks that will lead to international convergence regulatory oversight governing the capital adequacy of international banks are active, with

the aim to strengthen the health and stability of the banking system, which then developed further by the Islamic Financial Standards Board (IFSB), which in turn set standards of capital adequacy for Islamic banks is not lower than 8%.

In 2004, Basel II proposes a tightening of the rules of CAR. Meanwhile, Basel III is no improvement associated with increasing risk-weighted capital requirements (divided into Tier 1 and Tier 2) and non-risk-weighted leverage ratio. Polat and Al-Khalaf (2014) in his research to analyze the relationship specific variables banks, including CAR (dependent variable), profitability (ROA), non-performing loan (NPL), loan-to-deposit (LTD), leverage (LEV), the dividend payout ratio (DPO), loans (LOA), bank size (Size). This indicates that the ability to maintain the CAR is very important for the health of a bank.

Interesting study also done by Siti Rochmah et al (2011) regarding the financial performance of Islamic banks and conventional banks. Now, the conditions are different. The financial performance of Islamic banks are not better than commercial banks. This is reflected in the measurement of the CAR, ROA, ROA, and LDR or FDR as follows:

**Table 1**  
**Financial Performance Comparison between commercial bank & Islamic bank in Indonesia, 2014**

Indicator	Commercial Bank *			Islamic Bank**		
	2012	2013	2014	2012	2013	2014
CAR	17,43	18,13	19,57	14,14	14,42	15,74
ROA	3,11	3,08	2,85	1,94	1,58	0,41
BOPO	74,1	74,88	76,29	76,35	82,16	81,32
LDR	83,58	89,7	89,42	120,65	98,87	86,66

Source : Syariah Banking Statistics, OJK, 2014

\* Commercial Bank covers Conventional Bank and Islamic Bank(BUS)

\*\*Islamic Bank covers Islamic Commercial Bank (BUS) dan Business Unit Conventional Bank (UUS)

From several studies including that conducted by Erico and Partners Farahbaksh (1998) states that the rules of economic authority for sharia bank can basically use the same size with the bank, although in some cases the management of Islamic banks and conventional is similar.

Said (2012) conducted a study on how the application of the system of Islamic banking ranging from the establishment of the beginning of the establishment of the Dubai Islamic Bank in the United Arab Emirates, then continues in Jidda, Saudi Arabia, Egypt, Sudan, Kuwait, Bahrain and other countries. The need to put forward that are relevant to my research is put forward a study conducted in Indonesia are carried out by Umar, Majid and Rulindo during 2002 to 2004 at 21 private banks with DEA method. With a sample consisting of two Islamic banks and conventional banks remaining.

Likewise research done by Saifullah, on 2004-2008 found that Islamic banks are better in business development, profitability, liquidity and solvency compared with conventional banks. This was stated in the Journal of Literature Review, that on variety of studies both conventional banks and Islamic banks is mainly related to the bank's financial performance, especially in terms of efficiency between Islamic banks, including a variety of discourse, controversy and inconsistency of various studies. In this study the approach to measure efficiency was still simple.

The purpose of this paper is to present conceptual framework to see what factors are affecting the Capital Adequacy Ratio, which include internal factors which consists of some financial ratios, then Size banks and external factors, namely inflation rate.

Many studies, linking the effect of achieving the CAR management, attributed to internal factors and financial ratios. But, not many who measure CAR, from internal and external at the same time, the macroeconomic factors in this study is the inflation rate.

Lia Amaliawati and Lasmanah(2014) addressed the issue of Capital Adequacy Ratio and some other financial ratio but there, CAR is not as dependent variables but parallel with the other variables acts an antecedent and also was associated with bank management efficiency.

Many studies, linking the effect of achieving the CAR management, associated with its financial ratios. But, from the reference study, there has been no or not much that incorporate elements of management initiatives, namely the management of measurement of the size of CAR in the bank. In one article(Cohen, 2014), the author fill the research gap on this side. Also Schaffer(2011) delivered on banking studies which incorporate at least the macro element in the management of his CAR, has been a differentiator with previous studies, the researchers conducted answers to the current debate between the management of CAR.

Research conducted Dreca Nada (2013) and Ahmet and HasanBuyuksalvarciAbdioglu (2011) convey the determinant factors affecting capital adequacy / CAR, but seen from internal factors. The dynamics of the market risk in theIndonesia banking structure requires to be able to manage capital adequacy ratio (CAR) which is able to adapt to external shocks. As also stated by Nnanna (2003), a common indicator of macro factors developed by the IMF in assessing the health of the Bank with the acronym CAMELS which include Capital (adequacy), Assets, Quality, Management, Earnings, Liquidity, and Sensitivity to market risks.

Research on the CAR, especially in Islamic banking has been done by several researchers, although not much compared to conventional banks, but in this study the researchers wanted to know CAR associated with the external dynamics that inflation rate. Empirical studies on the determinants of banking Saudi Arabia against CAR (Polat and Al-khalaf, 2014) as well as the idea to include macro policies factor into it (Cohen and Scatigna, 2014), an interesting topic for research on Islamic Banking in Indonesia. Because not much research, especially for Islamic banking which combines internal factor by factors external / macro against Capital Adequacy. Some studies usually do so partially, this is where the researchers want to find a gap theory that has never been done by other researchers.

Many studies, linking the effect of achieving the CAR management of both conventional and Islamic banking more just through its financial ratios or internal factors. But there has been no or perhaps rare that CAR management for Islamic banks that combined with external factors.

The purpose of this study is to propose a more comprehensive research model to complete some previous research that can be developed more fully and comprehensively to determine the determinant factors on the capital adequacy of Islamic banks.

### *Capital adequacy*

The bank as a business unit requires “blood” of the business, namely capital. In other words, the bank's capital is an important aspect for a business unit of the bank. Because operates whether or reliability of a bank, one of which is strongly influenced by the condition of capital adequacy.

LiaAmaliawati and Lasmanah (2014) addressed the issue of Capital Adequacy Ratio and some other financial ratio but here, CAR is not as dependent variables but parallel with the other variables as antecedent and also was associated with bank management efficiency.

Bank capital has three functions (Johnson and Johnson, 1985) which are:

- a. As a buffer to absorb operational losses and other losses. In this function of capital provides protection against failures or bank losses and the protection of depositors.
- b. As a basis for the set lending limit. This is an operational consideration for the central bank, as the regulator to limit the amount of lending to each individual bank

customers. Through this restriction the central bank forced banks to diversify their credit in order to protect themselves against credit failure of one individual debtor.

- c. Forms the basis for market participants to evaluate the relative levels of the bank's ability to generate profits were. The rate of return for investors is estimated by comparing net profit with equity. Market participants to compare the return on investment among the existing banks.

While Hempel, Coleman and Simonson (1986) in relation to the function of the bank's capital, stressing there are four things, namely:

- a. To protect the depositors, when in a state bank and liquidation insolvency
- b. To absorb unexpected losses in order to maintain public confidence that the bank can continuously operate.
- c. To obtain the physical facilities and other basic necessities needed to offer bank services.
- d. As a means of implementing regulations controlling improper asset expansion.

See capital above functions, it can be seen that the position of capital is an important thing that must be met primarily by the founder of the bank and the bank's management for the bank operation.

Capital resources of banks according to Hempel, Coleman and Simonson (1986) is divided into three main forms of subordinated debt, preferred stock and common stock. Some types of subordinated loans and preferred stock convertible into common stock, and common stock can be developed, either external or internal.

Sources of capital above is the concept of capital theory in conventional banks. For Islamic banks, loan capital (subordinates loan) including greetings qard categories, namely loans refundable price. In fiqh literature Ash SalafSalih, qard categorized in aqadtathawwu, or contract mutual help and not a commercial transaction (Muhammad, 1999).

The main sources of Islamic bank capital is core capital (core capital) and quasi-equity. Core capital is capital from the owners of the bank, which consists of the capital subscribed by the shareholders, reserves and retained earnings. While quasi equity funds recorded in the accounts for the results (mudarabah). This is the core capital that serves as a buffer and absorbing failures or bank losses and protect the interests of account holders deposit (wadiyah) or loans (qard), mainly on assets funded by its own capital and funds wadiyah or qard.

The capital adequacy is important in the banking business. Banks that have a good level of capital adequacy shows indicators as healthy banks. For capital adequacy of banks shows that the situation is expressed by the so-called act a certain ratio of capital adequacy ratio or the Capital Adequacy Ratio (CAR). The capital adequacy level can be measured by (ZainulArifin, 2002):\

- a. Comparing capital with third-party funds

Viewed from the angle of the protection of the interests of the depositors, the ratio between capital and liability items is an indication of the level of security in bank deposits by the masses. The calculation is the ratio of capital associated with third party deposits (current accounts and savings accounts) as follows:

$$\frac{\text{Capital and Reserves}}{\text{Demand Deposits} + \text{Savings}} = 12\%$$

From these calculations it can be seen that the capital ratio on deposits simply by 10% and the ratio of bank capital that is considered healthy. Ratio between capital and public deposits should be integrated with asset and should take account of the risk. Therefore, the capital

must be supplemented by various capital reserves as a buffer, so in general the bank's capital consists of core capital and supplementary capital.

b. Comparing capital to risk assets

The second measure is today into an agreement BIS (Bank for International Settlements), namely the organization of central banks of developed countries sponsored by the US, Canada, the countries of Western Europe and Japan. The agreement on capital requirements was achieved in 1988, by setting the minimum CAR ratio is the ratio between capital base with risky assets.

$$\frac{\text{Capital and Reserves}}{\text{Risk Weighted Assets}} = 12\%$$

This agreement was motivated by the observation banking experts developed countries, including the experts of the IMF and the World Bank, of the existence of structural inequality and the international banking system. This is supported by a number of indications as follows:

- a) Loan crisis countries of Latin America were speculative disrupt the smooth flow of international money circulation.
- b) Which is considered unfair competition among Japanese banks with banks of America and Europe in the International Money Market. Japanese banks lend very soft (low interest) because of the provisions of CAR in the country is very soft, which is between 2 to 3 percent.
- c) Disruption of international lending situation which result in disruption of international trade.

Based on the indications mentioned above, the BIS establishes protection provisions of the Capital Adequacy Ratio (CAR) to be followed by banks worldwide as a rule in a fair competition in the global financial markets, the ratio of minimum 8% capital against risky assets (Muchdarsyah, 1994).

*Internal factors*

Internal factors affecting capital adequacy in this study uses several financial ratios and size of the bank.

1. Financial Ratios

Financial ratio analysis as a measurement of financial performance in the financial statements could be used as a basis for predicting the financial condition, business operations, earnings and dividends in the future. Financial ratio analysis combines the financial relationship between the components of the other financial components. In general, the relationship is seen from the ratio between the financial components with one another. Ratio analysis is also useful to compare the company's performance with each other or compare the performance of the company this year with another year

The ratio of accounting / financial ratios to minimize differences in the size of the bank and make them in average (Samad, 2004). The use of accounting ratios common in the literature (Samad and Hassan, 2000; Samad, 2004). Financial ratios have 13 financial ratios and can be grouped into four broad categories, namely the profitability ratios, liquidity ratios, the ratio of risk and solvency and efficiency ratios.

Mahmud and Halim (2003), Hanafi (2003) measure of performance includes the following ratios:

- a. Liquidity ratio measures the ability of the company's short-term liquidity to see the company's current assets relative to current debt (debt in this case is the obligation of the company) that serves to determine the company's ability to meet its short term obligations or the company's ability to meet its financial obligations at the time billed. Normally the ratio used is the current ratio, cash ratio and net working capital to total assets ratio.
- b. Solvency Ratio / Leverage ratios measure the extent the company meets its long-term obligations. Companies that are not solvable is a company whose total debt is greater dibadingkan total assets. Ratios include debt to total assets ratio, total debt to total capital assets ratio, total debt to equity ratio, long-term debt to equity ratio, etc.
- c. Profitability ratios measure a company's ability to generate profit/ loss on the level of sales, assets and certain share capital at a certain period. Some frequently used ratio is the gross profit margin, net profit margin, return on total equity, and so on.

## 2. Size Bank

Company size is an idea of the size of the companies that appear in the value of total assets at year-end balance sheet. In terms of obtaining funds, large companies have the flexibility and ability to obtain funding because of the easier access to capital markets.

Measurements size companies conducted by the natural logarithm that transforms heteroscedaticity namely to reduce the presence of enlarged variance or spread on each error that will produce biased estimated coefficients (Gujarati, 1995). The formula company size is as follows:

Firm size = The Natural Logarithm of Total Asset (LnTA)

Titman and Wessels (1988) suggested that the relatively large companies are generally more diversified as it can optimize the use of debt ratio targets, so it is not easy for bankruptcy. Therefore, large companies tend to use higher debt. This is consistent with the theory that trade off the higher rate of profit, the company will ramp to obtain greater profits by reducing taxes and when debt levels are too high, it will be reduced to the optimum targets.

The argument is different from Myer and Majluf (1984), that the size of the company-related negative leverage due to asymmetric information between the internal and external parties that tend to be larger on the smaller company than in large companies, in other words big companies are more transparent and more accessible to the parties so companies tend to fund external financial sources sensitive internal information, which will use equity through the capital market, thus inversely proportional to the size of the company's corporate leverage. This argument is consistent with the theory of pecking order that obtaining external funds by issuing shares when they cost less than the issuing of debt due to the small degree of asymmetric information, and in this regard large companies are generally more transparent. In contrast to small companies with a large degree of asymmetry would choose a debt due to its lower cost rather than issuing shares.

### *External factors*

Macro-economic linkages with the business / businesses be interesting to be explored, especially banking financial sector. Monetary policy (and abroad) affect economic activity in the banking financial sector, such as open market operations, the establishment of statutory reserves, the determination of interest rates.

Relations macroeconomic (monetary) and micro, is not a new thing in the world. However, it becomes interesting when studying the implications of the macro sector into the base or

foundation of building resilience micro enterprises / businesses. Global economic uncertainty and increasingly demanding national micro sector (bank) must be prepared as such to strongly build the foundation of business.

Banking financial sector has basically been set as an indicator for the security of a financial institution bank and non-bank, that is facing the uncertainty of the macro sector (monetary). Indonesia's role in the supervision of financial institutions and non-bank banks conducted by the Financial Services Authority (FSA). Prudential regulations set by the FSA include twenty provisions, some of which are core capital of commercial banks, the capital adequacy ratio, net foreign exchange position, lending limits, asset quality, allowance for uncollectible assets, restructuring of credit, restructuring financing for Islamic banks and UUS, statutory reserves, the transparency of the financial condition of the bank, bank product information transparency and use of personal data, and more. Meanwhile, the provisions of the rating of the bank by the FSA, including the risk profile (risk profile), good corporate governance (GCG), profitability (earnings) and capital (capital).

The ability of banks to maintain the soundness of the business / her business cannot be separated from management capabilities that has set the level of risk faced. The fourth factor which the provision of health assessment has covered various components that must be maintained and enhanced by the bank. Bank performance (ROA, NPL, ROE, etc.) who either need the support of macro policies to maintain the stability of the banking financial sector. Thus, synchronization between macro policies (monetary) to the micro sector (bank) becomes the main thing in maintaining the health of the banks to face global economic fluctuations which occur in the last decade.

Said (2012) conducted a study on how the application of the system of Islamic banking ranging from the establishment of the beginning of the establishment of the Dubai Islamic Bank in the United Arab Emirates, then continues in Jidda, Saudi Arabia, Egypt, Sudan, Kuwait, Bahrain and other countries. Likewise to be stated that this study is relevant to put forward a study conducted in Indonesia are carried out by Umar, Majid and Rulindo during 2002 to 2004 at 21 private banks with DEA method. With a sample consisting of two Islamic banks and conventional banks remaining. Here in the can that Islamic banks to operate above the average cost and profit efficiency compared to conventional banks. Likewise research done by Saifullah, on 2004-2008 found that Islamic banks are better in business development, profitability, liquidity and solvency compared with conventional banks. This was stated in the Journal of Literature Review, that on variety of studies both conventional banks and Islamic banks is mainly related to the bank's financial performance, especially in terms of efficiency between Islamic banks, including a variety of discourse, controversy and inconsistency of various studies.

The research to wanted to see what factors are affecting the Capital Adequacy Ratio, some of them with through the analysis of Financial Ratio, Size banks and of macroeconomic factors.

Dreca (2013) discusses the CAR affected by the capital structure, the size of the bank, an indicator of profitability, participation of deposits and loans on total assets and leverage. Results of the research that Size, DEP, LOA, ROA, ROE and LEV has significant influence, while LLR and NIM does not have a significant impact on CAR.

Bohari, Ali and Sultan (2012), conducted a study on the banking sector in Pakistan. Results of the study found that Average Capital Ratio, capital requirements and portfolio risk ratio showed a weak correlation, while the share of deposits, and ROE has shown strong but negative correlation.



**Variable and hypotheses**

1. *Return on Asset (ROA) on Capital Adequacy Ratio (CAR)*

The profitability ratio describes the ability of a company to make a profit with a given amount of capital (Melissa, 2012). The profitability ratio in this study was measured using financial ratios, including ROA, ROA and NIM. Polat and Al-khalaf (2014) describes factors that affect the Bank's CAR in Turkey 2006-2010, ie loan, ROA, leverage, NIM, deposits, and the liquidity and the Bank Size. Buyuksalvarcy and Abdioglu (2011) using ROA as a proxy for profitability, and stated that the tendency to increase the profitability of capital. Sundarajan and Errico (2002) held that the high NPF will reduce the quality of assets and the expected effect on capital adequacy in Islamic banks.

H1: Return on Assets (ROA) has significant effect on Capital Adequacy

2. *Structure of Deposits (DEP) on Capital Adequacy Ratio (CAR)*

Research on the link structure of the deposit to the capital adequacy has been done by Ismal (2011), as well as carried out by Sharpe (1977), Dowd (1999), as well as Harold (1999), which states the importance of deposits for capital adequacy.

H2: Structure of deposits (DEP) has significant effect onCapital Adequacy Ratio

3. *Liquidity (FDR) on Capital Adequacy Ratio (CAR)*

Bank said liquid if it has the ability to meet its obligations, it can repay all its depositors, and meet credit demand submitted. Liquidity ratio illustrates the company's ability to meet its short term obligations (Melissa, 2012). Melissa (2012) was a component of liquidity ratios that include financial indicators such as loan-to-deposit ratio (LDR) / financing to total deposits (FDR).

H3: FDRhas significant effect on Capital Adequacy Ratio

4. *Operational Efficiency (OEOI) on Capital Adequacy Ratio (CAR)*

Operating efficiency of research has been done by Sahajwala and Bergh (2000) and Sarker (2006). Stating that OEOI / Operating expense on operating income can be used as an indicator to evaluate the quality of bank management, particularly in operational efficiency.

H4: Operational Efficiency / OEOI has significant effect on Capital Adequacy Ratio

5. *Leverage (LEV) on Capital Adequacy Ratio (CAR)*

Leverage is the ratio of equity to liabilities in a company. The magnitude of the leverage ratio of the company describes the level of liabilities to equity gets smaller.

Büyükşalvarcı and Abdiöğlü in Polat and Al-khalaf (2014) found that leverage negatively affecting the CAR. This is in contrast with Ho and Hsu (2010) analyzed the relationship between leverage, performance and CAR in Taiwan during the study period 2001-2006, indicates that company size, leverage, and financial costs positively affects the performance of the company. Polat and Al-khalaf (2014) in his study of a number of banks in Saudi Arabia, suggesting that leverage positive effect on the bank's CAR.

H5: Leverage (LEV) has significant effect onCapital Adequacy Ratio

6. *Bank Size (SIZE) on Capital Adequacy Ratio (CAR)*

Al-Sabbagh in Polat and Al-khalaf (2014), as well as research Goddard (2000) in European banks, and Smirlock (2001) in Liu and Wilson, 2010, stating the effect of bank size on CAR

H6: Bank size (SIZE) has significant effect onCapital Adequacy Ratio

7. *Inflation Rate (IR) on Capital Adequacy Ratio (CAR) Bank*

Variables associated with the influence of external / macro-economics of the capital, William (2011) conducted a study in the banking industry in Nigeria, which are: inflation rate, exchange rate is a predictor of the CAR. Likewise, linking macroeconomic research conducted by JA &AdebiteOjo (2010) and Newman L (2010).

H7: Inflation Rate has significant effect on Adequacy Ratio

Based on the framework above, the Proposed model of research :

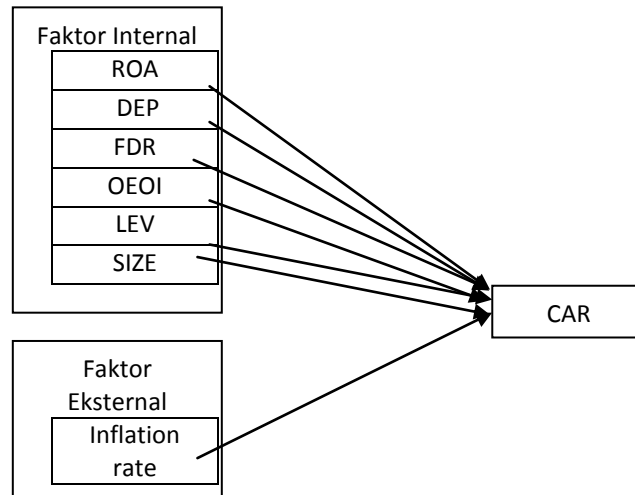


Figure 1  
Conceptual Framework

**Proposed hypothesis**

Based on the identification problem, research objectives and framework, the authors formulate the research related to the tests that will be carried out as follows:

H1 = rate of return on assets (ROA) has significant effect on capital adequacy ratio (CAR) of banks

H2 = Deposit Structure (DEP) has significant effect on(CAR) of banks

H3 = financing to total deposits (FDR) has significant effect on capital adequacy ratio (CAR) of banks

H4 = OEOI (ratio of operating expenses to operating income) has significant effect oncapital adequacy ratio (CAR) of banks

H5 = leverage (LEV) has significant effect oncapital adequacy ratio (CAR) of banks

H6 = Size Bank (SIZE) has significant effect oncapital adequacy ratio (CAR) of banks

H7 = inflation rate (IR) has significant effect oncapital adequacy ratio (CAR) of bank

**Conclusion**

The purpose of this conceptual paper is to investigate the factors that influence the CAR/ Capital Adequacy Ratio, both factors internal, and external micro and what factors are the most dominant influence. Thus it will be utilized for the banking industry and regulators in making decisions.

This type of research is verification, which aims to determine the relationship between variables through a hypothesis testing and other research method which aims to clarify the relationship variables.

Object of this research is the capital adequacy of Islamic banking in Indonesia, which is influenced by internal factors (ROA, DEP, FDR, OEOI, LEV, Size Bank) as well as external factors (IR). Then study the test empiris detection accuracy and validation of the model is formed.

In this study the researcher have not entered some other external factor. The factor that affect Capital Adequacy Ratio/CAR, such as Interest Rate, Demand Deposit, Money Supply, and other external factors.

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## BUSINESS STRATEGY DEVELOPMENT USING SCENARIO PLANNING FOR TELKOMSEL T-CASH

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### Abstract

Massive growth of the Internet along with the growth of mobile Internet access affects the lifestyle of people in the transaction. Based on the results of the world market research, there was a shift from the global trend towards non-cash cash. Transactions occurs with a volume of 357.9 billion in 2013, with steady growth of 7.6% in 2013 and 8.9% in 2014. The Asian continent is the fastest growing with 21.6%, led by China. More than 10% of transactions are digital and electronic payments (Lees and King, 2015). However, from the 250 million population of Indonesia there are 60 million people who have a bank account which is still relatively low when compared to the mobile phone penetration which has reached 123.1% in 2014. There are 70 million people in the city and 100 million people in villages that do not have a bank account (Wirjoatmodjo, 2016). This conditions can occur mainly due to: Minimum balance requirement is high for some people in Indonesia, especially for the poor people, additional costs for administration, card manufacturing and others, remote areas quite far from the bank.

The purpose of this research is to develop business strategy using scenario planning approach. Data collection method used is a combination of data collection through literature and collecting data through interviews with management, customers, and competitors T-Cash. Based on current conditions there is uncertainty in terms of regulation governing the company is allowed to do business micropayment. Aside from the regulatory uncertainties that may change the strategy map is a global player on the market penetration in the country. From these two things will produce four scenarios that will change the strategy of T-Cash. As the implementation of the recommendations of planning scenarios have been compiled in this research, planning scenarios that had been developed in this research needs to be synergized with the existing company's strategy. This research also analyzes the company's business conditions in T-Cash in 2015 and gave suggestions that scenario planning should be started within the next five years.

**Keywords:** *Scenario Planning, Business Micro Payment, T-Cash, Corporate Strategy*

### Introduction

Robert Reich (2012), argued: "There will be a time – I don't know when, I can't give you a date – when physical money is just going to cease to exist"

The volume and value of electronic money transactions in Indonesia climbed significantly, amounting to a total of 535.6 million transactions and IDR 5.3 trillion respectively. The positive growth reflected in these figures represented an increase in the volume and value of electronic money transactions of 163.4% and 59.1% respectively from the previous period's figures of 203.4 million transactions and IDR 3.3 trillion (Bank Indonesia, 2015). The cash circulating in Indonesia is around IDR 450 T in normal days. In peak seasons, for example in Eid Al-Fitr (lebaran) the cash circulated is around IDR 550 T. The retail transactions are about IDR 7500 T and 31% are using non-cash. Indonesia is the lowest cash less transaction in ASEAN, where other countries are using cash less more than 51% (Martowardojo, 2014). However, out of 250 millions people in

Indonesia, only 60 millions of them own bank account which is relatively low compared to cellular phone penetration that reached 123,1% in 2014. There are 70 millions people in the cities and 100 millions people in the villages do not have bank account (Wirjoatmodjo, 2016).

Telkomsel launch T-Cash in 27<sup>th</sup> November 2007 as the first mobile wallet and mobile e-money to facilitate financial transactions through mobile. In the mid of 2011, Telkomsel launched contactless payment via mobile phone. This innovation is the first and the only one in Indonesia called Tap-Izy. In October 2015, PT. Telkomsel launched a new development of mobile services of e-money by introducing the use of technology sticker NFC (Near Field Communication) to replace the SIM card with RFID technology. It use very short range of radio transmission, only few centimeters. The customers will pairing its MSISDN number (card identity) to the seller or shop that has a mobile e-money accounts. In addition, transactions are also very secure because customers must use PIN (Personal Identification Number) as a verification. TCASH Tap itself is already widely accepted in more than 2,500 merchants within the Jabodetabek area and an expansion plan is underway to cater to more cities in Indonesia. TCASH Tap features TCASH mobile money services, i.e. quick payment using tap, online shopping, buy and pay through mobile phone, and money transfer. Telkomsel also sealed partnership with communities and organizations, such as schools and Islamic boarding schools (Pesantren), to introduce e-money transactions to rural communities, representing Telkomsel's commitment to support Government's National Cashless Movement.

In 2015 program, one of the masterpieces of Telkomsel is "great digital payment experience". Marketing activities and Sales activities also are created to support masterpiece in digital payments. The main product of this masterpiece is T-Cash considering the big opportunity in Indonesia as stated by Wiryoatmodjo (2016) where 170 millions of people (about 70% of the population) do not have banks account. Even the opportunity is enormous, but the competition in this segment is very tight. Telkomsel as a Telco Company is not only competing with other Telco Company, but also with banking industry as well. Payment is a new business for Telkomsel and it is not a core business of Telkomsel. There are already big players in this segment, E-Money Mandiri and Flazz BCA followed by four new comers to penetrate the market such as Brizzi BRI, Tapcash BNI and BTN Blink, JakCard Bank DKI. In the Telco industry, XL comes with XL Tunai and Indosat with Dompetku and Smartfren with Uangku. Telkomsel also must pay attention also to the growth and penetration of Apple with Apple Pay and Google with Android Pay and also PayPal. In the existing market, there is Doku Wallet as an Over The Top Payment Application. In the other hand, some of the business which are not banks or Telco operators also creates a micropayment to support their business, such as Digicash for online gamers, Dimopay using QR which enables cross-platform transaction, Mimopay, Starbucks card and Go Pay from Gojek. Telkomsel face a tough strategic decision making in this tough competitions. This choice will define and impact to the investment strategy. The potential market is enormous, a lot of citizens do not have bank account and also much more does not use electronic micropayment. In the other hand, there are stiff competitions from existing companies and it will be more tough competitions if any new competitors with new business model from OTT or global player enter the market. The game in this business very dynamic and government are catching up regulations to secure the industry make benefit for the citizens and also for the country.

Scenario planning is an effective strategic planning tool for medium to long-term planning under uncertain conditions. This research is using scenario planning to manage the uncertainty and the rapid changing environment in the micropayment industry. This limitation for 5 years is based on the best practice in the Telco Industry. Telco industry

is the fast technology roadmap and triggered by the handset manufacturer and application developer.

## Business issues exploration

### Conceptual Framework

In current conditions, revenue stream for all operators mostly comes from voice traffic. Voice traffic trends is degrade day by day due to the increment users of the OTT like WhatsApp, Line, WeChat, Telegram, etc. Telkomsel have a strategy to broader the capability in digital business and one of the strategies is to grab the opportunity in the micropayment business. Telkomsel use T- Cash as an enabler in this business. In the micropayment business, there are a lot of players and the biggest player in Indonesia comes from banking sector like BCA with Flazz and Mandiri with e- money. In this mobile micropayment business, there are uncertainty that must be aware and be managed that possible happen in the future.

T-Cash needs a scenario planning to manage sustainability of this product. In order to create the scenario planning, the current and future business trends understanding and assessment is required to broader the knowledge of the business context. Internal analysis and external analysis are used to explore the T-Cash strength, weakness, opportunity and threat in micropayment business. This current strategy analysis will define the root of issues. Based on the issues, we finally develop the scenario planning and implementation. Below is the conceptual framework that is used in this project.

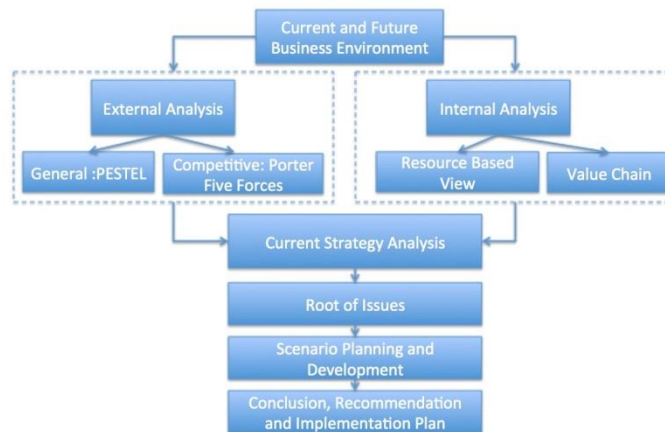


Figure 1. Conceptual Framework

## External Environment

### PESTEL Analysis

From the PESTEL analysis, the conclusion that can be gather:

1. Competition is very high even today with the open market in the region with ASEAN Market Community (AEC). In the other hand, the opportunity lies ahead due to the movement of the government to accelerate the non-cash transaction.
2. The growth of non-cash transaction very high and it is inline also with the growth of



electronic money.

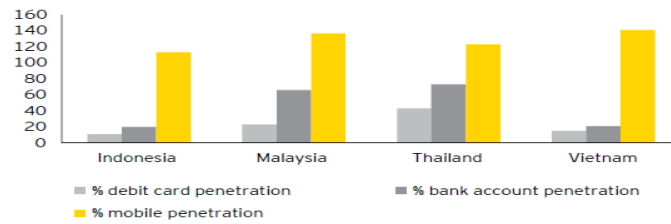
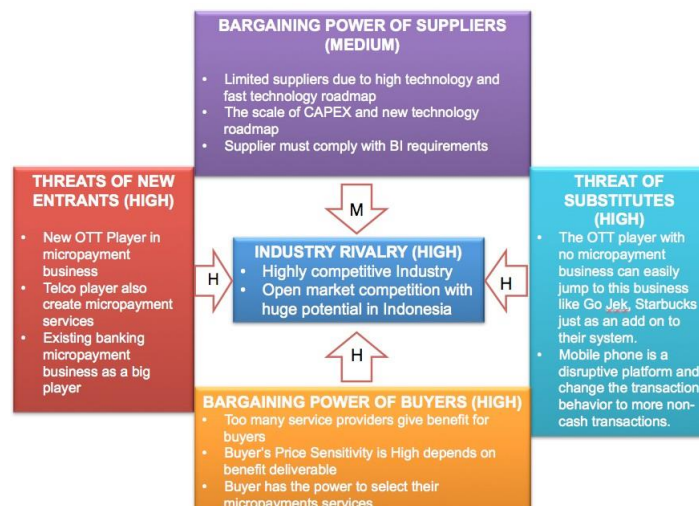
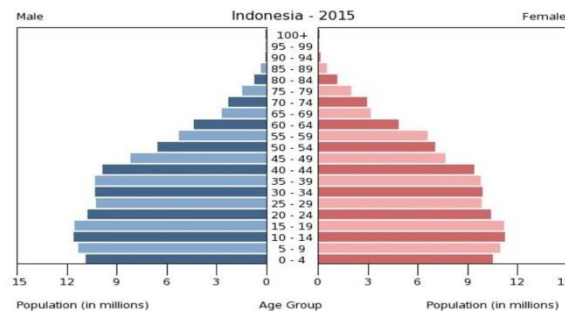


Table 1. Region Mobile Penetration versus Financial (Ernst and Young, 2014)

Economic of Indonesia are still in good shape even the global countries tend stagnant

- and even worse. In the specific service sector, the GDP even grow higher.
- Indonesia demography with younger people makes the market easily adopt new product with new technology. The lifestyle change more digital in the social activities, transaction and also spread to most of activities and environment. More people are using smartphone, non-cash transaction and NFC capable handset.

Table 2. Indonesia Pyramid Population (CIA World Factbook, 2015)



Porter Five Forces

Figure 2. Porter Five Forces Payment Industry

From the Porter Forces analysis, five forces that must compete and win competition are the fierce battleground. The conclusion from the Porter Forces as follows:

1. Entry barrier is very low but the competition is very high. A lot of big players are already in the market
2. It is easy to enter the business but it is not easy to get out due to the huge investment in this business.

**Internal Environment**

Resources Based Analysis

This analysis usually is called VRIO (Valuable, Rare, Difficult to Imitate and Organized). Based on this analysis, T-Cash VRIO can be describes as follows:

- T-Cash is the micropayment product from Telkomsel, Telkomsel is leading operator in Indonesia.
- T-Cash is the pioneer of the mobile micropayment in Indonesia. It started since 2007 and has an advance technology to support T-Cash.
- T-Cash payment system is supported by the advance mobile technology in Telkomsel. T- Cash can use all of the resources to make a differentiation to other product.
- Telkomsel have expertises in the mobile business but lack of resources in micropayment.

Value Chain Analysis

This framework is used to views the organization as a sequential process of value creating activities.

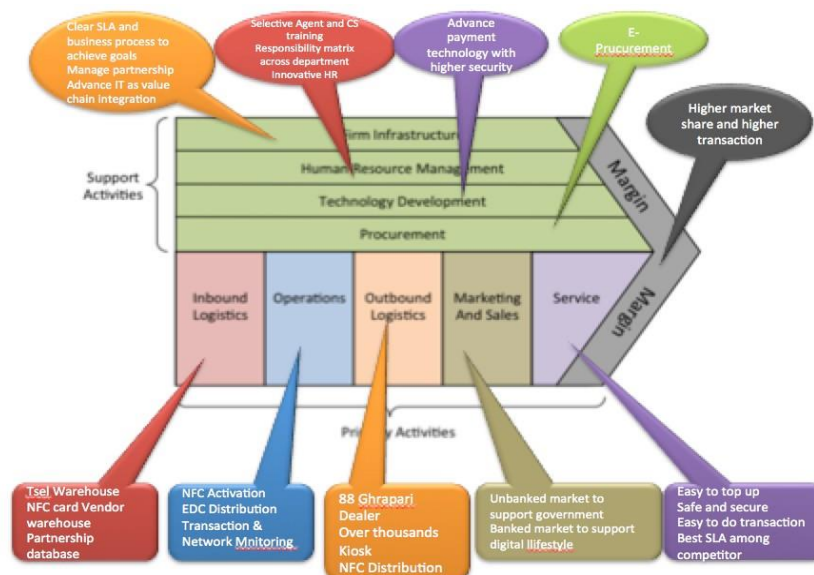


Figure 0-1 T-Cash Value Chain

The conclusion from the value chain analysis as follows:

- In the primary activities, there are some areas need to be strengthen. The operations of this business are different from the existing capabilities. Strengthen the core business competencies and core capabilities. Improve the operations business process, competencies and capabilities also impact the service deliverable. Service quality is the characteristic of the financial services and it measures from the accountable SLA (service level agreement) and MTTR (mean time to repair) ratio.
- In the support activities, there are some areas some focus area. Human Resources management is the key area to support and produce great resources with high capabilities and competencies. Telkomsel must aware of rapid updated of technology roadmap and ensure the investment in technology will support the business needs and the improve the customers experiences

### Porter’s Generic Strategy

Based on Porter’s Generic strategy, T-Cash is using **Differentiation** as their competitive advantage. Innovation is the key to keep the company has the competitive advantage from other company. T-Cash using approach to fulfill the area that existing financial system that cannot deliver using their existing resources. The differentiation that T- Cash give to the customers:

- T-Cash as the lifestyle to the banked customers. It provides the fast and convenient transaction just “tap and go”, fast and safe transaction with H+1 settlement, great customer experience as the easiest payment method.
- T-Cash as enabler to the non-banked customers. It provide the easiest way to do transaction by USSD for the feature/low segment phone, reduce the theft issues, ensure targeted transfers and reception of the government aids which is called “bantuan langsung tunai”.
- Telkomsel coverage that spread across Indonesia and more than thousands agent that cover rural areas can use as the “mini bank” for the cash out and cash in.

### Business solution

In order to deal with the uncertainties, T-Cash required scenario planning. According to Garvin, there are several components of the scenario planning that together create the view of the future (Garvin and Levesque, 2006).

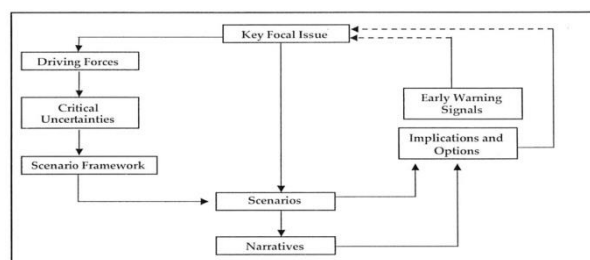


Figure 0-2 Scenario Planning Components

This research is using data collection that was conducted through two methods;

there are literature review, electronic micropayment customer’s qualitative survey and interview with expert. Literature review to get the insight related the theory, internal and external environment, the business sustainability and competitiveness. The respondent profiles in this research project are management team, customers of other electronic micropayment and customers of T-Cash. The goal from interview with T-Cash management are to get the insight related to the industry and trend in the future, the challenge and opportunity in the electronic micropayment industry. This interview session want to get the focal issues, driver and early warning regarding the T-Cash strategy and the industry behavior itself.

*Scenario Planning Development*

**I. T-Cash Business Key focal Issues and Driving Forces**

The key focal issues that have been identified based on the internal and external analysis, semi structural interviews and customers survey were:

- a. How T-Cash increases market share and revenue in the tight micropayment competitive market?
- b. How T-Cash increases competitiveness with the banking, OTT and telecommunication operator micropayment and competes the service deliverable to competitor?
- c. How T-Cash reaches the superiority in an Integrated Mobile Financial Services Eco-system?
- d. How T-Cash dealt with the regulation that set the rule of the game?

The driving forces will be mapped and grouped based on the degree of uncertainties and the level of the impact. Degree uncertainty and the level of impact from driving forces can be seen at below table.

		Degree Of Uncertainty		
		LOW	MEDIUM	HIGH
Level of Impact	HIGH	Human Resources Capability Telkomsel Financial and Support Fee of Services	Economic Climate Customer Lifestyle Trend Innovation	Government Regulation Market Competition
	MEDI	Telkomsel Subscriber Growth	TECHNOLOGY PUSH	Product Substitution
	LOW	Supplier Push	POLITICAL SITUATION	Security Issues

The critical uncertainties ranked by the highest degree of uncertainty and the highest levels of impact are:

*Government Regulation*

Regulation in the electronic money is dynamic because it is quite new payment method and the market behavior is still keep changing and market penetration is still low. Based on the interview from the customers, the low penetration is happen due to the customers did not see any benefit from using the electronic money. They used electronic money because they have to use it for the e-toll card and some of them use it for cinema discount, for example: 21 Cineplex discount for T-Cash customers. There is a time when the electronic money is the primary payment method in the micropayment transaction. When it happens, regulation already mature and the micropayment player also

already consolidate in term of services, customers and companies.

*Market Competition*

The potential market in this business is very huge because there are 70% of the Indonesian citizens did transactions with cash and only 30% with non-cash. Even the market potential is very huge; the competition also is very tight. The competition is happen in cross industry, start form telecommunication provider, banking and OTT player. New OTT player with the huge customers will use their own electronic micropayment with attractive discount of their product. Starbucks and GoJek already have their own electronic micropayment.

**2. Establishing Scenario Planning for T-Cash in Electronic Micropayment Business**

The scenario is built based on the combination of the highest rank of uncertainties and impact. The uncertainties spectrum will create the 2x2 matrix with four quadrants. Four quadrants create four scenarios with the description that highlight risks and opportunities will be faced in the future.

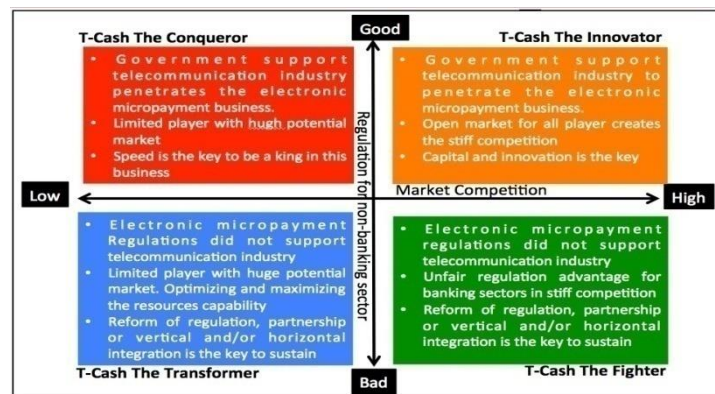


Figure 2-1 T-Cash Scenario

**Scenario Narratives**

**Scenario Title: T-Cash The Conqueror**

*Narratives:*

Politics in Indonesia are stable and support industries to keep moving in the right track. More policies and regulations are produced to improve the existing environment condition to be more transparent and more accountable. In the mobile services, all of the users are using smartphone as their mobile and digital lifestyle. People are using their mobile as their primary need, not only for legacy communication (voice and chat), but also for non-human communication (internet of things). Penetration of the electronic micropayment transactions spread rapidly across the nation. The players invest hugely in this business and accelerate the penetration just to win the competition and lead the market share as fast as possible. Who lead the market first will continuously dominate the market. Cash transaction decrease hugely year by year and become a very minor transaction due to the consolidation and interoperability of non-cash micropayment gateway. Government gives incentives for existing player to penetrate the market as fast as possible and reduce the cash transaction. Global player try to invest in micropayment business indirectly by acquisition or by joint venture with the existing

player because government tighten the regulation for the new global player.

Scenario Title: **T-Cash The Innovator**

*Narratives:*

Politics in Indonesia are stable and support industries to keep moving in the right track. More policies and regulations are produced to improve the existing environment condition to be more transparent and more accountable. In the mobile services, all of the users are using smartphone as their mobile and digital lifestyle. People are using their mobile as their primary need, not only for legacy communication (voice and chat), but also for non-human communication (internet of things). Potential market in this business is huge and a lot of players in electronic micropayment business want to enter and involve in the game. Electronic micropayment transaction increases steady linearly not exponential due to the stiff competition between all of the players. The competitions are not only from the global player and the existing players; it is also with the new OTT (over the top) players that have lot of customers. The focus of the game is to beat others and kill others because lots of players enter this business. Some of the players with huge resources attack aggressively the market, some of the players struggle and battle for life in this business with their limited resources. The differentiator in this business is in the resources. The resources can be the capital and also talents to create innovations. The stiff competition can be winning only with the innovation by the great talent. The scarcities of the talents are the big questions to be solved by the organizations.

Scenario Title: **T-Cash The Fighter**

*Narratives:*

Politics are playing dominantly in their interest in the government economic package decision. More policies and regulations are produced to create benefit to more sectorial and not comprehensive directly to the nation. Telecommunications sector suffer in this business because the regulation did not favor to the telecommunication sector. In term of competition, government invites more investors to invest in the electronic micropayment. The stiff competitions and also not favored-competitions make telecommunication sector are struggling and battle for life in this business. They are using all of their resources to keep them alive. There is a certain time, for the telecommunication player to consolidate and did partnership, horizontal integration and/or vertical integration between player to slim the cost and keep sustain. Electronic micropayment transaction still increases but not as expected due to the stiff competition between all of the players. The competitions are not only from the global player and the existing player; it is also with the new OTT (over the top) players that have lot of customers. Telecommunication sector are using their power in the mobile business to fight with the OTT player and mobile apps banking sector. The telecommunication sectors keep influence government to make fair competition. The focus of the game for telecommunication player is to keep alive. It can be by horizontal and/or vertical integration or by influencing government to create regulation fit for all.

Scenario Title: **T-Cash The Transformer**

*Narratives:*

Politics are playing dominantly in their interest in the government economic package decision. More policies and regulations are produced to create benefit to more sectorial and not comprehensive directly to the nation. Telecommunications sector suffer in this business because the regulation did not favor to the telecommunication sector. In the mobile services, all of the users are using smartphone as their mobile and digital lifestyle. People are using their mobile as their primary need, not only for legacy communication (voice and chat), but also for non-human communication (internet of things). The electronic micropayment transactions keep growing across the nation. Telecommunication sector are using their power in the mobile business to fight with the OTT player and mobile apps banking sector. The telecommunication sectors keep influence government to make fair competition. The potential market is bigger than the regulation limitation. The players invest hugely in this business and accelerate the penetration just to win the competition and lead the market share as fast as possible. Telecommunication sector optimizes all of the resources and emphasizes all of the regulation to maximize its profit. In the other hand, to fit with the regulation, some option must be taken. The transformation is an option needed to change the existing business behavior from Telecommunication Company to financial company. The transformation can be done by spin off the business from the existing company. Partnership, vertical and/or horizontal Integrations are also the possible way out in the unfavorable regulation.

Global player try to invest in micropayment business indirectly by acquisition or by joint venture with the existing player because government tighten the regulation for the new global player.

*Option and Consideration*

In this stage, we will develop implications and options for each of the alternate futures. Every scenario has implication to the strategy and option to consider in decision-making. This will impact on how management to make their strategic decision in order to react, action or anticipate current condition in every scenario to ensure the organization sustainability.

Scenario	Implications	Options
T-Cash The Conqueror (Good regulation for non-banking sector and low market competition)	Huge potential market with limited player	Invest effectively to increase market share
	Fast market penetration and increase market share	Get benefit from the wide coverage network and services of Telkomsel
	Push technology awareness to non-bank customers	Manage suppliers and vendors to deliver effective technology to every segments of customers
	Push great services for the digital lifestyle customers	Using data analytics to get customers behavior from mobile technology
	Grab the customers as fast as possible	Manage and increase core competencies and capabilities
T-Cash The Innovator (Good regulation for non-banking sector and high market competition)	Many player to play in the same ground	Innovate to gain the benefit from convergence of the mobile technology and electronic micropayment technology
	Capital resources and Talent resources play important role to win the competition	Prioritization of investment to obtain the maximum gain
	High gimmick cost to maintain and grab new customers	Using mobile data analytics to maintain and deliver premium services for the high value customers
	Lower profit margin for same services deliverable	Manage cost of services by manage the supplier and vendors selectively and cost effectively
	Slow market penetration due to the stiff competition Scarcity of the talent to deliver innovation	Built knowledge management system within organization
T-Cash The Fighter (Bad regulation for non-banking sector and high market competition)	Limited arena to penetrate the market	Find new stream and business model to inline with existing regulation
	Many player to play in the same ground	Partnership, vertical and/or horizontal integration with existing players
	Stagnant market penetration	Influence government to create favorable regulation
	Stiff competition and unfavorable regulation are the complex situation for the non-banking sectors	Cost efficiency and effectively in investment and operational
T-Cash The Transformer (Bad regulation for non-banking sector and low market competition)	Limited arena to penetrate the market	Create new business model to inline with existing regulation. It can be also partnership, vertical and/or horizontal integration
	Huge potential market with limited player	Invest effectively to enlarge the coverage and services
	Compete to fast penetrate the market and gain significant market share	Get benefit from the wide coverage network and services of Telkomsel
	Telecommunication sector must be agile to compete in this business	Influence government to create favorable regulation
	Huge potential market with unfavorable regulation regulation	

*Building Early Warning Signal*

This stage identifies early warning signals that could point to possible future directions and likely emergence of new scenario rather than others. This early warning signals are leading indicator to make organizations aware and prepare the changing of the scenario. Below are the early warning signals for every possible scenario.

**EWS for The Conqueror**

Forces	Indicators	Measurement	SignPost
Political and Regulatory	Regulation	Regulation to support mobile micro payment	Government support all instrument from mobile business
		Regulation to keep mobile micro payment to sustain	Government creates tight rules for global company
	Government support	Good environment in non-cash transaction	Government push all transaction using non-cash transaction
		Investment rate in mobile micro payment	High investment in mobile micro payment
Competitiveness	Government Policy for fair competition Number of player in electronic micro payment	No monopoly business	Open market for all existing electronic micro payment (unprotected)
		No Protected market	Open interoperability
		Number of player in the electronic micropayment	Government roadmap to consolidate existing and limit the new player in electronic micropayment
		Global Player Involvement	No direct global player involvement
		New OTT Player involvement	Limited new OTT player
Socio Cultural	Digital Lifestyle trend	Smartphone users trend	Smartphone users increase significantly
		Internet and mobile usage	Internet and mobile usage penetration increase significantly
		Non-cash transaction trend	Non-Cash transaction trend increase
		mobile lifestyle trend	More social interaction via mobile
Technological	New Technology and business model	New Advance mobile technology	New advance change of the mobile technology that support connectivity
		New mobile micro payment technology	New innovation in micro payment that change the micropayment behavior
Economical	GDP Ratio	Growth of GDP	Stable growth of GDP
	GINI Ratio	Increment of GINI ratio	Good GINI ratio
	NFC Growth	NFC growth users	High users of NFC enabled phone



EWS for The Transformer

Forces	Indicators	Measurement	SignPost
Political and Regulatory	Regulation	Regulation to support mobile micro payment	Government limit the Telco Company involvement in mobile micro payment
			Government push banking company to use mobile technology
			Government push Telco Company to support banking customers mobility
			Government push the Telco Company as support system for Banking Micro Payment
	Regulation to keep mobile micro payment to sustain	Government creates tight rules for global company	
	Government support	Good environment in non-cash transaction	Government push all transaction using non-cash transaction
Investment rate in mobile micro payment		Limited investment in mobile micro payment from Telco Company	
Competitiveness	Government Policy for fair competition Number of player in electronic micro payment	No monopoly business	Open market for all existing electronic micro payment (unprotected)
		No Protected market	Open interoperability
		Number of player in the electronic micropayment	Government roadmap to consolidate existing and limit the new player in electronic micropayment
		Global Player involvement	No direct global player involvement
		New OTT Player involvement	Limited new OTT player
Socio Cultural	Digital Lifestyle trend	Smartphone users trend	Smartphone users increase significantly
		internet and mobile usage	Internet and mobile usage penetration increase significantly
		Non-cash transaction trend	Non-Cash transaction trend increase
		mobile lifestyle trend	More social interaction via mobile
Technological	New Technology and business model	New Advance mobile technology	New advance change of the mobile technology that support connectivity
		New mobile micro payment technology	New innovation in micro payment that change the micropayment behavior
Economical	GDP Ratio	Growth of GDP	Stable growth of GDP
	GINI Ratio	Increment of GINI ratio	Good GINI ratio
	NFC Growth	NFC growth users	High users of NFC enabled phone

EWS for The Fighter

Forces	Indicators	Measurement	SignPost
Political and Regulatory	Regulation	Regulation to support mobile micro payment	Government limit the Telco Company involvement in mobile micro payment
			Government push banking company to use mobile technology
			Government push Telco Company to support banking customers mobility
			Government push the Telco Company as support system for Banking Micro Payment
	Government support	Regulation to keep mobile micro payment to sustain	Government creates tight rules for global company
		Good environment in non-cash transaction	Government push all transaction using non-cash transaction
		Investment rate in mobile micro payment	Limited investment in mobile micro payment from Telco Company
Competitiveness	Government Policy for fair competition	No monopoly business	Closed market for all existing electronic micro payment (protected)
		No Protected market	Selective interoperability
	Number of player in electronic micro payment	Global Player involvement	Global Player with huge capital enter the market
		New OTT Player involvement	Most of big retailer introduce new electronic micro payment
			New start up company in mobile micro payment enter the market
Socio Cultural	Digital Lifestyle trend	Smartphone users trend	Smartphone users increase significantly
		internet and mobile usage	Internet and mobile usage penetration increase significantly
		Non-cash transaction trend	Non-Cash transaction trend increase
		mobile lifestyle trend	More social interaction via mobile
Technological	New Technology and business model	New Advance mobile technology	New advance change of the mobile technology that support connectivity
			New innovation in micro payment that change the micropayment behavior
		New mobile micro payment technology	
Economical	GDP Ratio	Growth of GDP	Stable growth of GDP
	GINI Ratio	Increment of GINI ratio	Good GINI ratio
	NFC Growth	NFC growth users	High users of NFC enabled phone

## Strategic Roadmap

In this section, there are strategies that possible to choose that suitable for the scenarios:

### Grab it all (Applicable for T-Cash The Conqueror and T-Cash The Innovator)

This option focuses on how company reacts to the huge potential market. In this condition the player of the electronic micropayment is limited but the market is so huge. Electronic micropayment is increasing continuously. There are two types of customers in this arena; lifestyle play and enablement play.

There are some of the characteristics of lifestyle play. The characteristics are: medium to high class which are digital minded persons, most of the targeted customers in the cities, services is the key of the product: easy, simple, more merchant, have a brand reputation (feel secure). The service must deliver to this class are: deliver broaden services to marketplace via T-Cash, fast and convenience services, safe payment method, great customer experience

The characteristics of the enablement play are: lower class segments with non digital minded persons, rural area targeted customers, low banking acceptance due to low education persons, have a high risk savings (mostly in house), no access to the ATM. The service must deliver to this class are: safe micropayment services, can be a vehicle for the government aids (ensure the aids 100% to the targeted persons), broad services to marketplace via T-Cash, easy to use for non digital lifestyle persons

*Differentiation strategy* is the most suitable strategy to do aggressive market penetration.

Every segment has different needs to fulfill. Brand image, technology, innovation, customer intimacy and T-Cash network is the key that customers choose T-Cash as their primary product.

### **Share to Grow (Applicable to T-Cash The Fighter and T-Cash The Transformer)**

This option focuses on how company reacts to the hard time in the business. Most of regulations are unfavorable to the telecommunication business. Telco Company tries to protect their market from other micropayment company. There are time for the company to get consolidate and grab the business opportunity ahead. In this strategy, partnership is the option can be taken.

T-Cash can make a partnership with existing Micropayment Company from banking sector.

T-Cash has competitive advantage to run the micropayment business which are: wide coverage and wide service point and kiosk across Indonesia, mobile technology to support mobile micropayment with data analytics, product of Telkomsel as the premium brand image of Telco player, great knowledge in the mobile technology.

Banking sector also has advantage compare to the T-Cash, which are: expert in the financial services, wide services in financial services, cover most of the cities across Indonesia, have a good trust from customers in financial services.

The Partnership in this section can be done in some scenarios:

- **Horizontal Integration**  
T-Cash did a merger or acquisition the micropayment banking sector, which is complying with all regulation from government. This strategy will make T-Cash more agile to compete with other micropayment company.
- **Vertical Integration**  
T-Cash support the mobile technology and Banking Micropayment support the financial system
- **Strategic Partnership**  
T-Cash and other banking micropayment join together and set agreed objectives to create mutual objective from both parties. The expertise and resources from both parties can be used to create greater opportunity

*Overall Cost Leadership strategy* is the most suitable strategy to do in this unfavorable regulation. The arena is limited for the Telco Company to penetrate the market. In order to sustain and compete to other competitor, cost leadership is the option for these scenarios.

### **Conclusion and implementation plan**

#### *Conclusion*

In this research project, there are some points can be concluded:

1. There are current issues that identified in this research:
  - a. Low trust of the customers in the T-Cash micropayment
  - b. Huge potential market but low T-Cash penetration

- c. Unfavorable regulation from government to Telecommunication Company
- d. High competitiveness in the electronic micropayment business
2. The existing T-Cash Strategic plan that has been made by the Telkomsel:
  - a. Address lifestyle play and enablement play. 25 cities focus on the banked customers and 50 cities focus on non-banked customers.
  - b. Scale-up the revamped “T-Cash TAP” solution across key cities and segments
  - c. Be first to market and replicate to other cities
  - d. Look to extend T-Cash offerings to other areas of mobile payments like mobile ticketing (parking, transportation), merchant/retailers (in-store shopping, online\shopping).
3. The key focal issues of T-Cash are:
  - a. How T-Cash increases market share and revenue in the tight micropayment competitive market?
  - b. How T-Cash increases competitiveness with the banking, OTT and telecommunication operator micropayment and competes the service deliverable to competitor?
  - c. How T-Cash reaches the superiority in an Integrated Mobile Financial Services Eco-system?
- d. How T-Cash dealt with the regulation that set the rule of the game?
4. The research have been identified the driving forces that have the most uncertainty and most impact to the T-Cash sustainability:
  - a. Government regulation to support mobile electronic micropayment business
  - b. Stiff competition in the electronic micropayment business
5. The research already identified that there are 4(four) scenarios that impact to the T-Cash strategy in the next five years: T-Cash The Conqueror, T-Cash The Innovator, T-Cash The Fighter and T-Cash The Transformer.
6. The possible strategies roadmap to choose in the scenarios:
  - a. Grab It All Strategy  
This strategy is using differentiation strategy to penetrate the market as fast as possible. The differentiation strategy also to ensure the customers gets the best services compare to other competitor.
  - b. Share To Grow Strategy  
This strategy is using overall cost leadership to keep sustain in the market. In this scenario, the business environment is not favorable to the existing Telco Company.

### **Implementation Plan**

Implementation plan of this project is derived from the defined scenarios of the T-Cash. Every scenario has a clear time plan for action to be taken. The four scenarios also are using two strategies in this research, Grab It All strategy and the Share To Grow Strategy.

Share To Grow Strategy		Year 1	Year 2	Year 3	Year 4	Year 5
Scenarios	Task					
T-Cash The Fighter	Reduce any cost that is not correlate with the business strategy					
	Reduce OPEX for meeting, travelling,etc by using technology					
	Slim the organization until the new stream of revenue comes					
	Find the new stream with the new business model					
	Manage core competence and core capability within organization					
	Selective investment to the real business revenue stream by using data analytics					
	Influence government to create favorable regulation					
	Explore the possibility of the integration or strategic partnership to make the company sustain					
	Invest CAPEX with new engine and larger company capability and competence in micropayment (partnership)					
	Expand the merchant					
	Convergence mobile technology with the mobile electronic micropayment					
	Using data analytics to get customer behavior and create the new services					
	Increase market adoption and market penetration					
	Extends offering to other areas of mobile payment to engage customers with T-Cash					
T-Cash The Transformer	Reduce any cost that is not correlate with the business strategy					
	Reduce OPEX for meeting, travelling,etc by using technology					
	Find the new stream with the new business model					
	Manage core competence and core capability within organization					
	Increase Market Adoption					
	Keep invest to gain the market share					
	Build expertise in mobile micropayment					
	Built knowledge based company to create innovation					
	Influence government to create favorable regulation					
	Explore the possibility of the integration or strategic partnership to make the company sustain					
	Invest huge CAPEX with new engine and larger company capability and competence in micropayment (partnership)					
	Expand the merchant					
	Convergence mobile technology with the mobile electronic micropayment					
	Using data analytics to get customer behavior and create the new services					
Increase market adoption and market penetration						
Extends offering to other areas of mobile payment to engage customers with T-Cash						

Grab It All Strategy		Year 1	Year 2	Year 3	Year 4	Year 5
Scenarios	Task					
T-Cash The Conqueror	Increase Market Adoption					
	Building trust to the T-Cash as a payment method					
	Built expertise in mobile micropayment					
	Built knowledge based company to create innovation					
	Increase Market Penetration					
	Expand the T-Cash coverage to more cities across Indonesia					
	Expand the T-Cash merchant					
	Extends T-Cash offering to other areas of mobile payment to engage customers with T-Cash					
	Using data analytics to get customer behavior and create the new services					
	Invest capex with manageable cost with supplier and vendor to deliver effective technology to every segments					
T-Cash The Innovator	Increase Market Adoption					
	Building trust to the T-Cash as a payment method					
	Built expertise in mobile micropayment					
	Built knowledge based company to create innovation					
	Increase Market Penetration					
	Prioritization expansion based on the outcomes					
	Using data analytics to make prioritization investments					
	Smart T-Cash merchant expansion					
	Convergence mobile technology with the mobile electronic micropayment					
	Selective capex investment to gain maximum benefit					
Reduce OPEX for meeting, travelling,etc by using technology						
Reduce any cost that is not correlate with the business strategy						

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## INTEGRATED MARKETING COMMUNICATION; A CONCEPTUAL APPROACH

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### Abstract

This article aims to provide the clarity of integrated marketing Communication concept by analyzing and comparing the existing concepts or definitions from books, articles, journals and other sources. The implication of the finding of integrated marketing communication is a concept that integrates variety of communication disciplines, approaches and company resources to maximize the impact on customer that leads to maximum profit and low cost. The original contribution of this paper is to redefine the concept of integrated marketing communication. The approach taken by this paper is to compare the development of IMC, from their early years until today. From many literature review, we could see some approaches as a response to the emerging technology, but the roots remain on classic marketing, but all IMC concepts agrees that IMC related to how an organization communicates with its customer, whether by direct communication, or by branding, or by other indirect communication.

**Keywords :** *Integrated marketing communication, promotional, brand*

### Introduction

Integrated marketing communication has become a powerful idea in the marketing field (Christensen, Torp and firat 2005). since 1990, integrated marketing communication has been a hot topic in the realm of marketing (schultz, 1993). Integrated marketing communication can help a company to promote the business and to set a position of the product in the market. Many Scholars have defined the concept of Integrated marketing communication, but on the contrary of that, many scholars also argued that Integrated marketing communication lacks a theory base. It is also argued by (Cornelissen and lock cited in kitchen et al 2004) “on the basis of the observation that Integrated Marketing Communication as a theory is quite shallow through its lack of definition, formal theory construction, and research, the hypothesis emerges that Integrated Marketing Communication is a management fashion”. The previous argument shows that “because there is no established academic or professional definition of IMC, or recognized measurement system in place to gauge the influence and bearing of the various IMC concepts, it must be a managerial fad” according to (kitchen et al., 2004).

According to Edminston (2009) researchers have been inconsistent as to whether IMC represents ‘integrated marketing communication’ or ‘integrated marketing communications’ While a simple letter ‘s’ may seem to be a minor difference, there are major implied differences between the two terms. The term ‘ communication ’ is defined as ‘ the act of communicating; transmission ’ ( Communication, n.d. ) while the term ‘ communications ’ is defined as ‘ the technology employed in transmitting messages ’ ( Communications, n.d. ). Sometimes the ‘communication’ and ‘communications’ used interchangeably.

*Integrated marketing communication concept*

The integrated marketing concept is not a novel concept, as it is researched on the 1980s by the economic researchers (Hutton, 1996). The discussion surrounding IMC stems from a lack of consensus whether the IMC is just regular marketing communication given new buzz words but without addition of novel and newer things, or IMC is a type of marketing communication that are vastly different with its legacy marketing communication. (Beard, 1996) . Hutton (1996) though opinioned that finding differences between IMC (integrated marketing communication) and MC (marketing communication) is not easy, and even impossible, because integrated marketing communication itself will not be separated and cannot be separated with the "spirit" of the marketing communication, thus calling the attempt to separate IMC and MC are pure philosophical debate that will have no strategic management impact whatsoever.

Moharam and Shawky stated that “integrated marketing communication concept highlights the need to maintain a clear and consistent message throughout all marketing media channels and across all marketing communications messages”. According to brunello(2013) “The eventual role of the Integrated Marketing Communication is to convey a consistent message to customers. Effective Integrated Marketing Communication approaches foster companies to effective usage of promotional resource and to build longer term sustainable consumer relationships”. Schultz (1993) stated that “Integrated Marketing communications is the process of developing and implementing various forms of persuasive communication programs with customers and prospect over time”. (American Association of Advertising Agencies) claimed that integrated marketing communication “a concept that recognizes the added value of a comprehensive plan that evaluates the strategic roles of a variety of communication disciplines, and combines these disciplines to provide clarity, consistency and maximum impact. Furthermore (Jones and schee as cited in brunello 2013) explained that “integrated marketing communication represents a combination of direct marketing, general advertising, sales promotion and public relations”.

According to Pauwels (2013) integrated marketing communication must fulfill three basic functions : increase the awareness of product and services, change customer buying behavior, or increase the awareness of current or future marketing communication attempts to the customer regarding the said product and services. Increasing the awareness of the product and services will allow the customer to re-calculate the purchasing habits, hopefully allows switching of product from other product to current organization product. Pauwels (2013) also notes that it is important that customer expects further marketing communication, as this will allow the customer to make a "proper" response from the customer. IMC must made as such to get a "proper" response from customer (Erdogmus&Cicek, 2012).

Sisodia and Telrandhe stated that “Integrated marketing communication is integration of all marketing tools, approaches, and resources within a company which maximizes impact on consumer mind and which results into maximum profit at minimum cost”. Schultz as cited in Peltier et al., (2003) stated that “Integrated marketing communication is the result of a natural evolution from the use of mass-market advertising to more targeted message strategies”. Moreover (Rehman and Ibrahim 2011) explained that integrated marketing communication can build a positive image and brand awareness of a company, as they stated that “Integrated marketing communication is thus the voice of marketing creating brand awareness, deliver information, educate the market and make a positive image of the company. ” Mongkol (2014) clearly stated that Integrated marketing communication is a tool to convey the message of the brand, Mongkol stated that integrated marketing communication “is the marketing tool of consistent brand messaging across both traditional and non-traditional marketing channels and using different methods to reinforce each other”.



Katrandjiev (2000) stated that “this concept of Integrated marketing communication enables adequate tendencies accompaniment in the modern business conditions, which deal with internet application in business activities, globalization and brand image importance”. he also said that “The way to reach considerable sales volume and to build a strong brand image’ is called integrated marketing communication” katrandjiev(2000). Katrandjiev (2000) said that “combining the marketing communication tools and a solid campaign can be an effective impact, also integrated marketing communication programs give chance to low-budget campaign”. Furthermore from Katrandjiev (2000) “while Technology can gives power to competitors and consumers the same technology also enables to operate new levels. Mechanisms for two-way communication are more efficient and fluid than ever. by using technology to support Integrated Marketing Communication concepts, Companies can go beyond customer expectations and also the competition”. More from Katrandjiev (2000) he said that “IMC is planned, developed, executed, and evaluated with affecting one specific consumer behavior in mind, the process of making purchase now or in future”. He also said “the concept of integrated marketing communication means a long-term synchronization of messages and campaigns” Katrandjiev (2000).

The idea of Katrandjiev about Integrated marketing communication and technology is supported by (Kucukosmanoglu et al., 2010) which stated “Integrated Marketing Communications (IMC) is considered as one of the most prominent benefits of technology in the marketing communications field since the early 1990s”. (Kucukosmanoglu et al., 2010) said that “IMC is recognized as beneficial to the accomplishment of business objectives on one hand, and the key of competitive advantage on the other”. Kliatchko (2008) considered that “Integrated marketing communication is an audience-driven business process of strategically managing stakeholders, content, channels, and results of brand communication programs.” According to Luck and Moffat (2009) “IMC’s emphasis is on communication and its core concepts of nourishing profitable relationships and building brand equity are equally important to services marketers.”

Integrated marketing communications (IMC) “has become a popular approach with both clients and communication agencies Vel and Sharma” (2010). According to Vel and Sharma (2010) “Integrated Marketing Communication concerns the use of three main elements; tools, media and messages”. Vel and Sharma (2010) stated that integrated marketing communication requires that organisations coordinate their various strategies, resources and messages in order that it engages coherently and meaningfully with target audiences. Integrated marketing communication to deliver its desired output, it should in the first place be a strategic combination of the relevant communication mix tools including Advertising, Personal Selling, Sales promotion, Direct Marketing and Public relations, carefully selected message and the choice of right media mix Vel and Sharma (2010).

“Integrated marketing communication is a strategic business process used to plan, develop, execute, and evaluate coordinated, measurable, persuasive brand communication programs over time with consumers, customers, prospects, and other targeted, relevant external and internal audiences” Schultz and Schultz (2004). According to the Schultz and Schultz (2004) “Integrated marketing communication, however, uses multiple communication methods to focus on the customer with the overall objectives of acquiring, maintaining, growing, or migrating customers in order to generate greater and most consistent income flows over time. Schultz and Schultz also (2004) claimed that Integrated requires evaluating these activities not only as separate events but as part of an overall and ongoing program that continues to contribute to results and to build longterm relationships with customers over time. Schultz and Schultz (2004) “Integrated marketing communication process is to gain meaningful insights into the needs, wants, and wishes of those individuals or companies the firm wishes to serve”. According to Schultz and Schultz (2004) “IMC is about 5 R which are

Relevance, receptivity, response recognition, and relationship". For IMC to succeed, all communication systems must be interconnected and interactive so the customer is served and not impeded Schultz and Schultz (2004).

According to Belch and belch (2003) "integrated marketing communications (IMC) perspective, which calls for a "big picture" approach to planning marketing and promotion programs and coordinating the various communication functions". "Process of integrated marketing communications (IMC), which involves coordinating the various promotional elements and other marketing activities that communicate with a firm's customers. Belch and belch (2003).Belch and belch (2003) stated that "Each element of the promotional mix is viewed as an integrated marketing communications tool that plays a distinctive role in an IMC program" the promotional mix which are; advertising, direct marketing, interactive or internet marketing, sales promotion publicity/ public relations, and personal selling. Belch and belch (2003) stated that the "integrated marketing communications program can be designed to influence the response process in favor of the company's product or service".

Brunello (2013) stated that "Integrated marketing communication strategy plays a majorrole in persuading customers to buy the products or services of a particular firm". "IMC has a much more significant value: it contributes to the development of a company's brand equity" (Brunello 2013). Brunello (2013) considered that "the eventual role of the IMC is to convey a consistent message to customers". According to Brunello (2013) "effective IMC approaches foster companies to effective usage of promotional resource and to build longer term sustainable consumer relationships". Integrated marketing communication refers to speaking with one voice, eliciting a response Brunello (2013). Brunello stated that "integrated marketing communication strategy is essential to the firm's strategic brand development and that it strengthens the interface between the company' s brand identity strategy and its customer-based brand equity, that is, brand awareness and brand image.

Furthermore according to Brunello (2013) "Integrated marketing communication represents the reunion of all marketing tools, approaches, and resources within a company which maximizes the impact on the consumer's mind and which leads to maximum profit at minimum cost". Brunello (2013) declared that "the integration of all these promotional tools along with other components of the marketing mix to gain edge over competitors is referred to as Integrated Marketing Communication". Integrated marketing communication has been advanced as a strategic business process that could contribute to building brand value (Brunello 2013).

According to Carlson et al., (2003) "Integrated marketing communications (IMC) potentially can create synergy and produce a consistent front among communication tools and to help generate customer databases that can lead to effective target marketing". "Such outcomes are desirable goals for service organizations who struggle with promoting intangible offerings Carlson et al., (2003). Carlson et al., (2003) stated that "well-devised program of integrated marketing communications has the capability of producing this end by heightening the tangibility of the service product and generating consumer information that leads to more effective communication". Carlson et al., (2003) considered that "Integrated Marketing Communication is an attempt to accomplish one or all of three goals: build brand equity, provide product or feature information, or communicate or differentiate a product position. Integrated marketing communication is embraced by service organizations and how it is manifested in their advertising efforts (Carlson et al., (2003). According to eagle et al., (2006) Integrated Marketing Communication "is developed as a practice and philosophy in response to changing business environments, concomitant with heightened expectations of greater effectiveness and efficiency in all marketing communication activity. Elliot and boshoff (2008) stated that "An IMC approach to marketing communication ensures that a firm's messages, positioning and use of communication tools are coordinated and consistent".

According to Fitzpatrick (2005)“Integrated marketing communication involves the merging of distinct communication functions in a way that allows an organization to speak with one voice, one look”

Šerić, Gil-Saura, & Ruiz-Molina (2014) stated that IMC is a response by the marketers to respond to current change in how marketing is communicated, and how buying and selling patterns are evolving in the market. The goal of the IMC is similar, is to increase the awareness of the brand, product, and services, erodes the loyalty of the customer on other products and services, increase the switch factors to the current product and services, and change buying habits of the customer.

Hartley and Pickton (2001) have a quite different approach with IMC, that stated that IMC is defined as an integration of various marketing communication that embraces the elements of marketing mix, the 4Ps, which are the price, product, promotion, and place.

Kitchen and Burgman (2010) stated that “integrated marketing communication can help in creating coordinated and consistent messages across various channels of communication”. Most managers perceive IMC as a process which encourages message integration and consistency, thus facilitating the interpretation of information for customers. IMC “ helps to create a consistent marketing communication approach focusing on the long-term brand value of both corporate and product brand, which should lead to significant synergy effects” Kitchen and Burgman (2010). Kitchen and Burgman (2010) declared that “IMC, as a strategic business process, should therefore be implemented and applied throughout the organization.

Kliatchko (2005) Defined that Integrated Marketing Communication is the concept and process of strategically managing audience-focused, channel-centred, and results-driven brand communication programmes overtime. According to Rehman and Ibrahim (2011) the various steps in an integrated marketing communication process are:

- Identify the audience to be targeted.
- Determine objectives of your communication.
- Design the message of communication.
- Select your media channel.
- Decide the budget.
- Decide the marketing communication mix.
- Measuring your results.
- Managing and coordinating IMC.

*Concepts and the development of integrated marketing communications*

Below I will convey some of the concept and the development of Integrated Marketing Communications :

Table 1  
Concepts and the development of Integrated Marketing Communications

Researchers	Concepts introduced
(American Association of Advertising Agencies	a concept that recognizes the added value of a comprehensive plan that evaluates the strategic roles of a variety of communication disciplines, and combines these disciplines to provide clarity, consistency and maximum communication impact.
Jones and Schee, 2008 as cited in Brunello (2013)	“integrated marketing communication represents a combination of direct

Researchers	Concepts introduced
	marketing, general advertising, sales promotion and public relations” represents a combination of direct marketing, general advertising, sales promotion and public relations
Schultz 1993 as cited in Kitchen, Brignell, Li, Jones (2004)	IMC is the process of developing and implementing various forms of persuasive communications programs with customers and prospects over time process of developing and implementing various forms of persuasive communications programs with customers and prospects over time
Percy, Rossiter and Elliot (2001) as cited in Kitchen et.al (2004)	planning and execution of all types of marketing communication needed for a brand, service, or company to satisfy a common set of communication objectives, or put more specifically, to support a single positioning.
Duncan (2002, p.8) as cited in Dewhirst and Davis (2005:81)	“a cross-functional process creating and nourishing profitable relationship with customers and other stakeholder by strategically controlling and influencing all messages sent to these group and encouraging data driven, purposeful dialogue with them”.
Smith 1999 as cited in holm 2006 pg.24.	Ensuring the brand positioning, personality and messages are delivered sinergitistically across every element of communication and are delivered from a single consistent strategy. -a concept of marketing -communications planning that recognizes the added value of a comprehensive plan that evaluates the strategic roles of a variety of communications disciplines (for example general advertising, direct response, sales promotion, and public relations)
Phelps et al. (1996) as cited in (2003)et al. pg. 94	as a solution for achieving synergy in advertising planning and execution, with the end result being enhanced efficiency, productivity and performance -natural evolution of traditional mass-media advertising, which has been changed, adjusted and refined as a result of new technology.”
Kotler and Armstrong, (1999) as cited in Elliot and Boshoff (2008)	a concept of marketing communications planning that recognizes the added value of a comprehensive plan that evaluates the strategic roles of a variety of communications disciplines (for example general advertising, direct response,

Researchers	Concepts introduced
	<p>sales                      promotion, and public relations)                      -the strategic coordination of all messages and media used by an organization to influence its perceived brand value.”</p>
Sisodia and Telrandhe (2010:135)	<p>Integrated marketing communication is integration of all marketing tools, approaches, and resources within a company which maximizes impact on consumer mind and which results into maximum profit at minimum cost                      - powerful tool in reaching target audiences with persuasive messages</p>
Schultz (1999) as cited in Gabrielli and Balboni (2010)	<p>IMC “. . . appears to be the natural evolution of traditional mass-media advertising, which has been changed, adjusted and refined as a result of new technology.”                      -marketing tools                      -approaches                      -resources                      -maximizes impact on consumer mind                      -results into maximum profit at minimum cost</p>
Duncan and Everett (1993) as cited in Gabrielli and Balboni (2010)	<p>“the strategic coordination of all messages and media used by an organization to influence its perceived brand value.”                      -The strategic analysis                      -Choice                      - Implementation                      - Control of all elements of marketing communications that efficiently (best use of resources), economically (minimum costs) and effectively (maximum results) influence transactions between an organization and its existing and potential customers, consumers and clients.</p>
Pitta, Weisgal, and Lynagh (2006 p. 156)	<p>IMC is a powerful tool in reaching target audiences with persuasive messages.                      -A planning process                      -evaluates the strategic and synergistic role of a variety of communication disciplines                      -integrate them across the firm</p>
Vargas 2005 as cited in kajianSaeed, Naeem, Bilal, and Naz 2013 pg 127	<p>“IMC process is concerned with the identifications of target audience, determination of the communication objectives, designing of the message content, selecting the means for communication, defining the media mix, budget &amp; priorities and measuring the effectiveness of</p>

Researchers	Concepts introduced
	<p>effort.”</p> <ul style="list-style-type: none"> <li>-identifications of target audience</li> <li>- determination of the communication objectives</li> <li>- designing of the message content</li> <li>-selecting the means for communication</li> <li>-defining the media mix budget</li> </ul> <p>Priorities</p> <ul style="list-style-type: none"> <li>- measuring the effectiveness of effort</li> </ul>
Menurut Smith et al., (1999) as cited in Herstein, Mitki, and Jaffe (2008 p. 361)	<p>The IMC concept has been formulated as: the strategic analysis, choice, implementation and control of all elements of marketing communications that efficiently (best use of resources), economically (minimum costs) and effectively (maximum results) influence transactions between an organization and its existing and potential customers, consumers and clients.</p> <ul style="list-style-type: none"> <li>-a solution for achieving synergy in advertising planning and execution.</li> <li>-Enhanced efficiency</li> <li>-productivity</li> <li>- performance</li> </ul>
Schultz 1999	<p>“IMC is the result of a natural evolution from the use of mass-market advertising to more targeted message strategies.”</p> <ul style="list-style-type: none"> <li>-natural evolution from the use of mass-market advertising</li> <li>-to more targeted message strategies</li> </ul>
Kitchen et al., (2004) as cited in Madhavaram, Vishag and Mcdonald (2005:71)	<p>IMC is no longer just a communication process, but a process associated with management and brands.</p>
(Gronroos, 2004; Kitchen, 1993; Baines et al., 2008 as cited in Vel and Sharma 2010 p. 372)	<p>IMC is as a strategic approach to the planned management of an organisation’s communications</p> <ul style="list-style-type: none"> <li>-Brand positioning</li> <li>-personality</li> <li>-messages</li> </ul>
Zahay (2004) as cited in Reid (2005) pg.42	<p>As a planning process that evaluates the strategic and synergistic role of a variety of communication disciplines and considers how best to integrate them across the firm</p> <ul style="list-style-type: none"> <li>-strategic approach to the planned management</li> <li>-an organization’s communications</li> </ul>
Rehmann and Ibrahim 2011 p. 189.	<p>Integrated marketing communication is thus the voice of marketing creating brand awareness, deliver information, educate the market and make a positive image of the company.</p> <ul style="list-style-type: none"> <li>-the voice of marketing</li> <li>-creating brand awareness,</li> </ul>

Researchers	Concepts introduced
	<ul style="list-style-type: none"> <li>-deliver information</li> <li>- educate the market and make a positive image of the company.</li> </ul>
Mongkol (2014 p. 445-446)	<p>“is the marketing tool of consistent brand messaging across both traditional and non-traditional marketing channels and using different methods to reinforce each other”</p> <ul style="list-style-type: none"> <li>-marketing tool</li> <li>-consistent brand messaging</li> <li>-traditional</li> <li>-non-traditional</li> <li>-Advertising</li> <li>-promotion</li> <li>-event marketing</li> <li>- public relations</li> <li>- direct marketing</li> <li>Personal selling</li> <li>- word of mouth</li> <li>- marketing</li> <li>- interactive marketing</li> </ul>

Basically what Rehman and Ibrahim stated about IMC is about the comprehensive plan of integrated marketing communication. Similar to the Rehman and Ibrahim’s steps, Vargas (2005) also propose that “an effective integrated marketing communication compromises the following steps which are identify the target audiences, determine the communications objectives, design the messaging content, select the means for communications define the mix of media, budget and priorities , measure the effectiveness and efforts”. According to Vargas (2005) “Execution of Integrated marketing association needs evaluation process to ensure the effectiveness of the effort”. Further Vargas (2005) stated that “integrated marketing communication is a way of looking at the whole marketing process from the viewpoint of the customer”. Further according to (schultz & schultz, 2004) (1993) “ the goal of integrated marketing communication is to influence or directly affect the behavior of the selected communications audience. Schultz (1993) stated that “Integrated Marketing Communication makes use of all forms of communication which are relevant to the customer and prospects, and which they might be receptive”. Percy, Rossiter and Elliot as cited in Kitchen et.al (2004) stated that Integrated marketing communication “planning and execution of all types of marketing communication needed for a brand, service, or company to satisfy a common set of communication objectives,or put more specifically, to support a single positioning”.

Duncan as cited in Dewhirst and Davis (2005:81) stated that “a cross-functional process creating and nourishing profitable relationship with customers and other stakeholder by strategically controlling and influencing all messages sent to these group and encouraging data driven, proposeful dialogue with them”. Smith 1999 as cited in holm 2006 Ensuring the brand positioning, personality and messages are delivered sinergitistically across every element of communication and are delivered from a single consistent strategy. AMA stated that integrated marketing communication as “a planning process designed to assure that all brand contacts received by a customer or prospect for a product, service, or organization are relevant to that person and consistent over time Kotler and Keller marketing communications planning that recognizes the added value of a comprehensive plan to evaluate the strategic

roles of a variety of communications disciplines, and that combines these disciplines to provide clarity, consistency, and maximum impact through the seamless integration of discrete messages. Integrated marketing communication “. . . appears to be the natural evolution of traditional mass-media advertising, which has been changed, adjusted and refined as a result of new technology” Schultz (1999) as cited in Gabrielli and Balboni (2010)

Duncan and Everett (1993) as cited in Gabrielli and Balboni (2010) claimed that “the strategic coordination of all messages and media used by an organization to influence its perceived brand value.” Pitta et al., (2006 p. 156) stated that “integrated marketing communication is a powerful tool in reaching target audiences with persuasive messages. Smith et al., (1999) as cited in Herstein et al., (2008) The Integrated marketing communication concept has been formulated as: the strategic analysis, choice, implementation and control of all elements of marketing communications that efficiently (best use of resources), economically (minimum costs) and effectively (maximum results) influence transactions between an organization and its existing and potential customers, consumers and clients. (Gronroos, Kitchen, Baines et al., as cited in Vel and Sharma 2010) IMC is as a strategic approach to the planned management of an organisation’s communications. Zahay as cited in Reid (2005) claimed that integrated marketing communication as “a planning process that evaluates the strategic and synergistic role of a variety of communication disciplines and considers how best to integrate them across the firm

## **Discussion**

In this section we will summarize the essence, role, function and what the Integrated marketing communication concept is about.

Moharam and Shawky (2012) : concept- maintain a clear consistent message through all marketing media channels- across all marketing communication message. Brunello (2013): consistent message-Promotional resources- build long term relationship. Schultz (1993): added value of comprehensive plan-variety of communication discipline- general advertising-direct response-sales promotion- public relation- to provide clarity, consistency and maximum impact-influence and affect behaviour-selected communication audience- receptive customer. American association of advertising agencies: concept-comprehensive plan-communication disciplines-provide clarity and maximum impact. Jones and Schee as cited in Brunello (2013): Promotional mix. Sisodia and Telhandre: integration of marketing tools-resources of company-maximize impact-consumer’s mind- minimum cost. Rehman and Ibrahim: built positive image-brand awareness-educate the market-deliver information-comprehensive plan. Mongkol: Marketing tool-consistent brand message- traditional and non-traditional marketing channels. Katrandjiev: internet application in business activities-globalization-brand image-increase sales volume-marketing communication tools-solid campaign-low budget campaign-technology-planned-developed-evaluated-affecting-consumer behavior in mind-long term synchronization of messages. Kucukosmanoglu: technology –competitive advantage. Kliatchko: Audience-driven business process-strategically managing stakeholder content, channels and result brand communication program-overtime. Luck and Moffat: Nourishing profitable relationship and building brand equity. Vel and Sharma:clients and communication agencies with three main elements: tools, media and messages-strategies-resources-meaningful messages-targeted audiences-deliver desires output-combination mix of tools-selected messages-choice of media mix. Schultz and Schultz: strategic business process used to plan, develop, execute, evaluate coordinated-measurable - persuasive brand communication programs over time- multiple communication method-focus on customer-overall objectives acquiring, maintaining, growing, customers in order to get greater and most consistent income flows-contribute result-long term relationship-meaningful insight-relevance-receptivity-response-recognition and relationship. Belch and



Belch: Promotional mix-influence the response process in favor of the company product or services. Brunello: marketing tools approaches-resources-maximize the impact on consumers' mind and profit at minimum cost-promotional tools-marketing mix-business strategic process-build brand value. Carlson : Create synergy-communication tools-generate customer database- Heightening the tangibility of the service product-Generating consumer information-effective communication-build brand equity-Provide product or feature information-communicate or differentiate product position. Eagle et al.,: practice-philosophy heightening expectation through effectiveness and efficiency in all marketing communication activity. Elliott and Boshoff: ensure a firm's message- positioning-communication tools-coordinated and consistent messages. Kitchen and Burgman: creating coordinated and consistent message- various channels of communication-facilitating the interpretation of information for customer-focusing on long term brand value. Vargas: comprehensive planning and marketing process from customer point of view. Percy et al., as cited in Kitchen et al.,: Planning and execution- all types of marketing communication- brand positioning. Duncan as cited in Dewhurst and Davis: Process creating and nourishing profitable relationship-control and influencing all messages. Smith as cited in Holm: Brand positioning-personality-messages delivered synergistically - delivered from single consistent strategy. AMA :planning process –brand contacts- consistent over time. Kotler And Keller: Marketing communication planning -recognizes added value to evaluate strategic roles- variety communication disciplines-provide clarity- consistency-maximum impact-seamless integration of discrete messages. Duncan and Evered as cited in Gabrielli and Balboni: Strategic coordination of all messages -media -perceived brand value. Pitta et al: tool to reach target audiences persuasively. Smith et al., Herstein: the strategic analysis, choice-implementation - control-elements of marketing communications-efficient (best use of resources) - economical (minimum costs) - effective (maximum results) influence.

There are some similarities of points of the concepts that have been presented in the table which are American Association of Advertising Agencies, Kotler and Armstrong as cited in Elliot and Boshoff, Percy et al., as cited in Kitchen et al., Smith et al., as cited in Herstein et al., Jones and Schee as cited in Brunello-Gronroos, 2004; Kitchen, 1993; Baines et al., as cited in Vel and Sharma also Mongkol which are a comprehensive plan/planning, added value, marketing tools, advertising, promotion etc.

American Association of Advertising Agencies as cited in Brunello, 2013 and Smith et al., (1999) as cited in Herstein, Mitki, dan Jaffe (2008 p. 361) SisodiadanTelrandhe (2010:135) Integrated marketing communication needs to get a maximum impact on consumer's mind and maximum result. Pitta et al., and Schultz as cited in Kitchen et al., can be a powerful tool to reach audience persuasively.

Based on the studies that have been presented so this paper proposes that IMC is the act of a strategic and synergistic planning and implementing which involving all forms of marketing communication tools and technology continuously and persuasively, in order to get the maximum impact on consumers and also to create and maintain the company's relationship with its customers and stakeholders over time.

## **Conclusion**

This article aims to provide the clarity of integrated marketing Communication concept by analyzing and comparing the existing concepts or definitions from books, articles, journals and other sources. The implication of the finding that integrated marketing communication is a concept that integrates variety of communication disciplines, approaches and company resources to maximize the impact on customer that leads to maximum profit and low cost. The original contribution of this paper is to redefine the concept of integrated

marketing communication. But there is still wide open for scholars to conduct in-depth studies of Integrated Marketing Communication (IMC) considering the very breadth of its scope.

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**VALIDITY OF PFEFFER MODEL TO SRI LANKAN MANUFACTURING SMALL  
AND MEDIUM ENTERPRISES**

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**Abstract**

The purpose of this study is to examine the effectiveness of human resource management (HRM) practice and operational performance in manufacturing small and medium enterprises (SMEs) in Sri Lanka. Researcher used the Pfeffers' model from marketing research to explain and examine how HRM practices impact to operational performance of the SMEs. The study was conducted relating to 448 manufacturing SMEs in Sri Lanka. The structured questionnaire was administrated to cover 428 Human Resource Managers/Executives or responsible authorities in various SEMs in Sri Lanka; however data were possible to be collected from 135 only, making a responded rate of 30.1 per cent. The results of the study showed significant and positive relationship with seven HRM practices: employment security; selective hiring; use of self-managed teams and decentralization; use of compensation contingent on organizational performance; the extent of training; reduced status distinctions and sharing of information with manufacturing SMEs performance in Sri Lanka. Regression analysis was to examine the impact of the variables and it was found that 32.4 percent of the variance in the dependent variable is jointly and significantly explained by the collective variance in all the independent variables considered in the study Findings of the study will be important on the practical ground.

**Introduction**

Given contemporary financial market constraints and limited growth in demand, smaller firms refocusing increasingly on how to utilize existing resources more efficiently and effectively (Gallego et al., 2012). Given their resource limitations, small and medium-sized firms have fewer options than their larger counterparts to improve performance. However, one resource that is common to all organisations, which has been the focus of increasing theoretical, empirical and practical attention in small and medium sized enterprises (SMEs), is that of human resources. Pfeffer (1998), Wimbush (2005) noted that most valuable asset that an organization can possess is its human resource. Subsequently, human resources in the organization can vitally contribute to the success (or failure) of the organization. Hence, scholars have suggested that adopting specific human resource management (HRM) practices can improve small firm performance and sustain competitiveness (e.g. Michie and Sheehan, 2008; Patel and Cardon, 2010; Razouk, 2011; Williamson et al., 2002).

Most of Western based studies ( Delaney & Huselid 1996; Delery & Dot 1996; Huselid 1995; MacDuffi 1995; Pfeffer 1998; Wimbush 2005; Vlachos 2008; Michie and Sheehan, 2008; Patel and Cardon, 2010; Razouk, 2011, Sheehan, 2013) have revealed that human resource practices can enhance organizational performance. In addition, prior empirical studies have indicated that some human resource practices positively association with organizational performance. Researchers in the field of human resource management suggest that more future empirical investigations need to be carried out to ascertain and validity these findings (Brewest 2004; Givord & Mauri 2004). This is important consideration

as human resource practices are found to vary across countries and these variations are postulated to cultural values a country possesses (Ngo, Turban, Lau & Lui 1998), and also organizational size (Heneman, Tansk & Camp 2000). Majority of findings from human resource management – performance research in large firms points in the direction of a positive relationship (Combs et al., 2006). There are reasons to assume that these are not necessarily applicable to small and medium enterprises (SME). In comparison with large organizations, SMEs lack of economic of scale, less number of employees, and HR decisions in SMEs are usually taken by owners/managers in an informal and personalized manner (De Winne & Sels, 2013).

Over the years, researchers have suggested many HRM practices that have the potential to improve and sustain organizational performance. These practices include emphasis on employee selection based on fit with the company's culture, behavior, attitude and necessary technical skill (Ahmad & Schroeder, 2003). Same time growing number of empirical studies have confirmed that not every HR practice can impact on organizational performance or organizational sustainability (Ahmad & Schroede 2003; Cardon & Stevens 2004; Barring, Jones & Neubaum 2005, Boxall, 2013). Pfeffer (1998) has proposed seven HRM practices that are expected to enhance organizational performance. The practices proposed by Pfeffer (1998) are; employee security, selective hiring of new personnel, self-manage teams of decision making as the basic principles of organizational design, comparatively high compensation contingent on organizational performance, extensive training, reduced status distinctions and barriers, including dress, language, office arrangements, and wage differences across levels and extensive sharing of financial and performance information throughout the organization. Few empirical examinations have been carried out this model to understand the effect of HR practices on organizational performance (Vlachos 2008; Subramaniam, Shamsudin & Ibrahim 2011). These prior studies in HRM practices and performance by using Pfeffer model were mainly focusing large scale firms. With exception to Subramaniam, Shamsudin & Ibrahim (2011), the above studies were oversea based. Thus, HRM practices and performance in SMEs sector amongst Sri Lanka is still understudied.

There are two objectives of the present study based on these practices. First, to understand whether manufacturing SMEs' in Sri Lanka use of these seven practices. Second, whether these seven practices are impact to performance of manufacturing SMEs in Sri Lanka and check the usefulness of this model to Sri Lanka context.

### **Theoretical background and hypotheses**

In order for firms sustain competitive advantage, resource-based view (RBV) of the organization postulates that better performance is the result of mix of human resource practices (Barney 1991; Sheehan 2013). Razouk (2011) said that organization can develop a sustainable competitive advantage only by creating value through internal resource and RBV emphasizes the internal characteristics of the firm (Sheehan 2013), Barney (1991) noted that resource that are rare, valuable, inimitable, and non-substitutable can provide sources of sustainable competitive advantages. In contrast with other resources that are easier to imitate, the management of human resources is complex, ambiguous and dynamic, and thus a potential source of significant competitive advantage (Barney & Wright, 1998; Backer & Huselid, 1998, Razouk, 2011, Sheehan 2013). Several researchers (Cappelli & Singh 1992; Wright et al 2001) showed the relationship between the RBV and the HRM is widely and finally it effect on the firm performance (Ahmad & Schroede 2003; Cardon & Stevens 2004; Barring, Jones & Neubaum 2005, Razouk 2011; Boxall, 2013; Sheehan 2013). In addition to that human resources is regarded as a crucial input to the resource base of the firm (Barney & Wright, 1998; Backer & Huselid, 1998; Huselid 1995) because better management of human

resources contributes to sustained competitive advantage. But the management of human resources is differently in SMEs and larger firms. But several researchers have called for more research on HRM in SMEs, especially give the role and pervasiveness of SMEs in the economy (Cassell et al, 2002).

There is a little agreement as to which HRM best practices can be consider as strategic in an organization (Paauwa, 2004). Much of the prior research on the relationship between HRM practices and organizational performance has concentrated on a single HR practice (Wattanasupachoke, 2009; Tessema & Soeters, 2006) however, a growing number of researchers have argued for instituting complementary bundles of HRM practices to enhance organizational performance (Osterman 1994; Sheehan, 2013). The first works on HRM in SMEs have claimed for a long time that these last invest less inhuman capital and that their HRM practices remain informal (Mayson and Barrett 2006). One reason of this fact is the concentration on the financial aspects in SMEs. Marlow and Patton (1993) argue that the concentration on financial criteria for SME success has led to an imbalance in research towards financial investigation and away from human capital and reinforced the argument that HRM within SMEs may not be real. However, as SMEs control their own fate and involve everyone in the business, they are the best image for the involvement-oriented approach (Lawler 1992). A further issue complicating analyses of the HRM–performance relationship is the potential for the difference between rhetoric and reality regarding policy presence and implementation (Legge, 2005). Specifically, a human resource practice may formally be in place, but it may be delivered only sparingly, especially when delivery has been devolved to line managers and/or is not consistently applied to all employees (Legge, 2005; Bowen and Ostroff, 2004; Guest and Conway, 2011). In the small firm context, given the importance of informal practices, any survey about whether a formal practice is in place or not has the potential to underestimate, and possibly misrepresent, the extent to which human resources are managed in practice, since the use and effectiveness of informal management will not be captured in a survey.

Pfeffer's seven HRM practices are internally consistent with one another. The seven practices are expected to foster such inimitable attributes in human resources and, thereby help an organization attain competitive advantage. Several researchers (Delery and Doty, 1996; Huselid, 1995; Arthur, 1994; Osterman, 1994) including Pfeffer (1998) have argued why these practices are expected to enhance organizational performance. . However, Ahmad & Schroeder (2002) noted, empirical validation of the findings in operations across countries and/or industries is nearly non-existent and very limited at best. But, the impact of HRM practices on organizational performance as proposed by Pfeffer (1998) can be generalized across manufacturing plants operating in different industries and countries. Therefore, present study set of hypothesis below.

**H1.** *Each of the following seven HRM practices: employment security; selective hiring; use of self-managed teams and decentralization; use of compensation contingent on organizational performance; the extent of training; reduced status distinctions and sharing of information will be positively related to manufacturing SMEs performance in Sri Lanka.*

## Methodology

### *Sample and Data collection*

To achieve the research objective, a survey was carried out amongst SMEs in Western Province of Sri Lanka only because more than 46 percent of manufacturing SMEs are located in this area. According to Chelliah, Sulaiman, and Yusoff (2010), SMEs are usually define by socioeconomic development of each country. For example, in the US, Carusgil, Knight and Riesenberger (2008) defined SMEs as a company with 500 or fewer employees while in

Taiwan SMEs it is 650 employees or less (Lin & Chane, 2007). However, in Sri Lanka, does not have a nationally accepted definition for small and medium enterprises. For example, the Department of Small Industries defines SMEs as those with a capital investment of less than Rs. 5 Million, and which employ less than 50 employees; Export Development Board defines SMEs as those with a capital investment of less than Rs. 20 Million in plant, machinery and equipment excluding land and buildings and an annual export turnover not exceeding Rs. 40 Million and total annual turnover not exceeding Rs. 100 million ([www.srilankabusiness.com](http://www.srilankabusiness.com)); Department of Census and Statistics has defined an establishment with less than 10 persons engaged was considered as a small establishment and an establishment with 10 or more persons engaged was considered as a large establishment (Census of Industry 2010). Therefore, researcher, adapted definition given by World Bank in 1997 for this study. According to them, a small enterprise was defined to include 1-49 workers, and a medium enterprise with 50-99 (Ayyagari *et al*, 2003). At the initial stage, six hundred manufacturing SMEs were selected to the sample by applying random sampling procedure. After the cross checking with particular firms researcher was identified that hundred and fifty two SMEs are not come under the World Bank definition. Hence, these SMEs were dropped from the sample.

The questionnaire was prepared to be in line with the research objectives and variables. Basically closed questions are used since the research outcome is mostly quantitative study than qualitative. Structural questionnaires were sent out to selected four hundred forty eight firms namely to human resource manager and in some instances the owner or proprietor of the organization. The questionnaire was pilot tested with randomly selected organizations first before final distribution and several changers were incorporated based on the feedback received. The participants were given three weeks to respond to the questionnaire and a follow-up call was made to remind them also. After the stipulated time period given to them, only hundred and thirty five questionnaire were returned and used for analysis, making a responded rate of thirty per cent.

### **Measurements**

The items used to measure seven HRM practices were adapted from Pfeffer (1998) and Ahmad & Schroeder(2003) respectively. A set of Likert scales was used to measure pertinent constructs. Each item of a construct was answered using the following five-point scale: strongly agree (5), agree (4), neutral (3), disagree (2), and strongly disagree (1). Organizational performance was measured using Vlachos's (2008) instrument, which tapped the categories of self-reported measures on organization specific, market specific and overall organization. Past empirical research has mostly investigated the effects of HRM practices on financial performance (Delery and Doty, 1996) and some on efficiency and employee turnover (Huselid, 1995). However, very few studies have examined the impact of HRM practices on operational performance measures, such as quality, cost or delivery (MacDuffie, 1995) or intangible performance measures, such as organizational commitment (Kalleberg and Moody, 1994). Backer and Gerhart (1996) said that "*The appropriate dependent variable will vary with the level of analysis, but in each case the focus should be on variables that have inherent meaning for a particular context*". Because the unit of analysis for this study is a manufacturing SMEs, Hence, HRM practices will impact the operational performance measures at the organizational level. Therefore, this study investigate the impact of HRM practices on operational performance measures. The content validity of a construct was ensured through pre-testing of the questionnaires and structured interviews with the managers in the field. Each scale was evaluated for its reliability and uni-dimensionality. A value of Cronbach's alpha of 0.7 or more was used as a criterion for a reliable scale (Nunnally, 1978).

**Results**

The data has been analyzed in Statistical Package for Social Sciences (SPSS). Correlation analysis technique is used to find out the relationship among the variables and their relative strength. The results are given in table 1.

**Table 1: Mean and Correlation of HRM practices and organization performance**

HRM Practices	Mean	1	2	3	4	5	6	7	8
employment security	3.35	1							
selective hiring	4.32	0.31*	1						
self-managed teams	4.08	*	0.38*	1					
decentralization	3.32	0.24*	0.33*	0.28*	1				
compensation	4.58	0.27*	0.42*	0.39*	0.32*	1			
training	4.19	0.39*	*	0.47*	0.35*	0.37	1		
sharing of information	3.40	0.40*	0.53*	0.32*	*	*	0.41	1	
Organization performance	4.21	*	0.27*	0.36*	0.43*	0.42	*	0.39	1
		0.29*	0.47*		0.34*	*	0.47	*	
		0.38*				0.56	*		
						*			

significant at \*P < 0.05; \*\*P < 0.01

Table 1 presents the means and correlation values of the variables. High mean values indicated that most of organizations agreed the HRM practices are important. The correlations show low to moderate correlation between organization performances. It obtained for the values were employee security 0.38, selective hiring 0.47, self – management teams 0.36, decentralization 0.34, compensation 0.56, training 0.47 and sharing information 0.39.

Multiple regression analysis applied to test the hypothesis which is set in this study. Multiple regression analysis is used to determine what proportion of the variance in the dependent variable is explained by the independent variables are entered into the regression analysis (Cramer, 2003).

**Table 2:Result of Multiple Regression Analysis**

Model	R	R Square	Adjusted Square	RStd. Error of the Estimate
1	0.395	0.324	0.297	0.0382

- a) Predictors: (Constant), employment security, selective hiring, self-managed teams, decentralization, compensation, training, sharing of information

According to the table 2, a reliability test of the regression line was conducted and R = 0.395. It indicate that there is a reliability of the line. That means the multiple correlation (R) is 0.395 an indication of high multiple correlation between effectiveness of applicant attraction(dependent variable) and set of independent variables. The coefficient of multiple determination (R<sup>2</sup>) indicated that R<sup>2</sup> = 0.324. This suggests that 32.4 percent of the variance in the dependent variable is jointly and significantly explained by the collective variance in all the independent variables considered in the study. Hence, HRM practice have positive impact on organization performance in manufacturing SMEs thus supporting hypothesis 1.



## Discussion and Conclusion

Previously, a limited number of studies have found a positive relationship between a greater number of human resource practices and SME performance in both a cross-sectional context (Messersmith and Wales, 2011; Michie and Sheehan, 2008; Nguyen and Bryant, 2004; Verreyne et al., 2011) and longitudinally (Razouk, 2011). In this study, investigated the relationship of specific HRM practices which was introduced by Pfeffer (1998) and organization performance among the SMEs in Western Province of Sri Lanka. It was discovered that HRM best practices enhance firm performance. The study found that employment security, selective hiring, self-managed teams, decentralization, compensation, training, sharing of information have positive relationship on firm performance. The results found in this analysis are consistent with the previous studies, (Ahmad & Schroeder, 2003; Wright et al., 2005; Cho et al., 2006; Khan, 2010; Quresh et al., 2010; Arumugam & Mojtahedzadeh, 2011; Boohene & Asuinura, 2011). Compare with other HRM practices compensation is influencing organization performance. Further, it also confirmed by Chew and Chan (2008), they said that compensation plays an important role in maintaining their employment and enhancing work commitment. The present study has shown that compensation practiced by manufacturing SMEs in Sri Lanka has an impact on organization performance. This finding is also consistent with Subramaniam, Shamsudin and Ibrahim (2011). Nevertheless, less present study also found that training could influence significantly organization performance. Pfeffer (1998) noted, training is an investment in the organization's staff and in the current business environment. Successful firms that emphasize training do so almost as a matter of faith and because of their belief in the connection between people and profits. Present study also confirmed it because training of the manufacturing SMEs in Sri Lanka has a positive impact to organization performance. This finding is also consistent with Ahmad and Schroeder (2003). In addition, organizations serious about obtaining profit through people, for the purpose of that organization needed large pool of applicants, able to identify critical skills and attributes needed in its applicants and job requirements (Pfeffer, 1998) subsequently it leads to enhance the performance. Present study has shown that selective hiring also impact to employee performance and subsequently organization performance. Present study also revealed that sharing information, employment security, self – management teams and decentralization have weak moderated but positive relationship with organization performance. In conclusion, the present study has provided additional insight into the effects of HRM practices which was introduced by Pfeffer especially amongst the manufacturing SMEs in Sri Lanka. According to the findings of present study have manage to provide empirical Pfeffer model still valid to test the relationship between HRM practices and organization performance not in the large scale organizations but also in SMEs.

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## PREDICTORS OF STUDENT SPIN-OFF INTENTIONS: PERSONALITY

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### Abstract

Student spin-off has captured the attention of policymakers, educators and researchers because of its contribution in achieving university's vision and mission, regional economic growth, knowledge commercialization, and employment generation. This study is design to examine the role of personality traits in shaping students spin-off intention in higher learning institutions. A systematic literature review search is conducted and several scientific articles and reports have been examined. The results of this study indicate that many previous studies had mentioned the students' personality traits like needs for achievement, innovativeness, propensity for risk-taking, locus of control, and self-efficacy shows the positive relationship with entrepreneurial intentions. This study will serve as a base for future studies and will have valuable implications for policymakers and universities.

**Keywords:** *Student spin-offs, Personality*

### Introduction

The field of new business start-ups among university students has been the subject of increasing interest among scholars (Boh, De-Haan and Strom, 2015; and Hayter, Lubynsky and Maroulis, 2016). Bailetti (2011), student spin-off firms can be originated by students attending programs in any faculty at a university. These companies are operating independently from the university; they have their own legal, technical, and commercial structures. Student spin-offs are important at least for five reasons: (i) They offer a concrete proof the university is relevant, up-to-date, and competitive; (ii) They significantly contribute to the economic development of the region where the university is located; (iii) They commercialize knowledge that may otherwise go undeveloped within the university; (iv) They help universities accomplish their core missions of research, teaching, and community development; and (v) They increase the return on government investment in university research and development (Bailetti, 2011). More importantly, the realities of today manifest that; no government in this world can assure to provide jobs to all graduates, thus student spin-offs also could be the possible solution of shifting the job seekers to job creators. With numerous benefits offered, the process of investigating the key motivation of setting up student spin-offs is important to be executed. In this context, many different expectations have been articulated which functionally aim for the macro level goal growth of student spin-offs: the primary concern is to increase the potential number of students interested in starting new businesses (spin-offs intentions), to stimulate as many student spin-offs as possible (start-up realization) and finally to secure the survival and or growth of these start-ups (spin-off success).

Opening up a new company is reflect much with an individual decision, which is why the individual's qualities as an entrepreneur are central in the examination of entrepreneurship field (Littunen, 2000). Personality trait is the individuals' consistent reaction caused by stimulation of external environment. Past studies (e.g. Shaver and Scott, 1991; Crant, 1996; Rauch and Frese, 2000; Veciana, Aponte and Urbano, 2005; Aghazamani and Roozikhah, 2010; Hosseini and Ahmadi, 2011; and Kautonen, Van Gelderen and Tornikoski, 2013)

identified the personality traits have proven as predictors of many aspects of entrepreneurship including intending to start a business, starting a business, succeeding in running a business, and corporate intrapreneurship. Students possess certain personality traits, and the value of these characteristics in decisions related to the spin-off intentions is the focus of interest in this paper. Early notification of these characteristics will help the university to train them to become an entrepreneur. Perhaps the universities also can increase the commercialization of technology and getting good rating of graduates' employability rate through this activity. Then, the stakeholders will heavily recognize the contributions of university to the society. The reminder of this paper is organized as follow. The following section describes the methodology. Section 3 presents the key results and discussion. The last section concludes the study.

### **Methodology**

To study the types of personality that influencing student spin-offs intention, an organized literature review was conducted. The investigation was limited to the entrepreneurial intentions using web based search engines. Topic search was used to identify publications that refer to perception of barriers in setting up a business among students in title, abstract, and author keywords. The search then was further narrowed down to English language articles. The search included only journal articles without considering books and press papers publications. Major online databases such as Science Direct, Academic Search Complete, Wiley Online Library, Business Source Complete, and Emerald, were used.

### **Analysis and results**

The characteristics of individuals, the behavior of individuals, the nature or type of business start-up and characteristics of the environment in which a newly created company operates are decisive factors for the firm's performance (Gartner, 1985). As they are supposed to be leaders, their personality traits affect their firm vision and strategy (Peterson, Smith, Martorana and Owens, 2003). Besides, if the entrepreneurs possess certain traits, this enables them to perform their roles well (Judge, Piccolo and Kosalka, 2009). Thus, identifying the right personality of students that motivate them to establish the spin-offs is vital. Table 1 indicates some studies dealing with entrepreneurial traits among university students. Among the traits are needs for achievement, innovativeness, propensity for risk-taking, locus of control, and self-efficacy.

In view of entrepreneurial intention, Fishbein and Ajzen, (1975) identified it was a significant predictor of one becoming an entrepreneur. Intentions in general influence the engagement in actual behavior. Due to that, a number of scholars have viewed entrepreneurial intention as a motivating force of entrepreneurial activity and therefore have defined the construct to reflect this position. For instance, Katz and Gartner (1988) defined entrepreneurial intention as the search for information that can be used to help fulfil the goal of venture creation. It has also been defined as the perceptions of desirability and feasibility and the propensity to act upon opportunities (Peterman and Kennedy, 2003). Following from these definitions, this study define entrepreneurial intention as student's willingness, desire and ability to engage in entrepreneurial behaviors or establish a spin-off that is of relevance to the students, university, and society at large. Moreover, Krueger and Brazeal (1994) postulated that entrepreneurial intention is central to understanding the entrepreneurial process because it is the foundation and the first step to know the process of entrepreneurship. Furthermore, Segal, Borgia and Schoenfeld (2005) pointed two questions to predict an individual's intention to become an entrepreneur in which also can be used to test with university students: (i) is entrepreneurship desirable to me?; and (ii) is entrepreneurship feasible for me? Against these questions, this study concludes that a proactive individual

(student) has the attributes that mirror someone with high desire and motivation to venture into business. Therefore, the present study sought to literary investigates the students' personality to become an entrepreneur.

The relationship between personality traits and entrepreneurial intentions (spin-off intentions) has been established in literature (Table 1). During the start-up or pre-founding phase of a new venture, entrepreneurial intention model has confirmed that individual characteristics include achievement motivation, innovativeness, propensity for risk-taking, and self-efficacy were significantly associated with entrepreneurial intention. With regard to need for achievement, past studies (e.g. Tibbits 1979; Birds 1989; Davidsson, 1989; Boyd and Bozikis, 1994; Beverland and Lockshin, 2001; Papadakis, 2006; Gurol and Atsan, 2006; Manolova, Brush and Edelman, 2008; Benzing, Chu and Kara, 2009; Tong, Kin Tong and Loy, 2011; Ghazali, Ibrahim and Zainol 2012; Peng, Lu and Kang, 2012; Estay, Durrieu and Akhter, 2013; Amir, Mohamad and Abdullah, 2013; Bigliardi, Galati and Verbano, 2013; Olakitan, 2014; Rofa, Ngah and Ab. Wahab, 2015; Pinho and de Sa, 2014; and Karabulut, 2016) found the relationship between the needs for achievement and entrepreneurial behavior. Thus, university students who have a high need to achieve will show more entrepreneurial behavior and leading them to become an entrepreneur. McClelland (1961) introduces this concept to rather revealing empirical evidence (obtained through several kinds of methods) on the existence of a connection between the need for achievement and (business) development. The concept was empirically tested and shows the positive link of needs for achievement and entrepreneurial intentions among university students.

Evidence from a review of the literature discloses how entrepreneurs are significantly more innovative than non-entrepreneurs (Robinson, Stimpson, Huefner and Hunt, 1991). Schumpeter (1934) stressed the innovativeness is the most fundamental aspect of entrepreneurship and an essential entrepreneurial characteristic. Ghazali et al., (2012) added that innovativeness as crafting new products or new quality, generating new methods of production, attainment into a new market, creating a new source of supply or building new organization or structure in business. It is suggested as a behavior that characterizes entrepreneurial intention. Some previous studies (e.g. Carter, Gartner, Shaver and Gatewood, 2003; Gerry, Marques and Nogueira, 2008; Fatoki, 2010; Peng, Lu and Kang, 2012; Dinis, do Paco, Ferreira, Raposo and Ricardo, 2013; Estay, Durrieu and Akhter, 2013; and Karanja, Ithinji and Nyaboga, 2016) revealed that entrepreneurial intentions is linked with innovative students and thus supported the previous definitions. Other key characteristic to be an entrepreneur is the risk taking propensity. Risk taking propensity has been conceptualized by Sexton and Bowman (1985) as one's orientation toward taking chances in a decision making situation. Caird (1993) mentioned few characteristics of entrepreneurs such as the desire to take risks, the ability to identify business opportunities, the ability to correct errors effectively and the ability to grasp profitable opportunities. In addition, Gurol and Atsan, (2006) defined risk taking as the propensity of an individual to reveal risk taking or risk avoidance when confronted with risk situations. In short, the acceptance of risk in managing the businesses or activities is related the probability of success. Previous studies (e.g. Hisrich and Peters, 1995; Luthje and Franke, 2003; Segal, Borgia and Schoenfeld, 2005; Sanchez, 2011; Ghazali et al., 2012; Peng, Lu and Kang, 2012; Amir, Mohamad and Abdullah, 2013; Bigliardi, Galati and Verbano, 2013; Estay et al., 2013; Gomezelj and Kusce, 2013; Pinho and de Sa, 2014; Karanja, Ithinji and Nyaboga, 2016; Karabulut, 2016) have indicated that students who can manage the risks are linked with high entrepreneurial intentions. Next, the role of individual locus of control has been identified as the influenced factor of entrepreneurial intentions among university students. Altinay et al., (2012) brief mention about the locus of control as the individual's perception of his or her ability to influence events in life. Moreover, an internal control expectation is usually associated with entrepreneurial characteristics

(Littunen, 2000) and entrepreneurial success Brockhaus (1980). Due to that, Ismail, Ahmad, Gadar and Yunus (2012) have described students who have high internal locus of control are expected to become entrepreneurs than those with external locus control. The other past studies (e.g. Gatewood, Shaver and Gartner, 1995; Luthje and Franke, 2003; Gurol and Atsan, 2006; Frank, Lueger and Korunka, 2007; Turker and Selcuk, 2009; Khan, Ahmed, Nawaz and Ramzar, 2011; Gomezelj and Kusce, 2013; Kafi and Hosseini, 2013; Dinis et al., 2013; Karanja, Ithinji and Nyaboga, 2016; and Karabulut, 2016) also have supported the findings. Finally, self- efficacy has a significant impact on performance in variety tasks and has been related to dynamics around business performance (Hmieleski and Baron, 2008; and Machmud and Sidharta, 2016). As explained by Wood and Bandura, (1989) the self-efficacy is an individual's perception regarding his or her ability to successfully complete a given task. This is essential for entrepreneurs because they must be confident in their abilities to perform in diverse and unanticipated jobs in inexact situations. The self-perceived competence of the founders of entrepreneurial firms is positively related to the entrepreneurial performance (Baum and Locke, 2004) and can be prediction of entrepreneurial intention (Barani, Zarafshani, Del-Angizen and Lorgani, 2010). According to Saleh, (2014) students with high belief in personal capability or self-efficacy will have higher entrepreneurial intentions than with low personal capability. Among the past studies that supported the role of self-efficacy with entrepreneurial intentions are Boyd and Bozikis, (1994), Chen, Greene and Crick, (1998), Krueger, Reilly and Carsrud, (2000), Segal, Borgia and Schoenfeld, (2002), Wang et al., (2002), Ramayah and Harun, (2005), Zhao, Seibert and Hills, (2005), Basu and Virick, (2007), Kickul, Wilson and Marlino, (2009), Sanchez, (2011), Khan, et al., (2011), Akanbi, (2013), Pihie and Bagheri, (2013), Susetyo and Lestari, (2014), Pinho and de Sa, (2014), Olakitan, (2014) and Manik and Sidharta, (2016). To summarize, Altinay, Madanoglu, Daniele and Lashley (2012) claimed that the personality trait is the highest predictor in business set-up intentions. Table 1 below summarized the research findings.

Table 1. Studies of personality and entrepreneurship intentions

Personality	Previous study
Needs for achievement.	Tibbits 1979; Birds 1989; Davidsson, 1989; Boyd and Bozikis, 1994; Beverland and Lockshin, 2001; Papadakis, 2006; Gurol and Atsan, 2006; Manolova et al. 2008; Benzing et al. 2009; Tong, Kin Tong and Loy, 2011; Ghazali, Ibrahim and Zainol 2012; Peng, Lu and Kang, 2012; Estay et al. 2013; Amir, Mohamad and Abdullah, 2013; Bigliardi, Galati and Verbano, 2013; Olakitan, 2014; Rofa, Ngah and Ab. Wahab, 2015; Pinho and de Sa, 2014; and Karabulut, 2016.
Innovativeness	Carter, Gartner, Shaver and Gatewood, 2003; Gerry, Marques and Nogueira, 2008; Fatoki, 2010; Peng, Lu and Kang, 2012; Dinis, do Paco, Ferreira, Raposo and Ricardo, 2013; Estay, Durrieu and Akhter, 2013; and Karanja, Ithinji and Nyaboga, 2016.
Propensity for risk-taking.	Hisrich and Peters, 1995; Luthje and Franke, 2003; Segal, Borgia and Schoenfeld, 2005; Sanchez, 2011; Ghazali et al., 2012; Peng, Lu and Kang, 2012; Amir, Mohamad and Abdullah, 2013; Bigliardi, Galati and Verbano, 2013; Estay et al., 2013; Gomezelj and Kusce, 2013; Pinho and de Sa, 2014; Karanja, Ithinji and Nyaboga, 2016; Karabulut, 2016.
Locus of control.	Gatewood, Shaver and Gartner, 1995; Luthje and Franke, 2003; Gurol and Atsan, 2006; Frank, Lueger and Korunka, 2007; Turker and Selcuk, 2009;

Khan, Ahmed, Nawaz and Ramzar, 2011; Gomezelj and Kusce, 2013; Kafi and Hosseini, 2013; Dinis et al., 2013; Karanja, Ithinji and Nyaboga, 2016; and Karabulut, 2016.

Self-efficacy Boyd and Bozikis, 1994; Chen, Greene and Crick, 1998; Krueger, Reilly and Carsrud, 2000; Segal, Borgia and Schoenfeld, 2002; Wang et al., 2002; Ramayah and Harun, 2005; Zhao, Seibert and Hills, 2005; Basu and Virick, 2007; Kickul, Wilson and Marlino, 2009; Sanchez, 2011; Khan, et al., 2011; Akanbi, 2013; Pihie and Bagheri, 2013; Susetyo and Lestari, 2014; Pinho and de Sa, 2014; Olakitan, 2014; and Manik and Sidharta, 2016.

The results from the findings are then used to develop the research model. The suggest model is explained in figure 1. The personality traits i.e. needs for achievement, innovativeness, propensity for risk taking, locus of control, and self-efficacy are set to become the predictors of students spin-off intentions.

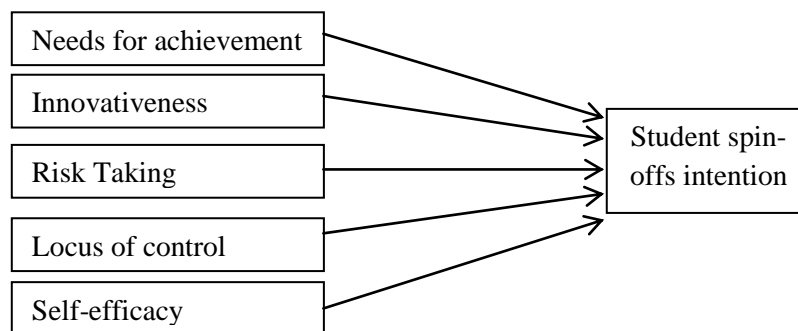


Figure 1. Proposed research model

### Conclusion

According to research findings, need for achievement, innovativeness, propensity for risk taking, locus of control, and self-efficacy affect entrepreneurial intention among university students. This study is designed to make contributions to vast parties such as students (potential entrepreneur), university, and the government. University through the entrepreneurship center can examine the personality traits and other factors which affect entrepreneurial intention by conducting follow-up studies. Potential entrepreneurs (university students) can understand personality traits affecting the entrepreneurial intention much better and improve these traits to become successful entrepreneurs. Given the positive effects of entrepreneurship on a country's economy in the form of the creation of employment opportunities, product innovation, and economic growth, the promotion of entrepreneurship inside university is a national priority for many governments around the world and particularly those in developing countries.

Since entrepreneurship and entrepreneurial attitude are not totally inborn and they can be stimulated by education. Therefore, it is suggested that the faculties or schools can provide complete entrepreneurial education, and allow university students to have the opportunity to learn organizations of firms, market analysis, product development, fund raising and corporate operation before they enter the society. It might reduce the risk of failure of student



spin-offs. Besides learning in classes, the faculties can construct the institutes by business competition, industry-academy cooperation center, innovation incubation center, skill transfer or authority center, and industry-academy cooperation in order to enhance the graduates' entrepreneurial intention and skills.

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**GROWTH STRATEGY DEVELOPMENT OF START-UP COMPANIES:  
EVIDENCE: INDONESIA**

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Abstract

The interest over entrepreneurship is manifested in start-ups or new-small businesses, but the number of startup entrepreneur is still low. One of many reasons for that is the risk of failures. People tend to adverse risk and come to more stability profession. These failures then become motivational factors and the need of management capability that role as internal barrier (Cooney, 2012) for being an entrepreneur. These failure often affected by their incapability of creating sustainable growth, making strong direction, and formulating strategies in order to continue being relevant.

This study emphasize on how newly-business would be able to encompass their strategies to grow, iterate them into business targets and activities, and what the essential logic and values that enable them to do so . Thus it will create an interpretation on how growth strategies are incorporated in start-up context.

Qualitative approach is selected in order to study how growth strategies affecting how start-up/small-new business perform. The approach is performed in multiple case studies including 27 startup/new-small businesses in semi-structured interviews supported by complement data from various secondary sources. Classification of Start-up by Start-up Genome Report (2014) and Blank-Marmer Phase are implemented in order to understanding more deeply behavior between one company to the other in incorporate growth strategies.

The study indicates that some of the firms in the strategy positively use emergent approach in strategy formulation, while the other combined between planning and emergent approach. All of the firms adapt the high-level of flexibility over implementation and formal strategies. This approach help some of the firms to made clear into steps taken by them to explore their entrepreneurial behavior in opportunity seeking behavior while maintained their sustainable source of advantages.

Through the interview, it is found that different elements affected the fabrication of growth strategies. External environment, access to financial, human and social resources is quite affected on how firms formulate strategies. Other factors that proposed internally affected the process such as entrepreneurial orientation and the owner-manager orientation towards growth are also affected the process of growth strategies manufacturing.

There also findings that Ansoff strategy map able to classify growth strategy taken by the participant.

Another finding is that strategic experience does give the firms more consideration in selecting strategies. It also will be a positive consideration for new-small business should consider collaboration in order to expand their own capabilities and cooperate with externals as strategic steps to obtained more sustainable growth..

**Keywords** : *Startup, Growth Strategy, Strategy Map, New-Small Business, Entrepreneurial Action*

## **Introduction**

According to Global Entrepreneurship Monitor Report 2015-2016, SME had its contribution to Indonesia's GDP for 57% (2013). That condition ratified Indonesia to have score 4.5/7 of World Economic Forum Global Competitiveness Rating. Slightly 0.5 points below Israel, known as a country with the most outstanding performance in developing entrepreneurship, that indicated with 3 times more (423 dollars per capita, Zirra Start-up Report 2015) investment dollars than USA.

Entrepreneurship, especially in Indonesia, had contributed to economic performance of a country. Unfortunately, potentials had by Indonesia couldn't be supported with the few numbers of entrepreneurs that still below 2%.

The interest over entrepreneurship is manifested in start-ups or new-small businesses. This study emphasize on how newly-business would be able to encompass their strategies to grow, iterate them into business targets and activities, and what the essential logic and values that enable them to do so . Thus it will create an interpretation on how growth strategies are incorporated in start-up context.

One of the problems occurs when we studied startup is, that they had problem in sustaining their growth and becomes a more established companies. The focus they made to create most viable product over time get their focus blurry. Thus, they should maintain their goals clear and they ought to formulate their strategies better in order to continue to grow (Rasmussen, 2009).

Strategies however take central aspect in how an organization run and process. It works by setting directions then formulating the way an organization achieve their goals (Gibcus& Kemp, 2003). In another way, the terms and the implementation of strategy rather are very well known in a more established companies. Ireland R et al (2003) conclude that small businesses, phrased specifically in terms of small and medium sized enterprises, are lacking their attention on formulating strategy also the definition of strategy in general.

Among other things, small medium business, especially the ones called start ups, are still lacking in efforts of researches and academic studies. People who embraced themselves in the world of startup business always try to find many alternative sources in implementing their ways to run the business. It is also justified with a little interest in small firms, data availabilities, and believes among entrepreneur. It lead to a conclusion that start ups, and small businesses roll the strategies in order only to survive. There are findings that say there are positive connections between the performances as results of strategy used in small business (Fletcher & Harris, 2002).

In recent phenomenon, start-ups, that have shifted its meaning over time, are also considered as small businesses. It is become popular as the way young people doing their business nowadays. It becomes so rapid that not many studies have been found regarding this topic.

In many studies, great emphasis of strategic management puts its focus on larger and more established businesses. There are less studies that gives a clear framework that capable of illustrate the use of Strategic management in specific definition in small business paradigm (Gilinsky et al., 2001). Young and small businesses are considered more effective in finding solution over problems compared to largerand more established one, thus made them more abilities in identifying opportunities (Ireland et al., 2003). Moreover, even if they able to find more problem/solution fit products, it is argued that Start-ups we mentioned before are quite hard to maintain sustainable competitive advantages over competitor based on the solution they implement (Ireland et al., 2003). This is happened when the founder/key-person of the business fail to think in more strategic manner, so that they fail in made above average performance and developing a more sustainable competitive advantages.

The process of altering invention to innovation is mentioned as creative destruction in

the entrepreneurial activity as Schumpeter (1934) in Rasmussen (2009). He also said that entrepreneurship contribute to the dynamism of industries and development of economic growth. Nowadays, the opinion stated start-ups and small business does give contribution on economic growth become more popular. That way, it emphasizes that growth performances of the industry become the measures for entrepreneurial success in the real practice.

But, the developing of firms success factors need to be done in the terms of start-up companies as well as the established ones. Specifically, Start-ups in need to be bigger and sustainable had to face dynamics and ill-threaten environment. The success rate of Start-ups Company is determined on how well they adapt to the conditions.

Adaptability of the company is can be seen in how a company could grow. But when we talked about growth, Paul graham (2012) said that start-up is a company engineered to grow fast (<http://www.paulgraham.com/growth.html>). The focus of growth that not limited by geographical variables is the factor that differentiates startups from small businesses.

How they anticipated the environment and pursue the growth of the company, is the one that interesting to discussed. Growth also became goals for start-up company in doing their activities. Strategy in doing so, to prevent common mistakes that lead the firms fail, should become the focus the firm had paid their attention to.

By those condition, this paper would like to take a closer look on how Startup making their strategy in order to grow and survive their business. This studies hope the results will confirm the subject relevances. It also will increase awareness among researcher and practitioner to further develop field of study of start-up industry and develop tools that will provide start-ups as well as small firms with direction and frameworks for strategy development for them to grow to more established companies.

## **Theoretical background**

### *Start-Up*

What is considered to be a small business/Start-ups? According to academic review, it is really hard to match a clear explanation of start-ups. The information comes in a wide range in accordance of one researcher/article to another. Such aspects like industries, geo-locations, and other operational variable such as revenue, number of employee and so on. Some researcher like Storey (1994) and Deakins & Freel (2003) did also manage to define it.

Blank (2013) mentioned that startup is the “temporary organization in search of scalable, repeatable, profitable business model”. Nowadays, start-up terms are correlated as the high growth business. Pieper (2013) stated that high growth new ventures are came from the terms “gazelles” that first introduced by Birch (1995) which define gazelles as a new firms that double its sales every four year. Saßmannshausen and Volkmann (2012) in Pieper (2013) elaborates the terms gazelles that shifted in ten years as below:

Table : Definitions of Gazelles based on Saßmannshausen and Volkmann (2012) on Pieper (2013).

***Table 15 Start-up/Small Business Definition Compilation***

Year	Author/Research/ Institute	Definition
1995	Birch, Haggerty, Parson	Enterprises that doubled their sales every four years
2000	Moreno & Casillas	SME according to definition of the EU grew their performance at least



Year	Author/Research/ Institute	Definition
		doubled in the last 3 – 4 years
2001	National Commission on Entrepreneurship	a firms that has employee growth at least 15% in 5 consecutives years /100% in 5 years.
2003	Littunen and Tohmo	a firms that at least doubled the size in 4 years
2007	Global Entrepreneurship Monitor, Autio	a venture that employe at least 20 employees in 5 years operations
2007	Acs and Mueller	a firms taht founded without subsidiaries of existing firms and employ at the start of 20 – 499 employees
2007	Lesonsky	a firm that managed by owner generate 233.757 USD revenue per employee
2010	Daunfeldt	a firms that belong to top 1% in terms of revenue, productivity, or employee growth on one population
2010	Stangler	a firms that has thirty percent renue growth and 20% employee growth
2010	Davila, Foster and Jia	a firm that exist for no more than 10 years and have, 20 – 150 employees.
2011	Ries, Eric	a human institution designed to deliver a new product or service under conditions of extreme uncertainty

In his works, Birch et al (1995) also mentioned other two terms regarding the typology, which mice and elephant. Later on ther terminology of mice and gazelles that will be differentiate on what the Pieper (2013) as a High growth new firms and a mere new firms. Elephant obviously refer to big-established companies that will be discussed later in terms of usual strategy implementation of a firm.

Categorization of start-ups and small businesses that divided by the number of people worked on it; by the size of market they operate, and/or by whether the owner manage it in a more personalized way are proposed by Deakin & Freel (2003). They also add information from European Commission where small medium enterprise is categorized by the number of workforces, its turnover or financial performances.

Different with Start-ups, although the number of employee are small, the market they ought to seize is numerous and wide. They focus themselves creating goods and services that accepted as general and can be enjoyed by wide variety of market. The main product they focusing on is called most viable product (MVP).

Start-up, a part of being small, it has to be new. It consists zero to ten years of existence. Startups need to be small companies determined to grow quickly in the hopes of becoming the next passé giant (Tech Crunch, 2016). Start-up business or a new business considered at them when they are less than forty-two months old (Reynolds, Bosma, & Autio, 2005).

Another definition of Startup is came from Wikipedia that state it as an early stage company in the life cycle of an enterprise where the entrepreneur moves from the idea stage to securing financing, laying down the basis structure of the business, and initiating operations or trading (Wikipedia, 2016). It also has to be an organization formed to search for a repeatable and scalable business model (Blank, 2011)

A more technical classification came from Alex Wilhelm (2015) that stated start up as an organization that not exceed \$50 million revenue run rate (forward 12 months); 100 or more employees; Worth more than \$500 million, on paper or otherwise. A startup is a young company that is just begins to develop. It usually small, initially financed and operated by a handful of founders or one individual. (Investopedia). A developmental organism that evolves along 5 interdependent dimensions: Customer, Product, Team, Business Model and Financials. How progress is measured varies depending on the stage of the development.(Startup Genome Report 2012)

A startup also are temporary organizations designed to scale into large companies (Ries, 2011). Early stage startups are designed to search for product/market fit under conditions of extreme uncertainty. Late stage startups are designed to search for a repeatable and scalable business model and then scale into large companies designed to execute under conditions of high certainty. (Blank, 2011);

The quality of start-ups becomes a decisive factor in determining the impact of entrepreneurial activity (Anokhin; Wincent,2012). They mentioned to have innovativeness that later on, innovative firms will create new products and technology that can generate extraordinary economic performances (McGrath, Tsai, Venkataraman & MacMillan ,1996).

The definition of start-up should differ from SMEs since not every newly founded company is a startup (Graham, 2014). Thus this paper will state that Start-up is a firms that undergone small time of operational (up to 60 months top), that not exceed \$50 million revenue run rate a year; and have 499 or less employees as in Autio (2007) and Arcs & Mueller (2007) in Pieper (2013).\

### *Start-Up Phase Typology*

Pieper (2013) said that even a high growth firms are started as a results of a start-up phase. As mentioned by Thomson (2006) in Pieper (2013) preparation phase are become preliminary requirement for high growth companies. It shows on the map of high growth firms are started from start-up.

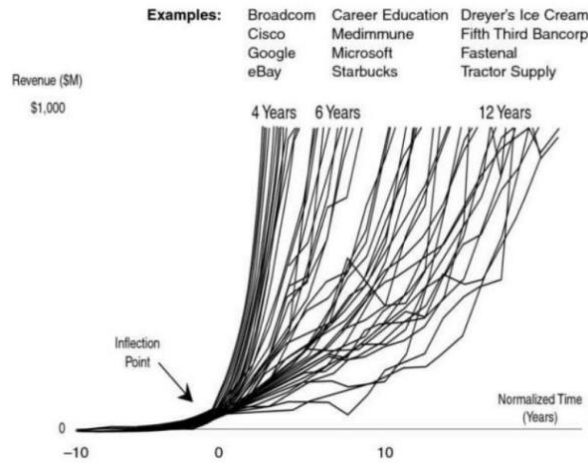


Figure 14 Nature Performance of Startup

Graph 2: Performance graph for high-growth ventures (Thomson, 2006) on Pieper (2013)

The pictures strengthen the argument on what is called of start-up, where a company had to have an enormous hockey-stick figure of the performances. The high risk- high return also applied here where the condition of start-up industry are very unstable that uncertainties often leads to failure.

#### *Start up Business Typology*

The graph above also more or less visualizes of how a good startup should meet the fit the success stories such company as Google, eBay & Cisco. Many scholars argued that business plan would ensure that a company will be formed (Heriot and Campbel, 2014 in Pieper (2013). Business plans (BP) also have good effects on company performances as Carland (2003) in Pieper (2013).

Apparently Ripsas and Zumholtz (2011) in Pieper (2013) mentioned that BP considered more likely a failure prevention-factor than a success factor of firms. This is due to findings that state BP is being used as way to get funding a not a strategic and planning tools to operate.

The failure of BP is that it often based on up-front known assumption. Thus it conclude to the point that the more details of business will run in BP the more biased and the more it will become out of the target. Then the new terms of communicating a way pf doing business well known more in terms of business model (BM).

The terms of BM according to Osterwalder (2005) in Pieper (2013) is already well known in 2000ish that firstly started at 1997. BM is known as the means of capturing the value of innovation (Chesbrough, 2010) in Pieper (2013). BM as a structural template of how an organization confirms values to their customer, partners, and vendors (Zott and Amit, 2004). BM also defined as Biakman (2014) said in his lecture as revenue-generator machine of the business that communicate well for the future investor.

Swifts that happened from BP to BM then will made it more clear to categorize the means of start-up business. There are many typologies of the start-up that being used. Steve Samartino (2010) define the typology of start-up from the means of Trophy Idea, Idea Borrowing and Renovation (<https://startupblog.wordpress.com/2010/08/23/startup-typologies/>). the classification based on the means of innovativeness of the idea that combined with the rate of success, the most innovative is "Trophy Idea" that will creat market demand and let the firms taste the first mover advantages to the least innovative of "Idea Borrowing".

One of the way to classify the business is the concept of Industry Classification

Benchmark (ICB). ICB is an industry classification taxonomy launched by Dow Jones and FTSE in 2005 and now owned solely by FTSE International. It is used to segregate markets into sectors within the macro economy. The ICB is used in a wide application to divide the market into specific categories. It will help this study to compare position of a startup regarding its business. The ICB replaced the legacy FTSE and Dow Jones classification systems on 3 January 2006, and is used today by the NASDAQ, NYSE and several other markets around the globe. All ICB sectors are represented on the New York Stock Exchange except Equity Investment Instruments (8980) and Non equity Investment Instruments (8990).

Steve Blank (2011) also promote the idea of how start-ups should be defined as its BM and other distinctive characteristics into 6 category ([http://www.xconomy.com/san-francisco/2011/09/01/why-governments-dont-get-startups-or-why-theres-only-one-silicon-valley/?single\\_page=true](http://www.xconomy.com/san-francisco/2011/09/01/why-governments-dont-get-startups-or-why-theres-only-one-silicon-valley/?single_page=true)). Lifestyle business who run the business in order to live the passion (ex: surfers and divers who run the business to finance their passion). Small Business that run his/her own business that mentioned with the same hard work level of silicon valley star-ups but most of them barely profitable. Scalable business that has vision to change the world and to made big business, it first needs huge capital to validate business before they grow-or die.

Next, Large companies start-ups that needed by the “elephant”’s Birsch type. this companies are in need to made their own disruptive products in order to secure themselves in the wild market. Born to flip (Buyable) business that usually being targeted by company who also made themselves to be more bigger corporation demand. Born-toflip business, as the name says, is founded to be bought. The last of Blank typology is Social start-ups that in focused their job in making the world a better place. Social’s one doesn’t have market share or wealth creation as a main goals.

Those category of Blank (2011) require different ecosystems, tools, incentives, and other facilities. It already had broad scope of the real condition of nowadays business and very tempting to be taken as a field of study. But then again, typology based on different measurements will be hard to validate.

Others typology is based on Thendayi Viki in April, 2016 (<https://medium.com/the-corporate-startup/a-new-typology-for-innovation-that-combines-the-three-horizons-of-framework-and-christensen-s-2155c42bdea#.y9nq3zx43>) that mapped the startup companies based the thought from Nagji and Tuff’s innovation Ambition Matrix that based itself on Ansoff’s Matrix Products-Market that made it through ranges with the combination of three main types of innovation: Core, adjacent and transformational.

Then again, the theory above is still considered new and very debatable. Another approach that would like to suggest next is BM typology in Startup Genome Reports (2012). Typology of start-up mainly derived from the means of internet start-ups with the spectrum of Marketing and Sales level based on 3200+ high growth technolgy start-ups around the globe. The highest, mid and low spectrum of marketing and sales then differ into 3 type of business. Then come the fourth type of startup which called 1N that had similarity of Type 1 but with the more of network effects.

Type 1, The Automizer consists of charecteristic of self-service customer acquisition, solution focused, product intensive, fast completion and often automation of manual process. This type needs the smallest capital, bigger market opportunities than Type 2 and more likely tackle the existing market. The example of the company is google, dropbox, basecamp, kickstarter, slideshare etc.

Type 1N are The Social Transformers that have characteristic for had critical mass, massive user growth, winner-take-all type, complex UX, network effects and typically creating new means of user’s interactions. It completely need longer time compared to Type 1 an type 2, business heavy and balanced team are considered success factor, have a large team and user growth. The example of this business are: Ebay, AirBnB, Uber, Craigslist, Skype,

Facebook, Youtube and LinkedIn.

Type 2 , The Integrator that lead generations with inside sales reps, more likely being succeed with prompt monetization phase. It focused on SMES thus have smaller market. Pivots idea that based on customer insight are happened more frequent rather than other types. The example of this business is: Zendesk, PBworks, Xignite, Code Margonda.

Type 3 are the Challengers that have characteristic of industrial market, high reliance on clients, complex and rigid market, and recurrence sales processes. It has the biggest market size among other three, tackle existing market with better product, become the longest time to achive scale stage than any other types. The example of this company are: Oracle, MySQL, Yammer, Redhat, and Cloudera.

The typology of thoses start-up will be used in this study along with Blank categorization of a startup as for more reliable in terms of data it has mapped also in order to find more clear linkage of growth stratgey and underlying logic that happened among start-ups companies. According to the mapping from the first Startup genome report.

**Table 16 Startup Genome Typology**

	<b>Avg. Months to Move Through Marmer Stages</b>	<b>Primary Service Providers Hired</b>	<b>Type of Founding Team that is Most Successful</b>	<b>Market size Estimation (Efficiency &amp; Scale Stages)</b>
<b>Type 1 (The Automizer)</b>	21	User Experience, Backend Development	Technical Heavy Team	\$11B
<b>Type 1N (The Social Transformer)</b>	32	User Experience, Backend Development	Balanced Team	\$13B
<b>Type 2 (The Integrator)</b>	16	Sales, Business Development, PR	Balanced Team	\$7B
<b>Type 3 (The Challenger)</b>	64	Sales, Business Development, PR	Business Heavy Team	\$65B

**Start up Phase Typology**

Correlate with the startup definition and typology phases and developmental stages probably one of the important factors to consider. Obviously in what state a start-ups are standing in a time will relate to how big the challenge it has to face. The challenges and the developmental itself has been slightly mentioned before.

Developmental stage model also distributed by Ash Maurya (2012) in Pieper (2013) that mentioned the stages in: (1) Problem/Solution Fit that have key question on product which must have, viable and feasible to be done. (2)Product/Market fit that tested with Sean Ellis Method in order to see the scalability of the start-up. (3) Scale that referring to her, company building goes parallel with customer acquisition.

Stages that being used in this study is genome +3200 startups were used stage map of Blank (2013). Steve Blank's 6 Steps of the Epiphany (2013) that an enhancements of his Four steps of ephihany (Blank, 2013) has mapped the startup lifecycle into 6 stages of development that focused the view on customer. Each stage of development is made up of levels of substages. Those stages include Discovery; Validation, Efficiency, Scale, Profit Maximization, Renewal. Combined with Max Marmer (2011), that focused on the length of operational time, phases of startup combined as five stages of start-up that consists of Discovery, Validation & Traction, Efficiency, Scale and Sustain/Exit (<http://www.techinasia.com/startup-stages/>).

Discovery	Validation & Traction	Efficiency	Scale	Sustain or Exit
Is there a real problem worth solving?	Validate the product through prototype with customers	Improve acquisition of customers to enable growth	Drive aggressive growth to increase profitability	Transition to sustainable model or exit the business
Form founding team Talk to customers Find Value Proposition Create MVP Join accelerator/incubator Friends & Family finance Find mentors & advisors	Refine core features Initial user growth Metrics & analytics Seed funding First key hires First paying customers Listen to customers Find product/market fit	Value proposition refined User experience overhauled Optimise conversion funnel Find scalable customer acquisition channels	More funding (A round) Massive customer expansion Improve back end for scale First executive hires Ramp up investment in marketing & infrastructure Process stabilisation Formal structure? First profit?	Build, sell or expand? Reassess company position and future growth Extract founders from operational matters Value the business Find a buyer Return the investment or seek more
5-7 months	3-5 months	5-6 months	7-9 months	Indefinite or never!

From : <http://www.techinasia.com/startup-stages/> - combined startup models from Marmer Stages & Steve Blank

**Figure 15 Blank-Marmer Start-up Developmental Phases (scales) Source: <http://www.techinasia.com/startup-stages/>**

While making their way into the phases, the firms had themselves an evolving mechanism in order to find the best business model. Through the changes and environment realization, it will affected on their former goals and organizational structure.

According to the finding in start-up genome, start-up firm tend to show mishaps in their developmental state by showing many inconsistency. Some inconsistencies are happened as the table below. Then those inconsistencies later on will be treated as Strategic experience to let participant know whether or not they through that phase so they learn to get up from there.

**Table 17 Strategic Experience (Inconsistency) seource: Startup Genome Report 2013**

Dimension	Examples for inconsistency
Customer	Spending too much on customer acquisition before product/ market fit and a repeatable scalable business model Overcompensating missing product/market fit with marketing and press
Product	Building a product without problem/solution fit Investing into scalability of the product before product/ market fit Adding “nice to have” features
Team	Hiring too many people too early Hiring specialists before they are critical: CFO’s, Customer Service Reps, Database specialists, etc. Hiring managers (VPs, product

Dimension	Examples for inconsistency
	managers, etc.) instead of doers Having more than 1 level of hierarch
Financials	Raising too little money to get thru the valley of death Raising too much money. It isn't necessarily bad, but usually makes entrepreneurs undisciplined and gives them the freedom to prematurely scale other dimensions. I.e. overhiring and over-building. Raising too much is also more risky for investors than if they give startups how much they actually needed and waited to see how they progressed.
Business Model	Business Model Focusing too much on profit maximization too early Over-planning, executing without regular feedback loop Not adapting business model to a changing market Failing to focus on the business model and finding out that you can't get costs lower than revenue at scale.

By having those typology, it will represents diverse types and exclusive patterns of characteristic that able to ascertain significant results of phenomenon (Doty,Glick, 1994). It also deliver a mental model that can be noted and explained.

#### Goal Setting Measurement

When an organization considered working strategically, Firstly they set their goals. In startup business usually called traction, sales, and market size. By doing so, the business able to track their performance, operational and financial. Latham and Lee (1986) in Fletcher et al (2002) found that 97% of studies involving in goal-setting experience showed that by set themselves challenging and clear goals, instead of doing a maximum efforts or not having goals at all, individuals can performed better. Ansoff (1991) approved that planning resulting the organization a better performances than the trial and error learning.

By having some goals, individuals could structure their planning aspect; allocate their resource, and setting more short-terms goals. All of the information then gave birth to what it called strategies. Ansoff (1991) mentioned that procedures in creates those plans produces better performance compared to trial and error mechanism. Then, those realities may look very intuitive.

Since Bhide (2003) said small firms does not implement strategy in the way more established businesses does. In what way does strategy and growth strategy implemented in small business, more exactly a start-up company?

Growth of companies in empirical studies is being used as dependent variable for the performance of young, small companies by Wiklund (1998) and Delmar (2006). It has become a central topic when entrepreneurship being discussed and studied. In many case,

growth measurements has been viewed as the main driver of entrepreneurship activities (Stevenson & Gumpert, 1991).

The framework of how strategy generated will be a basis for measuring how startups interviewed in this paper whether implement the strategy or not. This study will consider revenue, sales, and number of the employee as growth indicators.

Growth has been used to visualized achievement and trated as dependent variables of new firms in empirical studies Delmar (2006) and Wiklund (1998). Because of that, growth is considered as a main measurement for interacting with entrepreneurship studies.

In measure growth, Barkham et al (1996) said that human capital, assets, profits, revenue and some other of financial performances become most common ways to size the organization. In the meantime, Weinzimmer et al., 1998 claimed that multiple metrics will gave better insights than single indicators of the company.

Those variables are considered a good indicator of company size, and development of the start-ups company in term of size from time to time will seen as growth measures of having growth or not. Revenue become one of the measurements for the start-ups in order to maintain their goals on any strategy polar, emergent or deliberately. This multiple measurement are also according to Davidsson (1989) that suggested composite measure using multiple indicator in accordance to fact that no superior growth indicator seems to exist. Using multiple metrics may let the decision maker acquire a lot of underlying process for growth (Delmar, 2003).

### *Strategy*

Definition the terms strategy as a process came from Mintzberg et al. (2003). Process of the strategy presented by Mintzberg the categorized into plan, ploy, pattern, position and perspective. The description will be mentioned below.

**Plan:** Is a view that see Strategy in process terms that begin with the goal/direction setting process (usually long-terms) then go to formulation of plans. These implementations of plans act as guidelines on how the organization should maintain with different situations they faced with. Risk mitigation and alternative plans are one of the characteristic in employing the strategy as a plang

**Ploy:** Strategy viewed as an intention of the owner to react to competition.To threat, maneuver, and to outwit a competitor is a more practical way in explaining strategy as a ploy. The definition of ploy, clearly concerns on the competitive aspects of strategic management.

**Pattern:** Strategy viewed in an array and repetition of neither neither a stream of execution and action taken by the firms that came up without purposeful planning nor background of strategic plan, but show steadiness in the slants taken to deal with condition faced.

**Position:** Strategy that viewed as a position happened when the organization pursues to locate themselves among its surrounding competition. This lead to Porter's description that matches strategy alongside process of creating a valuable and unique position by choosing to take differently course of actions than competitors do. Maintain position and assess the strategic position of the company will be implementation of strategic as a position.

**Perspective:** Strategy that viewed as a perspective explore the way of company thinking as a results of collective and/or individual mind that drive organization behave as they were. This is happened due to internalization common and mutual common thinking or behavior in the every individuals thinking.

When it comes to strategy that can be overtook by the startup, there are contrast in terms of planned vs emergent approach of strategy formation (Mintzberg & Waters, 1985). Planned strategies and realized one sometimes called deliberate strategies, while emergent strategy viewed as successful actions that consistent but not to confuse with the concept of



chaos.

People who agree with deliberate strategies believe strategic actions are formulated in more concrete steps. Plan and execution being analyzed before it were coordinated beforehand in order to call them strategies. As De Wit & Meyer (1998) says that “A successful pattern of action that was not intended cannot be called a strategy, but should be seen for what it is – brilliant improvisation or just plain luck” (De Wit & Meyer, 1998:152).

Emergent followers agree on, as said by Mintzberg & Waters (1985), views strategies as activities that show constancy and transpire frequently, rather than intentional at a certain points of period. They see that emergent view is characterized by being malleable and adaptable to responding external condition of the organization. This view has been supported entrepreneurial circumstances as a best suited to unstable and unpredictable environments faced by them (Mintzberg & Waters, 1985). In that condition, planning is considered to be too bothersome to do since it takes too much procedures and resource to take.

Both of the view can be combined in order to obtain the advantages of the two views. Some firms (Growth one) will integrate the planning process, that usually more formal with the more deliberate approach than and as flexible as the environment and situation (Fletcher & Harris, 2002).

### *Strategic Entrepreneurship*

Entrepreneurship consists of activities that involve the discovery, evaluation and exploitation of opportunities (Ireland, Hitt, Camp, Sexton, 2001). Those activities then convert opportunities to value adding services and product to the market that require strategic act. Thus, a basic premise of this paper is that entrepreneurship is considered a process said Shane and Venkataraman (2000) on Rasmussen (2009). Another researcher describes entrepreneurship as a dynamic process of vision, change, and creation (Kuratko, 2009).

“It requires an application of energy and passion towards the creation and implementation of new ideas and creative solutions. Essential ingredients include the willingness to take calculated risks, formulate an effective venture team, marshal the needed resources, build a solid business plan, and, finally, the vision to recognize opportunity where others see chaos, contradiction, and confusion” (Kuratko, 2009, p. 5).

Adding to the definition, entrepreneurship is the process of altering invention into innovation (Schumpeter, 1934). Schumpeter (1934) also said that entrepreneurial activities are things that really affected the dynamism of industries and economic growth in the long run.

In the later work, Ireland, Hitt and Sirmon (2003) define strategic entrepreneurship as activities that involved behaviours of opportunity seeking and advantage seeking behaviour that run concurrently. They also developed model of it that integrate Entrepreneurial mindset collaborated with entrepreneurial culture and leadership in order to manage resource strategically. The capability of managing resources then amplified by creating creativity and innovativeness will create competitive advantages and wealth creation.

Biakman (2014) mentioned that strategic entrepreneurship is a process that creates changes with the opportunities seeking in transfer challenge to opportunities, creativity to innovation, and scalable business to sustainable business in terms of wealth creation.

When we talk about small business and/or start-ups as per viewed in strategic perspectives, we can't deny that strategic entrepreneurship (SE) play an important role. The underlying logic of SE that it combined how strategic management is being used in entrepreneurial activities. Ireland et al (2003) define it as a combination of opportunity seeking behavior of entrepreneurial goals and the advantage-seeking framework of strategic management goals.

In other words, SE is a concept where individual/organization determines action of

entrepreneurship, to identify and exploit the opportunities, along with concerns to create and sustain their competitive advantages, with a goal to create above average performance compared to their competitor.

Different studies reveal that SE is needed to create wealth and to maintain growth, the goals are to optimize the combination of advantage-seeking and opportunity-seeking behavior and complement each other (McGrath & MacMillan, 2000; and Ireland et al., 2003).

McGrath (2013) in his book describing on how competitive advantage considered hard to achieved (see *The end of competitive advantage*, Mc Grath) and get replaced by transient advantage that much more dynamic than a competitive advantages. In doing so startups should try harder to get and maintain this advantages beside to keep their track on SE. This concept is implementable to both entrepreneurs in terms of strategic views and goals, and intra-preneur of established business/organization to think more entrepreneurial. SE is also sets as a discipline that happened when a founder decided to switch from emergence of operational decision making Lasch in Kuratko et al (2009).

Small business tend to focus themselves on short-term goals to survive frameworks, to focus on the strategic development, further goals and market orientation of his business. Stephan Heblisch expresses Strategic Entrepreneurship to be an alternative way of running business that specifies the way of meticulous planning and unsystematic trial and error for being called running strategically (Kuraktko & Audretsch, 2009: 14).

Ireland et al (2003) get the sense and impression of Strategic Entrepreneurships as a perspective of Growth orientation of a small business. The growth-oriented perspective show how growths in the entrepreneurial firms are influenced. Those elements, together with strategic managemet framework resource allocation, are channeled to the final goals of entrepreneurial activities, growth and wealth creation.

The paper basically tries to implement the concept of Strategic Entrepreneurship in the entrepreneur's perspective. It done by seeing start-ups forming strategy process in their business. This is because strategic thinking/process is not only exploiting and allocating resources and capabilities of the firm, but also creating more sustainable value chains. By this strategical thinking, it will also enable workforce to stay on their target, as they know where the company they work for ahead to.

### *Growth Strategy*

Strategy beside Mintzberg (2003) had mentioned earlier is also considered as an act to choose to be different (Hammond, 2001). By taking option, trade-offs, well directed in a more sustainable way, the firm would regain a distinctive and sustainable competitive advantage.

Growth in another way, is one of the focuses that have been defined in visualizing the sustainability's of a company. It became goals, a general purpose of a company to operate. The same level applies also in Start-up companies.

Growth strategy, as the mean stated on the combination of the word, is strategy that aimed at acquiring bigger state on the company performances. As stated by Hammond (2001) on strategy, deliberateness in expense internal and external resources in order to create sustainable competitive advantages.

Ansoff (1957) however find growth strategy as a mean of effort that enable an organization getting bigger market share over competitor, that later visualize in a 2x2 matrix that also become fundamentals theory in this theses.

Mcfarland (interviewed by Mike Hofman, Jan 1<sup>st</sup> 2008) stated that growth strategies is a series of actions that enable organization get themselves from one point to another with the most results and the least efforts and results. The results in this study concerns on how start-up company gaining more on their performances.

This phase will divide into how we define start-up growth, how the growth strategy

emerge, and what kind of growth strategy typologies used in this study.

*Start-Up Growth and the Emergence of Growth Strategy*

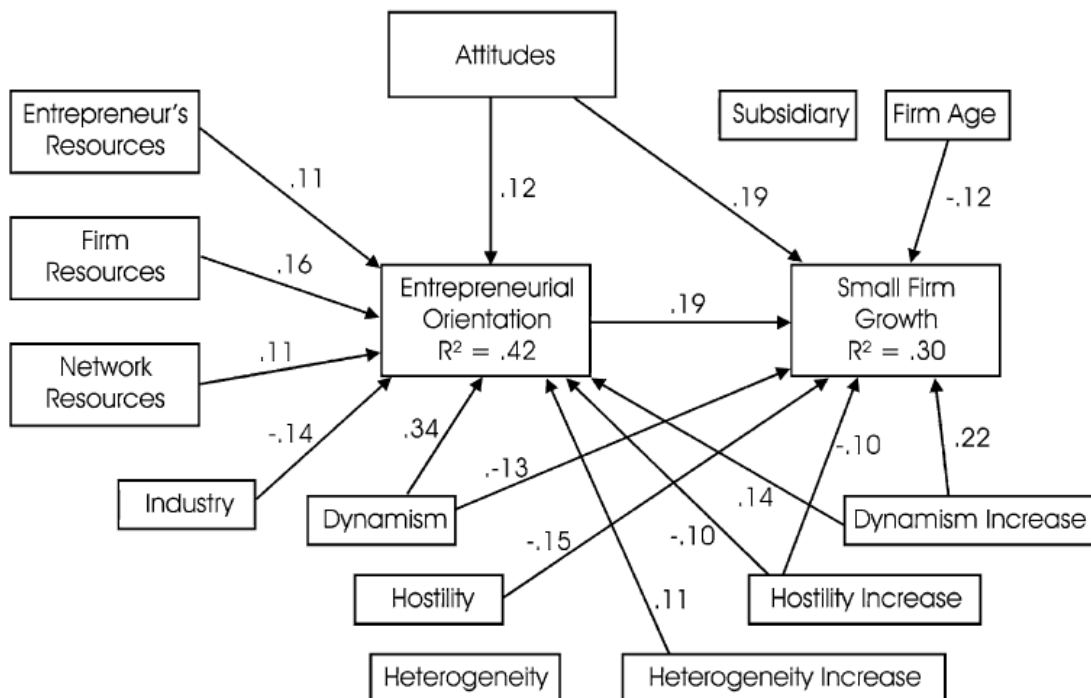
There is a common belief and unwritten standards of growth level of a Start-up. It has to be a Hockey-stick figure with the high achievement in the short of time. Academic approach of this phenomenon will distinct the characteristic of Start-up Companies with the small business growth. There should be many factors that influence the growth. Business context also more likely facilitating one's growth than any others.

A better perception of the factors will be relevant for a start-up, as the firms will able to grasp the context and articulate it into strategy for them to over and grow.

In terms of academic review, it's considered to be still insufficient for the practical use. The limitation of academic study making this trend an attractive area to be studied (Deakins & Freel, 1998). Since there's a few source to exploit, the shortcoming study will be disperse and the related connection between them will not be focus on the same interpretation (Davidson & Wiklund, 2000).

In accordance to what we mentioned, there are a lot of factors, internal and external, that affect willingness and ability to grow (Davidson, 1989). Evenmore, the decision of small firms to adopt specific strategy will also depend on the different factors affecting the firm's growth (Roper, 1999). By putting a better perception, of factors that affect growth in small business, it will affect the better comprehension in factors, whether internal or external affecting firm's motivation of growth.

Furthermore, the decision to adopt a particular strategy will also depend on the different factors affecting the firm's growth (Roper, 1999). Wiklund et al (2009) already map some aspects affecting firm growth, as they, statistically considered relevant to growths in small businesses.



**Figure 16 Wiklund Small Business Growth Integrative Model**

By analyzing 413 small businesses, he developed an integrative model that allows him

to measure dominant perspectives that affecting firms growth. The model also able to assess some of the construct such as entrepreneurial orientation (clear), environmental characteristic (a set of dynamism, hostility and heterogeneity as affected by industry), Resources (entrepreneurs resources, firm resources, and network resources), and manager orientation toward growth (visualized by attitude). Subsidiary and Firm age are taken out since it focuses on Start-up companies that rarely built with experience and time.

### *Entrepreneurial Orientation (EO)*

Entrepreneurship comes from dynamic processes of vision and changes that projected implementation and creation on new ideas as well as creative solutions (Kuratko, 2009). Altogether with the combination of visionary profile that able to seize the opportunities in others saw as chaos, contradiction and confusion (Kuratko, 2009).

Along with the heroic terms of entrepreneurship, it has valued as the main factor of economic growth as Schumpeter (1934) and Covin & Sleving (1991). Entrepreneurship activities hold importance in how they perceived as motor, job creator, enhanced technology and wealth generation.

Then, EO has derived from entrepreneurship and specifically established in strategic management field as strategic orientation that, as Miller (1983) stated, concerns entrepreneurial practice and method that visualized in terms of decision making process.

Differences between entrepreneurship and EO is distinguished by the content and the process perspective of strategic management (Lumpkin and Dess, 1996). Content means how a firms address basic entrepreneurial questions of business entry and how they able to distinguish between opportunities in wealth creation. Process means necessary logic, practices and methods of key persons in a firm that able to behave entrepreneurially.

A start-up is considered having strong EO as their actively engages in product or market innovation, practice risky activities in uncertain areas, and having a better proactive approach relative to their competitor as it implies in Miller (1983) and Lumpkin & Dess (1996). This study believes that innovations, risk engagement and proactive approaches has constructive/positive effects on startup performance, either financially or growth.

Innovation: as Kimberly (1934) found, innovativeness is an advancement of current technologies, practices and products. It also become one of the main elements of EO/process (Schumpeter, 1934). An organization considered innovative as they able to engages in new ways resulting in new market, or technology, services and products (Lumpkin & Dess, 1996)

Weak and strong consideration of innovativeness is indicated on whether they able to: design products; produce effectively; penetrate or enhance their market; manage business; getting technical knowledge; or able to overcome hurdles they faced in between processes.

Proactiveness: is a property that enables firms to execute innovation as product earlier than competitor does. Initiating action in order to gaining relative or competitive advantages over competitor is what categorized proactive.

Lumpkin & Dess (1996) argue that proactiveness emerge when there are asymmetric information exposing opportunities in the market which enable players gaining advantages over the others. Thus, this study will define proactiveness by initiatives taken by the firms to act and anticipate market condition as the pursuit of opportunities.

Risk Taking: Before Schumpeter, Cantillon (1734) as mentioned by Swedberg (2000) proposed entrepreneurship as the self-employed person who faced the absent of profit assurances rather than to work for somebody else for the assurance of wages. Repeating Ries (2011) A startup is a human institution designed to deliver a new product or service under conditions of extreme uncertainty. Thus, the handling of risk and uncertainty become one of the entrepreneurship features and what it means as EO in this study.

Risk as Miller & Friesen (1978) is a means of manager actions on making huge

commitment on resources in order for high returns. Even though not all the return paid back, in the long run, risk willingness create more growth to the firm (McGrath, 2001). In categorization, there are different level of individual and firm's risk attitude (Begley & Boyd, 1987 in Rasmussen 2009). In practical, to reveal firms risk taking attitude is asking managers whether firm is willing to engage in risky projects in order to reach the firm's goal.

#### *Manager orientation towards growth (MO)*

Davidson (1989) argue that economic science assume that owner-manager motivation in the firms is profit-maximizing and growth. But we aware that motivation on one person among another has differ. Along with Wiklund et al (2009), many researchers believe that reciprocal motivation of owner-manager has a key aspect in determining growth of a firm.

In other perspective, people begin their own business with vary motives than just to maximize their profit. Deakins & Freel (2003) distinct one group of self-employment person who pursue their own interest to another group who has ambition in making bigger firms. Later on, it projected with their action in terms of firm's growth.

Attitude of owner-manager towards growth has varied regarding situation they faced. Some authors claim that positive orientation towards growth came after the team has went through a successful growth period. Differently, Wiklund et al (2003) claim that changes that result from firm's growth became a hindrance for a firm to do so. This comfort zone that visualized in term of stabilities in terms of employee number, power distribution, and the need to adapt to harsh environment appear more interesting for managers to let every aspect in the firm remain unchanged.

Manager orientation towards growth has huge influence to direct and visualize strategies of the firm (Naffziger et al, 1994). Positive effect on owner attitude towards growth are shown in many studies that shown in relation of high degree control of owner-manager towards operation that responsible for strategic decisions in the firms that led to better performances to develop the firm.

#### *Resources (Re)*

Resources are the inputs or the factors available to a company which helps to perform its operations or carry out its activities. Also, these authors state that resources, if considered as isolated factors do not result in productivity; hence, coordination of resources is important. Resources are needed for firms to exploit new opportunities, apply new strategies, and implement projects in accordance to firm strategic goals. Financial, social and human capitals are respected to be three main resources necessary to develop and grow the company (Neergard et al, 2003, Wiklund et al (2009). Resource-based view (RBV) are considered to be basis for competitive advantage that rest the base application of a bundle of valuable tangible or intangible resources at the firm's disposal (Penrose, 1959).

Financial capital: financial capital level is correlate positively to firm growth. Alsos et al (2006) state that finance are the most basic yet supple to be formed to another type of resources. It also represents one of the vital resources to achieve firm's growth. It even could lead a firm's strategy at the very early stage of firm organization Boeker (1989).

Financial led a firm to implement more capital intensive strategies where at the same time, it provides buffer for experiment and early implementation to test Cooper (1994). Later, the implementation of it would gained advantages over competitor in terms of imitability and more barrier to compete by the ability of firm to mitigate unfavorable outcomes.

Human capital: This capital indicates the ability of the firm to retain manager's knowledge and attributes (hard or soft) that assist them in manage the firm (Koeller and Lechler, 2006). It also means of the sum of workforce that enable management of organization business process.

Human capital considered as an intangible asset that considered as a firm's competitive advantages that will help the firm to identify and attain new opportunities in order to grow the firm in a more effective way (Alvarez & Busenitz, 2001).

It already gain popularity in current research that stated as the firm competitive advantages that hard to replicate compared to others such as technology, scalability and natural resources. RBV accentuates human capital as inimitable resources and correlated positively with the firm performances (Guthrie, 2009). It also considered as a decisive factor in current market condition.

**Social capital:** Social capital represented by the significance of firm's connection, in numbers and worthiness (Borgatti & Forster, 2003). Freel & Harrison (2008) argue that those connection are commonly stated as relation between one's firm to other entities. Usual words regarding the network connection is to perform collaboration that not limited to: developing new products, combining complementary skills, regain new opportunities and many more. Scholars assess that relationship had an active role in the firm's growth (Barringer & Greening, 1998) since it overcome the problem of small-new firm and create collaborative relationships that can be beneficial in the early-phase of the firm. This capital attained through inter and intra-organizational networks. In managerial this capital provide necessities for firm to grow as; important information, new opportunities and other type of resources necessary to achieve growth.

Since those three caused specific change of challenge to the firm when restrained, this study tries to explore the source of the resources. Both of the analysis will be mapped with the source of the resource, from/to internal and external comparison in the firms.

Internal means that all the resources mentioned before are able to be fulfilled by internal condition of the firms. Whereas external means, whether asked or voluntarily, are the one that came from a means of networks from a firm to another. As Choonwoo et al, (2001) had summarize, internal capabilities were operationalized by entrepreneurial orientation, technological capabilities, and financial resources invested during the development period. External networks were captured by partnership- and sponsorship-based linkages. Partnership-based linkages were measured by strategic alliances with other enterprises and venture capitalists, collaboration with universities or research institutes, and participation in venture associations. Sponsorship-based linkages consisted of financial and nonfinancial support from commercial banks and governmental agencies.

Some scholars mentioned that networks play important role for small business growth. This networks denotes both founder-manager with the rest of the employee and from one firm to another that enable firm with the access to: capital; human resource and managerial advices.

This research will try to divide resources based on original sources. Internal resources will be categorized into initial financial and human resources. Whilst external resources will be denoted as external source of funding and social capital as definition mentioned before.

#### *Environmental Characteristic (EC)*

Pfeffer (1970) on Rasmussen (2009) has mentioned that environment influence growth of the firms. In term of opportunities, a specific environment may interfere managerial action. It also stated that the smaller firms established the more likely it being altered by environment (Dyer & Ross, 2008 on Rasmussen, 2009).

It is important for managers and founder to perceive their business environment nature being faced by the firm in order to associate their action respectfully to the condition. Hambrick (1982) on Rasmussen (2009) had researched the crucial role of the ability to perceive strategy to environment condition as the successful implementation of those strategies relies on the nature of its competitive environment (Murray, 1988)

From different views, the number of studies were established on how vary environment affected firm performances. Industries, demography, geographical area, worker union, maturity of the market are areas between those numbers (Baldwin & Gellatly, 2003). Those researches corroborate the firm's advantages regarding certain environments. There are variables to concern in order to perceive environment.

Since it too complex, Wiklund (2009) suggested that environment should be seen in small business perspective. They summarized in three levels in order to distinct characteristic of the environment; dynamic, hostile and heterogeneous environments.

Dynamic environment is an environment where demand changes continuously, volatility of the aspects of business environment and certain turbulences (Pelham, 1999 on Rasmussen 2009). Customer's need changes, volatility and other changes create opportunities to establish innovation, and deliberate strategies that later associated with higher growth. Dynamism claimed to have positive impact on firm performances that orient their goal to pursue new opportunities (Wiklund, 2009). Adaptability and flexibility of small startup enable them to cope up with that changes and pursue their opportunities through innovation process.

Khandwalla (1977) defined hostile environments as a risky, dominating and stressful condition faced by the firm. It described as an intense rivalry and risky industriousness condition. In hostiles, firms with limited resources have to considered their managerial decision as it will resulting higher cost and loss of competitive advantages when it's wrong. Otherwise, supported with enough resources, Mieller & Friesen (1982) said that startups would pursue benefits of this environment thorough their opportunity seeking behavior through aggressive and innovative products.

The other environment condition, heterogeneous, described as complex with multiple segments of customers (Pelham, 1999 on Rasmussen 2009). Those different market segments needs to be gained as it creates more opportunities for startup ploy in niche markets. Wiklund (2009) argue that this type of environment might provide startups growth opportunities as it able to explore specific niche segments. As long as the firm able to perceive and exploit those segments, then growth relation among the forms is inevitable.

As stated, environment might gave opportunities for firms to grow, but not as related directly as the other aspects. When founder had already attained strong growth orientation, pressures created through environmental changes only would have role as strong facilitators for achieving those objectives. Differ with conventional firms combined with low attention on innovation will prefer to compete in a stable environments. Stable environments later adhere firms to continue play safe with a rare occasion to rethink their strategies. Otherwise, the harder the setting, the more likely will the firm is to devise actions with the intention of surviving, growing and stay relevant.

This study then will try to distinguished startup firms environment and whether, as data provide, related to growth strategies and later to it's performances.

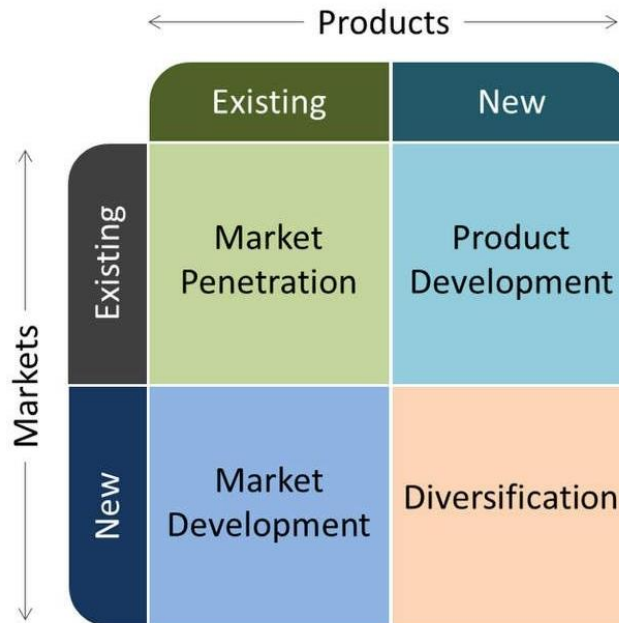
### *Growth Strategy Typologies*

The definition of strategy as a thoughtful unique choice came from Hammonds (2001). By making course of actions, trade-off choices, and leading with direction and continuousness, a firm can create sustainable competitive advantage and gain its uniqueness. Other word, Typology came from a value to translate more complex situations into more simple portrayals that enable to explain causality of outcomes and action based.

In terms growth strategy typologies, we used product-market model proposed by Ansoff (1965) as it holds variables that consider relevant to growth strategies (Moreno & Castilla, 2008). Besides, this typology usually taken place in corporate level of decision so it will be more solid to explain the strategy held together by the subject of this study.

Ansoff's (1965) model proposes different corporate-level strategies that aim towards

the growth of the firm. This typology is concerned with the strategic decision that a firm faces, when considering in widening the range of products or entering new markets. Based on two dimensions, product and market, four strategies are formed.



**Figure 17 Ansoff's product-market matrix (Source: [https://i.ytimg.com/vi/6NGehyOPF\\_k/maxresdefault.jpg](https://i.ytimg.com/vi/6NGehyOPF_k/maxresdefault.jpg))**

To be brief, Market penetration is a growth strategy based on increasing the firm's existing share of products and markets. It happened through; sells the product to existing customer, attract customer from competitor, and provide better product than the competitor.

Market development is a strategy where firm responds to the market by introducing existing products to new markets or customer groups. Internalization concept as a key area for growth could be recognized as the visualization of this strategy.

Product development is a strategy where firms Develop a new product for customers that already loyal to the brand. This entails additional product development costs, but eliminates the cost of acquiring new customers. Keogh & Evans (1998) in Rasmussen (2009) said that this strategy is compulsory in order to keep the firm competitive and grow (Keogh & Evans, 1998).

Diversification guides the firms to introduce new products to new markets. It Enter a new market with a completely new offering. Doing this entails significant costs and risk, but can be extremely rewarding.

In terms of parameters, Mascarenas et al., (2002) state that growth visualized in expansion on what is currently a firm doing.

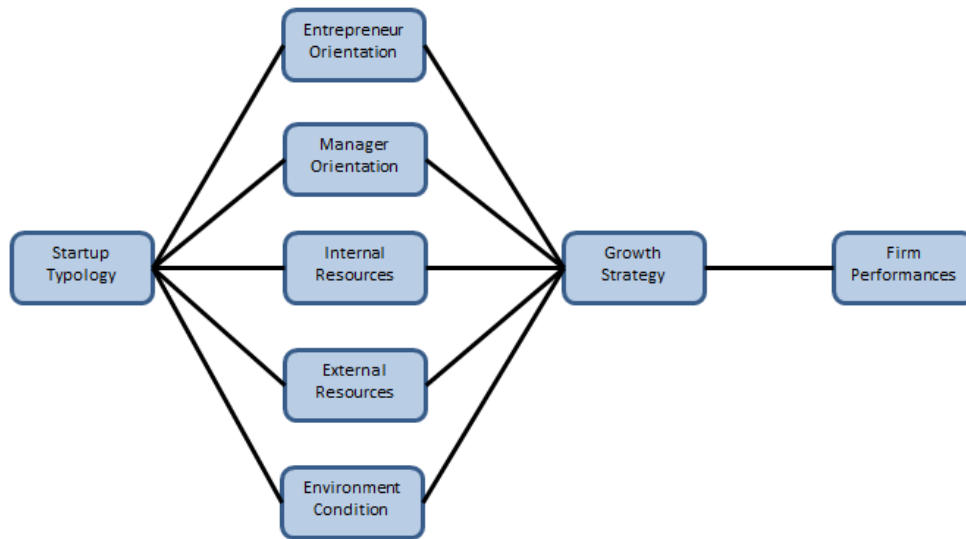
Even Watts et al (1998) in Rasmussen (2009) stated that most suitable strategy to grow are those vis-à-vis to product development or market development, but this study will explore how firms adapted to any strategy classified in Ansoff's (1965) product-market matrix. As the model taken as a guide during the case study, any flexibility regarding the exact strategy implemented by the startups are still put on consideration and documented.

*Growth Strategy Development on Startup Companies*

Based on the academic literature that had been mentioned from 2.1 to 2.6 then this study propose some of the causal models that later represent this logical think on how a



startup companies develop their growth strategy. We derived the models from Wiklund (2009) along with typologies that been declared by the Marmer-Blanks and Startup genomes. Those classification will later compared with the strategy they taken to grow that based on Ansoff (1991) Product-market matrix as representation of growth strategy option available.



*Figure 18 Proposed Research Model in Growth Strategies in Startup*

Those models then will be used as this study's framework of analysis. Any direction of question, interview and exploration on the research subject later on will be done through this framework. Validation of data will be cross-analyzed with the performances of the firms.

**Problem statement**

Start-up rate of success is considered low and most of the start-up/nascent entrepreneurs are failed to run business, most of them fails because they failed in setting strategic goals (Hechavarria, Renko, 2011).

The study about creating strategy for small business vis a vis a startup company are very well known in popular article, but very little the theme arise in academic research. By knowing on how strategies are made, it should inspired start-up founder to formulate the strategies in order to increase the survivability rate of the startup. This thesis will also creating more insight in how strategies are made in startups business.

The first phase to working strategically, means to set the well-defined goals. This process of vision and goal setting coherency that very important for the organization (Rasmussen, 2009)

Study apprehend by Latham & Lee (1986) show that 97% of goal-setting experience that having the challenging and clear goals one can performed better rather that the one that done their best' or not having goals at all. Planning process also resulting in better results rather than emergent actions (Ansoff, 1991). In term of strategy implementation, there is a different way to implement between small and established firms (Bhide, 2003).

Then, all the argument should conclude our first problem statement to:

1. What is a strategy and growth strategy in a Start-up company?

While maintaining its Most Viable Products (MVPs) to launch to the market, Growth Strategies in startups often defined as a strategic step that whether the company stay with the current product or pivoting (Blank, 2014). Some of the start-up in the same type of business characteristic had similarities in the way they behave in accordance on how they

react to their challenges (Startup Genome, 2012).

In the terms of business classification, Steve Blank's 6 Steps of the Epiphany (2013) that an enhancements of his Four steps of ephihany (Blank, 2013) has mapped the startup lifecycle into 6 stages of development that focused the view on customer. Each stage of development is made up of levels of substages. Those stages include Discovery; Validation, Efficiency, Scale, Profit Maximization, Renewal. Combined with Max Marmer (2011), that focused on the length of operational time, phases of startup combined as five stages of start-up that consists of Discovery, Validation & Traction, Efficiency, Scale and Sustain/Exit (<http://www.techinasia.com/startup-stages/>).

In every stage, there should be a certain condition that a company should fulfil in terms of resources, maturity, and market power/traction/customer. The availability of resources and capability will be faced differently between one start-up phases to another, thus it will be a challenge for a company in each phase to accomplish to move to the next phase, or to grow. It concludes us to the second problem statement:

2. What are the Challenges over Start ups in each Phase of Start up?

A start-up business that classified in taxonomy should have the similar pattern in the strategy they taken to grow. But it is still a black box, considering what triggering them using strategy? We hope that, by understand the context or pre-requisite of a start-up firms that enables them to implement growth strategy, founders would able to measure external condition of the firms matched with the resources in order to come up with the best-fit growth strategies.

It concludes us to the third problem statement:

3. Under What Condition does Start-up Emerge Strategy?

Strategy is emerged as an output of a company in responding external-internal condition; it is moved by either performance (Marmer, Hermann, 2011), Personal motives (Birley, 1994), or as a result for benchmark that considered the best practices of one companies with the underlying logic and revealed direction.

Balaji Viswanathan (2016) said that strategy is considered in some criteria and its goal is to not fail. In order to simplify the comprehension, also by analysis in many best practices, the growth strategies should be architect into a simple model. The model should self-descriptive to findings in the real condition. Thus, the model might be used for practical guidance by many company to follow.

Ansoff (1991) had mapped the strategy in every matrix that considered as strategy, it shows some direction on how a company would accomplish its goal to. Whether the company choose to (i) Decrease its price; (ii) Increase in promotion and distribution support; (iii) Acquire of a rival in the same market; (iv) Refine product to be modest to penetrate the market and so on in order to gain competitive advantage over its competitor.

It concludes us to the fourth problem statement:

4. What is the underlying logic and strategic direction of the growth strategies of Start-up Company?

## **Research object and methodology**

### *Research Purpose*

As stated from previous chapter, the purpose of the whole study is to answer some of the question that I consider important in order to find out all aspects that affected survivability in startup by the clear understanding of growth strategy. Those lead questions then followed with problem statements mentioned earlier.

Existing researches about growth strategies, especially in start-up company is consider

limited. One of the issues of that scarcity is there are still unexplored area in strategic development process. Later, Deakins and Freel (1998) consider the growth strategies emergence factors are still lacked cultivation among management school. Moreover, there is a need for summarizing long research papers into model that could gave overview and applied to business practice.

Yin (2003) as in Wahyuni (2012) categorized the research purpose of a study into three categories: exploratory, descriptive and explanatory. Exploratory research is taken when the main issues are not yet known and the available info is not yet complete. It helps the researcher to explain and comprehend those issues by gathering a lot of information about a specific matter (Zikmund, 2003; Yin, 2003). Descriptive research is used to find the answer of specific matter as how, where, what, and who.

When the intention is to identify causal relationships among variables, one can conduct an explanatory research (Zikmund, 2000). Yin (2003) claims that an explanatory research could also be used when the objective of the study is to explain specific procedures from different perspectives or situations with a given set of events.

### *Qualitative Research*

The research conducted in qualitative way which intend to develops and discover the new aspects of growth strategy, specifically in start-ups environment.

It is started from the subjective research and definitions of main concepts of the research. The down-side of this research is that subjectivity of research object and the role of the researcher becomes stronger in the quality of the process. Besides, the researcher himself becomes a collecting data tool and in certain areas has the suppleness to make fine-tuning in the process in order to gain better understanding of the data collected.

There are three kinds of approaches in qualitative research selected. There approaches to subjective view points; Description of the making of social situations; and Hermeneutic analysis of underlying structures. These approaches had differences in terms of objective of the research, theoretical conjectures and methods applied.

The first approach highlights the view point of the subject. The second approach attempts to describe the processes in the production of existing situations, and the last approach, is distinguished by the analysis of deep structures that generate action and meaning. This paper will employ the first approach, which focuses on the approaches to subjective viewpoints, by making use of, for instance, semi-structured interviews.

The goal is to gain a comprehensive view of the phenomena under study with detailed information about how the strategies adopted. Thus, this paper concentrates in answering how start-ups adopt sustainable growth strategies, a question that is not subject to behavioral events but deals with contemporary, present-day events. Case study is chosen as the research strategy of this study.

The research strategy adopted in this study characterized as explorative, which allows a case study approach. Case study is the investigation of a contemporary, empirical phenomenon within its real life context; when the boundaries between a phenomenon and its context are not really clear.

Hartley (1994) stressed that the key feature of the case study approach is not method or datam but an understanding of the process as they occur in the context. This type of case study research

There are two ways to conduct a case study, by analyzing a single case or multiple cases. Yin (2003) mentions that a single case study is suitable when the case is critical, extreme or revelatory. Multiple case studies, on the other side, are not dependent on one unique case and because they are based on diversified cases, it is considered that the pattern matching (validity) and robustness of the results are enhanced compared to a single case

study. The downside of a multiple case study might be a lack of depth, and the fact that they are more time consuming and expensive to conduct.

This paper chooses a multiple case study because it will be incomplete to study only one firm and its growth strategy/strategies. It is needed to study a selection of cases in order to get a more broad perspective of the actual practice of start-ups, and also to provide more robust and valid information concerning growth strategies in start-ups.

### *Research Strategy*

This study aim to understand the condition on how startups interact with growth strategy process along with the classification on actual categorization on startup typology by examining the decision and actions taken. We hope to create simple models that could illustrate actual practice, also to provide idea for start-up firms when dealing with growth strategies.

By the purpose, this study is considered exploratory in terms of exploring and gaining insight about the current issues, in order to contribute to current research. In the other side, this study also considered being descriptive in a way to find how exactly startup able to develop sustainable growth strategy.

Broadly speaking, the research carried out by the method of literature study, and deep interview for startups in Indonesia that closely varied to meet all population of startup Genome. Yet, the sample is selected among companies that considered a start-up in the various phases in order to get a better understanding about the issues.

Case studies are selected in order to gain more insight about start-up by describe in detail of the issue and by analyzed in diverse view of the subject. We hope that case study will allow the researcher to acquire richer information and deeper observation on the related subject.

In order to reach the goal of this study, this research will gain knowledge on startup companies as unit analysis. Selection of start-up firms are based on the business that established below 5 years regardless of the size of the company, founded by three or less people, and relatively targeting big market segmentation. Size of the firms doesn't become concerns since one of the variables that will be studied is startup typologies by Steve-Blank's that vary on term of firm sizes. Non-limitation in terms of main business process is also not become a concern, since by descriptively analyze business characteristic of the startup we hope that we will able to validate start-up typology by startup genome's.

After we able to define each of our respondent then we move to our next investigation on how they deal with growth strategy. Descriptive process on how startup formulates their growth strategies in a way that has constructed in the previous chapter. To enrich the observation, multiple case studies are selected. That way, it provide the study a more broad standpoints on how different startup reacts and play on different strategies one and another.

Collections of data are selected in the form of recording audio of the interview that later on Tran scripted into verbatim articles. Some of the complementary data are made through secondary research over internet, and some of the participant employees.

In the interview, we chose to use guided interview methods with questionnaires as a guide to every interview. All of interview questions are derived from every research questions that mentioned in problem statements before. All phases in order to answer every question are backed with literature review, terms of data collections and early data analysis among one informant to another. The process then replicated in order to answer the questions. The list of questions is illustrated in table below.

As Reynolds (1979) stated in Wahyuni (2011) that the informants in start-up's participants should dissect four principles of informed consent: competence; voluntarism; full-information; and comprehensive. In some times before interview schedule, those

questions above then compiled into one questionnaire then being informed to every participants.

As in participants, at first we want to use quota sampling in order to fulfil every aspect of Marmer-blank typology cross-sect with startup genome's typology then pre-determined either the participants use growth strategy in terms of either product development or market development. That way it calculated that we should get as many as 32 startups with each of main characteristics.

Research Question	Interview Guide	Source of Data
<p><i>Research Question one</i></p> <p><b>What is a strategy and growth strategy in a Start-up company?</b></p>	<p>o Could you describe what is your view towards strategy?</p> <p>o According to you, would you rank from 1(the most) to 8 (the least) your main competitive advantage over your rival/ other business? * : 1 Regulation Advant Technology; 3 Partnership/Supplier; 4 Strong Information; 5 Sources; 6 User Engagement; 7 Barriers to Entry; 8 Substitutes Product</p> <p><i>Strategy Implementation</i></p> <p>o Does your company make use of the strategies?</p> <p>o Do you hold meetings to discuss strategic issue?</p> <p>o Do you write down plan and had a written plan as a guide?</p> <p>o Do you set objectives and review the realization?</p> <p>o Do You Review Strategies vs Objectives</p> <p>o How Flexible are your strategies?</p>	<p>Literature Review</p> <p>Data Collection</p> <p>Secondary data regarding participant's firm</p> <p>Semi Structured interview with research participant</p> <p>Participant observation and informal interview</p> <p>Early data analysis</p> <p>further semi-structured interview</p> <p>Continuation of data analysis through and through</p>
<p><i>Research Question Two</i></p> <p><b>What are the Challenges over Start ups in each Phase of Start up?</b></p>	<p>o What is your main challenges in order to keep operational and grow? And why? Check all that apply option as: Acquiring More User/Customer; Maintain service/production level to meet the needs; Creating Product/market fit or Problem/Solution Fit; Building a solid group of team; Getting More Capital; Other (open ended)</p> <p><i>Strategic Experience</i></p> <p>o regarding to Customer are you... Spending too much on customer acquisition before product/ market fit and a repeatable scalable business model; Overcompensating missing product/market with marketing and press; Other:</p> <p>o Regarding to building your Product are you... Building a product without problem/solution fit; Investing into scalability of the product before product/market fit; Adding "nice to have" features; Other:</p> <p>o Regarding to building Internal Team are you... Hiring too many people too early; Hiring specialists before they are CFO's; Customer Service Reps, Database specialists, etc.; Hiring managers (V product managers, etc.) instead of doers; Having more than 1 level of hierarchy; Other:</p> <p>o Regarding getting Financials for grow are you... Raising too little money to get thru the valley of death; Raising too much money; Other:</p>	<p>Literature Review</p> <p>Data Collection</p> <p>Secondary data regarding participant's firm</p> <p>Semi Structured interview with research participant</p> <p>Participant observation and informal interview</p> <p>Early data analysis</p> <p>further semi-structured interview</p> <p>Continuation of data analysis through and through</p>
<p><i>Research Question Three</i></p> <p><b>Under What Condition does Start-up Emerge Strategy</b></p>	<p><i>Growth Strategies</i></p> <p>o In the last 3 months, how many average hours your worker spent their time working per week?</p> <p>o For teams that in-touch in technical and operational problems, how many years they had experience in their field?</p> <p>o For teams that in-touch in Business and Strategic matters, how many business they did help so far?</p> <p>o In your opinion, how can the firm achieve growth?</p> <p>o Can you describe the growth strategies employed by the firm?</p> <p>o How does the company go about developing new products?</p> <p>o How does the company go about expanding its markets?</p>	<p>Literature Review</p> <p>Data Collection</p> <p>Secondary data regarding participant's firm</p> <p>Semi Structured interview with research participant</p> <p>Participant observation and informal interview</p> <p>Early data analysis</p> <p>further semi-structured interview</p> <p>Continuation of data analysis through and through</p>
<p><i>Research Question Four</i></p> <p><b>What is the underlying logic and strategic direction of the growth strategies of Start-up Company?</b></p>	<p><i>Entrepreneurial Orientation</i></p> <p>o To what extent can the firm be described as having an entrepreneurial orientation? That is, its proclivity for risky projects, emphasis on innovation, and tendency to introduce products before competitors.</p> <p>o In your opinion, does the entrepreneurial orientation of the firm affect its growth strategies? If, how?</p> <p><i>Owner/Manager Growth Orientation</i></p> <p>o What is the main goal of the owner/manager with the firm? For instance, focus on survival of the firm, maintenance of lifestyle or achieve growth.</p> <p>o What is the attitude of the manager toward growth?</p> <p>o In your opinion, does the manager's attitude toward growth affect the firm's growth strategies? If, how?</p> <p><i>Firm Resources</i></p> <p>o Do you believe the firm has the adequate internal resources to grow? Such as human capital, intra-organizational networks</p> <p>o Do you believe the firm has the adequate external resources to grow? Such as financial capital, inter-organizational networks</p> <p>o In your opinion, do internal and external resources affect the growth strategies of the firm? If, how?</p> <p><i>Environment</i></p> <p>o How can you characterize the environment of the firm in your particular industry market or location? For instance, dynamic; instability and continuously changing hostile: high rivalry or decreased demand of the firm's products, heterogeneous different market segments with varied characteristics and needs or stable</p> <p>o In your opinion, does this environment affect the growth strategies of the firm? If, how?</p>	<p>Literature Review</p> <p>Data Collection</p> <p>Secondary data regarding participant's firm</p> <p>Semi Structured interview with research participant</p> <p>Participant observation and informal interview</p> <p>Early data analysis</p> <p>further semi-structured interview</p> <p>Continuation of data analysis through and through</p>
<p><b>Complementary Data of Participant</b></p>	<p>o Company Name</p> <p>o Month and The Year The Firms Start</p> <p>o What is the form of legal aspect of your company</p> <p>o Who is your Consumer/Customer/ User? Is there any specific market you target?</p> <p>o What is Product/Service you offered to your customer?</p> <p>o Could you describe Product/Service you offered to your User?</p> <p>o Do you have supplier or external service to support your business? Could you describe it?</p> <p>o Would you describe this business as: 1. An independent start-up, created by an individual or team working on their own; 2. A purchase or takeover of an existing business; 3. A franchise or multi-level marketing initiative; 4. A start-up sponsored by an existing business; 5. Something else. How would you describe the location where this new business is being developed?</p> <p>o Average Sales of the company</p> <p>o Average Sales Growth per months</p> <p>o Number of the Employees</p> <p>o Average Growth of User/Customer per month</p> <p>o Is the startup receive any financing/funding from external sources?</p>	<p>Data analysis and Synthesis</p>

But along the way, we find that there are not enough types of startups with that kind of characteristics. So we moved to chain referral sampling (snow ball) that meet what Castillo (2009) mentioned would overcome problems such as subjects that hard to locate (Wahyuni,

2011). Snowball sampling is a non-probability sampling technique to cover a very small subgroup of the population (Wahyuni, 2011). This type of sampling technique is used in terms of maximum variation sampling, where in the implementation, previous participants will refer the next participant with the most divergent forms of the experience.

#### *Assurance in Quality of this Study*

In order to ensure quality of this study, we decide on using Yin's (2003) in Wahyuni (2011) assessment criteria. Yin (2003) refers four design tests to assess quality of the research; construct validity, internal validity, external validity and reliability.

Construct validity is made sure by acquiring numerous foundations of info regarding academic statements of every argument from many scholars. Internal validity is gained from performing triangulation or cross analysis between participants, theories and literature. This process is also gained from patterns matching regarding one participant and another regarding specific issues. External validity is gained from documentations based on in-depth interviews. Triangulation process also considers in helping with confirmation from various sources of literature as well as from experts.

Reliability denotes to the similar discoveries and deductions when a researcher runs the same case study in various frequencies (Saunders et al., 2000). Implementation of the reliability of the findings and analysis is to minimize errors and biases in this study. Yin (2003) in Rasmussen (2009) stated that by constructing the most operational procedures as possible and conducting the research as being monitored, the research could improve the reliability of the study. In this study some of the participants' interviews are done through outsource help (Cozora, TemanJalan, and Bagi Kata) in order to see if the procedure will be as reliable as it hoped when designed.

For the record, some company is reluctant to reveal their performance measurements and their figure. One of the firms also doesn't want their name revealed as participants. In order to include that participant in this report then we rename all the details into an alias (Company A). Some of the data that failed to be obtained directly, are complemented through various sources.

#### **Case Studies**

As stated from methodology, startups are selected from snowballing samples. One of the first participants being interviewed is Tosha Telecommunication that was founded by Tommy Herdyansyah in 2012. This start-up works in creating digital solutions (websites, company internet branding, smartphone applications) for companies as a solution to optimize work process, branding and IT Solution. Later, he introduced the study to No Limit, a company specialized in analyzing social media contents for brand activation and optimizing actions regarding activities or testing the market.

Example above are patterns that happened in the study. With snowballing sample we proceed in interviewing 27 start-up firms with varied types of business (startup genome) and phases (blank-marmer's). One of the firms chose not to be mentioned in this study, which later on we called Company A.

Some information like sales and revenue are not quite easy to obtain. Some of the firms gave the information, most of them are reluctant to do so. This is quite burdensome to the study and for the firms is not an obligation to reveal sales and revenue since most of the

startups here. Even the big player such Gojek and Bukalapak are not required to open their information to public due to their status that still not listed in the stock market.

Since the goal of this research was to describe and to explore empirical data of the selected firms. Case studies are collected among 27 cases represented each of start-up firms. In this paper, will be shown 3 cases as representatives. Then all the findings will be summarized along with analysis.

*Case Study 1: Go-Jek (PT Asli Karya Anak Bangsa)*

Name of the Participant: Dayu Dara Permata, Vice President Non-Transportation Business

Go-Jek is a company that first started from 2011 with Nadiem Makariem as its founder. At first they maintain their main business by connecting the demand for Ojek (Motorcycle) Transportation manually. Even though started as a side project as for the Founder academic task in Harvard Business School back in 2010, the sole purpose of GoJek is to solve traffic Problem in Jakarta. Our respondent, Dayu Dara Permata, a Vice President in Non-Transportation Business Line stated that traffic problem responsible for 30 trillion Rupiah of unproductivity from 10 million people due to 1200 hr/year roughly from stuck in the traffic only.

Matches made for informal demands of transportation that started from the lowest transaction of 5 informal motorcycle drivers a day. In 2014, collaborated with his programmer friends, Nadiem created the apps for automatically match-make the process. Nostra, a Company of the friend of his, helped built his first app. From that moment, it is remembered his first Gojek pivot from Transportation Company into application based company. In 2015 it was launched as Go Jek and maintained its growth up until nowadays. The huge growth that claimed to be 200% incremental rose of performance per month (April, 2016).

The hockey-stick performances allow them to attract many venture capitalists that willing to help Gojek to scale up. It allows Gojek to scale up his line of business from 1 line, Go Ride (January, 2015) to 4 (March, 2015), to 5 (June, 2015), to 10 services ( October, 2015) finally 11 Services (February, 2016) that Consist of 7 Transportation line (Go Ride, Go Car, Go Food, Go Send, Go Mart, Go-Box and Go Busway) and 4 of non-transportation business (Go-Life: Go Massage, Go Clean, Go Glam, Go Tix). Now, the company held under PT Asli Karya Anak Bangsa (AKAB) now has 1700 workers that claimed to be a just-now best fit with the business process needs.

*Go jek Typology*

According to our analysis, the work length of Go-Jek is being classified as Efficiency with Avg Months Working of 16 Months but already got the funding, the Average growth of user, and number of employees within Scale classification of Marmer-Blank's Classification.

From that analysis we can assume that Go-Jek has already on its Scale startup business classification.

According to the business model and characteristic of the growth, Go Jek is classified as Type 1N (The social Transformer) while according to the interview, the focus they had is in their internal processes. The business heavy and balanced teams perform excel compared to their performance on technology heavy teams. They able to give births to new business line as fast as 1 business line per months they operated. The main purposes of the company to give society alternatives of transportation means strengthen the argument of this classification.

Challenge that faced by Gojek according to our respondent is in order to keep themselves growing they had to Maintain Service Level in order to meet market needs. This issue is came up as Go-Jek face some challenges to keep all of their services performed well even though they had some backend problem. It happened due to high level of demand of the recent product they introduce to the market, suddenly all of Go-Jek apps need to be updated in order to give maximum experience to their customer. More problems arise due to a huge number of users they had so far, automatically update the app would be burdened more the server they had. Consequently if the problem had to rose, it will give bad publication and it is hard to afford them right now.

Another challenge that becomes their focus is they had to create more product/market fit that answered recent problems. They had to do it fast in order to keep them having first mover advantages. It reflected on how much they launched 6 new products within the second year they had operated. Become the first mover is also become they main competitive at the start, within the first year they excel in transportation business, they become the first company which differentiate their product more than their rivals.

### *Strategy Aspect*

According to our respondent, strategies are the means to achieve their goals or objectives. Go-Jek strategies are managed and being monitored very intense as a serious commitment taken by management line. They are discussed and approved decisions in the annual general meeting. Later they wrote down and followed things up in the whole year.

The Strategy is considered really flexible as they aware that the growth of this company should be exceptionally high in order to becoming a more established company. Action plan and strategy as a whole are monitored in a tight timely manner so that any changes in the market could affect the whole strategy they created. As an illustration, respondent informed that strategy that implemented in go-jek in a year is equal to 4 years-of-strategy that implemented in a more established company.

As of today, go-jek has pivoted two times. First when they started matchmaking demand-motorcycle services by manual process, they collaborated with Nostra to build more



optimized and more automatic way to do so. The Second pivot then visually seen as they moving from a transportation businesses in to more to a backbone application services provider for a number of service Indonesia in 2015.

*Factors affecting Go-jek's growth and its growth strategies*

Entrepreneurial Orientation: Go-jek saw innovation on operational excellent along with presenting new products and services to the market has become the strong point that indicate the company had strong entrepreneurial orientation. By dedicating their business as a backbone application services, Go-Jek has dedicated into developing new products line in order to making their new market. Approach on non-transportation business, bundled with Go-Life Feature on the app made Go-jek adapt to new market segments in Indonesia allowing them to have first mover advantages.

New line of business are considered high-risk but as the March 2016 results, the demands for the new products still increasing in the point that Go-jek doesn't need to do more marketing activities. By doing so, Go-jek culminated as one of the most productive startup in Indonesia by taking risk, Innovate on process, pioneering new products and opportunity-taking actions from every level of the organization.

Validated to the question, our respondent agreed that without the strong orientation of entrepreneurial that the company has now, it would be hard to implement the growth strategies in Go-Jek. Innovation that emerged from the bottom line of organization has claimed to be setting new bar for the other player and grab the first market and mind share of the customer.

Manager Orientation towards Growth: The Interview session mentioned that there's policy in hiring people in Go-Jek. Go-jek builds a working environment that only people with a combination of hustler-hipster type that would be performed in Go-Jek. The respondent emphasised that only worker who had good spirit to become more salient and entrepreneurial minded are the one who being accepted and will survive in the company.

Our respondent shows her enthusiasm of solving one of the biggest problems in Indonesia big cities, traffic jam. As mentioned before, by solving big problems in the country the company along with awareness that people who work for the company are the one who have possibilities building their own company, The managers there surely try to perform well in achieving company growth and maintain healthy profitability. Until now, full support in order to execute strategies from decision maker are considered supportive for the implementation of the strategy, thus managers have a sturdy attitudes towards Go-jek development.

Firm's resources: Dayu consider have the good amount of internal resources in order to sustain the growth of the company. With 1700 people working on Go-Jek they first considered "too much" in January 2016 but with the extensive growth on product line, it

suddenly become fit as the requirement of operating those business (April 2016). That Human capital along with intra-organizational network of the company that given their own authority for each strategic function to operate does give an adequate numbers on what the company needs to grow.

As in external resources, Series B funding up until 2015 are considered as a big chunk of help. It help the company most on customer acquisition program. Some program like referral fee when a customer referred go-jek to other new user and 10.000 rupiahs service to go anywhere within Ramadhan Month in 2015 are evaluated as programs that never happened without the fund help.

As in their early phases (validation) of start-up, they consider their financial source in bootstrapping state are enough for them to operate the scale of business. In more advance phases (Efficiency), Series A funding series enable them to acquired more customer acquisition having more resources to grow to more scalable company as it is now.

Intangible external resources such as government support did so much help for the company to be able to penetrate many markets. With the vision to provide solution for traffic problem, governmental support for go-jek was welcoming to the point they gave easy access to penetrate new cities.

Environment Condition: Ever since the first Gojek operated, the business environment of mobile application has always been hard and hostile. Players that have similar capabilities in developing the same products are scattered. But, after this company managed to gain current market on their product and services, mostly after tremendous customer acquisition, the environment considered to be dynamic while go-jek claimed to grow in different market segment while other player sees it as hostile yet red-oceanic market.

The changes in social media activities and recent events (conventional taxi companies act against new player in transportation) had put emphasis and pressures on Go-Jek strategy and yet resulting in recent growth opportunities and win the mind share of a broaden existing customer. Another changes such as regulation changes, security of the driver in first quarter 2015, pricing war also play a role in operational strategies held by Go-Jek. Coalition with conventional motorcycle taxis and tight pricing become one of the strategies they launched as business environment adaptation.

### *Growth Strategies*

Market Development: Until the time the interview takes place, Go-Jek has services in big cities in Indonesia, and still focus in expanding to major big cities in Indonesia. They try to focus their services to Indonesia markets since its already big enough to explore. Switching themselves from transportation companies to specialized backbone application service provider enable them to expand their market more freely. The proven business model they had

with their driver partner and other non-transportation partners are so reliable to make them repeatable in almost every generic business condition and environment in the country.

Series B funding also factors that made them enable to enlarge their capacities in doing more customer acquisition in the new market they penetrated. It being said, the funding creating the first mover advantages in their new areas of business relatively to other similar business.

Nadiem Makariem, Go-Jek Founder said plays huge roles in expanding the market. He's being said being eloquent to helping solving traffic problems as the main values to offer to target cities. By being fearless to every situation they're in, this company gaining more markets as they get supported from user and motorcycle taxis in the cities they're operated. This positive attitude being said as the main catalyst of Go-jek in penetrated more markets area along new market segments.

Product Development: Our respondent mentioned about to focus on creating new products, Go-Jek needs to focus themselves to (1) identify white spaces in the market that meet an untapped needs; then (2) go it at first with minimum viable products; with (3) excellent pilot testing. Those steps are undergone to made new products blend well with the market to execute (4) scale –up phase of the product exploitation.

When the respondent being asked about expanding the market she set strategy that closes to product development approach. They should (1) set up team that assigned to that product, they had to have ability to (2) launch that product fast than any other competitor. The last, to meet the needs in their region, they had to (3) tailor fit products as per each region/area needs.

In implementing their strategies, they claimed to be very flexible and agile in the level they set and review their strategy every month. These measures undergone in order to face their dynamic environment.

Some of the experience they had so far is on strategy that related to customer that they had to ensure their quantity and quality of supply to maintain accessibility of their user group to Go-Jek Services to keep their customer satisfied.

In Product building strategy they had experienced a premature scale up before product/market fit. Eventually, to overcome their current status this premature scales up affect their performance and their strategy to become more and more aggressive by taking the first bite of new markets before their competitor.

In terms of Human Capital, Go-Jek believe that they had hired too many people in their early stage and in their recent stage. With 1700-ish people working for running Go-Jek Business, in January 2016 they thought that they over-hire. Our respondent then clarifies that in terms of growing business and demands, the huge number of employee is considered fit to operate the business.

In Financing strategy, that they raising huge funding (the number is classified) they forced to maintain cash flow really care-fully to ensure their financing sustainability.

In order to prevent all those things to happened again they had to introduce new services as soon as they can, expanding into new region. All of it was enhanced with cross sell and up sell the users to every services in Go-Jek App.

*Case 2: Company A*

Name of the Participant: Mr AS, Vice President on Quality Management

Is a new company raised by Company AA (Holding) as its holding company, in order to overcome the dynamic of lubricant business challenge in Asia Pacific. This company is first started as a function Marketing Directorate of Company AA, where marketing and sales policy is guided directly by head quarter office.

The need to become more agile and dynamic came up after in 4 years, the market segments of lubricants in Indonesia are penetrated by so many local and international players. The main quality of the company that established in 30 October 2013 is the capability of company in making many kind of lubricated solution. This capability is due to, PT. HQ Lubricant (COMPANY A) as the main supplier of base oil in Indonesia. It also claimed to have the biggest Lube Oil Blending Plant (LOBP) in ASEAN. This company also had acknowledgement from Minister of Law and Human Rights on 31 Oktober 2013.

According to its main capabilities, COMPANY A now able to fulfill all market segment of lubricates solution, from retail consumer to industrial, from light to heavy lubricated solution. Not only domestic COMPANY A already penetrated 23 countries regional market like Korea, Japan, Thailand, Vietnam, Bangladesh, Myanmar, Italy, UEA, Afghanistan, China, up until Mauritius and South Africa. The brand they sell might be different than the one that being sell in domestic market, but lubricant products are sold based on specification as ins SAE, that OEM approved and API SM based specification. By maintaining this formula, lubricant products that being sell are able to penetrated in many market and able to have 118 variations of OEM Approved Products.

Working condition of the COMPANY A doesn't change much from before it was established as a company. 8 hours a-day working time still applied to this company before and after it become spin-off. With the high demand of target and the need to gain maximum market share of lubricant product in Indonesia, also in order to expand to other countries, the need for the company to be more agile is needed. COMPANY A, after it becomes company, now is able to recruit more experienced workers. Our interview with Mr AS, Head of Quality Management in COMPANY A said that worker that have experienced in technical matter (such as LOBP and Laboratory) had average of 10 years' experience with the maximum experience is 18 years. In business and marketing field, they had average of 7 years' experience with the maximum of 20 years of experience.

By making it into more independent company, COMPANY A would able to excel its performances like customer satisfaction, worker productivity, supply chain performance and other operational performance to meet the criteria of company profitability. Even though the sales and revenue doesn't seems to have increased significantly, but the market share is raising up to 60%. Despite the stagnancy of lubricant market in ASEAN, COMPANY A is the company who still more profitable than any other player in Indonesia. Also by making it more independent, even though the company had a significant amount of communication development , COMPANY A is able to maintain its good-corporate governance level that measured by scores (73 in 2013 to 93 in 2015).

### *COMPANY A Typology*

According to the Marmer-Blank's typology, COMPANY A is already in Scale classification in terms of numbers of employee, funding raised and massive customer expansion. even though the national growth on consumer is still due to discovery level, but due to market share and the fact that it face more harsher environment that it has in 10 years ago (being a sole player of lubricant) it still happened maintain its majority against 32 rival companies in Indonesia.

According to the business model and characteristic of the growth, COMPANY A doesn't belong to any internet business classification since the base of the business is selling products and lubricant solutions as conventional to other business. But, when we used the approach and the concept of how it growth, COMPANY A could classified as Type 2 Integrator for the domestic market and Type 3 the challenger for the new market. Classification of Type 2 Integrator is due to its business that creates lubricant products and integrated lubricant solution for retail and industrial market. COMPANY A made it as they produce all of lubricant products for every consumer needs (118 OEM Approved products). Classification of Type 3 the challenger is due to its ability to build a rival and substitute products in the new market they had in the new countries they penetrated.

The main challenge that faced by COMPANY A according to our respondent is the need of COMPANY A in becoming a company as Indonesia's pride that visualize into company goals, to be a Top 15 World Class Lubricant companies. With the high-setting target, COMPANY A try to accelerate the company excellence with full team work. That's why workers' productivity becomes one of the most important measurements used by the company.

Another challenge that becomes their focus is they had to create more product/market fit that maintain the dominancy as the main player in national and ti penetrate more international market. They had to do it big and comprehensive in order to gain competitive advantages. It reflected on how much effort they create product variations.

*Strategy Aspect*

According to our participant, strategy is a tool to achieve company means of goals. COMPANY A had their strategies written, managed, and measured its performance very well. So well that KPIs over strategy achievement are cascaded into every function and key persons. Monitoring frequency in the company is mentioned to monitor achievement every quarter, while some are weekly and monthly. The KPIs are cascaded from the vision and long term strategic planning that tailored by the headquarter office and bootstrapped by the frequent performance records of the company.

There's no records and mentions whatsoever about COMPANY A doing pivot experience. They stick their plan in lubricant industries specialized in lubricant solutions for the next ten years. This decision is taken since COMPANY A already had invested in expensive asset that should take more time to enter more economic return time.

According to the information, the flexibility of the strategic implementation of COMPANY A is very rigid. This is due to the environment business and the maturity of the industries. Though, COMPANY A already aware with the disruption era of nowadays business environment. They had functions that have responsibilities to evaluate strategic, business development and risk mitigation in order to detect early warning indicators of business change.

*Factors affecting COMPANY A growth and its growth strategies*

Entrepreneurial Orientation: COMPANY A saw innovation as a culture that already maintained before it was spun-off. Innovation culture in terms of Project Control Circles, Quality Control Circles and Suggestion Systems are driven from headquarters as a quality management policies in the headquarter. That makes a means of operational excellence become more efficient in terms of cost and able to increase profit margin for the company that make them as one of profitable companies in 2015.

COMPANY A approach on introducing new lubricant products are made through its will to create as many as new products (OEM approved products) over competitor due to COMPANY A moves to one-step ahead in introducing new products in lubricant market. In the other hand, risk-taking environment is considered low and close to safe player.

However, our respondent agreed that strong entrepreneurial orientation will affect how a company able to grow. Since with the ability of searching for opportunities in terms of customer demands and new product introduction, a company should able to penetrate new market and gain more market share.

Manager Orientation on Growth: Our respondent mentioned that the owner-manager really expresses personal goals within working in the company. Numbers of salary and career safety are the main reason employee working on the company. Driven by target and

experience they had in their field, Employee able to reach and maintain their target set by the company.

With the skill and values that has been transferred from headquarter, COMPANY A had maintain the workforce climate of the company to share a mature value of established company. They aware that bonuses will come a lot when they achieve their company target that visualized how managers are positively support growth of the company. Managerial support is considered having the same aspect as the previous company.

Firm's Resources: Our respondent, Mr AS, consider COMPANY A had more than enough asset to explore national lubricant market segment. They see that they need more resources in order to penetrate new market overseas. One of many important resources that they need is governmental willingness and support for them in doing their business, especially internationally.

For internal resources, COMPANY A is confident in having enough resources to reach the goals set by the headquarters. Both white and blue collar employee has reached a significant level to make them able to operate as they were nowadays and penetrate into new markets. One of the evident that intra organizational resources are beneficial for company benefit is when even the supplier gave feedback and suggestion to the sales performances of one of the main product. When one of the products wants to be changed from SAE 0W-30 to SAE 0W-50, supplier had to research them if it will work or not. After they found out it probably won't work, they tell COMPANY A not to take the action. Later on COMPANY A found out that it was and still the right decision to not to change the specification.

All they now needs is supports from decision maker and more marketing expenses in terms of lubricant sales. Social capital played an important role within the ability of the company to penetrate new market. Accelerated process of these activities is reached through partnership with existing lubricant company or automotive company that affiliate with industry segments in Indonesia.

Environment Condition: Before 2002, when HQ still in charge in Crude and its derivatives products, Lubricant market segments are all covered by HQ. The number of player in the market at that time really segmented and doesn't have significant market segment. 98% of lubricant market segment is what they have at that time. But hen stable environment that they face suddenly changed after more players involved in Indonesia Market and some other player getting stronger to disrupt status quo.

Nowadays, they faced more dynamic environment and according to our respondent it closes to hostile that indicated by: strong market competition, increased churned costumer, changes in top-of-mind paradigm's survey results. Getting introduced by many marketing activities, new products able to gain more share against strictly restrained marketing activity held by HQ at that time.

With the spin-off of COMPANY A, now they able to do more marketing activities. COMPANY A now also able to get more initiatives happened after they now more independent.

Growth strategies.

Market profile & competitive level demand and supply become main characteristic and trends in lubricant market. 40% of world market lubricants are centered on Asia Pacific. Indonesia lubricant market grow at 2.2% that contribute to 3.8% Asian demand and placed the country to be the third biggest market after China and India. 80% passenger car motor oil increase is one of the main reason of the number.

Petrochina and Sinopec considered as two main giants in the market in terms of volume. Sales volume of the both exclusively came from their national sales. Then come Shell and ExxonMobil also other companies made COMPANY A become number 11 to this day. They right now had 2.6% market share, slightly above Total.

Market development: In order to face those market profiles, COMPANY A had to overcome five challenges in market development. Broaden market coverage; Sales increase, production capacity adjustment, quality of the products and competitive price becomes indicators to be concerned in winning lubricant market.

As mentioned earlier, COMPANY A had already doing its international penetration since it still become a function (2007). Now they already had 23 international export targets. In terms of developing overseas market, COMPANY A did brand acquisition, creating awareness and market penetration to gain more acknowledgement as well as other international player. In other activities, in 2014 and 2015 they increased their attempt to penetrate more international market, from 3 (2013) to 5 (2014). They disclosed the number of attempt in 2015 and 2016 in terms of strategic concern.

To gain more market and customer requirement, COMPANY A aware that they had to comply with registration and legal, technical and industrial requirements of the products. They aware that Lubricant market demand is increased 2.3% or become 55.24 Million of KL and slowed about 45% from the previous years. They also aware that base oil trend in the world will shifts from oil group I to base oil group II and III along with the increasing technical specification of machinery and automotive

Product Development: in 2013, they had decreased their International sales since they decide to stop Bulk Export sales. At the same year ownership of Lube Base Oil (main ingredients) are changed to other function in HQ (when COMPANY A still function) since the price of Lube Base Oil considered lower than its transfer rate. In the year of 2013, COMPANY A need to outsourced its lube based oil when it comes to fulfill international/regional market needs, since it's cheaper than had to imported to Indonesia. In 2014, the control of Lube Base Oil taken back to COMPANY A due to operational and efficiency matter.



Beside main ingredients, COMPANY A are really aggressive in terms of product development. It shows on how many they have variant in OEM approved. 217 Products that fulfil NPT recommendation and 118 OEM approved products are one of the example COMPANY A concerns in developing products.

*Case Study 3: KIBAR (PT. KIBAR KREASI INDONESIA)*

Name of the Participant: Yansen Kamto, Chief Executive Kibar

Kibar Kreasi Indonesia or well known as Kibar is called themselves as a tech-startup ecosystem builder that started its operational from the program Google for Education that focus in Indonesia education quality. Kibar firstly pointed as IT consultant in creating IT infrastructure in Indonesia campus that include in the program. Since 5 years ago it created, Kibar oriented their business on value creating activities that hoped to solve problems in creating the path and the good environment of creative industry in Indonesia. Right now, Yansen defined Kibar that consisted up to three pillars of Ecosystem builder business: Incubator, Start-up Management, and Innovation Hub for every client that become Kibar subsidiaries to attract.

Our respondent stated that the company doesn't need to sell any products, since they have their own idealism that focus on solving problems in the public as general and in the scope of the startups as specific. Most of the projects that run by Kibar are Pro Bono, this due to the idealism that led by Yansen as CEO that affected start-ups that run by Kibar. To build supportive ecosystem for start-up generation Indonesia become their vision that held the team together in working every prjects they own.

According to our respondent, Yansen Kamto believe that funding doesn't have that much influence in creating start-up process. He mentioned that Start-up need more strategic partner rather than a mere financial aid. In the growing phase, the start-up need to up skill the capability of every person in the firms then after that financial partner to scale up. That's why, Kibar focused in how they able to give newly born start-ups any help they need to bring their vision came through. As an ecosystem builder, Kibar also mediate the start-ups to investor, also create opportunities for them to collaborate with other people.

They had 6 – 8 years that consisted from fresh graduated to 25 years of experience employee in the team of technical expertise. The business team that already experienced in having run 3 businesses completed.

*Kibar Typology*

According to what Kibar had achieved so far with the results of the business, we can correlate business typology of Kibar into scale category. This typology is classified into Kibar by the working experience, number of employees and growth over last period (2015) in terms of financial and employee are more than 300%. Right now it has 30 people that worked solely in Kibar, and 65 others that scattered in startups they currently founded.

It also had competitive advantages that completely in different level over another incubation startup. Networking (traction) over either inter-organizational and clients that know Kibar which potential become future client. A set of startup ecosystem (technology) that exceed any other incubator in Indonesia also become the company's competitive advantages.

Also according to our interview, intention that put in the recruitment process, express how to build a solid team is still become a challenge of the company. In the interview also conceal how projects that entrusted to Kibar is still plenty. So much that they need to hold them out. It is express how Kibar try to fulfil their team readiness become more challenging.

How Kibar run the business, the company are categorized as internet startup of a Type 2 The Integrator. Even though Kibar motivation is seems close to a "change the world" terms, but it implied that they focus to build ecosystem of creative industry. The statement and the actions make them as an integrator that integrates any sources that needed to build ecosystem that support how a creative business could sustained and grow. This typology also confirmed that sales, business development and public relation become activities that they focused on combined with the balanced team of business and technical expert behind their sleeve.

#### *Strategy Aspect*

According to our respondent, strategy is the way to get the goals. Moreover, strategy is how we implemented this goals-setting mechanism in the way we live and expected to create value in life to make them more useful and solve more problems. The next thing he said was the importance to know well and righteous goals that want to achieved. Our respondent see the phenomena in start-up that doesn't really know the goals they want to achieved by the business or have been wrong in setting the goals. To show (kibar: raise the flag) how Indonesian start-ups become stars in Indonesia and from Indonesia to the world is the goals that want to achieved by the company and become fundamentals to move as they were now.

All activities that Kibar done are considered still align with Kibar strategy as an ecosystem management. Next strategy that will hold by Kibar is to collaborate with google communities in Google business group and Google development group. Our respondent said that startup is in the need of more community and then academic environment to survive and grow.

#### *Factors affecting Kibar growth and it's growth strategies*

After aware with how huge potential that lies in creative industries, and how chaotic standards of everything in this world, they ought to create a sets of new standards of creative industries. Those initiatives taken act in such action as price of the products, fee of creative worker, and quality standards of the products. These standards are sets in order to make the creative industry had their own authority.

Kibar sought this progress to create the better world is a constant vision held by the company in order to make good quality of firm growth and stick to their focus to create more solution and results for the society. Competitive advantages that already mentioned by Yansen.

Entrepreneurial Orientation: According to our respondent, Kibar activities are really focused on problem solving and to achieved values. In terms of more operational and strategically matters, Kibar aware of changes are happened very emergently that needed to be solved. That matters needs immediate solution and without an organization that have strong entrepreneurial orientation, Kibar never be as big as it is now.

Kibar also become the first company that do what they do. From the state of become the first person introducing startup environment, to become one of the first start-up incubator in Indonesia, Kibar had proven to be the organization that really have a strong entrepreneurial orientation.

Kibar made themselves as a place where, designer, programmer, cartoonist and other creative industry create together and create integrative community that able to not to just create products but also solving problem in the society. As the side effect they make a sustainable business out of it. There are neither records nor statement whatsoever that mentioned pivot event in Kibar core business. They basically move and actuate themselves in projects that in the end have the impact in achieving the main goals of Kibar.

They believe visionary aspect, and problem solving attitude of entrepreneurial orientation are very important for a company and Kibar especially to grow as it is now. As the results of having good entrepreneurial orientation, Kibar able to collaborate with regional government (Start Surabaya), Academic institution (UGM Business Incubator) and governmental bodies (National 1000 Startup Program).

Manager-Oriented towards Growth: According to Yansen, people hired in Kibar are required to have the same crystal clear goals as Kibar did. To become agents of changes. This changes means literally of a new world order that create values that worth more than money, but he good changes within the internal country's changes.

Our respondent also mentioned that he always remind their employee to resign on their own, literally every day. This mechanism trusted to build working and workplace environment that guaranteed in accordance to company vision and values. This condition also allow turnover employee very high, In the meantime, the employee believe that Kibar has to grow in order to made the employee feel that they left a legacy on mile stones of Kibar growth.

That mentioned in the interview that Kibar doesn't in need for people with superb skill. They believe that skill can be taught along the process employee work at Kibar. They choose the employee based on the good attitude personality the employee had. In this interview, Yansen also mentioned recruitment process in Kibar. Consensus with many former employee are required whenever any new worker like to be employed. This process

implemented due to select really carefully people that needed to fulfil their values in the employee, energy, intelligent and purpose. Those values are needed in order to apprehend the changes to Indonesia business climate as the sole purpose of Kibar.

This phenomenon supported by one of its worker, Andi Martin, that also CEO of Kratoon. He said that Kibar gave him the opportunity to create a startup there with that base of similar value and vision that his company and kibar shared. Kratoon wants to create intellectual property business in Indonesia to be more have values than it is now. Even though this is the 4th company that started by him, Kibar still willing to incubate the business as it is now. He also mentioned that he get incentives by being CEO that paid more than enough his bill and his employee's.

Manager orientations is believe to be important matter for the company to grow, since without awareness and supports from the operational and managerial level, a company will get a hardship in getting their goal achieved.

Firm's Resources: For the purpose that they had right now, internal resources that already acquired by Kibar are mentioned enough for them to grow. Thanks to the a strict recruitment process, they able to choose employee that required to run the business and the projects they had very well and efficiently.

Intra-organizational and working condition that they build till nowadays also able to naturally select star employees to stay, and the bad one to go. Collaboration with other functioned can be easily generated since they stated that they implement horizontally-collaborative-open organizational structure of the company. Personally, we found that Kibar actually implement more of a matrix organizational structure.

As for external resources such as finance, the rest of the projects they done that are not Pro Bono (as mentioned earlier) stated that able to aid their operational level. As for the salary, Yansen later on mentioned (after the interview session over) there are no employee that quit because the salary was not enough for them.

In the social capital point of view, collaboration with other external organization is one of the strong aspects for Kibar to grow. Many of the projects they had are the results of collaborative action between Kibar and other organization. They also mentioned that access and networking for business and social purposes frequently intertwined and supported each other in the organization growth.

As an addition, Yansen mentioned that financial aid is not the one that becomes primary factors in growth process of Kibar. To invest more in people, whether internal or externally is the main reasons Kibar could keep growing at an exponential level.

Environment Condition: Yansen aware that business environment in Indonesia for startup still not ideal for the start-ups to grow. It also applied to Kibar as well. With the absence of regulation and people awareness regarding start-ups industries, Yansen argue that environment for Kibar is rather dynamic than heterogeneous. Even though Kibar business is

one of a kind in Indonesia, but they saw changes is frequently happened in the environment that push them to challenge more and more activities in order to adapt with the market.

Kibar believe that environment really does affect the way they operate, and as the results really affect the way they grow and the growths results itself. It also valid for any other start-up company, since the way they managed strategy for start-up they incubated is based on the business environment that they has to face.

*Growth Strategies*

Kibar started as a consultant in order to gain financially independent to make the company operational secured. At the first time they didn't start looking for funding in order to keep their value encore. After a while they intend their strategy a little bit different than any other companies. But according to Yansen, it seemed take them to where they belong now. In the process, they admit that in the mean time they have been compromising quality of the employee when they want to build internal team, in order to do that right now they focusing themselves into more selective recruitment process. Another strategic experience they had is they feel they raise too little money to get operational secured. But, it confirmed later that they took the risk over control of values that still hold by them till this day.

In his opinion, if they stay true to our course true to our purpose is the main reason of startup to grow. They believe that Kibar achievement so far basically doesn't planned on in terms of written document. They flow naturally but supported with the backend operation that really effective.

Kibar aware that to grow, a company should maintain their product and how they need to expand their market coverage. But then again, Kibar doesn't focus on the need to develop their product and/or market. They focused on what kind of social problem or collaboration projects that needed to be solved. Regardless it will impact on their product refinements (in Incubator, Start-Up Management, and Innovation Hub) or broaden their market coverage is considered as a results for them.

*Compilation of Participants*

As stated earlier, all of participants are interviewed in snowballing sample with the sequence as seen in Appendix A. All of participants are being asked with the same interview questions as stated in Appendix C. This paper try to make the visualization of this study to more compact as the details of the rest case studies will be compiled in a series of data.

The compilation of participants divided by the nature of business by ICB are mentioned as table below:

***Table 18 List of Participant Main Business Compilation***

No	Name	Subsector (ICB)	Specific Business
1	Aksi Insan Nusantara	0587 Alternative Fuels	Trash/Garbage-Electricity

No	Name	Subsector (ICB)	Specific Business
			generator
2	Langgar Nanotech indonesia	1357 Specialty Chemicals	Toner producer for paint industry
3	Multi Karya Cipta Loka	2357 Heavy Construction	construction site service provider
4	Ramesia Mesin	2723 Containers & Packaging	Food and culinary business machinery distributor
5	Nanotech Indonesia	2791 Business Support Services	Consultant in material testing and Implementation of nano technology
6	Transinov	2791 Business Support Services	Event organizaer on academic environment
7	No Limit	2791 Business Support Services	Social Media Analytics
8	Tosha Telecommunication	2791 Business Support Services	Digital Business Consultant
9	Startup Legal Clinic	2791 Business Support Services	Content creator and Legal service provider
10	Kibar	2793 Business Training & Employment Agencies	Startup Incubator and Environment
11	Nano Center Indonesia	2793 Business Training & Employment Agencies	Startup Incubator in Technology Startup
12	Ruang Reka	2793 Business Training & Employment Agencies	Coworking Space and Business Incubator
13	Flip ID	2795 Financial Administration	Alternative inter-bank transaction provider
14	Company A	2797 Industrial Suppliers	Spin-off of lubricant producer
15	Nanotech Herbal Indonesia	3577 Food Products	Food Manufacturers specialized in

No	Name	Subsector (ICB)	Specific Business
			nanotechnology implementation
16	Atirupa	3726 Furnishings	Interior Designer and Furnishing Specialist
17	Kratoon	5555 Media Agencies	Digital hub for Intellectual Property character
18	Big Evo	5555 Media Agencies	Digital Marketing Specialist
19	Solusi Kolam	5755 Recreational Services	Hobby/Leisure on fishery tools provider
20	Travass	5759 Travel & Tourism	Travel and Leisure event organizer
21	Bukalapak	9535 Internet	Digital marketplace specialized in Small and Micro Enterprises
22	Go-Jek	9535 Internet	Backbone application on transportation services
23	Bagi Kata	9535 Internet	Portal of specific information
24	Cozora	9535 Internet	Internet content provider and webinar event organizer
25	Temam Jalan	9535 Internet	Transportation service application
26	Autonet Magz	9535 Internet	Youtube Content Creator and car trading
27	Center for Robotics and Intelligent Machines	9572 Computer Hardware	Academic-institution on Drone and Intelligent Machine

More specific visual presentation of the participants are put on Appendix B Categorization of Start-ups based on ICB. By classify them into main business we hope that we can be easier to analyze nature of the business of those startup business.

More deep into factors that had been analyzed through this study focus, all the participants then mapped from the business typology from Startup genome and Marmer-Blank's Scale. Red color indicated Type 1, Yellow indicated Type 1N, Blue indicating Type 2 and Green is indicate that participants are considered as Type 3 of start-ups.

Much further we also try to explore the intensity of the factors affecting growth such as; strength of EO, strength of MO, level of internal resources and external resources and categorization of their Environment Condition (EC). Special case for EC, we classify heterogenic as 1, dynamism as 2 and hostile as 3. The interval had given due to arguments in 2.6.1.4 that infer more hostile and uncertain condition will tend to made the firms take initiatives to grow rather than stable and safe environment.

As inferred from the interview, we also try to map strategic grow action based on ansoff's matrix. From information inferred we classify them either their strategy considered as Product Development, Market Development, Market Penetration or Differentiation.

Assessment of each participant later being validated with the current performance of the firms. A firms is considered as grow as their basic and known variables that shows so indicated growing significantly in the last of six months. Fair performance are assessed from the number of general 5 – 20% growth per year. They considered collapsed when they indicating a hiatus condition in transaction, sales, or activities in the last 6 months. Apparently not all the voice recording able to grasp these information. Beside from secondary sources, many of the firms try their best to seclude their firms performances. Some of the data are gained through off-the-record way to obtained.

All the map of the performances and interview session are visualized in Appendix D Start-up Interview Compilation.

## **Analysis**

### *Analysis of Start-up Typologies with the Actual Challenge Condition*

As we relate to actual data analysis, we provide that Startup genome's typology and Blank Marmer's scale quite practical in mapping condition of the startup firms. By making classification, it will make us easier with the justification over firm's actions that based on the company condition.

As can be seen, we try to cross case analysis between business type with scale of the firms to make an analysis about it. We find that 10 firms are still in discovery phase, 4 in validation/traction phase, 7 in efficiency and only 6 startups that well established (scale). By the table above, we also could infer that startups have propensity of time for them to scale quite related with type of startup business they run.

For Type 1-The automizer are shown that most of the solution-focused business doesn't run well in terms of growth. It seems product intensive that comes with the higher needs of R&D initial costs really affecting stated business in growth as fast as the traction comes. Most companies in Type 1 needed bigger support (financially) in order to grow. Other aspects is competition, exclude langgar nanotech that using an absence of rival, most of the firms in Type 1 really does compete with international rivals. Technology like apps (Flip ID,



Nanotech herbal), contents (SLC, AMI) and implemented electronics (Solusi Kolam and CRIM) are something that quite accessible nowadays. Thanks to internet and global spread of knowledge, beside patent, similar product would be easily copied by other firms.

For Type 1N players are quietly as harsh as type 1. With the condition either make it Big or thrive, social transformer business must regain tractions as big as possible in creating user awareness. In order to grow, the differences

***Table 19 Type 1 Start-up Participant***

Name	Startup Genome	Blank Marmer
Langgar Nanotech indonesia	<b>1</b>	<b>Validation</b>
Startup Legal Clinic	<b>1</b>	<b>Discovery</b>
Flip ID	<b>1</b>	<b>Discovery</b>
Nanotech Herbal Indonesia	<b>1</b>	<b>Efficiency</b>
Solusi Kolam	<b>1</b>	<b>Efficiency</b>
Autonet Magz	<b>1</b>	<b>Validation</b>
Center for Robotics and Intelligent Machines	<b>1</b>	<b>Discovery</b>

between Discovery and Scale firms of the sample are that, more Human Resources in making business heavy and balanced (technical and business) team, better user awareness, and varieties of contents they offered. I assume that time is one of the factors that will bring the smaller firms to go to the bigger phase of the firms.

***Table 20 Type 1N Participant***

Name	Startup Genome	Blank Marmer
Kratoon	<b>1N</b>	<b>Discovery</b>
Bukalapak	<b>1N</b>	<b>Scale</b>
Go-Jek	<b>1N</b>	<b>Scale</b>
Bagi Kata	<b>1N</b>	<b>Discovery</b>
Teman Jalan	<b>1N</b>	<b>Discovery</b>

For Type 2-Integrator business it is clear that resources and product-market fit become factors that differ scale to discovery an efficiency firms. While Travass and Cozora still new, they already proposed unique product/services as well as the other firms in the market. To listen to customer insights, to read market opportunities and to become the best in their business are some of the insight that made bigger type 2 to succeed to smaller ones.

**Table 21 Type 2 Participant**

Name	Startup Genome	Blank Marmer
Kibar	2	Scale
Nano Center Indonesia	2	Efficiency
Ruang Reka	2	Efficiency
Big Evo	2	Efficiency
Travass	2	Discovery
Cozora	2	Discovery

For Type 3, Challenger firms have something common to firms as an establish company. By targeting big market, recurrence sales processes, it shows the same characteristic as conventional companies. The need of competitive advantages and dynamic capabilities also become some of their characteristics.

**Table 22 Type 3 Participant**

Name	Startup Genome	Blank Marmer
Aksi Insan Nusantara	3	Discovery
Multi Karya Cipta Loka	3	Scale
Ramesia Mesin	3	Scale
Nanotech Indonesia	3	Efficiency
Transinov	3	Validation
No Limit	3	Efficiency
Tosha Telecommunication	3	Validation
Company A	3	Scale
Atirupa	3	Discovery

Relatable argument by making cross analysis between Blank-Marmer's Efficiency and Scale firms are came up after researching background of each participants. In terms of revenue, the biggest firms among participants is Company A, Bukalapak and Gojek. Exclude company A that act as a spinoff of existing establish business from big company, Bukalapak and Gojek had tell that time, distinctive product and winner-take-it-all market has placed those two as the main player in their industry. Rivals that against them should have better resources and strategies to win the market.

All the scale companies already through some challenges and strategic experiences as they mentioned in the interview. Human resource management mistakes, financing situation and some of growth related issue as timing and partnership had already made them as big as they are now. Pivoting from one main business process to another also become their experiences that made them perform. Apparently this study unale to find startup that fail after they go through scale phase.

In efficiency, they make clear that main focus and performance measurement by the time they interviewed is that they need to make sure they acquire more customers. All the company in efficiency already monetized their main products, which alre dy fit with the description pf Marmer-Blanks phase of efficiency.

***Table 23 Efficiency and Scale Participant***

Name	Startup Genome	Blank Marmer
Nanotech Herbal Indonesia	<b>1</b>	Efficiency
Solusi Kolam	<b>1</b>	Efficiency
Nano Center Indonesia	<b>2</b>	Efficiency
Ruang Reka	<b>2</b>	Efficiency
Big Evo	<b>2</b>	Efficiency
Nanotech Indonesia	<b>3</b>	Efficiency
No Limit	<b>3</b>	Efficiency
Kibar	<b>2</b>	Scale
Multi Karya Cipta Loka	<b>3</b>	Scale
Ramesia Mesin	<b>3</b>	Scale
Company A	<b>3</b>	Scale
Bukalapak	<b>1N</b>	Scale
Go-Jek	<b>1N</b>	Scale

*Strategy from Start-ups Perspective*

In the fundamental views of startup firms, strategies are perceived as many things. The table below is the recapitulation of every startups that shows a varied response on strategy. But seeing the result that related with the Mintzberg means of strategies, we can comprehend that strategy in a startup is a coordination and collaboration of plan and ploy.

These arguments really did meet the recent popular article regarding how start-up should plan thoroughly while making validated learning (Ries, 2014) as well as Pivot when necessary as the results of those learning. Changes in plan of startups that show by the gojek from transportation to backbone app, Nano center technology from association to incubator, Autonet Magz from automotive retailer to youtube content maker and Kibar becoming startup environment are examples of relatively scaled start-up that changed their main business into something else as the reason of more validated idea that will work on the market, or just to be their true self.

In terms of Implementation, 12 companies felt that they need to dedicated special times in reviewing strategy implementation, while 15 companies sees strategies are one-time-only planned and keep the rest in gaining their main performances.

Among those numbers, all the scale firms (Appendix D, Column Blank Marmer, Category 4), and most of the Efficiency (Idem, Category 3) are firms that allocated frequent times in incorporating their strategies to their business activities. More deep some big firms as Kibar, Gojek, Bukalapak are making more ladder-like system in decision making process, also with the strategy implementation performances.

They also seems really aware that operational performances are measured with the importance of whether they getting closer to their goals. From the study we also inferred that they aware that strategy plays important role in making a successful firm. The mix between planned and emergent implementation of strategy are shown with huge variety of time span between planned (Go-Jek, Langgar Nanotech Indonesia and Bukalapak) and how reactive emergent should be (Ramesia, Gojek, Bagikata, Travass, Nano Center Indonesia). This huge

variety only show different perception of strategy implementation means as the best practice running business, especially a start-up firms.

***Table 24 Participants Percepation on Strategy***

No	Name	Strategy is considered as
1	Aksi Insan Nusantara	Way to achive what we desire as a team, to provide energy
2	Langgar Nanotech indonesia	big picture in order to fulfil company needs
3	Multi Karya Cipta Loka	Procedure of company in making plan and implement those plan
4	Ramesia Mesin	a scheme in order to keep the company profitable
5	Nanotech Indonesia	tactic to fulfill company desired state
6	Transinov	tactic to fulfill company desired state
7	No Limit	course and ploy in order to be better than competitor (competitive advantage)
8	Tosha Telecommunication	a means of company efforts to gain more client
9	Startup Legal Clinic	a way of company in getting better performances
10	Kibar	the way to get the goals
11	Nano Center Indonesia	tactic to fulfill company need in order to reach desired state
12	Ruang Reka	a how-to, of how things worked in order to achieve the target
13	Flip ID	a way in getting more user
14	Company A	a tool to achieve company means of goals
15	Nanotech Herbal Indonesia	a way in getting the desired condition
16	Atirupa	how the company able to reach the target
17	Kratoon	the way to get the goals
18	Big Evo	is a way and how people
19	Solusi Kolam	an effort for making the company more profitable
20	Travass	a way to make the company bigger
21	Bukalapak	pattern in making product and to keep the company still relevant
22	Go-Jek	the means to achieve their goals or objectives
23	Bagi Kata	Step by step of achieveing goals
24	Cozora	plan of getting to the required company phase
25	Teman Jalan	plan of means to the required company state
26	Autonet Magz	a way to achieve company revenue
27	Center for Robotics and Intelligent Machines	tactics in order to get many customer in buying our products

In terms of scope, bigger companies also aware that strategy also has its scope. They aware that in bigger companies, decision making must be executed fast. They aware that by delegating decision making and sometimes strategic process making they will boost their performances fast as long as it supported with the same direction over managerial members. Bukalapak, Ramesia, and Gojek are some of the firms that implement delegations so that, the founder could focus their attention on bigger opportunities that will create more impact to their firms.

## **Growth Strategy**

### *Factors affecting the emergence of growth strategies*

From theoretical background in part 2 of this study, it appears from Wiklund's (2009) integrative model that EO, MO, Re (either internal or external) and EC become elements that affect the small firm to grow. It also infer in analysis part 4.1 startup really consider strategies as their means to achieve the goals. Later on, this strategy to grow is inferred affected by wiklund's (2009) factors for growth of the small firms.

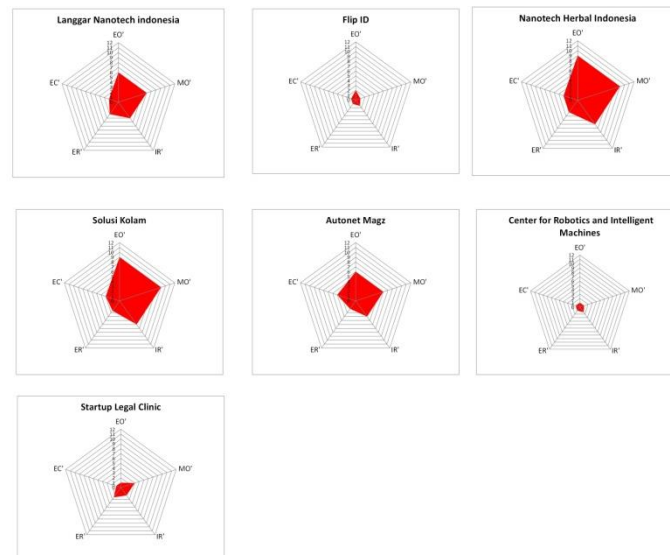
It also inferred that positive levels of the factor will subsequently foster growth strategies, whether it formal or informal one. EC are considered different since there are no

specific kinds of environment that better or lesser for the firm to growth. Most firms will likely pursue a stable and less competition environment, that's why blue ocean strategy becomes hype. But these studies refer to kind of EC that logically will affect firms in having more growth than the other.

We measure the factors by the strength they envision. As pictured in appendix D, we score all the factors with 1 (low), 2 (fair) and 3 (strong/high). Later, according to Marmar-Blank Scale we multiply the score with: 1 (Discovery); 2 (Validation); 3 (Efficiency); or 4 (Scale). That way, we would be able to recognize any pattern to show the firms profile in order to proceed with grow strategies. Exception for EC, we denotes that hostile environment as the most positive factor to grow the firm (score 3), and heterogenic as the least positive factors (score 1).

We also try to differ the pattern from its kind of business (startup genome typology) through the color that been mentioned in part 2.

For Type 1

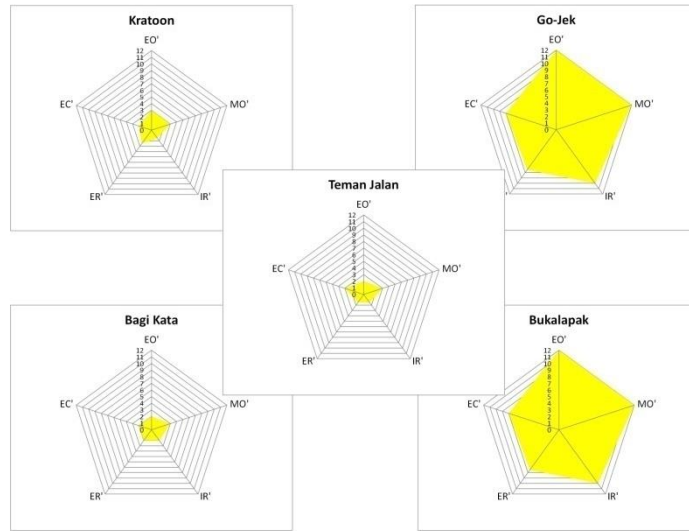


Type 1 – The Automizer

As we can see, EO did give positive impact on how a firm performs. All the “collapse” performance of the firm is reflected from the low level of EO. The high level of EO is also corresponding to the more growth strategy numbers the affected (from 2 to 4). But some cases as Cozora, No Limit, Solusi Kalam still give them fair performances. It brings us to the next factor, MO.

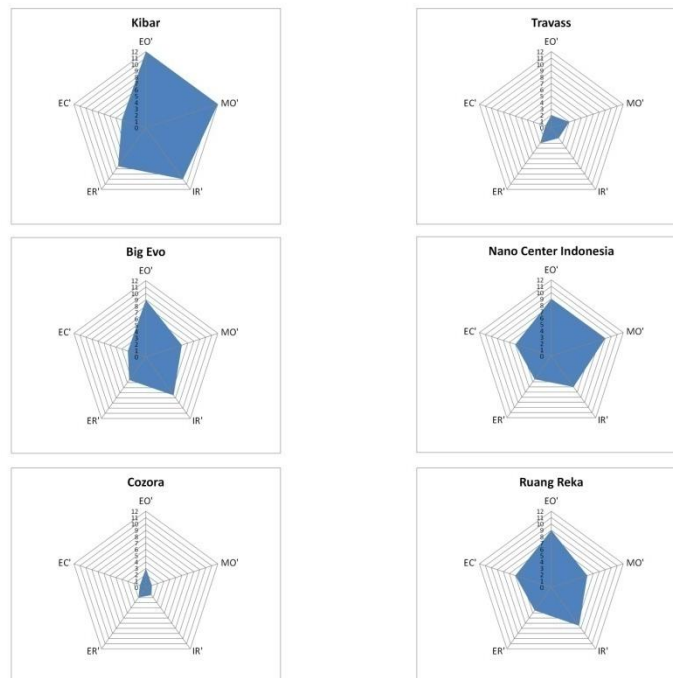
The high level of EO, as mentioned in part 2, are shown in 16 firms that envision innovativeness, proactive towards new opportunities, and enable to taking risks. In terms of innovativeness: Langgar Nanotech Indonesia are succeed in creating new domestic color pigment for paint industry in Indonesia based on waste iron. Multi Karya Cipta Loka enable to creating specialty services in building construction like epoxy mortar, anchoring, and rebar supplies. Ramesia mesin creating joint venture with Chinese distributor to supply food-related machinery and equipment complemented with guarantee.

For Type 1N



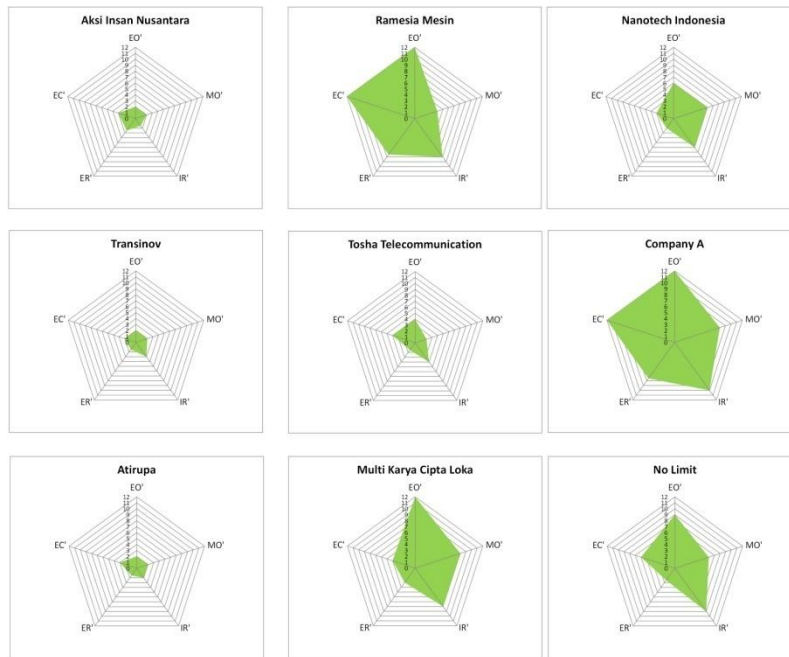
Type 1N – The Social Transformer

For Type 2



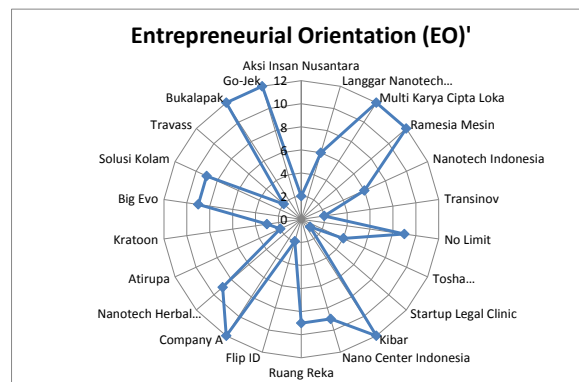
Type 2 – The Integrator

For Type 3



**Type 3 – The Challenger**

In term on proactiveness, Kibar pursue the hype in Indonesian culture trends in creating startup by providing support system for startup to growth, along with maintain projects with bigger institutions in gaining publication and more strategic collaboration. Big Evo founder, as an ex of international company worker in digital marketing, pursue new business in digital marketing in terms of clientele and training in the same industry. Company A decided to be a spin-off which bears more responsibilities and compliances activities as an independent entity in order to pursue international market.



**Figure 19 EO Mapping**

In term of risk taking, all of the firms categorized as so are pursue new market or existing market that already owned by stable supply. Company like cozora that supplied by major player like slide share and youtube, Nanotech Herbal Indonesia that risking making their own facilities to provide nano technology implementation of food processing, something that not commonly accepted among Indonesian, and Kratoon that pursue digital remarks and

arts that already captivated by Manga (japan), Comic (USA), and Manhwa (Korea) by making specialty services for intellectual property in Indonesia.

MO or Management Orientation towards growth did also give positive control to Performances and number. Interesting fact of MO is seen that it is affected by EO as well. Exception for Bagi Kata and Startup Legal Clinic are happened where MO are greater than EO. This case happened because in term of business process of those two are based on member generated activities. Bagi Kata is company that provides information regarding user generated answer they need to curate information on their site and gaining support from their content provider. SLC is also providing training and content regarding law issue related to startup business.

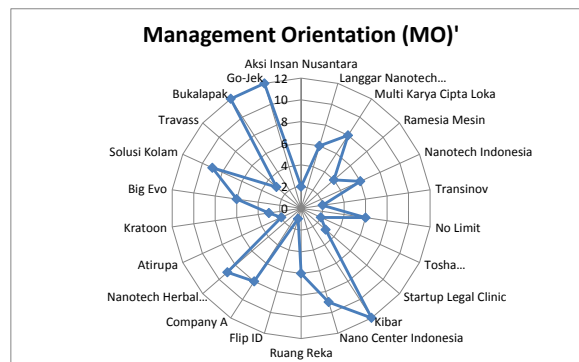


Figure 20 MO Mapping

From 27 participants, 5 participants felt their internal Re is not enough to perform growth strategy, among them 2 participants felt that external resources are not enough for them reveal to implement growth strategies. Firms that fulfil their needs regardless their performances, their able to perform more strategies than other firms. Beside Financial, most of the firms confirmed that they prefer good human resource and social capital among any other resources. Since through social capital, they able to grow even more in terms of performances and collaboration of making more action to develop the firms.

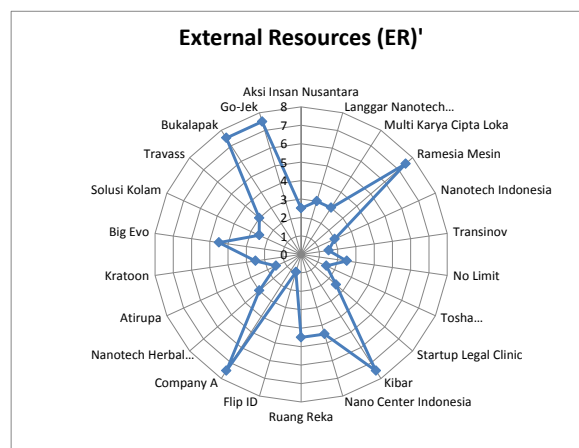
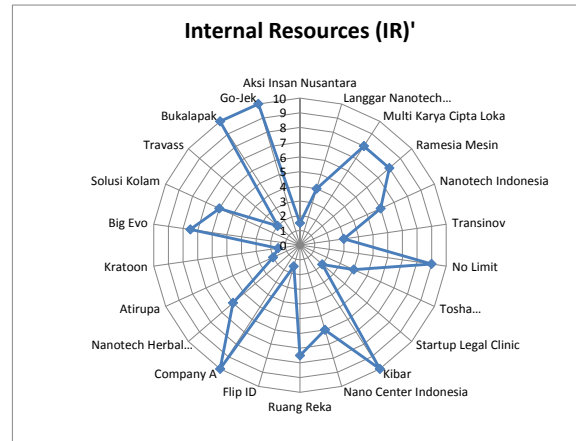


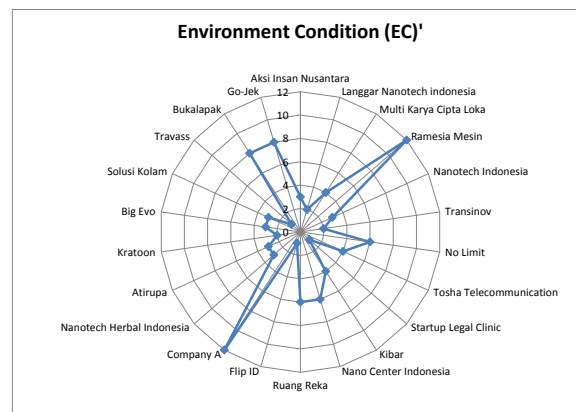
Figure 21 External Re Mapping



Surprisingly, as stated before regarding numbering of EC status that projected to having more chances for the firms to grow doesn't appear so. Firms in Hostile EC had the same numbers of growth strategies than firms in Dynamism EC (2 strategies), except for Atirupa and Teman Jalan where they still in early developmental phase and with the limited resources they have they tend to focus on single strategies as possible, which still Market Penetration.



**Figure 22 Internal Re Mapping**



**Figure 23 EC Mapping**

*Analysis of underlying logic of Growth Strategies*

The conjectural idea in studying the growth strategies of 27 participants was based on Ansoff's typology of growth strategy. In the interview we inferred that articulation of Apple product when re-describe their strategy in order to explain it to us.

Market Development mean introduce existing product to new market segment or new market geographically, or demographically like apple create Ipod touch for those who can't have Iphone because of market readiness in a country. Product Development means to develop new product for customer who already loyal to the brand with high development cost but they can minimize cost of new customer acquired like Ipod Shuffle for apple. Diversification are visualized as entering new market with completely new offering, with

significant cost and risk like apple introduce Itunes that change the game from computer product to music. Market Penetration mean sell more attract from competitors by providing better products in many ways available like I Phone to conventional phones and smart phones.

By that review, we able to grasp information among firms about what strategy they want to implement in order to achieve their goals. We use all four of typology from ansoff typology.

Form the interview we infer that, most of the firm, focusing on making natural growth by Market Penetration. While other firms choose other strategy beside that to Developing the product and market.



**Figure 24 Growth Strategy Map of 27 Participant**

Example of product development is reflected in No Limit. In order to enhance their service, in early 2016 they enable to analyze more data and give more information to future client, they made new tools to extract social media and content data over world wide web. nowadays, they able to give more information including trends and semi linguistic model for activities held by the customer.

Company A as mentioned before able to enrich new products to market in regional and overseas up to 118 Product that approved by OEM. Solusi kolam able to produce their own trickle filter that customize to tropical climate using their own bacteria and make their own company about it. Nanotech Indonesia create services regarding military grade over material testing and material construction.

Example of Market Development in Kibar beside made collaboration with company like google, they also work with academic and gorvermental bodies in order to create more network and social capital over startup ecosystem. They also develop their market to reach not only professional person that want to build startup but more general people through “gerakan 1000 startup” that run from august 2016 that supported by many stakeholders.

Aksi Insan Nusantara, even before their first project working, they enable to penetrate new market in Bali and Lombok regarding garbage/waste electricity generator. Company A as mentioned before try to penetrate international market to over 7 countries.

Example of differsification is when kratoon try to made a place for artist and content maker to nurture andmaking intellectual property, making Kratoon as one of the first player of

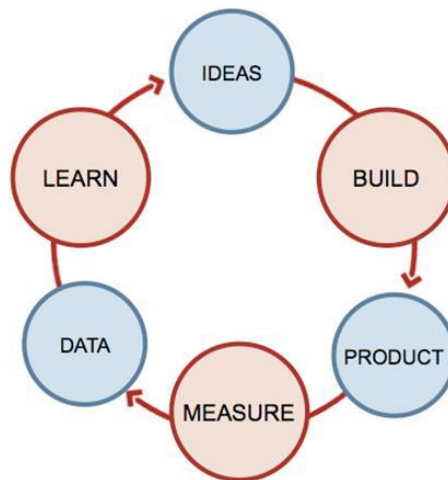
master IP protector in Indonesia. Bagi kata business by providing relevant and curated information over everything by making strategic partnership with content provider along with their content curator.

Financial capital can allow the firm to pursue more capital-intensive strategies that are also better protected from imitation (Cooper et al, 1994). This buffer may in turn increase the firm’s willingness to pursue new opportunities and strategies. On the other hand, firms that are content with their existing operations might not be able to follow with changing demands, and will consequently be negatively affected by this type of environment.

In his publication “The Lean Startup” (2011), Ries incorporates the lean manufacturing principles into the business model generation process. The underlying principle of Lean Management is to avoid waste by optimizing resource expenditure (Womack et al., 1991).

Traditionally, waste is defined as everything that does not add value to the end customer. However, many young businesses do not fail because they are incapable of building a solution or creating value to customers but because they face too many uncertainties and have not found a sufficient number of prospective customers to offset the costs.

Therefore, Ries incorporates a new definition of value for startups which he calls “validated learning”. Validated learning is a process that turns leap of faith assumptions into facts through falsifiable hypotheses. This concept is reached with the help of the Build-Measure-Learn-Loop (Ries, 2011).



*Figure 25 Build-Measure-Learn-Loop (Ries, 2011)*

Startup Genome report stated that similarities exist between firms on different stages. It also appear in validation to discovery, efficiency to validation, even scale to validation had some similarities. The need of more resource, ability to attain more customer and Inconsistencies of the following the right stages become findings that said the mentioned startups having more problems which premature scaling. The mistakes in premature scaling are following certain areas (Marmer, 2013):

A company named Brickhouse decide to put too many features in their product. It affected the main function and the top-of-mind feels in the user terms. In the end, they had to stripped down some of the feature that considered “too much”.

By having more capital a company tends to adding more management overhead such as facilities and a great-expensive team. It will be vulnerable for them if the sales won’t come as

high as they spend. After all, it is the money seeds that needed to return as fast as possible. Once they had too many traffic, they tend to have incorrect measurements of the goals. Often they tend to miss between the lead and the lag indicator.

So according to the finding, it is important to watch over the right developmental phases as long as growth strategy of the firms.

## Conclusion and future research

### *Overview*

The aim of this study is to find how startups managed and develop growth strategies. From part 3 we already aware that we already asked four questions regarding strategy growth formulation in start-up firm's perspective. We already aware that startup business have common pattern that lead us to find challenges over each phase of the start-up.

After finding pattern and self-definition of strategy in start-up concern, we need to know on what condition does startup emerge their strategy in order to find out more on what factors become the main motor for growth strategy on startup. Later we try to find underlying logic and direction of growth strategy in Startup based on Ansoff's growth strategy classification.

Academic framework and popular articles regarding startip offered pertinent background within definitions of strategies, Startup typology, growth strategies factors and growth strategy typologies as the direction of the research. Case studies are done through exact guidance as shown in Appendix B.

The following four parts of research question and connects it with the findings of each part of the study.

### *Research Question 1: What is a strategy and growth strategy in a Start-up company?*

The study exposed that participant had perceive strategy with the same definition as mintzberg's 'plan' and 'ploy' definition on strategy to achieve the goals and to go to desired condition of the company. However, the complexity, flexibility and formality of those 'plans' and 'ploys' varied in term of span and scope. From bureaucracy to time span, in practice variation of implementation is very wide, as it needed for startup to standardized process of strategic implementation. However, for some firm, strategies in practice were something that emerged according to the situations they faced and their environment.

Consequently, from start-up point of view, one can say that strategies are plans to achieve the firm's objectives and they are often used in practice through a combination of pre-decision analysis and emergent patterns.

### *Research Question 2: What are the Challenges over Start-ups in each Phase of Start up?*

The three main factors such as EO, MO and Resources (Internal and External) positively affecting startup's growth strategies were recognized by the four studied firms. Furthermore, it was possible for the firms to link those factors as being responsible for the emergence of their growth strategies.

EC known to be more informative as they seems doesn't correlate directly to the performances and the emergent of growth strategy.

### *Research Question 3: Under What Condition does Start-up Emerge Strategy?*

The five main factors affecting a firm's growth strategies were recognized by the 21 interview of the participants. Furthermore, it was possible for the firms to link those factors as being responsible for the emergence of their growth strategies.

Startup typology also has made a good pattern in assigning challenges on every phase

of the startup. By knowing challenges supported by strategic experience held by the firm made, it is possible to know certain strategy for startup to work on.

The case study suggests that growth strategies emerge where:

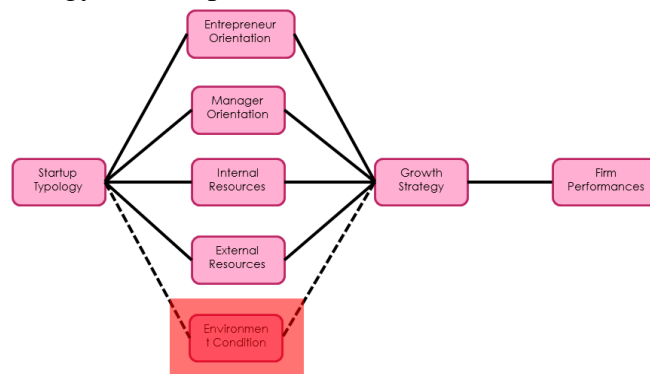
- The Manager Orientation towards growth is positive
- The firm possesses certain degrees of entrepreneurial orientation that vary to firm performances
- The firm has the varied status in financial (internal and external), human and/or social resources
- The environment of the firm creates certain felt pressures resulting in new opportunities whilst not really had directly affected performances and growth strategy.

*Research Question 4: What is the underlying logic and strategic direction of the growth strategies of Start-up Company?*

The findings suggested that the firms were making use of growth strategies directed to the development of new products while some other also pursue Market Development and Diversification as shown in Figure 11. Furthermore analysis on Market Penetration is not perceived as dist

Furthermore, after an analysis of the employed strategies, it was possible to state an important dimension that was present in those strategies.

Thus, it resulting in rejection in proposed model. That for Indonesia, model representing growth strategy in startup is as follow:



It is where Environment Condition doesn't satisfy the need for underlying logic for startup to employ growth strategy.

### Contribution

Topic discussed in this study invites to different path and approaches in order to ensure survivability of startup company. This study focus on five related aspects in term growth strategies in Startup Company. Business typology, Scalability, Factors affecting growth, growth typology and integration between them is focusing in exploring and describing a what and how startup works on strategy.

The contribution of this study is by far all-embracing suggestion and facts in startup company practices. This study suggests that:

- Startup perceives strategies as valuable tool and means to achieve their goals and desired condition of the firm. Participants in this study do incorporate strategies in their business process.
- Could be perceived that typology is a practical mean of firm's predetermination in plotting of following up patterned strategic action for the company growth.
- The pre-decision analysis of strategy formulation along with strategic experience that came

along with scale of the startup could drive the growth strategy and need more improvement in order to make it more practical for the use.

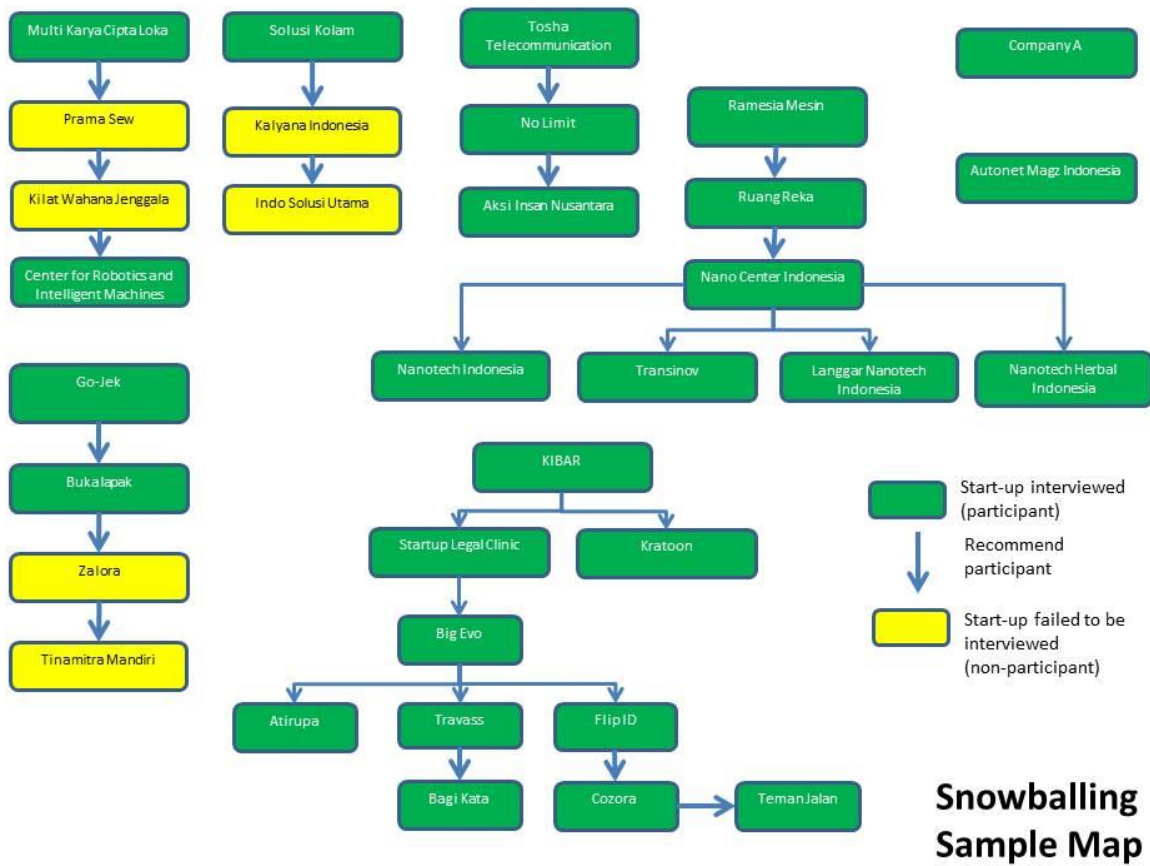
- Start-up could be defined with the typology maps from Wiklund integrative models along with scales from Marmer Blank's.
- The different factors affecting the emergence of growth strategies, showed that certain conditions were most likely to foster growth strategies than others.
- Growth strategies in small businesses can be classified by Ansoff's growth strategy with the variable actions called pivoting as Ries (2011) suggested.
- Inter-organizational cooperation has a key role when developing growth strategies. Firms should therefore consider looking opportunities with collaboration to create sustainable growth strategies.

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Appendix A. Snowballing Sample Map





**Appendix B. Categorization of Start-ups based on ICB**

No	Name	Industry	SuperSector	Sector	Subsector	Specific Business
1	Aksi Insan Nusantara	0001 Oil & Gas	0500 Oil & Gas	0580 Alternative Energy	0587 Alternative Fuels	Trash-Electricity generator
2	Langgar Nanotech Indonesia	1000 Basic Materials	1300 Chemicals	1350 Chemicals	1357 Specialty Chemicals	Toner producer for paint industry
3	Multi Karya Cipta Loka	2000 Industrials	2300 Construction & Materials	2350 Construction & Materials	2357 Heavy Construction	construction site service provider
4	Ramesia Mesin	2000 Industrials	2700 Industrial Goods & Services	2720 General Industrials	2723 Containers & Packaging	Food and culinary business machinery distributor
5	Nanotech Indonesia	2000 Industrials	2700 Industrial Goods & Services	2790 Support Services	2791 Business Support Services	Consultant in material testing and Implementation of nano technology
6	Transinov	2000 Industrials	2700 Industrial Goods & Services	2790 Support Services	2791 Business Support Services	Event organiaer on academic environment
7	No Limit	2000 Industrials	2700 Industrial Goods & Services	2790 Support Services	2791 Business Support Services	Social Media Analytics
8	Tosha Telecommunication	2000 Industrials	2700 Industrial Goods & Services	2790 Support Services	2791 Business Support Services	Digital Business Consultant
9	Startup Legal Clinic	2000 Industrials	2700 Industrial Goods & Services	2790 Support Services	2791 Business Support Services	Content creator and Legal service provider
10	Kibar	2000 Industrials	2700 Industrial Goods & Services	2790 Support Services	2793 Business Training & Employment Agencies	Startup Incubator and Environment
11	Nano Center Indonesia	2000 Industrials	2700 Industrial Goods & Services	2790 Support Services	2793 Business Training & Employment Agencies	Startup Incubator in Technology Startup
12	Ruang Reka	2000 Industrials	2700 Industrial Goods & Services	2790 Support Services	2793 Business Training & Employment Agencies	Coworking Space and Business Incubator
13	Flip ID	2000 Industrials	2700 Industrial Goods & Services	2790 Support Services	2795 Financial Administration	Alternative inter-bank transaction provider
14	Company A	2000 Industrials	2700 Industrial Goods & Services	2790 Support Services	2797 Industrial Suppliers	Spin-off of lubricant producer
15	Nanotech Herbal Indonesia	3000 Consumer Goods	3500 Food & Beverage	3570 Food Producers	3577 Food Products	Food Manufacturers specialized in nanotechnology implementation
16	Atirupa	3000 Consumer Goods	3700 Personal & Household Goods	3720 Household Goods & Home Construction	3726 Furnishings	Interior Designer and Furnishing Specialist
17	Kratoon	5000 Consumer Services	5500 Media	5550 Media	5555 Media Agencies	Digital hub for Intellectual Property character
18	Big Evo	5000 Consumer Services	5500 Media	5550 Media	5555 Media Agencies	Digital Marketing Specialist
19	Solusi Kolam	5000 Consumer Services	5700 Travel & Leisure	5750 Travel & Leisure	5755 Recreational Services	Hobby/Leisure on fishery tools provider
20	Travass	5000 Consumer Services	5700 Travel & Leisure	5750 Travel & Leisure	5759 Travel & Tourism	Travel and Leisure event organizer
21	Bukalapak	9000 Technology	9500 Technology	9530 Software & Computer Services	9535 Internet	Digital marketplace specialized in Small and Micro Enterprises
22	Go-Jek	9000 Technology	9500 Technology	9530 Software & Computer Services	9535 Internet	Backbone application on transportation services
23	Bagi Kata	9000 Technology	9500 Technology	9530 Software & Computer Services	9535 Internet	Portal of specific information
24	Cozora	9000 Technology	9500 Technology	9530 Software & Computer Services	9535 Internet	Internet content provider and webinar event organizer
25	Teman Jalan	9000 Technology	9500 Technology	9530 Software & Computer Services	9535 Internet	Transportation service application
26	Autonet Magz	9000 Technology	9500 Technology	9530 Software & Computer Services	9535 Internet	Youtube Content Creator and car trading
27	Center for Robotics and Intelligent Machines	9000 Technology	9500 Technology	9570 Technology Hardware & Equipment	9572 Computer Hardware	Academic-institution on Drone and Intelligent Machine

## Appendix C Questionnaire

11/20/2018

Growth Strategy on Start up

## Growth Strategy on Start up

Entrepreneurial activity has a very central role for economic development (Delmar, 2000). By stimulating growth and innovation, entrepreneurial activity contributes to the creation of new products, production methods, technologies, which challenge existing businesses models, creates jobs and contributes to the general welfare of a society (Iværksætterindeks, 2008). Unfortunately, most of these internet startups eventually went bust due to major oversights in their underlying business plans, such as a lack of sustainable revenue.

Start-up rate of success is considered low and most of the start-up/nascent entrepreneurs are failed to run business, most of them falls because they failed in setting strategic goals (Hechavarria, Renko, 2011). Meanwhile, Strategy plays an important role in a business' management process, as it helps a business to set a direction and to formulate the way they want to achieve their goals (Gibcus & Kemp, 2003). However, earlier research indicates that small and medium sized enterprises (SMEs) pay little attention to strategy formulation and strategy in general (Ireland, R., 2003). The lack of research effort concerning growth strategies in small businesses may be justified with a limited interest in Start-ups, even the definition of it is still ambiguous among its practitioner. The research will be focusing on of how growth strategies are developed by start-up businesses by answering the following problem :

- (1) What is a strategy and growth strategy in a Start-up company?
- (2) Under What Condition does Start-up Emerge Strategy?
- (3) What is the direction and underlying logic of the growth strategies of start up?
- (4) What are the Challenges over Start ups in each Phase of Start up?

In order to do that, we would like have insight of company practice from you, an owner/manager of a company that most fit the Unit analysis of this research according to Blank-Marmer Phase and Startup Genome Typology. Some of the question below will be asked to you in forms of interview session that will be held by our researcher.

We would like to hand you final analysis of this research to each company that help this research by getting interviewed and fulfilling some questions in this forms in advance.

We would like to thank you in advance for spend your time in this research.

Best Regards  
Senna Gumilar

\* Required

## Growth Strategy on Start ups



FAKULTAS  
EKONOMI  
DAN BISNIS

### General Question

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This general question is to provide basic information of the company

General Question

Company Name \*

Month and The Year The Firms Start \*

Startup Typology

Performance

Performance often categorize start-up phase and typology. Company Performance in the Last three years will gave insight about the company outlook, and will shorten the time it needed for interview session.

Please do fill in the blanks answer to every question in following format:

2015: ...

2014: ...

2013: ...

1. Average Sales of the company
2. Average Sales Growth per months
3. Number of the Employees
4. Average Growth of User/Customer per month
5. Is the startup receive any financing/funding from external sources?

Business Profile of Start-up

Information needed such as Product/Service, Forms, Consumer/User, Legal Aspect and External Sources; you are free to answer those question

1. What is the form of legal aspect of your company
2. Who is your Consumer/Customer/ User? Is there any specific market you target?
3. What is Product/Service you offered to your customer?
4. Could you describe Product/Service you offered to your User?
5. Do you have supplier or external service to support your business? Could you describe it?
6. Would you describe this business as:
  1. An independent start-up, created by an individual or team working on their own;
  2. A purchase or takeover of an existing business;
  3. A franchise or multi-level marketing initiative;
  4. A start-up sponsored by an existing business;
  5. Something else. How would you describe the location where this new business is being developed?

Other :

Team Capability

Team plays important rule to succeed of business. Commitment, skill and attitude towards growth is an important factors to start-up achievement

1. In the last 3 months, how many average hours your worker spent their time working per week?
2. For teams that in-touch in technical and operational problems, how many years they had experience in their field?
3. For teams that in-touch in Business and Strategic matters, how many business they did help so far?

Strategic View

1. Could you describe what is your view towards strategy?

2. According to you, would you rank from 1(the most) to 8 (the least) your main competitive advantage over your rival/ other business? \*

Mark only one oval per row.

1 Regulation Advantages

2 Techlogy

3 Partnership/Supplier

4 Strong Infromation

5 Sources

6 User Engagement

7 Barriers to Entry

8 Substitutes Product

Competition

1. Does your company make use of the strategies?
2. Do you hold meetings to discuss strategic issue?
3. Do you write down plan and had a written plan as a guide?
4. Do you set objectives and review the realization?
5. Do You Review Strategies vs Objectives
6. What is your main challenges in order to keep operational and grow? And why?

Check all that apply.

Acquiring More User/Customer

Maintain service/production level to meet the needs

Creating Product/market fit or Problem/Solution Fit

Building a solid group of team

Getting More Capital

Other:

7. How Flexible are your strategies?

Strategic Experience

Did the following things occurred in your firms?

8. Regarding to Customer...

Check all that apply.

Spending too much on customer acquisition before product/ market fit and a repeatable scalable business model

Overcompensating missing product/market fit with marketing and press

Other:

9. Regarding to building your Product

Check all that apply.

Building a product without problem/solution fit

Investing into scalability of the product before product/market fit

Adding “nice to have” features

Other:

10. Regarding to building Internal Team

Check all that apply.

Hiring too many people too early

Hiring specialists before they are critical: CFO's, Customer Service Reps, Database specialists, etc.

Hiring managers (VPs, product managers, etc.) instead of doers

Having more than 1 level of hierarch

Other:

11. Regarding getting Financials for grow

Check all that apply.

Raising too little money to get thru the valley of death

Raising too much money. It isn't necessarily bad, but usually makes entrepreneurs undisciplined and gives them the freedom to prematurely scale other dimensions

Other:

StartUp Typology

This section is aimed to categorized the firms you work on. it is based on BlankMarmer and Startup Genome's Internet Startup Typology

1. What is the name of this new business – what do you call it when you talk about it?
2. Why do you expect this new business to be successful? \*
3. If you were t starting this business, what would you be doing with your time and money?
4. Have you taken any classes or workshops on starting a business?

Factors That Trigger Strategy A Start Up

This is some questions that will be asked to you as our resource person in our scheduled interview.

Entrepreneurial Orientation

1. To what extent can the firm be described as having an entrepreneurial orientation? That is, its proclivity for risky projects, emphasis on invation, and tendency to introduce products before competitors.
2. In your opinion, does the entrepreneurial orientation of the firm affect its growth strategies? If , how?

Owner Manager Growth Orientation

3. What is the main goal of the ownermanager with the firm? For instance, focus on survival of the firm, maintenance of lifestyle or achieve growth.
4. What is the attitude of the manager toward growth?
5. In your opinion, does the manager's attitude toward growth affect the firm's growth strategies? If , how?

Firm Resources

6. Do you believe the firm has the adequate internal resources to grow? Such as human capital, intraorganizational networks
7. Do you believe the firm has the adequate external resources to grow? Such as financial capital, inter-organizational networks
8. In your opinion, do internal and external resources affect the growth strategies of the firm? If , how?

Environment

9. How can you characterize the environment of the firm in your particular industry, market or location? For instance, dynamic: instability and continuously changing, hostile: high rivalry or decreased demand of the firm's products, heterogeneous: different market segments with varied characteristics and needs or stabile
10. In your opinion, does this environment affect the growth strategies of the firm? If, how?

Challenges and Strategy

Growth Strategies

11. In your opinion, how can the firm achieve growth?
12. Can you describe the growth strategies employed by the firm?
13. How does the company go about developing new products?
14. How does the company go about expanding its markets?

Appendix D Start-up Interview Compilation

No	Name	Startup Genome	Blank Marmar	Entrepreneurial Orientation	Manager Orientation Towards Growth	Financial	Human Resource	Ext Financial	ext Social	Environment Condition	Market Penetration	Product Development	Market Development	Differentiation	Performance
1	Aksi Insan Nusantara	3	1	fair	fair	low	fair	high	fair	Hostile	X		X		Fair
2	Langgar Nanotech indonesia	1	2	high	high	low	high	fair	fair	Heterogen	X	X			Grow
3	Multi Karya Cipta Loka	3	4	high	fair	fair	fair	low	fair	Heterogen	X				Grow
4	Ramesia Mesin	3	4	high	low	fair	fair	high	high	Hostile	X	X			Grow
5	Nanotech Indonesia	3	3	fair	fair	fair	fair	low	low	Heterogen		X			Fair
6	Transinov	3	2	low	low	fair	low	low	low	Heterogen	X				Collapse
7	No Limit	3	3	high	fair	high	high	low	fair	Dynamic		X	X		Fair
8	Tosha Telecommunication	3	2	fair	low	fair	fair	low	low	Dynamic	X				Collapse
9	Startup Legal Clinic	1	1	low	high	low	high	fair	high	Heterogen		X			Fair
10	Kibar	2	4	high	high	fair	high	high	high	Heterogen	X	X	X	X	Grow
11	Nano Center Indonesia	2	3	high	high	low	high	fair	high	Dynamic	X	X		X	Grow
12	Ruang Reka	2	3	high	fair	high	fair	fair	high	Dynamic	X			X	Grow
13	Flip ID	1	1	fair	low	fair	low	low	low	Heterogen	X				Fair
14	Company A	3	4	high	fair	high	fair	high	high	Hostile	X		X		Grow
15	Nanotech Herbal Indonesia	1	3	high	high	fair	fair	low	high	Heterogen		X			Grow
16	Atirupa	3	1	fair	fair	high	low	low	fair	Hostile	X				Fair
17	Kratoon	1N	1	high	high	low	fair	fair	high	Dynamic		X		X	Fair
18	Big Evo	2	3	high	fair	fair	high	fair	high	Heterogen	X				Grow
19	Solusi Kolam	1	3	high	high	fair	fair	low	fair	Heterogen	X	X			Fair
20	Travass	2	1	fair	high	low	high	high	high	Heterogen			X		Fair
21	Bukalapak	1N	4	high	high	fair	high	high	high	Dynamic	X	X			Grow
22	Go-Jek	1N	4	high	high	fair	high	high	high	Dynamic		X	X		Grow
23	Bagi Kata	1N	1	fair	high	low	high	low	high	Dynamic	X			X	Fair
24	Cozora	2	1	high	low	low	fair	fair	fair	Heterogen	X			X	Fair
25	Teman Jalan	1N	1	fair	high	low	fair	low	fair	Hostile	X				Fair
26	Autonet Magz	1	2	high	high	fair	fair	low	fair	Dynamic		X			Fair
27	Center for Robotics and Intelligent Machines	1	1	low	low	low	fair	low	low	Heterogen	X				Collapse

## INCREASING THE QUALITY OF TUNA TO FULFILL JAPAN EXPORT MARKET PREFERENCES

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### Abstract

In Aceh, Tuna is one of marine products commodity that has high economic value. Tuna is caught by fishermen then sold either to Toke Banku (dealer), which is part of the of marketing intermediary chain, before they sold to the wholesalers. Ulee Lheu is one of the port where Tuna fishermen landing its boat. But unfortunately economic value of Tuna has not been utilized properly so there was some economic value that loss because the fishermen did not do proper handling of Tuna after they are being caught. Through the program of economic livelihood done by the university of syiah kuala, the fishermen have been trained so they are now able to do tuna handling better and get better quality of Tuna. By having good quality of tuna, they also get better price and consequently get better income.

**Keywords :** *Tuna , Distribution Channel , Product Export , Export Markets , Value Chain, Better Price, Better Income, Fishermen.*

### Introduction

#### *Background*

In Aceh, Tuna is one commodity of marine products that have high economic value. Tuna is fished by fishermen then it sold to either to Toke Bangku, which is part of the chain of intermediaries marketing, or directly to whole sellers. In Banda Aceh, there are some fishing port where tuna fishermen can landed their boats. Ulee Lheu is one of them. Ulee Lheu fishing port is not the biggest in Banda Aceh, but in term of Tuna, Ulelheu could be said as an important fishing port compare to other fishing port such as Lampulo located 5 km North of Ule Lheu.

Currently not less than 10 tones of tuna per day landed in Ulee Lheu fishing port, produced by dozens of Boat Bak (7-8GT) and Boat Tep Tep (1-2GT) (Nagata, 2014). If the average Tuna weight is 60 kg, then there are more than 166 tuna landed in this fishery port. With a selling price to Toke Bangku at an average of Rp 40,000 / kg, then the economic value generated is Rp 400 million per day, or Rp 12 billion in a month. Although this number is an optimistic estimate, but a market capitalization level of tuna business in Ulee Lheu can not be underestimated. Moreover, if the calculations performed referring to the price set or obtained by exporters of Fresh Tuna, then the economic value even bigger. Fortunately most of tuna landed in this post have lower grade: B or C. While Japan as one of the biggest market for Tuna only accept Grade A Tuna

According Junianto (2007), the characteristics grade A Tuna are:

- The color of the meat for yellow fin tuna was fresh red as blood, and for the big eye tuna is dark red like a rose, and there was no rainbow
- The Eye are clean, bright, and stand out - normal skin, the color is clean and bright
- The texture of the meat for yellow fin Tuna hard, chewy and elastic and for big eye tuna is soft, supple and elastic fish condition (appearance) was nice and intact.

However, this condition could not not be achieved by the fishermen in Ulee Lheu. Most fish they bring ashore usually in Grade B or C.

Because the quality of Tuna is low, then the selling price received by the provider Tuna in Aceh including fisherman, intermediaries (Toke Bangku) and Exporter Tuna is also low. This means that there are a number of economic value is lost simply because of the ignorance of the

fishermen in treating Tuna well in order to maintain quality of Tuna to stay in Grade A. Why Japan is selected as the market Tuna? Because Japan is the biggest tuna consuming country other than European countries and the United States (Mahmud, 2014).

This activity is supported by the theory of Marketing by Kotler (2007), especially in the subject of Product management. In designing this activities to improve the quality of products, the author also uses the theory of supply chain stated by Michael E Porter (2007) in his book Competitive Strategy

#### *Formulation of the problem*

One of the problem to market fresh fish is margin. Marketing margin represents the difference between the final consumer price and the price of product sold by the fishermen. he detailed formulation of the problem is as follows

1. What kind of marketing channels of tuna exist in Banda Aceh and its surrounding area?
2. What factors that influence the margin of fresh tuna?
3. Marketing channels fresh tuna are most efficient in Banda Aceh?

#### *Research purposes*

The purpose of this study are:

1. To identify the marketing channels of fresh Tuna in Banda Aceh.
2. To determine the factors that influence the margin of fresh tuna in Banda Aceh.
3. To determine the most efficient marketing channels of fresh tuna

### **Literature review**

#### *Japan Market Overview*

The most consuming countries of tuna in the world today apart from the United States and EU is Japan.

Tuna market opportunities in Japan, generally in the form of fresh and frozen products. Japanese tuna market today tend to be decreased from 751.293 tones (2008) to 702.450 tons (2012). This is due to a decrease in the level of fish consumption as a result of the composition of the Japanese population is dominated by adult and elderly (inverted pyramid) as indicated by the level of food intake began to decline. However, Japan is still the world's largest importer of tuna.

Currently, Japan is developing the concept of eco-label in marketing their products. It is very possible to succeed, because apart from being a manufacturer of tuna, Japanese as well as the main market destination, so it has a strong influence in determining the market (market driven).

One of the issues of market access at discussion at the conference labeling and eco-certification is a requirement of the market (market driven). Ecolabel on tuna products is a recognition in conducting fishing practices and good production on an industrial tuna, as well as being one of the market requirements that must be met (Machmud 2014)

#### *Tuna Fish Production in Indonesia.*

Tuna is an economically important fish species in Indonesia. Indonesia tuna fish distribution area covers from the Banda Sea, Maluku, Flores Sea, Celebes Sea, Indian Ocean, Halmahera Sea, the waters of the to the Arafura Sea. Volume production of tuna, including skipjack tends to increase every year, where in 2010 and 2011 respectively reached 910.506 tonnes and 974.011 tones.

#### *Distribution Marketing*



According to Keegan (2003) Distribution Channel is a channel used by the manufacturer to deliver the goods from producer to consumer or industrial user. Marketing terms according to Keegan (2003), synonymous with business administration or distribution, which is a kind of economic activity that carries or deliver goods from producers to consumers. Marketing is an important link in fishery activities. Marketing efforts can play a role in price formation and absorption of production. Marketing of fishery products according to A.M Hanafi and A.M Saefuddin (1983) have the following characteristics:

1. Fishery products largely absorbed by the final consumer steadily throughout the year, while its bid depends on the production affected by the climate.
2. In general, traders give credit (advanced payment) to producers (fishermen) as collateral in order to obtain the largest share of the fishery.
3. Channel marketing of fishery products generally consist of fishermen, middlemen as collectors, wholesalers (wholesaler), retailers and consumers (industrial processing and end consumers).
4. The movement of fishery products from producers to consumers in general includes the processes of collecting, counterbalancing and deployment, where the collection process is paramount.
5. The most important aspect in the marketing of fishery products traders lies in the area of production that is scattered, small-scale production and seasonally

The smoothness of fish marketing is because of the intermediaries. Fishermen are hardly to sell their fish by themselves. They always use intermediaries to market the product. In Aceh intermediaries in fish marketing called Toke Bangku.

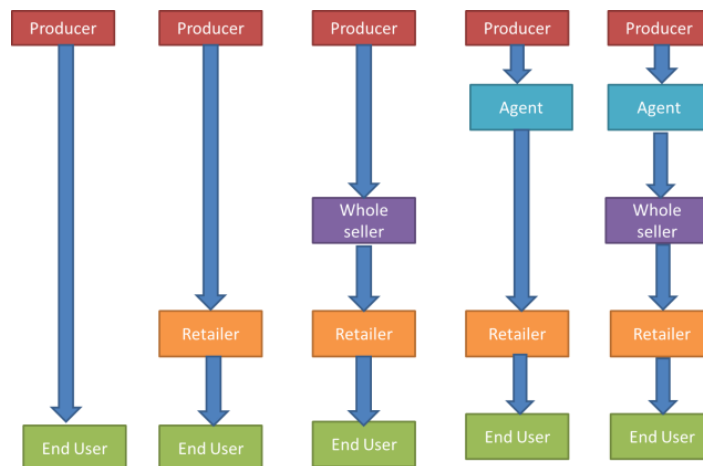


Figure 1  
Distribution Channel

Source: <https://ultimatesammy.wordpress.com/2013/12/31/kegiatan-pemasaran-koperasi-saluran-pemasaran/>

## Research Model

### *Research Model*

This research uses the model as follows:



Figure-2

## Research methods

### *Scope of the Study*

This study used a survey technique. Data was collected from respondent in the same period through interviews by using questionnaires (Surakhmad, 2004). In this study the unit analysis is the fishermen and middlemen. This research was conducted at the Fishing Port of Ulee Lheue, home of the largest population of Tuna fishermen in Banda Aceh.

### *Types and Sources of Data*

The data used in this study consisted of primary data and secondary data. The primary data obtained from interviews with fishermen and middlemen. To facilitate exercising the interview provided a list of questions to obtain uniformity questions.

Secondary data were obtained from the agency or institution that has to do with research, among others: the Central Bureau of Statistics of Banda Aceh, the Fisheries and Marine Banda Aceh, Indonesian Fishermen Association of Aceh, PT Nagata Tuna Prima Aceh and ADB TA 8224 program for the improvement of Quality of Tuna in Ulee Lheue

### *Sampling Methods*

To determine the sample area for the selected districts used cluster random sampling method. In this study the sample area for the selected districts is Ulee Lheue fishing port, with consideration that this port has the largest number of tuna fishermen.

The respondents consist of 24 fishermen that regularly catch Tuna, both fishermen of Boat Bak and Boat Tep Tep. While sampling of intermediaries were Toke Bangku and Whole Seller.

## Discussion

The activities to improve the performance of the fishermen in handling tuna at Ulee Lheue fishing port started from training activities to teach the fishermen how to handle Tuna well when it was caught. Training activities were divided into two sessions: in class training conducted through face-to-face with the instructor who were Tuna care practitioners. The session was done by using workshops included the practice of doing GG. The second session was practice at sea. The instructors come to sea with the fishermen, when the Tuna successfully captured and landed on the boat, then the hand on session training began over the boat, to maintain the quality of tuna always fresh upon arrival on land.

With the increasing quality of tuna produced, PT Prima Nagata as collectors and processing of Tuna is also willing to buy at higher prices. The impact is to the increasing of fishermen income.

Because the training was done not merely maintain the quality of Tuna to remain good, but fishing is also equipped with some basic knowledge about technology such as to see the

coordinates of the location so that it can marked the fishing area more clearly. At the same time they have also been given the understanding of the use of weather application to see the weather forecast, so that they are spared from the storm at the sea.

With a variety approaches, not only the quality of the Tuna increased but also increase the amount of tuna caught.

The following table presents the benefit of fishermen who are members of the community service activities to improve the quality of Tuna.

**Table IV-1: CAPITAL**

No	INCREASING RANGE	FREQ	PERCENT
1	300.000-400.000	3	13%
2	400.001-500.000	20	83%
3	500.001-600.000	0	0%
4	600.001-700.000	1	4%
	TOTAL	24	100%

The average capital owned by fishermen increased from Rp 300,000 to Rp 400,000 per person. The highest increased was in a range between Rp 400,000 to Rp 500,000 – that was recorded by 83%.

**Table IV-2: SALES**

No	INCREASING RANGE	FREQ	PERCENT
1	500.000-1.000.000	20	83%
2	1.000.001-1.500.000	2	8%
3	1.500.001-2.000.000	2	8%
	TOTAL	24	100%

In addition to capital, sales turnover Tuna fishermen after joining this program were also increased from Rp 500,000 to Rp 2,000,000 per person per month.

The largest increase was in the range of Rp 500,000, to Rp 1,000,000, - that is 83%. In other words 83% of the fishermen who joint this program experience the increasing of sales turnover between Rp 500,000 to Rp 1,000,000, - per person per month.

**Table IV-3: TUNA CAUGHT**

No	INCREASING RANGE	FREQ	PERCENT
1	10-20	15	63%
2	21-30	6	25%
3	31-40	1	4%
4	41-50	2	8%
	TOTAL	24	100%

In line with the increasing of fishermen sales turnover, so the catch is also increasing, because fishermen have been equipped with the technical knowledge associated with the use of GPS readings and weather applications such as Accu weather. Added the catch was between 10

and 50 fish of tuna per month. The increase in catches occurred in a range between 10-20 per month is equal to 63%.

**TABEL IV-4: NET INCOME**

No	INCREASING RANGE	FREQ	PERCENT
1	<=250.000	14	58%
2	250.001-500.000	5	21%
3	500.001-750.000	1	4%
4	750.001-1.000.000	3	13%
5	1.000.001-1.250.000	1	4%
	TOTAL	24	100%

Ultimate goal of these activities actually was to increase fishermen's income. With the increase of the income of fishermen means the objective of the community services conducted in that area is said to be successful. The fact was an increase in income between Rp 250,000 up to 1,250.000 per month. While additional revenue was in the range of Rp less than 250,000. Indeed, the increase was not large enough. But at least there is extra revenue to show gain by fishermen. It is showed visible results that the activities of economic empowerment that starts from downstream up to the marketing as a model of community empowerment that has a higher probability to succeed.

The intervention of the program to also include PT. Nagata Prima Tuna as a buyer was really help full to convince fisherman to produce high quality tuna since they will also get higher price as a consequences.

#### *The use of additional income*

Some expenses that are commonly used by fishermen when they get additional revenue are to finance a child's education, increase business capital or pay off their debts. This study also looked at for consumption pattern when they get extra revenue gained from improving the quality of tuna they produced. As for the question that asked to them can be seen in the following table:

**TABLE IV-5  
THE USE OF ADDITIONAL INCOME**

NO	QUESTIONS	YES	NO	% YES	% NO
1	Finance the children's education?	19	5	16%	4%
2	Adding venture capital?	3	21	3%	17%
3	Creating a new business?	0	24	0%	19%
4	Buy food for your family?	24	0	21%	0%
5	Buy clothes or other household items?	22	2	19%	2%
6	Give / lend money to your spouse or someone else?	21	3	18%	2%
7	Keeping them in case there will be unexpected needs?	15	9	13%	7%
8	Paying other debts?	9	15	8%	12%
9	Repair or buy a house or land?	1	23	1%	19%
10	Finance the celebrations (eg weddings, circumcision, etc.)?	2	22	2%	18%
	TOTAL	116	124	100%	100%

From the table above shows that the increasing income they get mostly earmarked as additional funds to buy better food (21%). In the second place additional allocations earmarked income to buy better clothes (19%).

From this fact we can conclude that the fishermen who were respondent of this study were still relatively lacking basic needs of both clothing and food. So the extra income they have, not been spent on luxury goods but on primary needs such as food and clothing.

## **Conclusion**

1. Community service program performed in Ulee Lheu fishing port been able to help improve the welfare of fishermen, in the form of an increase in sales turnover, the catch and also revenue
2. The majority of the additional income generated from the program has been spent to fulfill basic needs such as food and cloths.

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**EMPOWERING OF SMALL, MICRO AND COOPERATIVES BUSINESS ENTERPRISE (SMCEs) ON BASE AGRIBUSINESS TO FACE ASEAN MARKET: SURVEY AT SMCEs CENTRAL OF ACEH, INDONESIA**

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**Abstract**

This study aims to analyze the Empowering of Small, Micro and Cooperatives Business Enterprise (SMCEs) on the base Agribusiness in Facing Asean Economic Community (AEC). Population in research is all SMCEs under development on Board of Cooperative, Industry and Commerce of three areas, North-East, Central, and South-West Aceh being based on Agribusiness. Sample was done of the trained and developed about management of its effort; administration, accountancy, marketing and exploiting of various facilities of its inclusive of information technology that is as much as 60 SMCEs. Analyze conducted by regression of variable supporting power of SMCEs. The study result shows that variables identified in model to progress of effort SMCEs equal to 0,66%. While if seen from level of influence relative minimize, that is only equal to 0,44%. Its small cause is the influence possibility of progress variables of effort, with the indicator only mount the advantage and satisfaction in trying to represent the small shares from progress variables of its effort very macro. But that way result of this study represent the step of early good in comprehending by real condition faced by SMCEs in Aceh. To be obtained by a more result utilize the importance of planning and better future policy needed by research coverage of inclusive of indicator amount as well as amount of sample of larger ones again. Other cause of this research possibility not make classified of stratified random sampling. Because in the fact of SMCEs are differed. The difference of the aspect; (a) scale of business, (b) market share, (c) capital, (d) labor force, and the others. The results of test showed that the level of tolerance significantly by 10% then the variables that affect PE (Progress of Enterprises) are VAR00006 / CTE (Completeness Technology of Enterprises) and VAR00012 / CBA (Condition of Business Administration), and there are 13 other variables were not significant the progress of the business.

**Keywords:** *SMCEs Agrobusiness, AEC*

**Introduction**

Small businesses, micro and Cooperative (SMECs) is often used as a sector of economic power which gives support and contribution to public life in many countries. Many facts in many countries that cooperatives, small and micro enterprises have saved the life of the local economy a weak one, and marginalized groups are frozen out of the market competition. Not a few of the executive and the legislature to make SMECs as an important instrument in realizing the kinds of government programs in the field of economic and social welfare, in particular through the empowerment of the economic sectors in the community, such as agribusiness. But on the other hand portrait SMECs unstable, marginal and vulnerable to the onslaught of powerful financiers, it is often overlooked. SMECs often received unfair treatment in many respects compared with large corporations, both state and other private corporations. In fact, much evidence supports the idea that SMECs able to survive in difficult economic conditions.

The data are available on the Department of Cooperatives, Industry and Trade (Diskopindag) Central of Aceh district by March 1<sup>st</sup>, 2013 shows the number of cooperatives in various kinds reached 376 units, comprised of 182 active and 194 inactive units. The number of inactive this is generally a result of the negative impact of the conflict. While the micro, small

and medium enterprises under the guidance Department of Cooperatives, Industry and Trade Central of Aceh reached 1521 units. Micro, small and medium enterprises are engaged in various fields of business, covering; small industries, handicrafts and trade. Industrial enterprises, handicraft and the trade based on agricultural commodities produced by local people.

In the reality on the ground a lot of SMECs are less able to grow well in spite of its potential is relatively large, especially in the agricultural sector. This is due to many factors that influence the development of the SMECs, therefore, considered to be very important study and understand the problems faced and thus in turn is expected to provide an appropriate solution in developing SMECs in Central of Aceh in particular, and SMECs nationally, and regionally in general.

In addition to the above conditions in Aceh today SMECs soon faced a new era that is facing an economic and free trade area between ASEAN countries and China, known as ACFTA (Asia-China Free Trade Agreement). Based on that in addressing this condition SMECs anywhere including in Aceh require attention was more serious in order to organize further about their performance in the face of this global issue. Otherwise SMECs would lose in global competition, which grew rapidly in the future.

This study aims to: (1) Analyze the factors supporting and hindering business development SMECs Central of Aceh in facing the ASEAN market, (2) Generate SMECs Central of Aceh empowerment strategy in the face of competition.

### **Literature review**

SMECs often characterized by: (1) The structure of simple business, (2) Often without the use of staff, usually the owner serves as the staff, (3) The division of labor is less clear, (4) Having a managerial hierarchy is relatively short, (5) Activities business was relatively less formal, less perform management functions, (6) Less distinguish personal assets from the company's assets, (7) registration of simple financial, some even do not make a recording. There are several reasons why SMECs survive in times of economic crisis: (1) Most SMECs producing consumer goods and services with the income elasticity of demand is low, then the level of the average income of people do not have much effect on the demand for the goods produced. The opposite is also the level of income will not affect the demand, (2) Most SMECs not get capital from banks. Because of the deterioration of the value of money is not dragging SMECs in bankruptcy business, (3) the relative SMECs very dynamic in production and are not bound by a fixed product. SMECs is relatively without any obstacles out into the market. So that they can be continue to survive in the markets.

Quite a lot of facts on the ground convince us how SMECs have a lot to save the rabble of a constellation of a bad economy, greedy, and oppressive. Because that's the reason for E.F. Schumacher author of the book "Small is Beautiful" which has been translated under the title "Small is Beautiful" (1978) believes that "small businesses will increasingly contribute to a strong future for the prosperity of a nation". Likewise, the forecast futurologist John Naisbitt (1999), he believes that the future of the global economy is in the hands of small business, autonomous, yet solid technology. What was predicted by both experts in the above proved to be of small businesses have contributed stabilize the economy of a country, especially when many countries buffeted by a severe economic crisis. There are still many other views of various groups with a similar tone that small and medium enterprises and cooperatives often becomes a symbol of rescue institutions against economic marginalization of the people, little people who are oppressed and bounced out of competition. Especially for institutional cooperation, Endress in Munkner (2000) illustrates that the cooperative also plays a role similar to the rescue of the oppressed economically, "the agency proved to be able to help the farmers, artisans and small traders survive and strive in difficult times, which is caused by the reforms, agriculture, industry

and liberal economic policy. Cooperatives become an appropriate alternative, not only in times of scarcity, but also in the all-round prosperous future".

On the other hand, although admittedly, in reality SMECs considered relatively immune to survive and face the crises, there is no doubt there are also some small businesses are also caught in a difficult economic situation. As a result of the impact of a prolonged crisis, rising fuel prices and other energy, rigid government regulations, causing many small business units were forced out of business. But it will not be easy dampen our courage even heighten our spirit to be able to give full support to a healthy business climate for the development of SMECs amidst global competition. As the opening of the market with ASEAN. By strengthening SMECs in various aspects, both aspects of business management and is expected to survive in any condition as part of economic actors in a market increasingly competitive and cooperative.

### Research methods

This study used survey method, which takes a sample of part of the population to represent the population as a representative (Masri Singarimbun and Sofian Effendi, 1995). The target population in this study are all SMECs which is the responsibility of coaching the Department of Cooperatives, Industry and Trade in Central of Aceh district. Keeping in population SMECs the relatively large reach 376 cooperative units and 1521 units of SMECs, and of the number of SMECs are some who are not active and the types of businesses that are very diverse, this research has only sampled SMECs is still active and has received coaching by the Department of Cooperatives, Industry and Trade on the period July 2013 is 80 units. Although it acknowledged the type and scale of business of each SMECs are different from one another, but in terms of criteria, typical, and the problems encountered in the field are relatively the same. The coaching has been done include; management training, institutional, entrepreneurial, accounting, and information technology of SMECs.

The data collection is done by direct observation in the field in a participatory manner. It also created guidelines for interviews with key informants, such as with the leadership in the Department of Cooperatives, Industry and Trade in charge SMECs and business leaders from SMECs studied. The data collection took place in July 2014. The data were analyzed qualitatively and quantitatively. Quantitatively used regression model as follows:

$$PE = a + \beta_1 AIM + \beta_2 SG + \beta_3 CB + \beta_4 CT + \beta_5 SL + \beta_6 CTB + \beta_7 TFI + \beta_8 CAI + \beta_9 BR + \beta_{10} CP + \beta_{11} C + \beta_{12} CBA + \beta_{13} BW + \beta_{14} BV + e$$

Informations:

AIM = Ability of Individual Managing Business (X1)

SG = Supporting of Government (X2)

CB = Competition of Business (X3)

CT = Customer Trust (X4)

SL = Strategic of Location (X5)

CTB = Completeness Technology Business (X6)

TFI = Trust of Financial Institutions (X7)

CAI = Application of Ability Information Technology of Business (X8)

BR = Business Relations (X9)

CP = Cost of Production (X10)

C = Capital (X11)

CBA = Conditions of Business Administration (X12)

QW = Quantity Workers (X13)

BV = Business Volume (X14)

PE = Progress of Business (Y)



The research variables, indicators and measurement can be seen in the matrix below:

**Table No. 1.1 Variable Matrix Research**

No.	Variable	Indicator	Measurement
1	AIM = Ability of Individual Managing Business (X1)	The individual's ability to lead / manage a business	(5) Very Capable (4) Able (3) Average (2) Underprivileged (1) Not Able
2	SG= Supporting of Government (X2)	The intensity of the government guidance for SMECs	(5) Very Often (4) Often (3) Average (2) Less (1) Very Less
3	CB = Competition of Business (X3)	The conditions of competition (many similar businesses)	(5) Very Much (4) Many (3) Average (2) Less (1) Very Less
4	CT = Customer Trust (X4)	The conditions of customer confidence levels on SMECs	(5) Very Strong (4) Strong (3) Average (2) Less (1) Very Less
5	SL = Strategic of Location (X5)	The conditions of business strategic location both in terms of consumer reach and access to production inputs	(5) Very Strategic (4) Strategic (3) Average (2) Less Strategic (1) Not Strategic
6	CTB = Completeness Technology Business (X6)	The conditions of production equipment (technology) owned in trying	(5) Very Complete (4) Complete (3) Average (2) Deficient (1) Not Complete
7	TFI = Trust of Financial Institutions (X7)	The condition of confidence in financial institutions (banks, donors, etc.) of the business carried	(5) Very Strong (4) Strong (3) Average (2) Less (1) Very Less
8	CAI = Application of Ability Information Technology of Business (X8)	The ability of technology companies in applying existing businesses	(5) Very Capable (4) Able (3) Average (2) Underprivileged

			(1) Not Able
9	BR = Business Relations (X9)	Ability to establish a business relationship (partnership) with other enterprises (in marketing, financing, procurement of inputs, etc.)	(5) Very Strong (4) Strong (3) Average (2) Less (1) Very Less
10	CP = Cost of Production (X10)	The conditions production costs borne by companies in production in comparison with the cost of production outside of the Central of Aceh	(5) Very High (4) High (3) Average (2) Low (1) Very Low
11	C = Capital (X11)	The conditions ability of capital companies today	(5) Very Strong (4) Strong (3) Average (2) Less (1) Very Less
12	CBA = Conditions of Business Administration (X12)	The condition of administration of the company nowadays	(5) Very Good (4) Good (3) Average (2) Less Good (1) Not Good
13	QW = Quantity Workers (X13)	The conditions of use of manpower in running business activities	(5) Very Supports (4) Supports (3) Average (2) Less Support (1) Not Support
14	BV = Business Volume (X14)	The conditions volume of business generated by companies nowadays	(5) Very Large (4) Large (3) Average (2) Small (1) Very Small
15	PE = Progress of Business (Y)	The conditions advances in benefit and satisfaction in business	(5) Very High (4) High (3) Average (2) Low (1) Very Low

### Result and discussion

Central of Aceh district is rich in various natural resources, particularly agricultural and forestry resources and supported by most of the territory that the cool air has made it as one of the center area of coffee production and horticulture are important in Aceh. The potential of the rich natural resources has become a major business base and the potential for SMECs. These resources include plantations, agricultural crops, livestock, processing results of the plantation and agriculture, as well as the marketing of agricultural products.

Based on the report of Department of Cooperatives, Industry and Trade of Central of Aceh by March 31<sup>st</sup>, 2013 amounted to 367 units the number of cooperatives. Of these active are as much as 171. Cooperative inactive are generally stuck with funds Farmer Business Credit (KUT) and the fuel compensation amounting to Rp.35 billion which has not been able to be repaid to the donors. Another problem facing cooperatives is due to the low quality of management, as well as member participation is also low. As a result of cooperative business activities is running in place there that has not run the business again.

The result of the calculation using the regression formula shows that the relationship between the variables identified in the model of the business progress SMECs in Central of Aceh district with the indicator is the achievement of progress in obtaining benefits and satisfaction in business is not too strong only by 0.66%. Meanwhile, when seen from the magnitude of the effect is relatively small, at only 0.44%. Thus there are many other variables that affect the business progress SMECs in Central of Aceh. Because the variable progress of the business is very macro variables. It also estimated the size of the samples taken are only 80 units that are in accordance with the predetermined criteria of the hundreds of units SMECs in Central of Aceh can be a cause of small effect of these variables. Therefore, in the interests of future planning and policy better is needed expansion of the scope of research with larger samples, in order to know more clearly about the dominant factors affecting the business progress SMECs in Central of Aceh.

By understanding the possibility of the dominant factors that influence of the factors exist, then the following steps can be found much more appropriate solutions in the empowerment of SMECs in Central of Aceh district. Another cause is that the study also did not classify the samples by strata. Even though in reality, the SMECs is relatively different from each other. Such differences include aspects; (A) the scale of business, (b) the extent of marketing, (c) the power of capital, (d) the number of workers employed, and many others if you want to stratify. The small sample is taken due to the limited funds available for research on the larger samples. Likewise SMECs limitations in meeting the desired criteria are also still limited to SMECs who has followed guidance from the government of a few things. Whereas it is most SMECs in Central of Aceh is still very limited receiving guidance from the government. As a result, the determined sample less representative and is also relatively limited. Further details of the results of regression to the above variables can be traced to the regression output below.

**Table: The Results of Regression Calculation**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.662 <sup>a</sup>	.439	.316	.86462

a. Predictors: (Constant), VAR00014, VAR00002, VAR00010, VAR00001, VAR00007, VAR00005, VAR00012, VAR00013, VAR00008, VAR00004, VAR00011, VAR00009, VAR00006, VAR00003

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.300	.683		.440	.662
	VAR00001	.040	.100	.041	.403	.688
	VAR00002	.003	.121	.003	.025	.980
	VAR00003	.243	.154	.289	1.574	.120
	VAR00004	-.141	.140	-.174	-1.005	.319
	VAR00005	-.041	.106	-.047	-.384	.702
	VAR00006	.605	.177	.533	3.409	.001
	VAR00007	-.240	.188	-.198	-1.281	.205
	VAR00008	.033	.124	.034	.268	.789
	VAR00009	-.196	.144	-.210	-1.359	.179
	VAR00010	.017	.164	.012	.104	.918
	VAR00011	.028	.129	.031	.220	.827
	VAR00012	.173	.100	.213	1.733	.088
	VAR00013	.113	.104	.133	1.087	.281
	VAR00014	.173	.117	.178	1.477	.145

a. Dependent Variable: VAR00015

The results of test showed that the level of tolerance significantly by 10% then the variables that affect PE (Progress of Enterprises) are VAR00006 / CTE (Completeness Technology of Enterprises) and VAR00012 / CBA (Condition of Business Administration), and there are 13 other variables were not significant the progress of the business.

### Empowerment Strategy

Based on the results of field research in 80 units SMECs in Central of Aceh can be given some recommendations as an empowerment strategy. The strategy includes: (1) Improvement Performance Management and Institutional, (2) Improved Business Performance, (3) Strengthening the Partnership, (4) Strengthening the Access to Information and Production Technology, (5) Strengthening Network Marketing, (6) Assistance Capital, (7) Mentoring Program, and (8) Strengthening competitiveness by studying each change and global consumer taste, especially looking at the strategy launched by competitors other ASEAN countries including China who are members of the ACFTA.

#### 1. Improved Performance and Institutional Management

In connection with the management and institutional performance improvement in the near future need to do the continuous training in the field of management information systems based on information technology. Likewise, more in-depth training on the basic tasks and management functions ranging from mid-level to the top, especially medium-sized enterprises and cooperatives. Especially in the areas of planning, financing and supervision.

Ability of management to make the right business planning will help SMECs to achieve the expected level of progress. With reference to the plan that has been outlined it will be able to understand the target achievement of the activities performed. The planning have to assessed through monitoring of what has been realized or which ones have not.

In addition to performance-related management also needs to be improved the quality of institutions, for example in the case of institutional business licensing in order to have a solid legal foundation in their daily activities. Similarly, in terms of self-image agencies, such patents from SMECs, however little it may be very useful for SMECs in the midst of a very strong competition. Imaging company through branding (trademark) is very important in order to have

a place in public memory. Strong branding in the minds of consumers is a very valuable asset for the company's progress. The actually is many products SMECs in Central of Aceh who need to get proper legal protection from the government. But until now there is still very limited obtain such protection. So that the products of SMECs routinely ignored, while they do have advantages if get serious attention, both from the business community and from the government itself.

## **2. Improved Business Performance**

Central of Aceh government needs to continuously provide knowledge and expertise in advancing theoretical and technical effort. Internally the company, SMECs in Central of Aceh is still need to improve efficiency in the attempt. The efficiency include; (A) Low-cost strategy, and (b) Utilizing human resources with knowledge and expertise in the field.

In addition, strong efforts are needed from SMECs with the administration and accounting in accordance with the provisions of Accounting Standard Indonesia (SAI). Indicators of business as business volume, profit margins, liquidity, Return on Investment (ROI) and other financial indicators going to be understood in depth by the SMECs. Because by understanding these indicators management has a strong effort in the achievement.

## **3. Strengthening the Business Relations**

The business relations also a factor that needs special attention especially in an increasingly competitive world. The SMECs will be able to exist if an intense relationship with various circles. The partnerships can be done with similar businesses, financial institutions, government agencies, and other institutions that put a strong interest in the field of SMECs. It is impossible to ignore the importance of partnerships with various parties at this time for SMECs. Because the business world is dynamic and competitive demands all parties to mutually advantageous cooperation in various fields. If the partnership ranging from downstream to upstream can be knitted then SMECs will get the benefits that must have as strength in various business activities in the future.

## **4. Strengthening Access to Information and Production Technology**

The application of information technology and the production of appropriate technology would be very helpful in developing a business SMECs. Almost no longer possible today if SMECs apart from both of the above. Because one of characteristics of the progressive and modern business nowadays are characterized by ability to utilize existing technology to improve the productivity (Soekartawi, 1990). Further Cobia (1989) emphasized the importance of procurement in marketing information networks in order to reach a comprehensive marketing area. "Mastery of a strong information network supports businesses to develop properly, due to a variety of information in quick time and the right has a value that is very valuable in terms of production and marketing of their products". Even more than the production of information technology and provide its own power for SMECs in the transformation of local businesses that are becoming more global. Moreover, with the opening of free trade between Indonesia and other Asean countries and China is certainly strengthening access information and production technology is crucial. Given the global and local customers require products that are more qualified.

## **5. Strengthening Network Marketing**

Strong marketing network is very helpful SMECs in profit. Therefore we need a strong effort from SMECs to create a chain to the marketing of various circles. For example mastery transport networks, promotion agency, to the various layers of the consumer is very important. The Products of SMECs need to get a room and a more easily accessible by consumers, for example by opening promotion centers at various strategic places, such as airports, shopping

centers, ports, terminals, tourist sites, and various other places are more easily accessible by consumers, The network can be done locally, nationally, and internationally. Especially for those who have a value SMECs reliable products for export purposes. Thus the level of the profits are also expected to be increased.

## **6. Supporting Funds**

The adequate capital base to do business is needed, but the immediate need to do is facilitate them to be able to deal with financial institutions, including microfinance institutions (MFIs). The capital aid in question can be done in two models; (A) providing capital that is able to turn the business from upstream to downstream, especially SMECs which has the potential to export market orientation, (b) providing capital only as a stimulus for business development. The both models can be operated in a more real in the field, and thus clearly known anywhere SMECs are included in that category in order to carry out policy is not misplaced.

## **7. Mentoring Program**

Although the implementation of assistance programs in the field are often less satisfying results yet to SMECs still needed. Mentoring programs can be done by setting up personnel more appropriate and in accordance with the character of the local SMECs. Because if the Human Resources (HR) companion character is poorly understood by the public and also the character SMECs the assistance efforts often fail. In addition to mentoring programs in the form of assistance in terms of human resources are also other very necessary soft skills such as; facilitate comparative studies and others who are able to change the mindset and culture of effort toward more efficient.

## **8. Strengthening the Competitiveness**

Strengthening the competitiveness is meant here is doing a careful arrangement of the imaging product (quality, branding, service, and price), and also a deep understanding of the global consumer tastes by observing the consumer behavior of each country. This can be done in producing various agro-based products, such as Gayo's coffee that as long as it is well known in foreign countries. The Gayo's coffee is marketed now only with one sense, but in the future can be better engineered with a rich flavor that global consumers can enjoy according to their taste. Similarly, other export commodities, such as horticultural products can better adjust to the conditions that exist in order SMECs engaged in agribusiness is more able to exist in the global competition that is already in sight.

Specifically about the cooperative development, Syahza (2010: 1) so that the cooperative can function properly, then the government needs to develop a supporting factor of regional economic development through cooperative development, namely: (1) The potential of the community, (2) Employers, (3) Institute of crediting, (4) Relevant agencies; and (5) Cooperative as a business entity.

## **Conclusions**

In the face of intra-ASEAN competition today is expected SMECs again should further adjust its performance to better withstand and still be able to contribute for many people to meet various needs. The learning of the spirit of vitality SMECs during this despite the onslaught of the harsh global economic proven that many parties gave a high appreciation of the importance of developing a wider range SMECs effort to bridge the economic gaps that exist. This can be done as long as the government together with the wider community in developing SMECs synergy together.

SMECs development efforts should be done in an integrated and continuous in order SMECs can develop in line with expectations. There are still many SMECs in Indonesia,

including in Central of Aceh require special attention and touch in many aspects, so that their efforts have stalled in the middle of the road. The government needs to encourage continuous tireless order SMECs more independent in all respects, including the strengthening of management, financing and marketing. Considering there are still some SMECs is in need of protection from the government because of the scale of operations and marketing reach is still limited. With the development of the SMECs income levels will increase and thus will have positive implications for economic growth. Therefore, in promoting SMECs should be synergized with the other cross-cutting in order to obtain protection and force of law in carrying out activities. Otherwise it will be difficult to develop SMECs in the constellation of the business world is increasingly competing today.

Reflecting on the conditions and the potential SMECs in Central of Aceh should increasingly read an important opportunity to expand its business, for example, so far only focus production efforts on the local market, but now should be oriented to export markets (Asean regional market and China) and even other countries in world. It is not impossible given the magnitude of the potential possessed by the region. Moreover, nowadays Central of Aceh has become the center of production of some export commodities and also to local market needs in Aceh. Its strategic location as the gateway to the northern coast of Central of Aceh has made very favorable as the hinterland, a supplier of horticultural products needs to parts of Aceh, Indonesia, and also for the neighboring countries that are members of the ACFTA.

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## MAQASHID AL-SHARIAH INDEXAS A BASED OF ISLAMIC BANKING PERFORMANCE MEASUREMENT OF INDONESIA AND MALAYSIA

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### Abstract

A review of the Islamic Banking performance in Indonesia and Malaysia can be applied by using Maqashid al-Shariah Index approachment. This research is a descriptive quantitative type where eight Islamic Banks in Indonesia and nine Islamic Banks in Malaysia are the objects of this research because these Islamic Banks fulfil the criteria to be the research objects. The secondary data which are financial statements/annual reports were obtained from the official website of each banks. To conclude the result, this research used Maqashid al-Shariah Index approachment with SAW (The Simple Additive Weighting) method. The result showed that Islamic banking peformance in Indonesia is still under the performance of Islamic Banking in Malaysia as much 1%. It showedthat Malaysia has better performance of its Islamic Banking compared to Indonesia Islamic Banking Performance.

**Key words** : *Islamic Banking, Maqashid al-Shariah Index, Performance, Simple Additive Weighting,*

### Introduction

The interesting phenomenon today as alternative banking service is the presence of Islamic banks which have given new variation in the business world. Islamic banks have influenced the economic development of a country, especially in Indonesia and Malaysia, in provide the working capital or as a place to invest.

Generally, the peformance of banking is measured by using financial ratios such as CAMELS (*Capital, Assets, Management, Earnings, Liquidity, Sensitivity of Market Risk*), including Islamic banks. According to Antonio et al., (2012), CAMELS are too weak in measuring the performance of Islamic banking. Thera are many reasons why CAMELS become weak. Among others are, first, financial ratios as the main determinant of the performance make managers will act in the short term and ignore the long-term plan. Second, ignoring the non-financial aspects and fixed assets will give an erroneous view of the manager in the present and the future. The last one is the financial performance which is based on past performance will unable to the company in organize the plan in the next period.

Islamic banking has many criterias that requires a measurement in terms of objectives of sharia.

Maqashid al-Shariah is one of performance measurement to assess the extent to which performance has been achieved, which should be in accordance with Islamic principles in its operations, especially the objective of Islamic banks itself. The objectives of Islamic banks are not only limited to the financial aspects, but also to other aspects such as social and environmental. Based on the Law of the Republic of Indonesia No. 21 of 2008 concerning about Islamic Banking, The objective of Islamic banks is to support the implementation of national development in order to improve justice, solidarity and equal welfare of the people".Bedoui and

Mansour (2013) stated that ethics is the view Islamic performance and it is not only about the financial dimension, but also about the additional dimension that makes the company has not oriented to the owners but widely, to all stakeholders and society as a whole. This is the main idea for performance based on the concept of Maqashid al-Shariah.

Many researches were conducted before. The result stated that the Islamic banking performance measurement can not only be measured by conventional measurement, but as an Islamic institution, Islamic banking can be measured in terms of Maqashid al-Shariah as well to see the extent of Islamic bank in carrying out the objectives of sharia well. Based on this phenomenon, the purpose of this study was to analyze the performance of Islamic banking based on Maqashid al-Shariah, a comparison between Indonesia and Malaysia.

This research will assess the performance of Islamic banking using Maqashid al-Shariah with The Simple Additive Weighting Method (SAW) and Maqashid al-Shariah Index (MSI) to describe the comparison of the performance of Islamic banking in Indonesia and Malaysia the year of 2012-2014. Both countries were selected as the object places because these countries consist of mostly Muslim. Moreover, among ASEAN members, Indonesia and Malaysia are countries that have the big numbers of Islamic banks. Based on the background, the problem in this research is how is the comparison of the performance of Islamic banking in Indonesia and Malaysia based on Maqashid al-Shariah index.

## Literature

### *The Principles of Islamic Banking*

Islamic banks are commonly called Islamic banking or interest free banking, because the banking system in the operational implementation do not use the system of interest (riba), speculation (gambling), and the uncertainty or vagueness (gharar) (Zainuddin, 2010:1).

The products of Islamic bank have their own specifications which conduct in form contract (aqad) and divided into two types of profit contract they are the contract sale and purchase agreement (Murabaha, Salam, and Istishna) and the contract of revenue sharing (Mudaraba, Musharaka, Ijarah and Ijarahmuntahiya bit Tamlik). The non profit Islamic banking contracts consist of tabarru contract for products of Qard, Qardhul hasan, Wakalah, Kafalah, and Rahn (Karim, 2006:97).

The principle of Islamic banking is stipulated in the Al-Quran and As-Sunnah which state the prohibition of usury, the division of risk, considering money as capital potential, a ban on speculative activities, the sanctity of contracts, and sharia-compliant activities. Thus, the principle of Islamic banking also refers to the principles of willing-to-willing (antaraddim minkum), no oppressing and oppressed party (la tazhlimuna wa la tuzhlamun), result-cost display (al kharaj bi al Dhaman), and benefit-risk shows (al ghunmu bi al ghurmi).

### *Islamic Banking Performance*

The bank's performance is an achievements of the bank in its operations and also in the banks' financial condition of the given period in both aspects of fund raising and distributing. Performance indicates to the strengths and weaknesses of an Islamic bank. Maqashid al-Shariah Index now is a trending methods to measure the performance of Islamic Banking. It consists of two words *maqashid* and *sharia*. *Maqashid* is the plural form of *maqashad*, the word means purpose. Maqashid al-Shariah framework can be an instrument to improve the capabilities and quality of community intellectual reform and reform of civilization (Elahi, 2010).

The term Maqashid al-Shariah of was popularized by Imam Syatibi. Syatibi explained that the ultimate goal of lawmakers is *tahqiq* (realizing the benefit) and the law has to maintain Maqashid al-Shariah. al-Raisuni in his study argued that maqashid of Syaitibi is

formed on two principles, enumeration of sharia by and as induction into basic products ijihad in cases that have not been touched by nas and qiyas. The concept of Maslahah as the core of maqashid is the best alternative for the development of ijihad methods. Al-Zuhaily also explained that the law was made in order to realize human maslahah. Based on the research of ushul fiqh, there are five principals to be maintained and realized. The five principles are to preserve religion, life, intellect, lineage, and property.

Qaradhawi had put forward views on how to give understanding about Maqashid al-Shariah. First, examine every illah in the text of the Qur'an and hadith. Second, examine and analyze the particular laws, then deduce the meaning of the ideal integration of particular laws. Meanwhile, to know more about Maqashid al-Shariah, Asyur mentioned at least three methods can be used:

TABLE I. Istiqra, reviewing all aspects of the law. This can be done in two ways. Reviewing and researching the illat of the law, so maqashid can be seen easily. Then, examine the arguments of the illat, until it is certain that the illat is the maqashad.

TABLE II. The dalalah of the Quranic arguments are clear and unequivocal. It must be Zahir.

TABLE III. The arguments of sunnah are mutawatir, both ma 'Nawi and' Amali.

Knowing and understanding Maqashid al-Shariah can be used as an aid in understanding the editorial Qur'an and Sunnah, helping to settle the argument of conflicting, and establishing a legal a case that the provisions of the law are not listed in Qur'an and Sunnah if using semantics assessment (Anshori, 2009). Maqashid is the nature of the concept as part of the texts that must be applied as in the direction of the Shari'a which is clear and real (Al-Ghazali in Hurayra, 2015).

Al-Ghazali utilized maqashid concept as the basis for some of the rules in Islam. Maqashid al-Shariah was developed based on three main factors; the education of individuals, the creation of justice, and the achievement of prosperity, in which three of these factors in accordance with Maqashid al-Shariah goal of achieving prosperity and avoid evil. In the books of Ushulul Fiqh by Zahrah, there are three goals or objectives of Islamic law are as follows:

1. Educate individuals (Tahdhib al-Fard)

Educate individuals could be a source of good for associations and not for the worse for the society. Educating people is a worship that is prescribed by Islam. It is intended to cleanse the soul and strengthen social solidarity. This service can cleanse the soul from impurities (disease) malice that inherent in the human heart. Thus, it will create an atmosphere of mutual love, not mutual unjust and cruel among fellow Muslims.

2. Establishing justice (Iqamah al-Adl)

It must uphold justice in society, both related to fair dealings among fellow Muslims and in relations other party (non-Muslims).

3. Prosper (Jalb al-Maslahah)

The ultimate goal to be achieved by Islamic law is maslahat. According to Zahrah, all matter will contained maslahat essential. Although, the beneficiaries was disguised by some people covered by their own will, while the beneficiaries are required by law. However, the ultimate beneficiaries are for public society, they are not for the interests of certain individuals or groups.

### Theoretical Framework

The measurement of performance of Islamic banking is important and necessary. The researchers wanted to describe the comparison of the performance of Islamic banking by using Maqashid al-Shariah Index between Islamic banking in Indonesia and Malaysia. The comparison is to know which Islamic banks between Indonesia and Malaysia have better performance by Maqashid al-Shariah.

This study uses three concepts of Maqashid al-Shariah in measuring performance, which is to educate people (Tahzibul Fardi), justice (Iqamah al Adl), and achieve the prosperity or welfare (Maslahah).

### Research Methodology

The type of this research is descriptive quantitative research. The unit of analysis of this study is a group of Islamic banks registered in Bank Indonesia and Bank Negara Malaysia in 2012-2014. The data used in this research are financial statement (annual report) of Islamic banks registered in Bank Indonesia and Bank Negara Malaysia over the years 2012-2014.

The objects in this study are all the 27 Islamic banks, which are divided into two groups, 11 Islamic banks registered in Bank Indonesia and 16 Islamic banks registered in Bank Negara Malaysia during 2012-2014. Based on the criteria that have been determined, the number of objects used this research are 27 Islamic Banks.

This study uses a quantitative method called SAW (The Simple Additive Weighting), which requires a decision to determine weights for each attribute. The total value for each variable is obtained from the total results of the comparison between the attribute ranks in a variable with the weight of each attribute (Antonio, Sanrego, An Taufiq) 2012). The calculation of the performance of Islamic banks is conduct from various aspects by using the approachment of MADM (Multiple Attribute Decision Making). The performance measurement with Maqashid al-Shariah index was determined from the performance ratio as well assign weights to each component of the ratio. When using Maqashid al-Shariah index, there are several steps in the measurements that determine performance indicators and rank of Islamic banks by using Maqashid al-Shariah index (Mohammed, Dzuljastri and Taib, 2008). Some of the steps are:

1. Determine the performance indicators:
  - a. Education grants / total revenue ( $R1^1$ )
  - b. Education costs / total cost ( $R1^2$ )
  - c. Training costs / total cost ( $R1^3$ )
  - d. Publicity costs / total cost ( $R1^4$ )
  - e. The Amount of financing and loss / total investment ( $R2^2$ )
  - f. Non-interest income / total revenue ( $R2^3$ )
  - g. Income / total assets ( $R3^1$ )
  - h. Zakat / net income ( $R3^2$ )
  - i. Investment in the real sector / total investment ( $R3^3$ )
2. Calculate the performance of Islamic banks on their respective Performance Indicators (PI). The next step is to perform a multiplication of the weight of each variable with the weight-performance ratio for each attribute. Mathematically, the calculation model of performance indicators which was then called the Performance Index (PI) is described as follows:

#### 1. Education (O1)

$$PI(O1) = W1^1 (E1^1 \times R1^1 + E1^2 \times R1^2 + E1^3 \times R1^3 + E1^4 \times R1^4)$$

Description:

$W1^1$  is the weight for education

$E1^1$  is the weight to the first element in O1 (education grants)

$E1^2$  is the weight to the second element in O1 (Research)

$E1^3$  is the weight to the third element for the O1 (Training)

$E1^4$  is the weight to the fourth element in O1 (Publicity)

$R1^1$  is the ratio of performance to the first element in O1

$R1^2$  is the ratio of performance to the second element in O1

$R1^3$  is the ratio of performance to the third element in O1

$R1^4$  is the ratio of performance to the fourth element in O1

## 2. Justice (O2)

$$PI(O2) = W2^2 (E2^2 \times R2^2 + E2^3 \times R2^3)$$

Description:

$W2^2$  is the weight for justice

$E2^2$  is the weight to the second element on O2

$E2^3$  is the weight to the third element on O2

$R2^2$  is the ratio of performance to the second element on O2

$R2^3$  is the ratio of performance to the third element on O2

## 3. Welfare (O3)

$$PI(O3) = W3^3 (E3^1 \times R3^1 + E3^2 \times R3^2 + E3^3 \times R3^3)$$

Description:

$W3^3$  is the weight for welfare

$E3^1$  is the weight to the first element in O3

$E3^2$  is the weight to the second element in O3

$E3^3$  is the weight to the third element in O3

$R3^1$  is the ratio of performance to the first element in O3

$R3^2$  is the ratio of performance to the second element in O3

$R3^3$  is the ratio of performance to the third element in O3

Determination of Islamic bank ratings is obtained from the total of all the performance indicators of the three variables Maqashid al-Shariah that can be formulated as follows:

Maqashid al-Shariah Index (STI) = PI (O1) + PI (O2) + PI (O3)

Description:

PI is a Performance Index

O1 is the first of Maqashid al-Shariah index of education

O2 is the second of Maqashid al-Shariah index of justice

O3 is the third of Maqashid al-Shariah index that welfare.

## Results and Discussion

### *The first Index Maqashid al-Shariah (Education)*

Education index has four items in measure the performance of islamic bank which are consist of education grant, research, training, and publicity/promotion. Out of the 17 banks that became the research objects, only three Islamic banks in Indonesia and two Islamic banks in Malaysia provide the details of the education grant which is distributed to the public, either in the form of scholarships or assistance to educational institutions. In Indonesia, the Islamic bank that has the largest distribution for education is Shariah Mandiri Bank with a total grant of Rp12 billion in 2012-2014 with a percentage of 0.29% of the total expenses. The next ones are Muamalat Indonesia Bank and Bank Negara Indonesia Shariah with the ratio of 0.11% and 0.03%.

Meanwhile in Malaysia, the contribution for education is still very far behind Indonesia. It can be seen from two Islamic banks that show the education contribution detail. The largest contribution in the field of education in Malaysia only reached 1 billion RM (Ringgit Malaysia) by AIBB. The BIB was the second with numbers that are not much different. Thus, the distribution of funds for education contribution from Islamic banking in Indonesia is still better than Malaysia. Education is very important and vital. The cost of education given by Islamic banking is expected to develop the education for generations and to accelerate the growth of Islamic-based economy as a whole so that the existence of Islamic banks can continue and grow from time to time.

The second ratio of education describes the expenditure of funds used for the purposes of research and development, especially in the development of the banks. This research is expected

to help the development of new products that conform to Islamic principles and to strengthen the position of Islamic banking.

Muamalat Indonesia Bank (BMI) is at the first in a field of research with a percentage of 0.22%, while the second place is occupied by Mandiri Syariah Bank (BSM). The fund allocated to the research field between BMI and BSM is not quite different, as much Rp10.7 and Rp10.2 billion from the year of 2012-2014. In contrast to the two banks, based on the results of the analysis, six other banks do not allocate funds in the field of research and development. Supposedly, other Islamic banking can also provide special funds in the field of research which is expected to assist in advancing the sharia-based economy and to strengthen the Islamic banking industry in Indonesia. Nevertheless, the ratio of the two maqashid index, Indonesia is better when compared to Malaysia.

Based on the analysis, none of the banks in Malaysia disburse funds for research and development. Although Malaysia applies dual banking system, Islamic economy in Malaysia is already growing better than conventional systems. However, it is good for Islamic banks in Malaysia to allocate funds for research in order to create new innovations so that the sharia-based economy system can continue to show the strength.

The third ratio of the first maqashid index is the amount of funds spent by Islamic banks for training and education to employees. The training is conducted to improve the understanding as well as soft skills and hard skills of the employees so that banks can operate optimally. However, Islamic banks also provide the opportunity for employees to get further education so the future employees can be more readily perform the duties and has more responsibilities.

The bank which is in the first rank for this ratio is Bank Negara Indonesia Shariah (BNIS) with a percentage of 3.28%. BNIS gives considerable attention to the training. The amount of funds allocated to research and development in the period of the study more than Rp30 billion. The trainings that was conducted by BNIS included technical training and soft skills with more than 100 types of training related to leadership, risk awareness, and effective internal controls. For a relatively new bank like BNIS, this ranking is a remarkable achievement. This should be an example for other banks to improve the skills of employees.

In the second place, BMI and Permata Syariah Bank (BPS) have the same percentage of 1.57%, and then followed by Bank Rakyat Indonesia Shariah and Bank Central Asia Shariah (BCAS) at the same percentage of 1.23%. Percentage of 1.05% is owned by BSM, which made this bank is far behind than that of other Islamic banks in Indonesia in terms of training and development. However, it is still better than BBS and BMI that just have a percentage of 0.6% and 0.3% of the total expenses and enable them to be at last in this ratio.

Trainings are very useful for the progress of the banking industry itself to face the economic change that moves so quickly. Therefore, Islamic banks must be able to act fastly and be responsive to face any situation, including crisis that suddenly hits.

Islamic banking in Malaysia seems ignore this research ratio. Out of the nine research objects of Islamic banking in Malaysia, only AFB clearly states the allocation of funds for training purposes. AFB with a percentage of 2.13% is worthy to be an example for other banks in Malaysia that training and development is indispensable for the sustainability of Islamic banking industry. The training is expected by the employees to continue in maximizing their performance for the advancement of Islamic banks. The conclusion is Indonesia outperforms training ratio over Malaysia.

The fourth ratio of the first maqashid index is publicity or promotion. Publication is expected to attract the interest of investors. The hallmark of effective publication is reliable and appropriate. That is, the message should directly lead to the consumer so that Islamic banks can also be expected to respond to consumer concerns that Islamic banks completely are different from conventional banks which apply the system of interest (usury).

Out of all the Islamic banking in Indonesia, only BMI did not allocate funds for publication. This means that, Islamic banking aware of the importance of a publication that could affect consumers in making decisions. The highest publicity of 5.87% is owned by BNIS. In 2014, the fund allocated by BNIS was more than Rp50 billion, equivalent to 0.5% of the total expenses. This publication is expected to improve the competitiveness of BNIS in the Islamic banking industry. The second rank is occupied by BMI with a percentage of 4.33%. Others are BMI, BRIS, and BSM with each percentage of 2.53%, 2.33% and 2.22%, while the smallest percentage of the allocation of funds is owned by BBS with the percentage of 1.06%. This figure is quite good compared with BMI that does not issue the allocation of funds for publicity ratio.

In line with Indonesia, the percentage for this ratio on Islamic banking in Malaysia also showed sizable numbers. ARBB has the highest percentage of 6.20%, followed KFHB by 5.69%. ABB also has a percentage that is not much different from the KFHB of 5.29%, followed by BMB, BIB, and ABIB with the percentage of 2.71%, 2.18%, and 2.13%, while the AFB and AIBB have the smallest percentage in terms of allocation of funds for the publication that is equal to 0.18% and 0.13%.

At this ratio, Islamic banks in Malaysia are better compared to Indonesia. The difference was not significant. This percentage can be said that Islamic banks are already promoting optimally.

#### *The Second Maqashid al-Shariah (Justice)*

The second goal on Maqashid al-Shariah index is justice. There are three ratios that measure the extent to which Islamic banks have been instrumental in upholding justice is PER (profit equalization reserve), mudaraba and musyarakah financing, and the ratio dealing with usury. On the purpose of this second Maqashid al-Shariah, only two ratios are used, they are mudaraba and musyarakah financing and income without interest. The ratio of PER is not used because the Islamic banks are not yet fully implemented PER and there is no Islamic banks to report the level of PER in the annual report.

In the comparison between the two countries in this ratio, the Malaysian Islamic banks still superior to 19.38% compared to Indonesia which is only 18.67%. It is indicated that the difference was not significant. This can serve as a motivation for Indonesia to continue to improve and enhance the justice of sharia banking.

#### *The Third Maqashid al-Shariah (welfare)*

The third objective of Maqashid al-Shariah index is the benefit or welfare. Welfare is a very important aspect of human life. Each agency that operates a business must make welfare as an objective of the company, so that this aspect deserves attention in maqashid index in the world of Islamic banking. In this Objective, Malaysian Islamic banks are still superior to the value of 30% compared to the Islamic banks in Indonesia which only gained 28.80%. This is because the contribution of Malaysian Islamic banks to finance the real sector is bigger than Indonesians'. The welfare index can be seen from the profitability, zakat, and real sector investment.

Profitability is a picture of a company's success in carrying out its functions. If the expense is greater than the income earned, the company is failed to function properly. In Indonesia, BMI had the highest profitability of 17.90%. This percentage continues to decline in the next year. This could be happen because of the high COF (Cost of Fund) as well as the main business BMIs, namely financing micro and small segments and motor vehicle financing declined significantly. In addition, the ratio of financing problems also increased so BMIs should establish a backup taken on the burden of allowance for uncollectible accounts. It is finally also suppress the amount of profit. Furthermore, BCAS, BSM and BSB have a percentage of 10.97%, 9.80% and 9.26%, while the lowest percentage is in BNI with 7.19%.

For Malaysia, the Islamic bank with the largest percentage of profitability ratio is owned by ARBB by 4.93%. It is followed by KFHB, BIB and ABIB, with a value of 3.54%, 3.36% and

2.72%. The high percentage of profitability is a picture of pretty good asset utilization. When compared with Malaysia, it can be seen that Islamic bank assets in Indonesia is relatively higher than that of Islamic banks in Malaysia. According to Brigham (2001), the higher ROA indicates that a company is more efficient in utilizing its activities to earn profits, and thus the value of the company increases. The high ratio indicates the good efficiency and effectiveness of asset management.

The second ratio at the third maqashid index is spending zakat by Islamic banks themselves. Zakat is something very special because it has standardized requirements and regulations, for allocation, source, amount or number which shall be issued at a specific time. Zakat which is distributed to the right receiver can improve the welfare of society. As an institution that has an income, it would be nice if the bank also issued zakat on income earned.

BMI is an Islamic bank that has the highest value at a ratio of zakat amounting to 4.65%, followed by BSM, BMIs, and BNI with a value of 3.49%, 3.42%, and 3.30%, while the smallest is BRIS by 2.30%. For Malaysia, only 5 Islamic banks pay zakat while four other banks did not. AIBB has the highest value with 11.70%, followed by BMB and BIB with 3.73% and 2.39%. The Malaysian Islamic bank with the smallest ratio of zakat is OCBC with a value of 0.04%.

The higher the level of profits the bank, the greater the zakat to be paid. In addition to paying zakat, Islamic banks also act as the distributor of the zakat. In its function as a distributor of zakat, Islamic bank also cooperates with agencies that manage zakat as LAZNAS (National Zakat Institution) or can form a channeling zakat institution itself that the disbursement of zakat can be run more effectively.

The last ratio is the allocation of funds for investment in the real sector. Based on the analysis, BMI and BMB rank first in their respective countries with the percentage of 65.08% and 68.01%. This proves that the two banks are actually invested in the real sector for the benefit of society in accordance with the objectives of the establishment of Islamic banks. The least investment in the real sector in both countries is BPS and ARBB. BPS Indonesia is an Islamic bank that has no investments in the real sector, whereas in Malaysia ARBB provides investments with a percentage of 0.19% only. This indicates that the two banks are not focusing on the financing the real sector. Basically, the real sector is one of the efforts to improve the welfare of small and medium communities by providing financing for their businesses as in agriculture, animal husbandry and aquaculture. Furthermore, it is expected that Islamic banks has a real contribution to the investment of the real sectors.

As an institution that collects funds from the public, Islamic banking should also focus attention on the real sector. This investment is expected to have a direct impact on the welfare of the community, so that one of the goals of Islamic banks to create wealth to society can be achieved.

#### *The ranking of Islamic Bank in Indonesia and Malaysia Based on Maqashid al-Shariah Index*

Maqashid al-Shariah index was developed with three main factors that are universal. The three performance measurements require the banks to be capable of designing education and training programs that include moral values so that the bank is able to improve the skills of employees. The aspects of justice require that the bank must be honest and fair in operation as well as the need to develop an investment that can improve people's welfare.

The best Islamic bank in Indonesia in terms of maqashid index with a value of 0.30261 was BMI, while the AFB has a value maqashid index of 0.27869 and was the bank with the best performance in Malaysia. The lowest performance of Islamic bank in terms of maqashid index in Indonesia was BMIs with a value of 0.17754, whereas the lowest for Malaysia was ARBB with a total value of maqashid index of 0.17237. The overall rank for islamic banking both in Indonesia and Malaysia can be seen in the Tabel I.



Table I.

The rank of Islamic Banks in Indonesia and Malaysia Judging from Maqashid al-Shariah Index

Islamic Bank	T1	T2	TT3	Total	Overall Rank
<b>Islamic Banks in Indonesia</b>					
BMI	0.004492	0.218477	0.079641	0.30261	11
BRIS	0.002714	0.192204	0.033682	0.228601	22
BSM	0.002723	0.185038	0.037008	0.22477	88
BPS	0.002764	0.20653	0.007485	0.216779	13
BBS	0.001263	0.178166	0.021918	0.201348	14
BCAS	0.001787	0.179577	0.017812	0.199177	15
BNIS	0.006644	0.177737	0.009805	0.194187	16
BMI's	0.000308	0.156598	0.020638	0.177544	17
<b>Islamic Banks in Malaysia</b>					
AFB	0.001792	0.268984	0.007914	0.278691	11
KFHB	0.003926	0.234363	0.014122	0.252412	22
BMB	0.001874	0.171414	.0788	0.252088	33
Abib	0.001474	0.193688	0.036497	0.231659	44
AIBB	0.001068	0.211489	0.013184	0.225741	55
ABB	0.003652	0.165631	0.047791	0.217075	66
OCBC	0.002115	0.177241	0.02649	0.205846	17
BIB	0.002115	0.158868	0.040774	0.201756	17
ARBB	0.004279	0.163166	0.004929	0.172374	88

### Conclusion

There was no significant differences in both Islamic banks. From the analysis, the difference was 1-3% per bank for both countries. Based on the analysis, none of the Islamic banks in Indonesia and Malaysia showed a significant different on the performance. The difference was only around 1-3 % for each ratio.

Generally, the performance of Islamic banks in Malaysia was better than the Islamic banks in Indonesia. However, the difference was only 1%.

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## VALUE AT RISK OF SUKUK IJARAH AND MUDHARABAH IN INDONESIA

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### Abstract

Sukuk is one of financial instrument that is compliant with Islamic Sharia law. Sukuk is popularly being used as a funding mechanism by the governments and corporations throughout the Muslim world and other countries. The aim of this study is to investigate risk structure of sukukijarah and mudharabah in Indonesia. This study using Value at Risk (VaR) framework with an independent model analysis of t-test samples. VaR is a method of assessing the risk that uses standard statistical techniques routinely used in other technical fields. Formally, VaR is the maximum loss over a target horizon such that there is a low, prespecified probability that the actual loss will be larger. Samples of this study were 21 companies that issued sukukijarah and mudharabah listed on the Indonesia Stock Exchange. The results indicate that sukukijarah have a lower level of risk than sukukmudharabah. By identifying the sukuk risk, it should enable stakeholders to address related funding issues.

**Keywords:** *Islamic Finance, Sukuk, Ijarah, Mudharabah, Value At Risk*

### Introduction

A company has excess funds in the form of cash due to gains or achieving goals. There are several ways to utilize the excess funds at the same time to gain benefit. One of them is investments in bonds or sukuk. As the time runs, there will be a modification of bonds in investment markets. Sukuk is one of the modifications that occur in the investment market. It is a halal investment which avoids usury, gharar, and maysir. According to Sharia Board of Indonesian Ulama Council fatwa No.32/DSN-MUI/IX/2002, sukuk can be interpreted as an Islamic long-term securities which issued by the issuer to the holders and it requires the issuer to pay income to the holders in the form of profit sharing, margin / fee, as well as repayment of the bonds at maturity. The differences between Sukuk bonds and conventional bonds are the concept of reward and profit sharing instead of interest, the existence of underlying transaction in the form of certain assets, and the Islamic-based contract/agreement.

According to AAOFII (Accounting and Auditing Organization for Islamic Financial Institution), there are many types of sukuk known internationally but only four of them are regularly used by the public, namely mudharabah, ijarah, musharaka, and istishna. Mudharabah is one form of cooperation, of which one party provides capital (rabb al-maal) and other parties provide expertise (mudharib). The profit of the cooperation is divided based on the proportion that has been previously approved. Losses incurred will be borne solely by the capital provider. Ijarah is a sukuk in which one party, alone or through a representative, sell or lease an asset to another party based on the rent price and the lease period without transfer of asset ownership. Musharaka is a cooperation between two or more parties to combine capital to build new projects, develop the existing project or fund operations. Gains and losses incurred are shared according to the capital participation. Istishna is a contract in the form of the purchase agreement between the parties for project financing. The process, duration, and prices are determined by the agreement.

State-owned sukuk records a very rapid movement. Until the period of March 3, 2014, 43 sukuk were issued with a total of Rp139.97 trillion. Since the first sukuk issued in 2002 until now, there is 64 cumulative issuance of corporate sukuk with total emissions of Rp11.9 trillion. Based on the data obtained from IDX (Indonesian Stock Exchange), sukuk issued in Indonesia is currently only using two kinds of contract namely mudharabah and ijarah. According to Fatah (2011), sukuk during the period of 2002-2004 was dominated by mudharabah for Rp740 billion (88%) and the remaining Ijarah amounted to Rp100 billion. The 2004-2007 period was dominated by ijarah amounting to Rp2.194 trillion (92%) and the rest was mudharabah amounting to Rp200 billion (8%).

After the SBSN Law of the year 2008 was legalized, the government issued sukuk amounting to Rp15 trillion. This issuance was done as a part of financing the budget deficit on the state budget in 2008. The amount of sukuk in accordance with the underlying assets owned by the government was Rp 15 trillion. The government used the collateral in the form of state-owned assets such as land and buildings. Based on the Islamic capital market statistics per December 31, 2013, Sukuk ijarah is most preferred. This is due to more simple structure than the sukuk mudharabah . The use of underlying assets as a condition of issuing sukuk mudharabah becomes a limiting factor for the issuer because it requires the valuation of assets.

Every investor who invest funds in the capital market both in sukuk ijarah and mudharabah certainly hopes and desires to make a profit or return. However, an expected return can not be separated from the risk of the investment. One of the risks is the market risk. Market risks come from price movements or volatility of market prices. Return and risk have a positive relationship. The greater the risk of an investment, the greater the returns.

Conversely, when the risk of an investment is small, then the return also will be small. Diversification can be done to reduce the risk because each instrument has different risk and return. The rate of return earned by investors in each kind of sukuk is different. Hence, in capital markets, there are important factors that should be used by investors as a material consideration in purchasing sukuk as an investment instrument. That is called as Yield. Fabozzi (2000) suggested there is some measure of yield that can be used by investors, namely Current Yield and YTM (yield to maturity). Tandelilin (2001) stated that YTM is the most frequent tool. YTM is a measuring tool used by investors to make considerations in purchasing sukuk.

Pramono and Setiawan (2008: 8) showed the comparison of both sukuk ijarah and mudharabah that we can see in Table 1

**Table 1**  
**Comparison of sukukmudharaba and ijarah**

	Ijarah	Mudharabah
Akad (Transaction)	Ijara (lease)	Mudharaba (profit sharing)
Transaction type	Certain contract	Uncertain contract
Character	Investment	Investment
Bid price	100%	100%
Bond principal at maturity	100%	100%
Coupon	Rewards/Fee	Revenue/Profit Sharing
Return	Predetermined	Indicative based on Revenue/Income
National Sharia Board fatwa	No.41/DSN-MUI/III/2004	No.33/DSN-MUI/IX/2002
Investor type	Sharia / conventional	Sharia / conventional

Source: Datuk (2014)

Based on Table 1 it can be concluded that yield and risk of sukuk was different. In terms of its coupon, the YTM of mudharabah is obtained based on revenue or profit sharing, while the sukuk ijarah is based on rewards. In terms of the return, sukuk mudharabah is determined based on the income generated, while the return of sukuk ijarah is predetermined. So the risk obtained by sukuk ijarah is lower than mudharabah sukuk.

The previous research by Puspitadewi about a comparative analysis of YTM and market risk between bond portfolios and sukuk, the scope of the research as well as the portfolio used in the study were very small, and the research time duration was very short. Since the variables used were very good, yet the objects were still general, I am interested in conducting this research using the same variable but different objects, with a measure of risk using VAR (Value at Risk). VAR is an attempt to quantify the magnitude of the maximum potential losses that may occur at a particular asset position with a certain probability over a certain period. Based on the background, the problems of this research is there any difference between the market risk of corporate sukuk ijarah and mudharabah based on VaR.

## **Literature Review**

### *The concept of Sukuk*

Sukuk is an Arabic word which is the plural for the words *akk* that means financial certificate. Sukuk in the context of Islamic capital market refers to a process of securitizing and is known as Islamic bond. In sharia standard No.17 about investment of sukuk, AAOIFI defined it as follows: "Sukuk is certificates of equal value representing undivided share in ownership of tangible assets, usufruct, and services or (in the ownership of) the assets of particular projects or special investment activity. However, this is true after receipt of the value of sukuk, the closing of the subscription and the employment of funds received for the purpose for which the sukuk were issued." According to the Sharia Board of the Indonesian Ulema Council fatwa No.32/DSN-MUI/IX/2002, sukuk can be interpreted as Islamic long-term securities issued by the issuer to the holders, which require the issuer to pay income to the holders of Islamic bonds in the form of profit sharing, margin/fee, as well as to pay back the fund at maturity.

Sukuk has different characteristics compared to conventional bonds because the structure is based on tangible assets. It can minimize the possibility of the fund to exceed the value of the underlying sukuk transaction. Sukuk holders own the portion of the revenue generated from the assets in addition to the rights to the sale of assets. Claims on sukuk are not based on cash flow but on asset ownership. According to AAOIFI via the Ministry of Finance (2010), there are many types of sukuk which are known internationally. Sukuk can be divided into two which are sukuk based on debt (Sukuk al-Murabahah, al-Istisna' dan Salam) and based on equity (Sukuk al-Mudharabah, al-Musyarakah dan al-Ijarah). Nevertheless, there are other kinds of sukuk practiced in the activity of financing although it is less popular which are sukuk al-Wakalah, Bay bithaman Ajil, al-Muzaraah, al-Musaqa and many more.

### *Sukuk Ijarah*

The concept of ijarah can be used to mobilize funds for the development of long-term infrastructure projects. Ijarah is an engagement lease which entitles *muaajir* (the lease) to receive wages from *mustajir* (tenants) on the benefits. This means that the lessor would entitle the other parties to use the leased object. However, the tenant must give rewards in accordance with the agreement. (Dewi et al. 2006:158).

In ijarah contract, there is a transfer of benefits, temporary, without any transfer of ownership. The rate of rents in ijarah must be clearly defined for the first rental period. The next

periods, the rent can be updated, whether to keep, increase, or decrease based on a benchmark or a variable such as rate of inflation, price index published periodically, or a defined percentage. Mainstream sharia experts allow the use of a benchmark with reference to interest rate, though for them it is not an ideal practice (Usmani, 2000: 168-171).

Sukukijarah is issued based on the Ijarah contract in which one party through a representative rents an asset to another party based on the price and the agreed period without being followed by the transfer of ownership. Sukukijarah is securities that represent ownership of assets whose existence is clearly attached to a hire purchase contract. For investors, sukukijarah more beneficial because under no circumstances will receive the benefit (return) in the form of rent paid by the issuers of sukuk (Purnawati: 2013)

#### *Mudharabah*

Sukuk mudharabah is a partnership contract between the owners of capital (shahibul maal) to the managers (mudharib). Mudharabahh investment transactions are based on trust. Trust is the most important element in mudharabah, that is the belief of shahibul maal to mudharib, where the owner of the funds provide the money of 100% to mudharib. Mudharib as service providers only manage property fully and independently, and also only bear the loss or risk in the form of time, mind, and efforts for administering such project or business, as well as the loss of an opportunity to obtain some of profits in accordance with the agreements.

Sukuk Mudharabahare investment Sukuk used to enhance public partnership in capital intensive projects, for example the development of airport, dams and power generations facilities. For that purpose the SPV will issue Mudaraba Sukuk for raising funds required to develop that project. SPV manage the development of the project on behave of Sukuk holders. Any income or fee generated at liquidation or sale is paid to Sukuk holders as per agreed share (Al Zubi and Maghyereh, 2006, p. 235-248).

#### *Market risk*

Market risk is the risk due to changes in market prices, such as exchange rate changes or changes in the value of assets that can be traded or leased. The objective of market risk management is to minimize the possible negative effects as a result of changing market conditions on assets and capital. Market risk consists of foreign exchange risk, commodity risk, and equity risk. Exchange rate risk is the risk due to changes in the value of TB (Trading book) and BB (banking book) caused by changes in foreign currency exchange rates and gold prices. Commodity risk is the risk that occurs as a result of changes in the price of financial instruments from the position of TB and BB which are caused by changes in commodity prices. Equity risk is the risk due to changes in the price of financial instruments of TB caused by changes in stock prices.

The Bank of Indonesia Regulations or PBI No.11/25/PBI/2009 and No.13/23/PBI/2011 state that the risk in the conventional market is different with the shariah one, where the conventional system is based on interest, while sharia system is based on sharing system. In conventional the main activity is trading. Trading is the buying and selling of financial instruments on behalf of the bank for the purpose of short-term gain from the expected changes in market prices to determine the value of a financial instrument. These trading instruments include cash instruments and futures instruments. Cash instruments are foreign exchange spot transactions, forward foreign exchange, bonds, etc. While the futures instrument is interested swaps, currency swaps, options, etc.

Investors should develop a strategy to market risk, including the level of market risk that can be accepted into contractual agreements with providers of funds, the type of risk-taking activities, and target markets to maximize returns. Investors must establish market risk management processes and information systems which are healthy and comprehensive

consisting of The conceptual framework to encourage the identification of the underlying market risk, guidelines for the management of risk-taking activities on different portfolios in limited investment and market risk limits, framework for the right pricing, valuation, and revenue recognition, the strong Management information systems (MIS) for the counting, monitoring, and reporting of market risk exposure and risk management performance.

Historical method is a method that uses past data to calculate the VAR (Value at Risk). The historical method has advantages and disadvantages. The advantage is that it does not assume certain distribution and it is simple. The disadvantage is the assumption that past data can be used to predict the future. In other words, these methods have the assumption that the data patterns of the past are the same as the data pattern in the future.

*Framework*

This study aims to compare the coupon rate and market risk of corporate sukuk ijarah and mudharabah. The yield levels are analyzed using a coupon. Compound rate of return is accepted if the investor buys the bonds at current market prices and holds at maturity which is calculated using the yield to maturity (Tandellin, 2001).

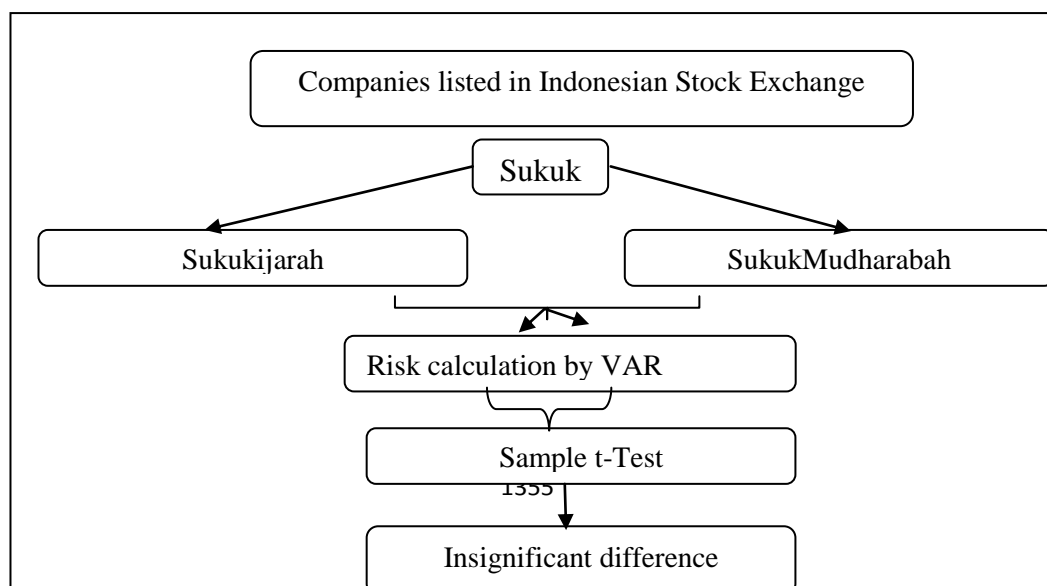
Bonds can be issued by governments, corporations, banking institutions and non-banking financial institutions. Because of forward sales or forward purchases of goods through salam is allowed, there may be forward commodity markets, which would differ from conventional markets (Job, 2009: 319). Sukuk differs in its nature to the common stock of a combined company. The certificate is similar to the values that represent stocks which do not separate the ownership of assets of a specific project or activity, the right of assets and services (AAOIFI, 2004:298-300). The yield and market risk are things that must be watched by any investors because the return on bonds depends on the income derived from underlying assets or projects, so as to minimize risks (Ayub, 2009).

Transactions in ijarah contract have several advantages compared with other types of contract, including:

1. Compared with other types of contract, Ijara contract is more flexible in terms of the transaction object. In murabahah contract, the transaction object must be goods while at the Ijara contract, the transaction object may be services such as health services, education and others that do not contradict sharia.
2. Compared with investment, Ijara contract contains a lower business risk, like the income is relatively fixed (Yahya et al., 2013: 252).

The historical method has advantages and disadvantages. The advantage is that it does not assume certain distribution and it is simple. The disadvantage is the assumption that past data can be used to predict the future. In other words, these methods have the assumption that the data patterns of the past are the same as the data pattern in the future. If the pattern occurred fairly stable, then the data in the past can be used to predict the future (Hanafi, 2009:151).

**Scheme of theoretical framework can be seen in Figure 1**





## Data and Methodology

### *Data Sample of the Study*

This research is a comparative research which is a research that uses T-test analysis tool, has a minimal intervention level, does not set the research condition, hassukukijarah and mudharabah as its analysis units, and its time horizon is longitudinal (period of 2010-2014). This study uses quantitative secondary data derived from the financial statements, the annual ratio (financial highlights), and cash flow statement and income statement. In this study, the data used quantitative secondary data obtained from the Stock Exchange, KSEI, the FSA and the Bond agency.

The sampling model in this study is nonprobability sampling that the chosen design is judgment sampling. Judgment sampling is based on certain considerations, including selecting a subject which is in the most favorable place or in the best position to provide necessary information (Sekaran, 2006: 137). The number of observations is 21 observations from the 13 companies, 13 ijarah, and 8 mudharabah. Sugiyono (2009: 263) stated that, if the object of research it has a number of samples (n) which are different (homogeneous variance), then the number of samples can vary by using the pooled variance formula.

### Variable Operationalization

This study analyzes one calculation of yield and one VAR (Value at Risk). The yield calculation is Yield to Maturity ratio and the VAR uses the historical method (Back Simulation). VAR historical method (Back Simulation)

The historical method uses past data to calculate VAR, in which the historical method has an advantage and a weakness. The advantage is that, it is simple and does not assume certain distribution. The weakness is that, it assumes that past data can be used to predict the future. In other words, this method believes that data patterns of the past are the same with the data pattern of the future.

The formula used in the calculation of historical data is:

$$VarT = V \cdot 1,65 \cdot \sigma t$$

$$VarT = V \cdot 1,65 \cdot \sigma t$$

Where:

V = the market value of the asset at time T

$\sigma t$  = standard deviation of the portfolio

T = period of time during the standard deviation of returns counted

### Data Analysis Methods

T-test is used to determine whether two unrelated objects have different average values. It is performed by comparing the difference between the average value with a standard error of the two research objects (Ghozali, 2009: 6).

## Research result

### *Data Research Description*

This study aims to compare the performance which is measured by using two types of Market Risk in sukuk ijarah and sukuk mudharabah. Data used in this research is secondary data (the data of sukuk ijarah and sukuk mudharabah are selected based on the criteria during the period 2010-2014). Table 2 shows the first analysis to find a picture or a description of the variables.

**Table 2**  
**Descriptive Statistics of Market Risk of Sukuk Ijarah**

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
RisikoPasar	13	2661, 15	7392, 08	4353, 7472	1551, 43714
Valid N (listwise)	13				

Source: Data processed (2015)

Based on Table 2 we can see the value of the minimum, maximum, average, and standard deviation for each variable in 2010- 2014 with the research object of 13 samples. The minimum value of the market risk of sukuk Ijarah is 2661.15 and the maximum value is 7392.08. The average value of 4353.7472 with a standard deviation of 1551.43714 means that there is variations in market risk of sukuk Ijarah . The number 4353.7472 shows a big number because the standard deviation of the market risk of sukuk Ijarah is smaller than 4353.7472 which is 1551.43714. This indicates that the level of risk that will be received by investors when buying sukuk Ijarah at the current market price and hold it until maturity is 4353.7472 in average.

**Table 3**  
**Descriptive Statistics Market Risk of Sukuk mudharabah**

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
RisikoPasar	8	4227, 10	8454,20	6039, 4720	1320, 43182
Valid N (listwise)	8				

Source: Data processed (2015)

Based on Table 3 we can see the value of the minimum value of the market risk of sukuk mudharabah is 4227.10 and the maximum value is 8454.20. The average value of 6039.4720 with a standard deviation of 1320.43182 means that there is variations in market risk of sukuk mudharabah . The number of 6039.4720 shows a big number because the standard deviations of the market risk of sukuk mudharabah is smaller than 6039.4720 which is 1320.43182. This indicates that the level of risk that will be received by investors when buying sukuk Ijarah at the current market price and hold it until maturity is 6039.4720 in average.

**Table 4**  
**Independent Sample T-Test to Market Risk**

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Risiko Pasar	Equal variances assumed	,353	,559	2,551	19	,020	1685,7248	660,80770	302,638	3068,81
	Equal variances not assumed			2,655	16,851	,017	1685,7248	634,89612	345,309	3026,14

Source: Data processed (2015)

Table 4 shows the calculated F value of Levene test amounted to 0,353 with a probability of 0.767. Because the probability is greater than 0.05, it can be concluded that both variances of Ijarah and Mudharabah are the same. Thus, the t-test analysis should apply equal variances assumed. Based on SPSS output, it shows that the value of t oneequal variances assumed is -2,551 with the significance probability of 0.028 is smaller than 0.05. So it can be concluded that the Yield to Maturity of Ijarah and Mudharabah differ significantly.

#### *Comparative Analysis of Market Risk of Sukuk Ijarah and Sukuk Mudharabah .*

The results indicate significant difference between ijarah and mudharabah, which Ijarahsukuk have a lower level of risk than mudharabhsukuk. Unfortunately, our predictions that sukukijarah and sukukmudharabah should have similar level of risk were incorrect. As revealed above average VaR of sukukijarah is almost higher than average VaR of sukukmudharabah.

Yahya (2013: 252) argued that ijarah contract has a lower business risk than investments. The income of ijarah is relatively fixed. It is statistically proved that there is a significant difference on the market risk between Sukuk Ijarah with sukuk mudharabah with significance value of  $0.020 < 0.05$ , with the risk level of 4353.7472 for ijarah and 6039.4720 for mudharabah. The results support the research Puspitadewi (2010) who studied the market risk on a portfolio of sukuk bonds. Although this study uses different objects, the statistical results show that there is a significant difference between Sukuk ijarah with mudharabhsukuk.

In previous studies, the object used as a comparison is the portfolio of bonds and sukuk, not between one sukuk and another sukuk. The reasons to use one more variable in this study is that to know the market value changes that occur in mudharabhsukuk because mudharabah sukuk are issued earlier than Sukuk ijarah which are recently published. So market risk may occur because of the difference. This study shows that sukuk Ijarah can minimize the potential negative impact due to changes in market conditions on assets and capital investment by having a lower investment risk than sukuk mudharabah.

#### **Conclusion**

This research has compared the performance of market risk sukuk ijarah and mudharabah using a series of indices in the Indonesia sukuk market. Indeed, we use the indices of the series SukukINDEX reflecting the performance of Sukuk and bonds market in Indonesia for the period from 2010 to 2014. We first addressed that the development of sukuk issuance in Indonesia is not in line with the development of sukuk trading. There are several factors that caused it, they are: the limited issuance of sukuk corporate in Indonesia, the investor has a lack of understanding about the corporate sukuk trading in the secondary market. Secondly, There are differences in sukuk Ijarah and Mudharabah schemes. The scheme adapted to the condition of each issuer. The results also show that Risk of Ijarahsukuk have a lower level than mudharabhsukuk.

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**THE EFFECT OF SUPPLY CHAIN INTEGRATION, INFORMATION SHARING, AND BUYER-SUPPLIER RELATIONSHIP TO SUPPLY CHAIN PERFORMANCE (STUDY AT PT FREEPORT INDONESIA'S DOMESTIC SUPPLIERS JAKARTA AND SURABAYA AREA)**

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**Abstract**

The research examines how supply chain integration, information sharing and buyer-supplier relationships affect supply chain performance. The research problems are came from two main issues, the first is PT Freeport Indonesia's (PTFI) domestic supplier Jakarta and Surabaya area performance which their on-time deliveries were not optimal and wrong specification or damage goods were still commonly found. The second, this research is also based on some inconsistency results found from previous researches such as Sezen (2008), Pinindari (2011), Kocoglu et al (2011), Ibrahim et al (2011). Proportionate stratified random sampling is used for research sampling method. Respondents of research are 64 companies, which all of them are PTFI's domestic supplier Jakarta and Surabaya area. The research requires PLS-SEM analysis with SmartPLS3.0 software. The result of data analysis shows that the research model is valid to meet all the requirements and the result will be well received. The result proves that supply chain integration partially affects supply chain performance. Then information sharing is also proved partially affects supply chain performance. Similarly, buyer-supplier relationship partially has effect on the performance of the supply chain. Finally, supply chain integration, information sharing and buyer-supplier relationship simultaneously affect supply chain performance.

**Keywords:** *supply chain integration, information sharing, buyer-supplier relationship, supply chain performance*

**Background**

Supply chain management is one of common strategies for companies and organizations to strengthen their operational and business activities with the main objective to achieve the maximum benefit. Heizer and Render (2014) stated that companies and organizations need to consider supply chain issues to support to their main strategies. Supply chain management represents the flow of materials, products, information, and financial within organization, as well as across businesses from suppliers to manufacturers to customers in the supply chain to improve the long-term performance of organization (Mentzer, 2001; Baofeng Huo, 2012)

Some previous studies examined several factors that influence supply chain performance, they are supply chain integration, information sharing and buyer-supplier relationship. Supply chain integration becomes an important factor for organizations that can improve supply chain performance. Integration is not only performed by organizations with customers or suppliers, but they also need to integrate process and functions in their internal business activities (Huo et al, 2012; Flyn et al, 2010; Wong et al, 2011; Pinindari, 2011). Integration enables organizations to maintain flexibilities in the product specifications, production volume, product customization options and product changes to compete with others (Wong et al, 2011).

Rapid changes in recent technologies, information systems and data processing become valuable elements in supply chain. Information sharing can affect supply chain performance through what type of information to be shared (Lin et al, 2002; Ogunyemi, 2011), potential information varieties that need to be standardized (Yu et al, 2010; Kocoglu et al, 2011) and its

ability to improve the efficiency and effectiveness of the supply chain to provide a competitive advantage to organization in the long term (Arawati Agus, 2011).

Meanwhile, buyer-supplier relationship have crucial roles to reduce uncertainties in business process changes (Patterson et al, 1999; Hsu et al, 2008) that drive organizations to ease dependencies on suppliers, improve demand forecasting and delivery performance and achieve superior performance. Kamau (2013) stated five factors in buyer-supplier relationships: trust, communication, cooperation, mutual goals and commitments are able to improve company performance.

PT Freeport Indonesia (PTFI) is one of the largest copper and gold mine in Indonesia, which operates in Tembagapura, Mimika District, Papua Province. PTFI requires a lot of materials, equipment, machinery, spare parts, logistics and others from its suppliers to ensure business and operational activities work properly. PTFI anticipates good cooperation and coordination with suppliers in providing goods or services to support PTFI that can establish its main activity in mining and processing mineral resources.

Refer to PTFI internal data, suppliers are still indicated to have not optimal performance as expected. Some of supplier performance issues in PTFI supply chain are

- a) Late delivery. Suppliers are tend to struggle in fulfilling their commitment to provide on-time delivery as stated in purchase order (PO) due date.
- b) Wrong specification. There were still found different or wrong specification, poor quality and defect material.
- c) Lack of responsiveness in communication.
- d) Lack of flexibility in order changes.

Our study aims to examine the real condition of supply chain integration, information sharing and buyer-supplier relationship in PTFI and build a model to represent the relationships among those aspects and their impact to supplier performance using data collected from PTFI domestic suppliers in Jakarta and Surabaya area.

## **Literature review**

### *Supply Chain Performance*

Measuring supply chain performance is the process of measuring the effectiveness and efficiency of supply chain activities. The effectiveness is the extent to which customer requirements can be met and efficiency measures how company resources are economically utilized in providing customer satisfaction (Neely, 1995; Spemherd and Gunter 2006). Gunasekaran et al (2004) explained supply chain performance as measurement and comparison to standard output of processes that performed in a supply chain to meet the competitive and strategic objectives on quality, speed, reliability, flexibility and cost.

Gunasekaran et al (2004) provides a measurement framework for supply chain performance based on activities of the supply chain such as plan, source, make/assemble and delivery/customer. SCOR model method is also widely used in measuring supply chain performance, there are five key attributes in SCOR performance measurement, and they are supply chain reliability, responsiveness, agility, costs and assets. Chopra and Meindl (2013) assess supply chain performance in terms of responsiveness and efficiency, and stated that it is necessary to study driving factors in logistics and cross functions for improving performance such as facility, inventory, transportation, information, sourcing, and price to understand how the company can improve its supply chain performance.

This study examines Beamon (1999) performance measurement method in flexibility, resources and output performance which were also used by other previous studies (Pinindari, 2011 and Sezen, 2008). Flexibility can measure the ability of the system to accommodate volume and schedule fluctuations in suppliers, manufacturers and customers. Resource performance is generally measured by its level of efficiency in resources utilization . Efficiency

measures the use of resources to meet the set up goals in the system. Output performance measurement can be represented numerically such as number of items produced, time required to produce a particular item or set of items and number of on-time deliveries (orders).

#### *Supply chain integration and supply chain performance*

Supply chain integration can be defined as the degree to which an organization strategically able to collaborate with its supply chain partners and cooperatively manage processes inside and outside the organization to achieve effective and efficient flows of products, services, information, finance and decisions to provide maximum value for end customers with low cost and high speed (Flynn et al, 2010; Baofeng Huo, 2011). Supply chain integration allows organization to strengthen the sustainable competitive advantage in the market competition and achieve their goals and objectives to improve organizational performance. (Li et al, 2006; AlSagheer et al, 2011) with lower inventory levels, shorter cash flow, improved labor efficiency and customer satisfaction (Vokurka et al, 2003 in Pinindari, 2011).

There are several dimensions of supply chain integration concept used in previous studies. Zolait et al (2010) examined three-dimensional integration of supply chain their research: financial flow integration, physical flow integration and information flow integration. Gimenez et al (2011) used three different categories in supply chain integration, they are supply chain practices (specific activity), supply chain patterns (communication models) and supply chain attitudes (aspects of relationships, trust). This study will examine three-dimensional of supply chain integration focused in the level of integration with suppliers, integration within organization and integration with customer (Oghazi, 2009; Soo Wook Kim, 2009; Flynn et al, 2010)

Kocoglu et al (2011: 1634) mentioned organizations that committed in supply chain integration will obtain competitive advantage, improve their both business and operational performance, provide efficiencies in their supply chain by increasing flexibility on delivery time and response to customer demand, eliminate bullwhip-effect and reduce transaction costs and provide great attention to information sharing. Integration in the distribution process from upstream to downstream, such as organization commitment in providing quick access to product requirement, more sensitive to customer needs and more responsive than competitors will increase the effectiveness of supply chain (Rosenzweig et al, 2003; Cagliano et al, 2006; Pinindari, 2011).

H1: Supply chain integration positively influences supply chain performance

#### *Information sharing and supply chain performance*

Information sharing is to share organization valuable information (Spaho, 2011) related to operations, tactics and strategies to other partners in its supply chain (Qing Hu et al, 2011: 4) to get benefit from the shared information for all parties involved in the supply chain network (Kalyar et al, 2013) and improve supply chain performance in terms of flexibility and reliability (Ibrahim et al, 2011).

This study uses a two-dimensional information sharing: information with suppliers and information sharing with customers (Sezen, 2008; Pinindari, 2011). Information sharing is required to perform with two external partners (customers and suppliers) in supply chain. Sharing information with customers will ensure customers can monitor their orders due to its importance for them to make decisions on their business operations. Meanwhile, sharing information with suppliers is crucial for buyers to obtain proper information about product to minimize wrong specification or material in procurement process.

Information sharing has strong influence to supply chain performance by eliminating the potential for variation in information to achieve standardized information sharing framework (Yu et al, 2010; Kocoglu et al, 2011). It will establish better communication in supply chain

using real-time information shared by all supply chain members that enable more accurate decision-making process to improve inventory control/management and inventory turnover (Moberg et al, 2002; Abdallah et al, 2014) and achieve efficiency in resource utilization to improve organization performance (Graham et al, 2000; Pinindari, 2011).

H2: Information sharing positively influences supply chain performance

*Buyer-supplier relationship and supply chain performance*

Buyer-supplier relationship is the extent of relationship developed between organization with its partners along supply chain, not limited to the particular partner only, (Hsu et al, 2008) wherein there is a good understanding in their roles and responsibilities (Lemke et al, 2002; Inayatullah et al, 2012), and high level of trust and commitment to establish a long-term relationship as an important factor in achieving competitive advantage for all parties (Aghamohammadi et al, 2014)

There are three key elements of buyer-supplier relationship: trust and commitment, buyer dependency and supplier dependency (De Jong and Nooteboom, 2000; Caniels et al, 2010). Another study states that key attributes such as coordination, collaboration, commitment, communication, trust, flexibility and dependability are widely considered as the center of meaningful relationship (Mburu, 2012). This study uses a two-dimensional of buyer-supplier relationship: trust and commitment.

Buyer-supplier relationship will grow stronger with the development of trust that is facilitated by face-to-face communication between buyer and supplier, buyer fair and proper treatment to its supplier and supplier willing to invest for buyer specific requirement. Robust buyer-supplier relationships will improve the performance of suppliers who also lead to increased organizational performance (buyer) (Inayatullah, 2012). When relationship between buyers and suppliers are established, it will encourage suppliers to provide a better response to buyer needs and drive improvement for buyers and suppliers performance (Rashed et al, 2010).

H3: Buyer-supplier relationship positively influences supply chain performance

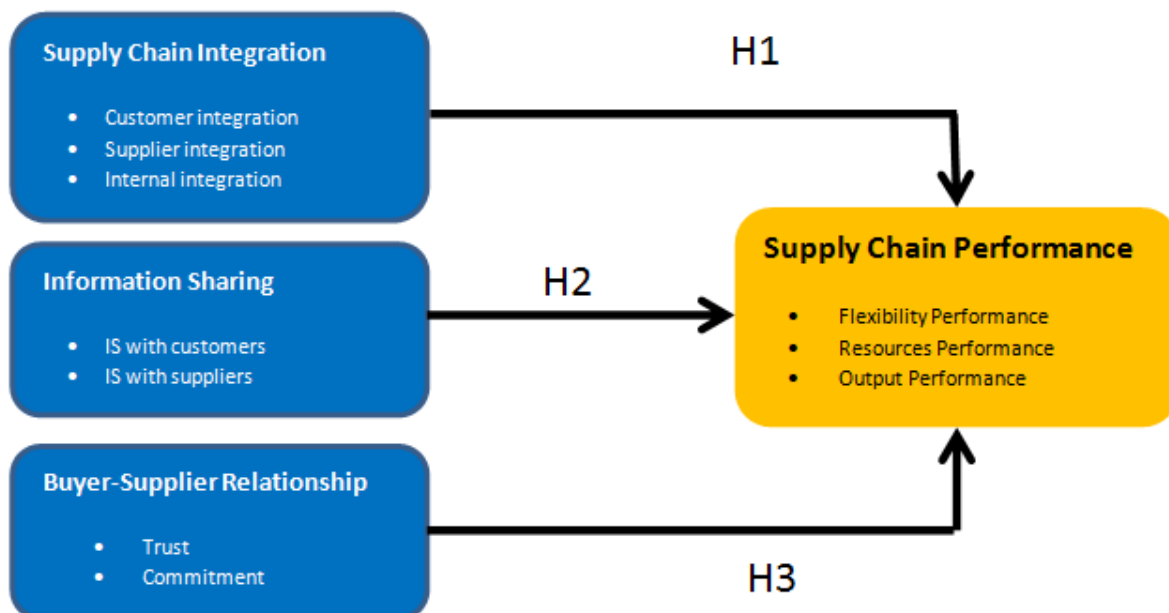


Figure 2.1 Conceptual framework

The conceptual framework of this research can be illustrated in Figure 2.1 which shows the relationship between supply chain integration, information sharing, buyer-supplier relationship and supply chain performance. Supply chain integration will use three dimensions: customer integration, supplier integration and internal integration. Dimensions of information sharing are represented by information sharing with customers and information sharing with



suppliers. While the buyer-supplier relationships are using two dimensions: trust and commitment. Supply chain performance will be measured by flexibility performance, resources performance and output performance.

**Research methodology**

*Research Variables*

This research is a quantitative research with survey approach infive-point Likert scale questionnaires form for respondents as sample of determined population. The obtained data from survey will be processed and analyzed descriptively and quantitatively using PLS (partial least squares) statistical modeling techniques with SmartPLS software.

Statistical analysis in PLS uses second order construct method. There are four latent variables, supply chain integration (SCI), information sharing (IS), buyer-supplier relationship (BSR) and supply chain performance (SCP). SCI is using 3-dimensional variables: customer integration (CI) with measured indicators CI1-4, supplier integration (SI) with indicators SII-3 and internal integration with indicators I1I-3. There are two dimensions of IS, they are information sharing with customers (ISC) with indicator ISC1-5 and information with suppliers (ISS) with indicators ISS1-5. BSR uses a two-dimensional variable trust (TRS) with indicators TRS1-4 and commitment (COM) with indicators COM1-3. The last variable is SCP with three dimensions of flexibility (FLX) with indicators FLX1-3, resources (RES) with dimensions RES1-3 and output (OUT) with indicator OUT1-6.

*Population and Sampling*

The population in this study is PTFI partner suppliers at Jakarta and Surabaya area with active and recurring transaction with minimum transaction value of USD 50,000 during 2013 period. PTFI internal data recorded 76 qualified suppliers. The study will use a sampling method because not all suppliers returned the questionnaire until the specified. Therefore census method should not be allowed. By using Slovin method, the representative sample is obtained (64 suppliers) as shown in table 3.1.

The sampling technique used in this study is the probability sampling with proportionate stratified random sampling method. Probality sampling method is a selecting sample size method in which each member of the population has an equal chance to be elected as members of the sample (Umar, 2013). While the proportionate stratified random sampling method is used when the population has not homogeneous member and stratified proportional (Sugiyono, 2011).

Transaction value (2013)	Suppliers	Research Sample	
		Slovin Method	Rounding Sample
Above USD 10M	5	4.2105263	4
USD 5M - 10M	5	4.2105263	4
USD 1M - 5M	27	22.736842	23
USD 250K - 1M	27	22.736842	23
USD 50K - 250K	12	10.105263	10
Total	76	64	64

Table 3.1 Research population and sample

*Outer Model Evaluation*

Evaluation of outer model is used to determine the validity and reliability of indicators relationship with latent variables. Indicators are reflective because the indicators of latent

variables affect its variable. Therefore there will be two stages of measurements: Convergent validity and Discriminant validity (Sofyan Yamin, 2011)

There are three kinds of measurements in convergent validity, they are individual items reliability (standardized loading factor), construct reliability (internal consistency and composite reliability) and average variance extracted (AVE). Only one indicator has loading factor value below 0.5 which is OUT4 indicator with loading factor value -0.093 (from a construct SCP) and -0.096 (from a construct OUT). Thus OUT4 indicator is excluded from the model

The second measurement in convergent validity stage is composite value reliability (CR) and Cronbach's alpha measurement which both first order and second order construct are greater than 0.70. It is implied that all the indicators are consistent in measuring their variables. Then, the third measurement is an AVE measurement. AVE value at least 0.5 indicates convergent validity is good, and this research has AVE values greater than 0.5 as required.

Variables	AVE	Composite Reliability	Cronbach's Alpha
SCI	0.539	0.913	0.891
IS	0.58	0.932	0.919
BSR	0.501	0.875	0.832
SCP	0.58	0.938	0.926

Table 3.1 AVE, Composite Reliability and Cronbach's Alpha values

The next stage measurement is the evaluation of discriminant validity. Model measurement is assessed by cross loading measurement with its variable. If variable correlation with each indicator is larger than its correlation with other variable, then it has better prediction to its indicator than to another variable. Cross loading values in this study indicate that almost all indicators respectively have higher correlation value with their variable compared to their correlation value with another variables except CII that have cross loading 0.717 with its variable (CI), lower than its cross loading with SI (0.797). It does not meet discriminant validity requirements and CII indicator will be excluded from the model.

The outer model evaluation indicates that almost all of the variables/construct and indicators in this study are accepted, except indicators OUT4 and CII that do not meet validity and reliability requirements and both indicators are excluded from the model. The new research model without indicators OUT4 and CII will recalculate using algorithm and bootstrapping for structural (inner) model evaluation.

*Inner Model evaluation*

There are several stage of inner model evaluation, start with variable relationship significance represented by path coefficients in accordance with research hypothesis. The next stage is to evaluate the R-square (R<sup>2</sup>), effect size f<sup>2</sup> evaluation, Stone-Geisser Q-square test evaluation for predictive relevance and goodness of fit (GoF) evaluation for model validation.

The results of PLS algorithm analysis generated correlation values between the relevant variables. SCI and its first order construct variables have correlation values 0.865, 0.887 and 0.926. Whereas IS to its first order construct have correlation values 0.962 and 0.960. BSR correlation values to its first order construct are 0.920 and 0.904. And SCP has correlation values with its first order construct 0.840, 0.829 and 0.954. All correlation values are significant at the level of 0.05.

PLS algorithm also generated path coefficient values for all research variables. The significance value obtained from the bootstrapping process by using a sub-sample value of 500 and 0.05 level of significance in PLS that resulted t value for each path coefficients in the

model. PLS analysis results can be seen in Figure 3.1 below which included path coefficient value and t value to support the research hypothesis.

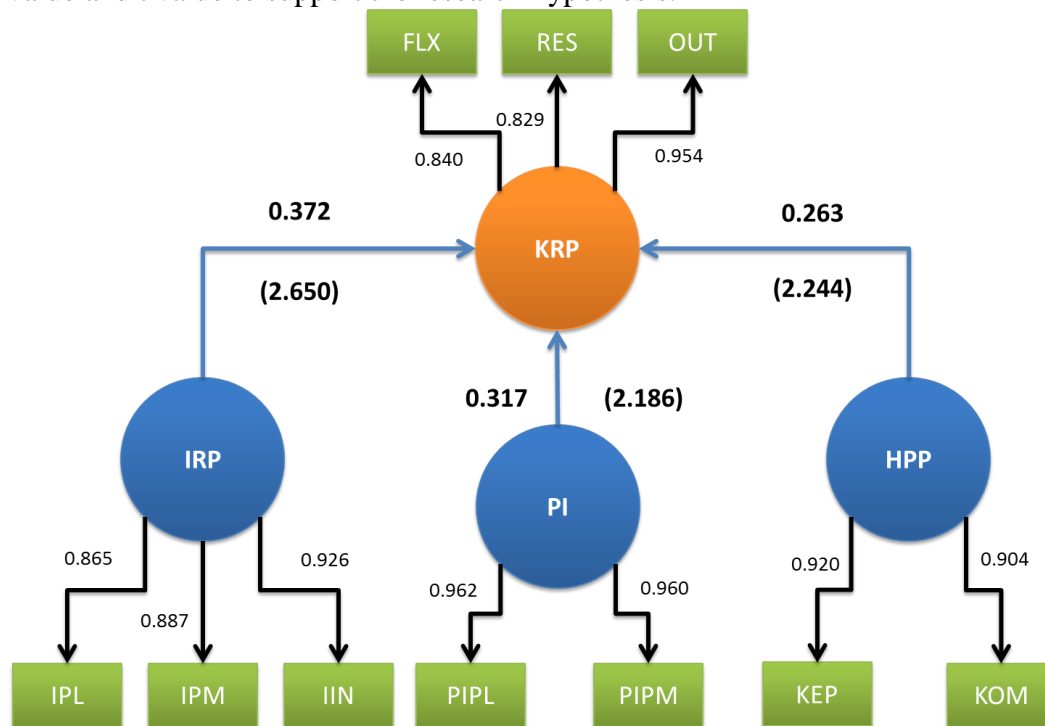


Figure 3.1 Path coefficient and t value

Figure 3.1 shows the effect of SCI, IS and BSR to SCP. As shown in the figure, SCI has a positive influence to SCP ( $\gamma_{11} = 0.372$ ,  $t = 2.650$ ) supports the hypothesis H1. Then IS also positively influences SCP ( $\gamma_{21} = 0.317$ ,  $t = 2.186$ ) supports the hypothesis H2. Hypothesis H3 is also supported that BSR positively influences SCP ( $\gamma_{31} = 0.263$ ,  $t = 2.244$ )

Then R-square ( $R^2$ ) evaluation was also conducted to determine how much latent exogenous variables (supply chain integration, information sharing and buyer-supplier relationships) influences were able to explain endogenous variables (supply chain performance) variability.  $R^2$  value of supply chain performance is 0.789, which means supply chain integration, information sharing and buyer-supplier relationships together are able to explain the variability of supply chain performance by 78.9%.

The effect size  $f^2$  evaluation will determine the effect of exogenous latent variables (SCI, IS and BSR) on the structural level when they are or not in the research model.  $f^2$  effect size value for SCI is 0.152 (a moderating influence on the structural level) means SCI moderately contribute to the research model. Values  $f^2$  effect size for IS and BSR are 0.123, 0.109. They have little effect on the structural level, both of these variables only make a small contribution to the model.

Stone-Geisser's  $Q^2$  evaluation is used to examine the model predictive ability of exogenous latent variables. This value is obtained through the process of blindfolding in PLS data analysis. Construct cross validated redundancy value of supply chain performance (SCP) is 0.448 greater than 0. Therefore exogenous latent variable SCI, IS and BSR have good predictive ability for endogenous latent variables SCP.

The last evaluation of inner model is goodness of fit (GoF) evaluation that was examined to validate the overall model (inner model and outer model evaluation), the result of GoF index calculation in this study is 0,702 and greater than 0.26. It is categorized as large GoF and indicates overall model both inner model and outer model are met to standard requirement as a good model.

## Result and discussion

Supply chain integration have partially the highest influence on supply chain performance with the path coefficient 0.372, t statistic value 2,650 > 1,96 and significant at P Value 0.008 < 0,01 compared to two other variables. Therefore, organizations with higher degrees supply chain integration are more likely to have better supply chain performance. This finding is consistent with those of Lee et al (2007), Baofeng Huo (2011), Pinindari (2011), Kocoglu (2011) and Abdallah et al (2014). However this study does not support those of Sezen (2008) and Gimenez et al (2011).

PTFI domestic suppliers Jakarta and Surabaya area implemented supply chain integration practices with supply chain partners both their suppliers (sub-suppliers or manufactures) and customer (PTFI) increasingly improve flow of information, materials, products or services and finance in all parties. They have better coordination and communication with their suppliers and manufactures through their information network. PTFI as customer utilizes ERP and web base system to manage its procurement process. Suppliers have significant role to receive and review PTFI order electronically, review PTFI stock item status and their delivery status. It represented the strong integration as there seems no limit or boundaries between all supply chain partners. Meanwhile, internal integration through integrated internal data, periodic department meeting and cross-functional team utilization encourage suppliers to optimize their resources in their effort to support customer and supplier integration.

Information sharing is essential to ensure the seamlessly flow of information among supply chain members to support their supply chain activities. Information sharing has the second greatest influence partially on supply chain performance with the path coefficient 0.317, t statistic value 2,186 > 1,96 and significant at P Value 0.029 < 0.05. When organization is willing to share its information with supply chain partner, it will drive better performance for all parties in supply chain context. It is align with previous studies from Kocoglu (2011), Ibrahim et al (2011), and Abdallah et al (2014). However this study does not support those of Sezen et al (2008), Rashed et al (2010) and Pinindari (2011).

PTFI domestic suppliers Jakarta and Surabaya area closely monitor and communicate their orders to sub-suppliers or manufacturers to ensure the quality and delivery of products. By using supplier portal provided by PTFI, suppliers are able to review and update PTFI orders frequently to provide the real-time order status, better and flexible response to order changes. The distribution of clear and explicit information shared with their sub-suppliers or manufacturers and customer (PTFI) provide great benefits to all supply chain parties by enabling them to take the right decision on their operational and business activities. However, all parties need to guarantee the confidentiality of shared information especially related to intellectual property rights to prevent any information abuse. PTFI as customer also necessarily communicates its standard of procedure related to procurement process for suppliers to ensure their understanding in roles and responsibilities to provide on-time delivery and proper goods or services.

Buyer-supplier relationships have the smallest influence than the two other variables partially on supply chain performance with the path coefficient 0.263, t Statistic value 2.244 > 1.96, and significant at P Value 0.025 < 0.05. This study supports previous studies by Hsu et al (2008), Gozlu (2010), Kamau (2011) and Ibrahim et al (2011).

Although PTFI domestic suppliers Jakarta and Surabaya area generally have performed good buyer-supplier relationship with their sub-suppliers or manufactures and customer (PTFI), there are two indicators of trust dimension are still not optimally performed. Responsible is a key indicator to measure how suppliers will respond customer orders and fulfill their delivery time. It was concerning that suppliers often asked PTFI to modify the order due date as they unable to deliver the order on-time. PTFI expected suppliers to commit with their delivery time as their proposed, but many suppliers are unable to keep their promise. They will give some

reasons just to justify their late delivery. Low score in responsible and keeping promises indicators indicated suppliers still need to reconsider their approach in developing their partner's level of trust. The higher level of trust will lead to better relationship for upstream and downstream supply chain members and improve overall performance.

### **Conclusion**

This study examined PT Freeport Indonesia domestic suppliers Jakarta and Surabaya area to determine the effect of supply chain integration, information sharing and buyer-supplier relationship to supply chain performance based on encountered supplier performance issues. By reviewing literature from previous studies and referring to existing issues, this study stated its research hypothesis and performed statistical analysis to confirm the hypothesis.

While supply chain integration, information sharing, and buyer-supplier relationship are found positively influence supply chain performance, there are some factors that need adequately further action for better result in the future. Supply chain integration through customer integration, supplier integration and internal integration will improve the coordination of business activities among supply chain members. Information sharing between supply chain members provides the opportunity to obtain valuable information on the right time and the right place for better decision making. Buyer-supplier relationship increase the level of trust and commitment all supply chain members and will establish competitive advantage. All of those aspects will lead to improved supply chain performance in terms of flexibility, resources and output performance.

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**EXPERIMENT OF SOLAR DRYER TO SUPPORT MEDICINE PLANT FARMERS  
MEET SNI 01-3393-1994 (CASE STUDY: GINGER DRYING PROCESS IN  
KARANGANYAR, INDONESIA)**

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**Abstract**

To anticipate declining ginger selling price when the harvest season is over, medicine plant farmers in Karanganyar, Indonesia process fresh gingers into ginger simplisia (dried form). Accordance to SNI 01- 3393-1994, the maximum water content in ginger simplisia should not be more than 12%. To support farmers in producing ginger simplisia, the prototype of solar dryer has been made. The prototype uses a main heat source from solar energy and a heat backup source from biomass stove. Before the solar dryer can be applied by farmers, the prototype needs to be evaluated. The evaluation was done by the experimental method. Experimental method that used in this study was a split-split-plot design. Based on the results, the solar dryer prototype has been able to meet the performance target when using heat source from solar energy (up to 12% water content within 8 -12 hours).

**Keywords:** *solar dryer, experiment study, water content, split-split-plot design*

**Introduction**

Simplisia is a dried form of natural substance that is used as raw material medicine (Dirjen POM, 1982). National Standardization Agency of Indonesia (BSN) in the SNI 01-7087-2005 stated that specifications for the ginger rhizome are fresh, no buds, bright cross-sectional, intact, and free from insects or other pests. For the standard product of dried ginger (ginger simplisia), the standard is based on SNI 01-3393-1994. Within these standard, there are some special requirements regulating ginger simplisia that can be categorized to have a good quality, which include 12% maximum water content of ginger simplisia.

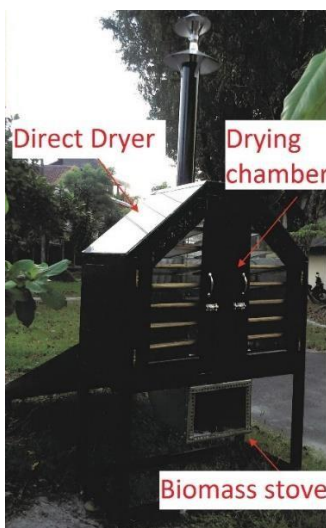
Previously, medicine plant farmers in Karanganyar, Central Java, Indonesia used the conventional drying method to dry ginger rhizomes. This method was done by drying the ginger rhizomes that has been cut under direct sunlight. Figure 1 shows the drying process of ginger rhizomes with the open sun drying method.



**Figure 1.** Direct open sun drying method of ginger simplisia

Open sun drying method was less effective and efficient, as it required a wide space, long time, depending on weather conditions, and make ginger simplisia was easily contaminated with dirt or mold spores. Based on research by Fahma et al. (2014), the ginger simplisia was not homogeneous and still had 18-20% water content.

Based on these problems, the technology that can be used to dry the ginger simplisia has been developed. The technology was a solar dryer which has a main heat source from solar energy and a backup heat source from biomass stove (Agassi et al, 2015). The prototype of solar dryer is shown in Figure 2.



**Figure 2.** Solar Dryer Prototype with A Backup Heat Source from Biomass Stove

The solar dryer prototype used woods as the main frame. It was based on the consideration that the solar dryer can be reproduced independently by farmer groups in the region that the region has the potential sources of wood. The solar dryer prototype had the dimensions of length, width, and height of 2,4 x 1,2 x 2,2 meters. The solar dryer prototype specification are presented in Table 1.

**Table 1.** Solar Dryer Spesifications

Solar Dryer Parts	Spesifications
Frame Material	Wood Zinc 1,8 m
Solar Collector Material	15°
Solar Collector Size	5 mm
Solar Collector Slope	0,13 m <sup>2</sup>
Solar Collector Thickness	0,14 m <sup>2</sup>
Inlet Size	
Collector-Drying Chamber	1,9 m x 1,2 m x 0,6 m
Connection Hole Size	16
Collector Dimensions	6°
Number of Drying Rack	8 cm
Drying Rack Slope	7 kg
Distance Between Drying Rack	1,2 m x 0,6 m x 1,7 m
Drying Maximum Capacity	Aluminium
Drying Chamber Dimensions	0,6 m x 0,4 m x 0,3 m
Biomass Stove Material	
Biomass Stove Dimensions	

Agassi, et al (2015) has conducted evaluation by computer simulation, with the result showed that the solar dryer has been able to meet the performance target both the drying heat

source from sun (solar) energy and the backup heat source from biomass stove. The performance target of 12% water content was achieved within 5-8 hours. Moreover, the drying condition result was uniform for all ginger simplisia.

Before the solar dryer can be used by farmers, in addition to an evaluation by computer simulation, the prototype needs to be evaluated by direct testing. It aims to find out the real performans solar dryer based on real environmental conditions. The direct testing was conducted by the experimental mechanism.

### Literature Study

#### *Ginger Simplisia and SNI 01-3393-1994*

Simplisia is a dried form of natural substance that is used as raw material medicine (Dirjen POM, 1982). Simplisia can be derived from plants or animals. The production process of simplisia consists of several steps: washing, first sorting, slicing, drying, second sorting, packaging, storage. The illustration in Figure 3 shows sample form of fresh rhizomes and various product of simplisia.



**Figure 3.** Examples Form of Fresh Rhizomes and Simplisia

Indonesia has a standard relating to the characteristics of simplisia used as herbal raw materials or traditional medicine. For ginger, Indonesia through the National Standardization Agency (BSN) has issued a standard product of ginger simplisia in SNI 01-3393-1994. The detail of ginger simplisia quality requirements is listed in Table 2.

**Table 1.** Ginger Simplisia Requirements in SNI 01-3393-1994

Characteristics	Requirement
Smell and taste	Unique
Maximum water content (%)	12
Minimum il content (ml/100g)	1,5
Maximum ash content (%)	8,0
Fungi and Insect	No
Maximum foreign object/material (%)	2,0

### Drying Method

Medicine plant farmers in Karanganyar, Indonesia beside sell rhizomes in fresh form, also process into simplisia (dried form). During the production process of simplisia, drying is the process that takes the longest time. It has been presented in the introduction that farmers drying was done through the conventional (traditional) way, by direct open sun drying. The direct open sun drying process takes 10- 14 days. Previously, farmers in Karanganyar, Indonesia already have a oven for drying rhizomes (Figure 4). The oven dryer was a relief from the Ministry of Research and Technology Indonesia in 2011. Based on its technical specifications, the oven dryer was

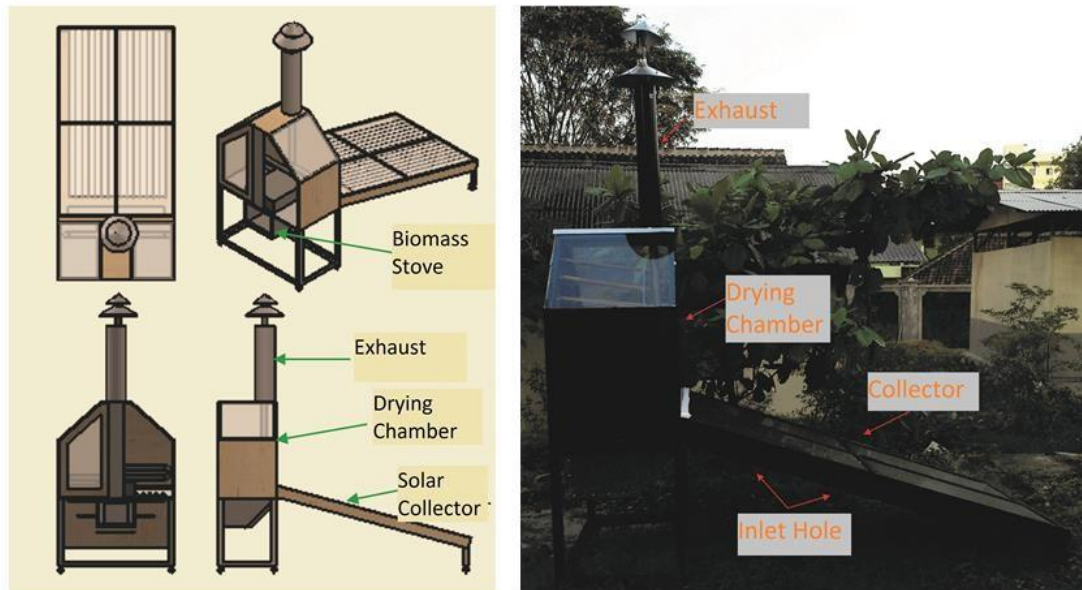
capable to drying rhizomes with a production capacity of 100 kg. However, this oven dryer did not benefit the farmers. Because the use of very high power (10,000 watts) and long time drying (24-hour). At the beginning, the farmers were still trying to use this oven in the drying process by hiring power generating units, but this resulted in high production costs (Fahma et al, 2014). So in the end farmers returned to traditional drying method for the production of simplisia.



**Figure 4.** Oven for Drying Simplisia

To solve these problems, it has been developed a dryer with a heat source from solar energy (solar dryer) and it equipped with a backup heat source from biomass stove. The solar dryer design was based on the needs of farmers that the drying process of simplisia do not require electricity, but still be able to meet the drying target.

According Hii (2012), solar dryer is a drying mechanism by utilizing the heat energy of sunlight that has been used to dry the plants, seeds, fruit, meat, and other agricultural products. The solar dryer with mix heat source (hybrid) has been developed by the Asian Institute of Technology (AIT) for drying agricultural products. The solar dryer used heat energy from the sun by using flat plate solar collector. Kirirat (2006) designed a solar dryer using solar energy with backup from biomass stove as heat sources drying. The biomass stove was used as energy reserves when the heat energy from the sun can not be used, for example at night, cloudy, or rainy. Kirirat (2006) solar dryer design was used as the basis Agassi et al (2015) to make the effective technology for farmers in Karanganyar, Indonesia to drying simplisia. The design and prototype of Agassi solar dryer shown in Figure 5.



**Figure 5.** Design and Prototype of The Solar Dryer

### Experiment

Experiment is an defined action of steps, so the necessary information for the problems can be collected and analyzed to answer the question. Experiment can be use to test/evaluate the performance of tools or equipments for further development.

To assess the performance of solar dyer prototype that has been made, it was necessary to do experiments to find out capabilities of the solar dryer. Before the experiment was conducted, the experiment should be designed so that the objective of the experiment can be achieved. This experiment was designed with reference to the previous studies that have been done before.

In this study, there are three factors used in the experiment. The first factor is the heat source. The decision to make the heat source as one of the factors because there are presumption differences in the response of different heat sources. Additionally, the study about the solar dryer with different heat sources also conducted by Kassem et al (2006). In that study, the systems used are solar dryer drying, direct open sun drying (as a natural drying method) and oven drying (as artificial drying). While on this dryer, heat sources to be compared were solar drying, biomass stove drying, and combination of both.

The second factor in the experiment of this study was the drying time. Comparing to another steps in the drying process from fresh rhizome into simplisia, the drying step takes a long time. However, if too long, it makes the simplisia did not meet the quality. Therefore, it is necessary to find the optimal time to dry the simplisia.

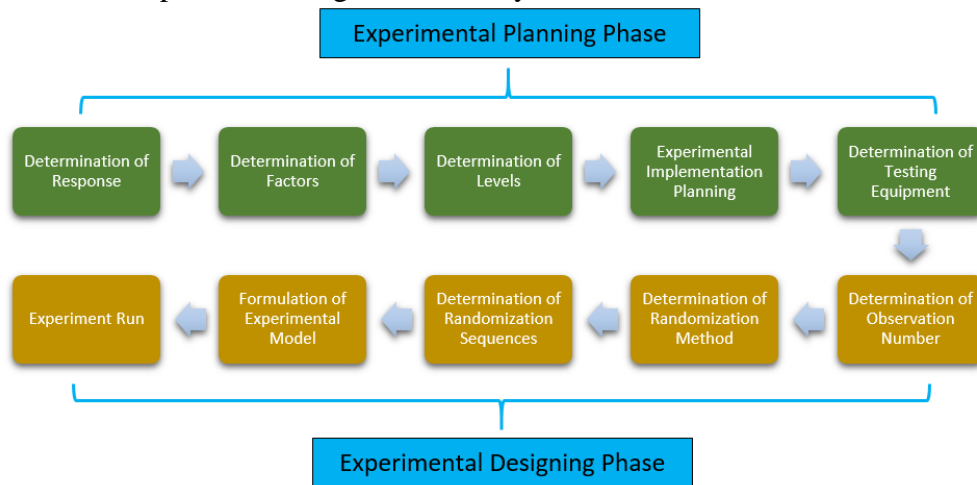
In observing the drying time, Susilo and Okaryanti (2012) conducted a study in a drying machine to dry the Mocaf chips (Modified Cassava Flour) fermented with a thickness of 1-1.5 mm for 9 hours starting from 09:00 am until 18:00 pm. Then, the temperature and humidity on the drying machine were measured every one hour.

However, sometimes the drying time was dependent to the drying rack position. It caused by the temperature difference between top racks and bottom racks position. Therefore, the position of the rack was also used as a factor in this experiment.

Meanwhile, the water content of the simplisia was a response to be measured. The water content was directly affected by temperature, humidity, and wind speed (Yuwana and Silvia, 2012; Rocha et al., 2011). The temperature, humidity, and wind speed were actually also be referred to uncontrolled factors. However, these factors were also influenced by the source of heat, drying time, and rack position. Thus, the temperature, humidity, and wind speed were more accurately described as between responses.

## Methodology

Before the experiment was conducted, the experiment design was need to be developed. Figure 6 shows the experiment design of this study.



**Figure 6.** Experiment Methodology

### 1. Experiment Planning Phase

#### Determination of Response

The water content of ginger simplisia was selected as a respon in this study. In addition, there were selected environmental responses from internal environmental conditions (temperature and humidity of drying chamber) and external environmental conditions (wind speed and outside temperature of the drying chamber).

#### Determination of Factors

In this study, source of heat, drying time, and rack position were selected as factors. The heat source was expected to have an influence on the drying process according to the research by Kassem, et al (2006). Meanwhile, the difference in drying time ever assessed by Susilo and Okaryanti (2012). The position of the rack was used as a factor because it was expected differences in water content at each rack position. Figure 7 shows the rack position of the solar dryer prototype in this study.



**Figure 7.** Racks Position in the Solar Dryer Prototype

#### Determination of Levels

The heat source has three levels: sun (solar), biomass stove, and both combined solar and biomass stove energy. The position of rack has eight levels: rack A, rack B, rack C, rack D, rack E, rack F, rack G, rack H, as shown in Figure 7. The drying time has 8 levels: 1 hour of drying, 2 hours of drying, 3 hours of drying, 4 hours of drying, 5 hours of drying, 6 hours of drying, 7 hours of drying, and 8 hours of drying based on the research by Susilo and Okaryanti (2012).

#### Experiment Implementation Planning

In this study, the experiment used ginger as a research object. The quality of gingers that were used in this study was considered homogeneous. Before experiment was conducted, fresh gingers were washed, aerated, and sliced crosswise with a size of 3-6 mm. In this study, the experiment used a 2 kg of fresh ginger in each experiment run. The fuel used for biomass stove in this study was a branche of woods.

#### Determination of Testing Equipment

The measuring instruments used in this experimental study were: thermometer (to measure the temperature inside the drying chamber), thermo-hygrometer (to measure the temperature and humidity inside the drying chamber), anemometer and thermometer (to measure wind speed around and outside the drying chamber, moisture gauge (to measure the water content of ginger simplisia).

### Experimental Designing Phase

#### Determination of Observation Number

In this study, the experiment took 3 times replications at random method.

#### Determination of Randomization Method

The experiment in this study used split-split-plot randomization method. The heat source factor had three levels contained in one prototype, so the experiment must be run separately (plot). Furthermore, randomization in retrieval data in a split (split-plot) was based on the drying time, where the experimental data taken in consecutive accumulated time. So the experiment was more efficient because the drying time was not be repeated. Then the experiment data was taken in a split-split-plot design according to the rack position.

#### Determination of Randomization Sequences

According to the experiment design (split-split-plot), ginger simplisia were measured randomized to each rack on each drying time in each heat source.

#### Formulation of Experimental Model

The experimental model developed in this study is shown in equation 1.  $Y_{ijk} = \mu + R_i + S_j + RS_{ij} + W_k + RW_{ik} + SW_{jk} + RSW_{ijk}$  +

*whole plot* *split-plot*

$$P_m + RP_{im} + SP_{jm} + RSP_{ijm} + WP_{km} + RWP_{ikm} + SWP_{jkm} \quad (\text{equation 1})$$

*split-split-plot*

Where,

- $Y_{ijk}$  : Decreased levels of ginger simplisia water content
- $\mu$  : Average water content reduction
- $R_i$  : Replication
- $S_j$  : Heat source factor
- $RS_{ij}$  : Interaction between replication and heat source
- $W_k$  : Drying time

factor

$RW_{ik}$  : Interaction between replication and drying time  $SW_{jk}$  :  
Interaction between heat source and time

$RSW_{ijk}$  : Interaction between replication, heat source, and drying time  $P_m$  :  
Rack position factor

$RP_{im}$  : Interaction between replication and rack position  $SP_{jm}$  :  
Interaction between heat source and rack position

$RSP_{ijm}$  : Interaction between replication, heat sources, and rack position  $WP_{km}$   
: Interaction between drying time and rack position





$RWP_{ikm}$  : Interaction between replication, drying time and rack position  $SWP_{jkm}$   
: Interaction between heat source, drying time and rack position



**Result and Discussion**

The implementation of the experiment lasted for three days, with the first day of drying condition with solar heat source, the second day was drying with the biomass stove heat source, and the third day was drying with the heat source from both (combined) solar and biomass stove heat source. The experimental procedure used in this study was according to the methodology steps. The overview of the experiment implementation in this study is shown in Table 3.

**Table 3.** Experiment Steps of The Solar Dryer

No	Steps
1.	Preparing ginger rhizomes (washing and slicing with a thickness of 6 mm / standardized thickness of the herbal industry and traditional medicine)
	
2.	Arranging gingers into the racks of drying chamber
	
3.	Record the drying temperature inside the drying chamber (under heating conditions from biomass stove, and a combination of both)
	
4.	Measuring water content of ginger simplisia per
	
5.	Record the weight of dried ginger (ginger simplisia) as the result of the drying
	

After the experimental testing, the interaction of three factors experiment: heat source, drying time, and position of the rack was discussed further by the ANOVA test. Based on the ANOVA test for three interaction factor, there was a significant difference at each level of the experimental factors. From the ANOVA and SNK (Student Newman Keuls) test, it can concluded that the best interaction of the three factors that can decreased water content of ginger simplisia are as follows:

The heat source from solar energy on rack D with 8 hours drying time with 61.4% of

average water content reduction.

The heat source from biomass stove energy on rack D with 5 hours drying time with 63.9667% of average water content reduction.

The heat source from combination both solar and biomass stove energy on rack D with 5 hours drying time with 61.2667% of average water content reduction.

From these tests, all heat sources can be used to dry the gingers according to the water content target of 12% (SNI 01-3393-1994). However, if examined from the temperature, the biomass stove drying process resulted in more than 60°C drying temperature. According Fitriani (2013) ginger drying process should be done at a temperature between 40-60°C. This was to maintain the essential ingredients in ginger simplisia. To overcome these problems, it is necessary to do the installation of the thermostat, where this concept has emerged in the solar dryer design concept, but has not been realized in the prototype of this product.

The solar dryer with solar energy heat source can be used during the summer where there is enough sunlight to support the drying process. Meanwhile, the use of biomass stove, both as an primary energy source or in combination with the main heat from solar energy can be used during the rainy season. This ensures the drying process is still ongoing despite at the night or at the cloudy weather.

## Conclusions

To evaluate the performance of solar dryer prototype, the experimental method has been conducted. The experiment showed that to achieve the ginger simplisia water content target according to SNI 01-3393-1994, the use of solar energy as heat source took eight hours, while the use of a biomass stove as heat source took 5 hours. Although shorter in achieving the target of 12% water content standard, but the use of biomass stove as heat source of drying needs to be studied further in this solar dryer. This is because the biomass stove can not meet the maximum allowable heat for the drying (40- 60°C). Best rack position to reach the target is on rack D. But in its implementation, all of racks can be used well. This is because the flow of hot air inside the drying chamber is quite homogeneous.

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## GREEN BUSINESS DESIGN OF COFFEE WASTE THROUGH REVERSE LOGISTIC FOR URBAN FARMING

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Indrianawati, Universitas Airlangga, Indonesia

### Abstract

Coffee is one of the popular beverages, which is currently becoming a trend and part of an urban lifestyle. Based on the data collected from the Association of Indonesian Coffee Exporters (AICE), it was noted that an increase in consumption of coffee by Indonesians began four years ago. And it is predicted that the needs of coffee in 2016 will hit 300 million kilograms or reach the coffee consumption per capita as big as 1.15 per kg / capita / year.

The increasing number of coffee enthusiasts in Indonesia triggers the growth of new small business sectors, such as cafe, with a variety of forms ranging from the cheap prices up to the classy cafe. The interesting things that were examined in this study are the impact of these business processes, namely the coffee grounds. Transforming the negative impact on the environment of coffee grounds waste into beneficial forms that bring positive impacts to the environment.

This research is aimed to create a business plan coffee grounds waste management into something that brings economic value through the concept of reverse logistics. This study aims to describe the design of reverse logistics for the management of coffee grounds waste in order to be utilized as a new product and generate added value for businessmen.

**Keywords:** *waste, reverse logistics, economic value*

### Background

Coffee is one of the popular beverages, which is currently becoming a trend and part of urban lifestyle. Based on the data collected from the Association of Indonesian Coffee Exporters (AICE), it was noted that the consumption of coffee by Indonesians is increasing rapidly.

**Table 1 Data of Coffee Consumption in Indonesia**

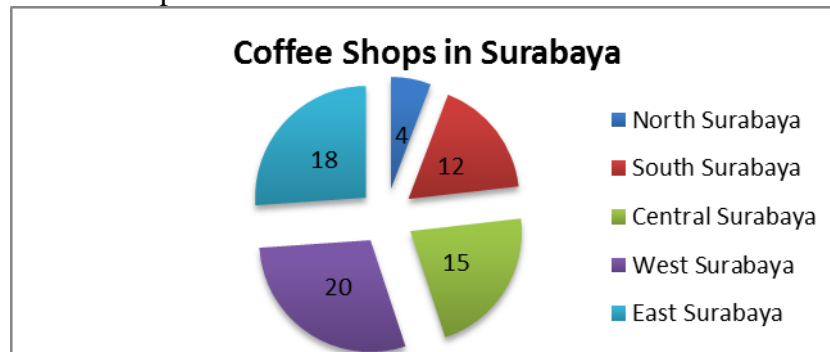
No.	Year	Number of Population (persons)	Needs of Coffee (kg)	Coffee Consumption (kg/capita/year)
1	2010	237.000.000	190.000.000	0,80
2	2011	241.000.000	210.000.000	0,87
3	2012	245.000.000	230.000.000	0,94
4	2013	249.000.000	250.000.000	1,00
5	2014	253.000.000	260.000.000	1,03
6	2015	257.000.000	280.000.000	1,09
7	2016*	260.000.000	300.000.000	1,15

\* estimation

Source : <http://www.aeki-aice.org/uploads>, 2016

Based on the data presented in Table 1 above, it can be seen that the interest of the Indonesian people for coffee has increased every year, and predicted that coffee needs in 2016 will reach 300 million kilograms or reach the coffee consumption per capita as big as 1.15 per kg / capita / year. The phenomenon of the increasing number of coffee enthusiasts also occurred in East Java, especially in the City of Surabaya. The number of cafes in Surabaya are growing by 10-15% annually alongside with the acceleration of the infrastructure development in East Java.

Looking at the Table 1.1, it can be seen the number of café / coffee shop located in the city of Surabaya has processed coffee-based beverages for their core products ([www.tripadvisor.com](http://www.tripadvisor.com), 2016). This chart has been compiled based on data collected by Trip Advisor, the biggest website in the world which contains a lot of reviews related to travel business with over 60 million members in the world and operates in 30 countries around the world as follows:



**Figure-1 Coffee Shop in Surabaya**

Source : [www.tripadvisor.com](http://www.tripadvisor.com), 2016 (processed)

As seen on Graph 1.1 the number of café / coffee shop in Surabaya, the coverage area of café / coffee shop which are still active until recently listed as follows: there are 4 outlets in North Surabaya, 15 outlets in Central Surabaya, 20 outlets in West Surabaya, 18 outlets in East Surabaya, and 12 outlets in South Surabaya. The growth of the small business sector / café that involve a variety of business operations and production activity are seen as activities that significantly impact the environment changes. In connection with environmental issues, in running the business process employers should think of ways to minimize waste and reduce negative impacts on their surroundings.

One factor needs to be considered is the company's supply chain management. Supply chain management is a set of activities in the form of entities or facilities involved in the process of transformation and distribution of goods ranging from raw materials from the very start to the final consumer. Implementation of supply chain management has now becomes environmental factor which has considered as a global issue in a business. Issues about business concept in regard to environmentally friendly, encourage businessmen to adjust to the concept of green business / industry in their every business process. The concept of green business / industry itself in its development is known as the concept of green 552 procurement (environmentally friendly procurement), green manufacturing, green distribution, and reverse logistics (Ninlawan et al., 2010). It is also in line with the concept of the triple bottom line, as quoted from the article at [www.swa.co.id](http://www.swa.co.id) edition in November 2010, the concepts that define the sustainability and growth of the company depends not only on the profit alone, but also the real action of the company the social circumstances (people) and the environment (planet). The three components of the triple bottom line moves dynamically depending on the circumstances and the pressure of social, political, economic, environmental, and due to possible conflicts of interest of certain parties (Elkington, 1998). Besides, it also refers to the concept of blue economy as stated by Pauli (2010), the concept of blue economy aims to provide opportunities for businesses to develop investment and business that brings more profit both economically and environmentally.

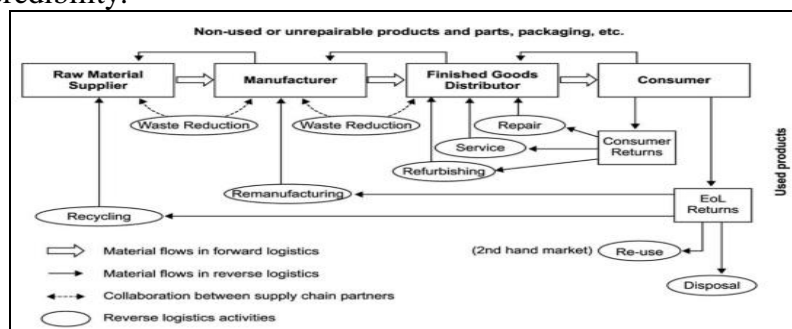
One of the interesting issues for further discussion on the topic of supply chain management is the application of reverse logistics in a company. In general, a lot of research only discusses the flow of forward logistics, which only concerns about the flow from suppliers to the final consumer. This shows that there is not much research that fundamentally studies about the flow in the backward or reverse performed from consumers, retailers, and to the company or from within the company itself. Theoretically reverse logistics also has a major influence on the cost for both the companies and the suppliers (Daugherty et al, 2005).

Focusing back on the rapid growth of café / coffee shop business which is booming a trend in Surabaya, waste production in the form of coffee grounds produced during the production process is unavoidable by the manufacturer. This will be discussed by the authors, which is a problem in the supply chain or problems in supply chain management that will ultimately "give birth" to the reverse logistics activities in the supply chain looking at the point of view in waste management or the dregs of coffee production in order to be utilized as a new product. As noted in the article at [www.nationalgeographic.co.id](http://www.nationalgeographic.co.id) in January 2015 edition, production in the form of waste coffee grounds can be utilized as several new products, among others they are: hair care products, skin care, facial scrubs, and complementary ingredients kitchen, briquettes, and manure or fertilizer. The research will focus on the use of coffee grounds that will be processed into fertilizer / fertilizer materials plants so that they will have economic values. This research is intended to design green reverse logistics business through the management of waste. The results of this study are expected to provide benefits, such as for businesses, to determine the design of reverse logistics for the management of waste in the form of coffee grounds in order to create economic value products and to provide a solution in the form of recommendation, and as the study of literature in future studies that focuses on the research of reverse logistics design.

*Theoretical Background*

Supply Chain Management is defined as a set of methods that collaborate every part of business (supplier, manufacturing, warehousing, and consumers) so that the product can be produced and distributed at the right time, the right place, the right amount, and the conditions according to which desirable, with the aim of minimizing the total cost of the expenses, and be able to improve service needs of the end consumer (Simchi-Levi, 2009).

Logistics is defined by the Council of Supply Chain Management Professionals (CSCMP) as a process of planning, implementing and controlling the efficient flow and effective in the cost of raw materials, in process inventory, finished goods and related information from point of origin to point of consumption for the purpose in accordance with customer requirements (Kenneth and Dwayne, 2008). Include events logistics transportation, warehousing (storage warehouses), inventory, value, and management (Ming-Chih et al, 2008). Logistics is part of the supply chain management; it helps trigger the development of a network or network in supply chain management and supply chain support to the organization. As explained in the advice given by Dischinger et al (2006) which states that the logistics professionals must be able to process various functions of skills, technical skills, leadership skills, global management, experience, and credibility.



**Figure 2. Basic activities and flows in reverse logistic**

Source : adapted from Srivastava (2008) in Lau dan Wang (2009)

*Definition of Reverse Logistics*

Reverse logistics is a process of planning, implementing, and controlling the efficient and effective flow of goods (raw materials, in-process inventories, or finished goods) and related information, from the consumer point back to the origin (Rogers and Tibben-Lembke, 1999), In this case, the handling of returned goods either salvage and scrap disposal, is part of a process that is closely related to reverse logistics, and is also a component of logistics that need more attention. Reverse logistics also involves the removal and disposal of waste material from the production, distribution and packaging. If the unnecessary waste material that cannot be used to produce other products, the material must be removed. Figure 2 below provides exposure to the key tasks in the flow and reverse logistics.

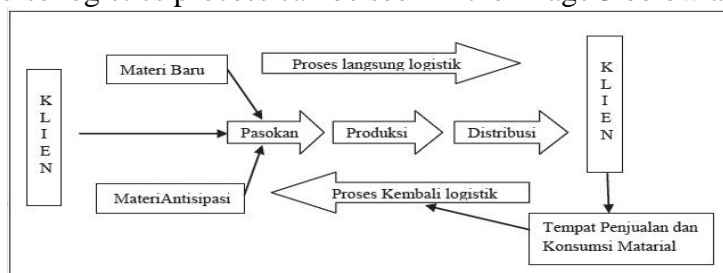
As stated by Jayaraman et al, (2003) Reverse logistics is the flow in which the product or component coming back after being used for the purpose of repair, recycle or rework. In a world with limited resources and limited disposal facilities, recovery, or improvements made to the product or material is key to supporting the population with rising consumption levels (Georgiadis and Vlachos, 2004). The purpose of reverse logistics is to capture or re-create value or for disposal of goods flows back (Rogers and Tibben-Lembke, 1999). Currently, reverse logistics has a broader concept, as mentioned by Fleischman (1997), this activity seeks to renew the value of goods. Thus, not only of goods withdrawn from the market (distributors, retailers), but also from the end-user even bins and warehouses used in consumer goods. Goods are withdrawn, then processed, either by the original manufacturer or by third parties, for the enhanced value of his or her values returned to normal. The production is also varied; depending on what extent used goods can be processed and value returned. From some literature related to reverse logistics, there are basically four things that considered being the motives of reverse logistics; the economical aspects, environmental aspects, legal aspects, and extended responsibility.

*Process of Reverse Logistic*

As mentioned before, the process happens in reverse logistics is essentially similar to the activity that occurs in traditional logistics, but there are some differences, some differences are explained by De Britto et. al. (2002) describe such a difference include:

1. On the reverse logistics supply there are many points where the product can be obtained as well as the collection point.
2. It takes a good cooperation and voluntary contributions from suppliers of products, in this case is the consumer, to hand over the goods to the point of collection of the product.
3. Items are collected usually have a low economic value. Unlike traditional logistics came first, logistics to reverse logistics network in various aspects need to be developed.

Reverse logistics are the result of several products that lose their values because of their use as packaging, the loss of function such as a defective product, it is difficult to be sold in the public market, such as excess stock, or must be returned for some reason because of a flaw, everything must be returned or flow backwards from downstream to upstream in the supply chain (Jun-Ji, 2008). Reverse logistics process can be seen in the image 3 below as follows:



**Picture 3 Process of Reverse Logistics**  
(Source: Roggers and Tibben Lembke, 1995)

### *The Purpose of Reverse Logistics*

The increasing pressure from various circles on the sustainability of green-production / green company that is happening at the moment, makes the reverse logistics strategy to be one of the main strategies that may be considered by companies to deal with the crisis. As Gungor and Gupta (1999) stated that the company's attention on the environment can be further improved by regulating the production flow in vain, and the handling of the remainder of unused raw materials.

In accordance with the triple bottom line concept that formulates the sustainability and growth of the company depends not only on the operating profit (profit) alone, but also concrete action by the company against the social circumstances (people) and the environment (planet). The three components of the triple bottom line move dynamically depending on the circumstances and the pressure of social, political, economic, environmental, and due to possible conflicts of interest of certain parties (Elkington, 1998). This shows that the concept of social concern in this regard is the concern for the environment is one of the concepts that should be applied to support the company's strategy. However, that does not mean that reverse logistic is similar with the green logistic which is fully focused on the environmental aspects. Manufacturing environmentally conscious is a step further than just manufacturing that implement forward logistics.

Generally speaking, reverse logistics is controlled by several factors such as environmental legislation (Nnorom and Osibanjo, 2008), the extension of the responsibility of the manufacturer (Extended Producer Responsibility) (Khetriwal et al., 2009; Lee et al., 2000), the economy (Liu et al., 2008), and improved customer service (Wu and Cheng, 2006). So basically the reverse logistics strategy can become a competitive force for the company.

### *Definition of Value Added*

Value added is the value of a commodity due to the processing, transportation, and storage or in a production. As argued by Hayami et. al. (1987) in Hidayat et al. (2012), the value added is the difference between the value of the final product by the value of raw materials and other inputs.

### *Waste*

Waste can be defined as any work activities that do not provide added value in the process of transforming inputs into outputs throughout the value stream (Gaspersz, 2011).

Waste can also be defined as a material that is wasted or discarded from the source as the results of human activities and natural processes that do not have economic value (Tchobanoglous et al., 1993). According Tchobanoglous et al. (1993) solid waste is all scrap arising from human activities that are normally solid and discarded when no longer desired or drained. Waste or scrap of waste is the result of human activity that comes from waste generating activities such as market, households, commercial activities such as shops, restaurants and hotels, as well as other activities such as industrial activities that generate waste.

### **Research method**

The approach used in this study is a qualitative approach that is able to provide flexibility and allow researchers to obtain information from primary sources (first-hand information). This research can be categorized as "Qualitative Business Research" which aims to get the desired results in the achievement of business goals.

As described by Zikmund et. al. (2013), through a qualitative approach, researchers can conduct an elaborate interpretation of information to find the substance of a phenomenon without



relying on purely quantitative measurements (numerical measurement), but focused on the discovery of a phenomenon substance and find a new understanding of the perspectives. Design research is using the case study method, which is expected to answer the question "what / how" in a phenomenon / problem that occurs in an organization (Yin, 2014). Such design is done with consideration to get an idea of depth on the design of reverse logistics on the management of waste generated in the form of coffee grounds to create economic value in the supply chain process.

### **Data Collection Procedures**

The data collected in this study using a number of ways that will be stated as follows:

1. Observation, a preliminary study aimed to see, know and understand the problems and the phenomenon of what is happening in some café / coffee shop in Surabaya. Problems and phenomena that occur in the café / coffee shop can be formed into a new strategic framework that is used as a proposed improvement strategy. By observing the production system and supply chain and logistics systems of the café / coffee shop to see the problem.
2. A Literature Study is enabled to view and get information about the phenomenon or problem that occurs in some café / coffee shop in Surabaya with the support of existing theories. Obtained from books, journals about economy and also of the materials that are generally associated with this research as reference material.
3. Interviews, namely excavation or search for data through interviews. This is done in order to find all the information about problems that occur in some café / coffee shop located in Surabaya, and can later be used to obtain data that serves as a support in making the proposed new strategy.
4. Survey the field, observation or research directly to several café / coffee shop located in the Surabaya to obtain the real data and see firsthand process on the spot.
5. Secondary data from the Internet. Data derived from sites containing about things that relate to the theme or subject matter of the study.

Analysis of the data used in the qualitative research done by using words that are always arranged in an expanded text or described (Miles and Hubberman, 1986). In this study, the validity of the data will be tested using the method of triangulation. As stated by Moleong (2004), triangulation is a technique that utilizes data validity checking something else outside these data for purposes of checking the data or as a comparison against the data. Triangulation can be grouped into four types of analytical techniques; the triangulation method, researchers, source, and theory.

### **Analysis and Result**

The research will focus on interviews, surveys and observations conducted on 13 brands café / coffee shop that were selected randomly based on the location / layout of the café / coffee shop itself. Selection of the 13 brand café / coffee shop is based on the geographical location of the café / coffee shop which were scattered in various areas in Surabaya, they are: 2 brands located in North Surabaya, 2 brands in Central Surabaya, 2 brands located in East Surabaya, 2 brands located in West Surabaya, and 2 brands located in South Surabaya, as well as 3 great brands that has a nationwide distribution outlets throughout Indonesia and has the largest number of outlets in Surabaya.

Through Table-1, as follows, can be seen from the informant profile of 13 brands that are used as a reference for researchers in exploring the design of reverse logistics related to the information on coffee grounds waste management in order to create value added in the industrial supply chain processes café / coffee shop in Surabaya:

Table -2 Informant Research Profile

NO	NAMA	LOKASI	JUMLAH OUTLET	JABATAN	KETERANGAN
1	LIBRERIA COFFEE & EATERY	Surabaya Timur	1	OWNER	INFORMAN 1
2	COFFEE TOFFEE SPECIALTY	Surabaya Timur, Selatan	3	MANAGER	INFORMAN 2
3	KABINET COFFEE	Surabaya Barat	1	BARISTA	INFORMAN 3
4	MONOPOLE COFFEE LAB	Surabaya Barat	1	BARISTA	INFORMAN 4
5	HISTORICA COFFEE & PASTRY	Surabaya Pusat	1	BARISTA	INFORMAN 5
6	STARBUCKS	Surabaya Pusat, Barat, Timur, Selatan	10	SUPERVISOR	INFORMAN 6
7	J.Co DONUTS & COFFEE	Surabaya Pusat, Barat, Timur, Selatan	7	SUPERVISOR	INFORMAN 7
8	THE COFFEE BEAN & TEA LEAF	Surabaya Pusat, Barat, Timur	5	SUPERVISOR	INFORMAN 8
9	CALIBRE COFFEE ROASTERS	Surabaya Pusat	1	BARISTA	INFORMAN 9
10	ROLLAAS COFFEE & TEA	Surabaya Utara, Pusat, Selatan	3	BARISTA	INFORMAN 10
11	De Mandailing	Surabaya Selatan, Timur	2	BARISTA	INFORMAN 11
12	My Kopi O	Surabaya Utara, Barat, Selatan	3	BARISTA	INFORMAN 12
13	OOST KOFFIE & THEE	Surabaya Timur	1	BARISTA	INFORMAN 13
<b>TOTAL</b>			<b>39</b>		

Based on the data shown in Table-1 above it can be seen that the 13 brands of café / coffee shop that are used as a reference in the study may be representative of the overall total outlet café / coffee shop were recorded in Surabaya as many as 69 outlets. With a total of 39 outlets or outlet amount equivalent to 56.5% of the total number of outlets recorded, the 13 brand also has a high degree of heterogeneity when viewed from the map distribution locations in various areas in Surabaya; Central, North, West, East, and South.

**Supply Chain Scheme On The Café / Coffee Shop Industries in Surabaya**

Based on the observation that has been done, it can be obtained information regarding the supply chain process that is based on a system of forward logistic of café / coffee shop as shown in Figure 4 below:

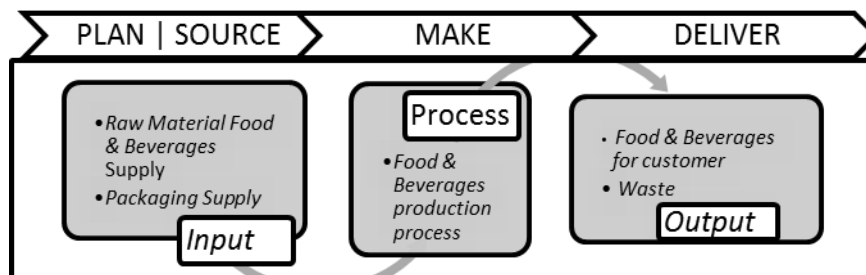


Figure 4. Supply Chain Scheme on Café / Coffee Shop in Surabaya

As shown in Figure 4 above, it can be seen that the picture of the supply chain process in the café / coffee shop in Surabaya still refers to forward logistics system. As described by Srivastava (2008) in the journal written by Lau and Wang (2009), forward logistics is a supply chain system that focuses on activities such as: movement / supply of materials from suppliers, processing of materials in the production, and distribution of the final product to the consumer.

This is consistent with the picture of the supply chain process in the café / coffee shop in Surabaya that is divided into 3 main activities include: input which contains activities reception / supply from suppliers in the form of raw materials of food and beverages (food & beverages) as well as raw material non-food and beverage such as packaging. In the input phase there is also a plan of activity covering the planning process and inventory control as well as the source of activity that includes the supplier selection activities, evaluating the performance of suppliers, scheduling delivery from suppliers, receiving, checking, and make a payment to the supplier. The process of the raw material processing activities / materials (food & beverages) is to be processed into foods and beverages to be consumed by consumers. In the process phase there is also a

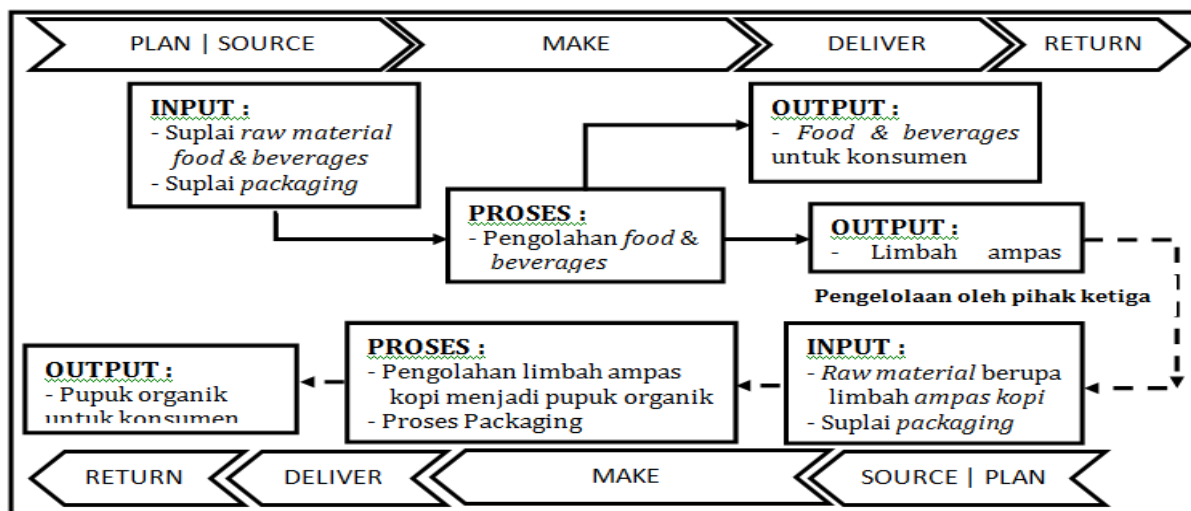
make-activity which includes the process of transforming raw material / materials into products that customers wanted. Output of the food and drink that has been generated will be ready for consumption by the final consumer. In the phase of the output is also contained deliver activities that include process to meet the demand for these products in terms of food and beverage customers want. Not only that, the output generated by the production process also includes waste or waste generated during the production process. In this study the waste generated in the form of coffee grounds, because this research focuses on industrial café / coffee shop that has a core product of coffee-based drinks.

**Potential Number of Coffee Dregs**

Based on the observation of several café / coffee shop in Surabaya it can be obtained some information that there is a potential amount of waste in the form of coffee dregs of 1-2 kg / day / outlet. This amount, if calculated on the period of 1 month assuming 25 working days, can be obtained potential waste coffee grounds of 25-50 kg / month / outlet, in order to obtain information that the total amount of potential waste coffee grounds produced by 69 outlets café / coffee shop were still active in Surabaya amounted to 1725 - 3450 kg / month.

**Plan for Waste Management in Reverse Logistics of Coffee Dregs**

The number of potential coffee grounds are thrown away in vain by the café / coffee shop in Surabaya for 1725 - 3450 kg / month as well as the availability of several options in conducting the processing of waste in the form of coffee grounds that are not worth to be a new product, making it as the basis of the research in determining design of reverse logistics on the management of waste coffee grounds to be considered as a new business. Later on it will be explained about the proposed design of reverse logistics activities on the management of waste coffee grounds in order to create economic value in the supply chain process industries café / coffee shop in Surabaya as shown in Figure 5 below.



Note: **→** Forward logistics activities  
**- →** Reverse logistics activities

**Figure 5 The Plan for Waste Management in Reverse Logistics of Coffee Dregs**

In the figure-5 it can be seen that the proposed design of reverse logistics activities focuses on the process of managing waste coffee grounds obtained by collecting coffee grounds that have been discarded by the café / coffee shop by a third party, in this case the researchers. The plan of reverse logistics proposal is intended to provide an overview of new business opportunities for

third-party / parties other than the manager of the café / coffee shop that can do the coffee grounds waste management to be processed into a new product which has more value.

The activities of reverse logistics on the management of waste coffee grounds produced by the café / coffee shop in Surabaya begins since the process of making coffee grounds in fact be the final activity (output) in the scheme of supply chain based on forward logistics that has been applied by the managers of the café / coffee shop. In this phase there is also a return activity that is the process of receiving product returns of the generated café / coffee shop that waste coffee grounds itself. This is in contrast with the scheme forward logistics supply chain where the process stopped until the output stage in this case the disposal of waste. Waste in the form of coffee grounds into a major raw material input to the process of reverse logistics activities. Not only the collection of waste in the form of coffee grounds into the main raw material, the input process is also carried out other activities that the supply of goods into raw material support such as packaging used to package new products such as organic fertilizer. In phase of input there is also a plan of activity covering the planning process inventory source coffee grounds and activities that include the distribution process at the time of collection activity coffee grounds. Not only that, the input phase there is also a supplier selection activities, evaluating the performance of suppliers, scheduling delivery from suppliers, receiving, checking, and making payments to suppliers who provide material support.

The management activities of waste is continuing to the next stage which is the processing activity the waste of coffee grounds to be processed becoming organic fertilizer, which at this stage of processing is divided into two main activities namely, the process of drying the coffee grounds and the packaging process is done so that the organic fertilizer to be distributed to the consumer has a special attraction in addition to show the benefits that can be provided from the organic fertilizer for plant growth. In this phase there is also a make-activity which includes the process of transformation of raw materials / materials into new products resulting from such waste coffee grounds.

The final stage of the supply chain process based on reverse logistics is the output process, wherein the organic fertilizer packaged together and ready to be distributed to consumers. In output phase there are also activities that include the delivery process to meet consumer demand for organic fertilizer products itself, and there was activity returns if there are defects in the production process.

Through this study, the researchers also wanted to illustrate the potential market that can serve as a primary target users of organic fertilizer products that are made from the coffee grounds, as will be described in the following sub - chapter.

### **Economic Value Of Reverse Logistics Activities On Coffee Waste Management and Coffee Utilization Being Organic Fertilizer To Support Urban Farming**

Based on the results of the triangulation between researchers, can be obtained information that the coffee ground is an organic fertilizer that is economical and environmentally friendly. Spent coffee grounds contain 2.28% nitrogen, 0.06% phosphorus, and 0.6% potassium. Slightly, the acidic pH of coffee grounds is ranging from 6.2 on the pH scale. In addition, the coffee grounds containing magnesium, sulfur and calcium that is useful for plant growth (Adikasari, 2012). The study uses hydroponic tomato plant through the media as an object of research. Hydroponic planting medium is a way of farming without the use of soil media that is currently prevalent in the area of agricultural that has minimum/limited land, especially in urban areas in Indonesia.

Alongside with the development of science and technology, in urban areas there are many farms and plantations were converted into industrial areas, warehousing, as well as housing. This resulted in an increasingly narrow agricultural land and plantations in Indonesia, whereas when viewed in terms of economics, agriculture and plantations can help people in increasing their income. Moreover, farming is a concrete effort that can be done to prevent global warming.

Through this research also can be obtained information that the city of Surabaya is a city with a population that has considerable enthusiasm in doing farming activities, or better known as the urban farming trend. Urban farming is one of solutions development of agriculture sector due to limited land is being aggressively promoted by the government through the Department of Agriculture Surabaya Surabaya. As revealed by Mr. Djoestamadji, Head of Agriculture of Surabaya in articles on [www.antarajatim.com](http://www.antarajatim.com) in July 2015 edition, urban farming is one solution that can be applied in view of the limited farmland and plantations located in Surabaya.

One form of implementation of urban farming is to conduct farming activities using hydroponic media. Hydroponic systems are using water main elements and complementary elements in the form of bricks, gravel, or other solid material. One of the pioneers in the development of urban farming in Surabaya is Hydroponics Community Surabaya (SHC). In this study, researchers conducted observations and interviews to explore more about the market potential of the organic fertilizer made from coffee grounds and triangulate the source of that performed on the PR Community Hydroponics Surabaya with an informant named Mrs. Fananah Firdausi located in Green House Puspa Agro Jl Sawunggaling 177-183, Jemundo (Kletek), Taman, Sidoarjo, East Java, Indonesia. Based on observations and interviews, information was obtained that the plants grown using the medium of hydroponics has the advantage of ease of cultivation methods, cheapening the costs involved, and the resulting product is healthier for the body because the plants grown with media hydroponic free of pesticides, fungicides, and insecticide.

Currently, Community Hydroponics Surabaya has a membership of some 19 thousand people and has business potential form the vegetable market that has much in demand at home and abroad. This is consistent with the statement of the Chairman of Farmers' Cooperative Hydroponics East Java, Mr. Yoso Susrianto in an article published in the daily Surya Online edition of March 2015 stating that there is a potential demand of up to 1 ton of vegetables every month to be able to meet demand needs in vegetables both at home and abroad. To perform the calculation of economic value that can be obtained through reverse logistics activities on the management of waste coffee grounds, researchers refer to research conducted by Hidayat et al. (2012). These studies use Hayami method adapted and developed in accordance with the characteristics of agro-industrial supply chain of palm oil, and eliminate the weaknesses that exist in the method. A modification made is the basis for calculating using the value of money, no more weight materials and products. Using the methods detailed Hayami can generate potential economic value and add value for businesses, especially coffee and also create new business models coffee waste utilization, especially for creating useful economic activities like small bintis creative actors. Hayami calculation method provides results in the form of information that the coffee grounds that initially has no value or an added value ratios of 0%, it can be increased until reaching added value ratio of 57%. This represents an added value to be gained if we are able to process the coffee grounds are not worth into a new product that has more benefits.

## **Conclusion**

Based on the analysis through interviews with informants who became manager of the café /coffee shop in Surabaya, literature review on the concept of reverse logistics on the management of waste coffee grounds, as well as the results of triangulation can be concluded that in general, the supply chain process in the café / coffee shop in Surabaya still refers to a forward logistics system that focuses on activities such as: the supply of raw materials by suppliers to the process of providing food and beverages to final consumers and stop the waste disposal activities remainder of production.

Business café / coffee shop in Surabaya do not make the effort management of waste in the form of coffee grounds to be processed into new products that can provide economic value. Obstacles faced by the manager of the café / coffee shop in Surabaya in managing their waste independently among others, is the limited amount of coffee grounds waste generated for each

cafe, limited to time and human resources that willing to conduct utilization of waste coffee grounds. Through the concept of reverse logistics, waste coffee grounds are thrown away in vain by the café / coffee shop in Surabaya which can be utilized as an organic fertilizer that is economical and environmentally friendly, and can act as an enhancer of nutrients for plant growth.

This study provides an overview of the new business opportunities in relation to the management of waste coffee grounds to make a profit by creating a new product that is organic fertilizer that has more value, as well as supporting the creation of the concept of the triple bottom line of a business. This research is only done until the design phase reverse logistics, so it is advisable to be able to proceed with further research, by expanding the scope of the study so that the results can be generalized to create reverse logistics implementation that can later be used properly by operators.

The practical implications for small entrepreneurs should be able to act in a creative and innovative way in creating new business opportunities, especially on the management of waste generated by businesses themselves, given the current business operators should not only focus on the acquisition of profit alone, but also needed cooperation between the various parties to create the concept of environmentally friendly for the companies that support the creation of the concept of the triple bottom line of a business.

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## MAPPING THE TERRAIN; THE INDONESIAN BUSINESS PERSPECTIVE IN ASEAN ECONOMIC COMMUNITY

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### Abstract

The ASEAN Economic Community (AEC) has been implemented throughout the ten ASEAN members. On one hand, the preparation seems to be an issue of readiness, and on the other hand, many of the practitioners are expecting that changes of business environment will change. This study focusses on related institutions that will be affected by AEC project. By employing institutional logics offered by Thornton, Ocasio, and Lounsbury (2012), the study scrutinise on academics and business practitioners as institutions and the cultural context embedded within. A mixed method of newspaper data analysis and semi-structured interviews were utilised in order to get a comprehensive data from both sources. The finding suggests there is a definite gap of orientation between business practitioner and the academics and that the two institutions have less information and contribution, compared with government and association ones. This study concludes that more participation is needed from both institutions, which are currently being 'victimised' from the project and is less communicated.

**Keywords:** *ASEAN Economic Community, Institutional Logics, Indonesian Business*

### Introduction

December 31<sup>st</sup>, 2015 marked the implementation ASEAN economic community (AEC); all 10 nations bound together in the ASEAN region will be expected to implement and harmonise their economic and trading regimes. As stipulated in the Bali Concord II blueprint, the economic integration constitute 'a stable, prosperous and highly competitive ASEAN economic region in which there is a free flow of goods, services and investments, a freer flow of capital, equitable economic development and reduced poverty and socio-economics disparities' (ASEAN, 2007). AEC is essentially a process of singularising market and production within the region into larger market place (Soesastro, 2008). The intention is to fulfil regional consumption needs, while offering wider opportunity to market easily within ASEAN countries. One of the attempts is the removal of trading barriers such as customs, taxes, for goods, services and investment. As a consequence, some 591 million people around the region will be effected through an attempt to remove trade barriers and strengthen close cooperation amongst the ASEAN member countries.

The economic integration, that was prepared since its establishment of agreement in 2003, is considered as 'ambitious and sophisticated initiative of its kind' (Jones, 2015; Petri, Plummer, & Zhai, 2012). The initiative began after the ASEAN foreign trade agreement in 1993 was considered a slow progress in terms of implementation and commitments from the members (Ravenhill, 2008). Moreover, Soesastro (2008) also argue that the nature of ASEAN integration has been a voluntarily action. In the past, the regional cooperation between these nations were constituted on a dynamic process, which was left open-ended and slow-progressed. However, the AEC blueprint, which was established on November 2007, is expected to booster the implementation process.

Another obstacle to face the AEC is the clarity of blueprint. Ravenhill (2008) argues that

the blueprint document contains a well-meaning phrase but lacking of specificity regarding realisation of objectives. In other words, there is a wide gap and unclear meanings from the blueprint against what should be done. He suggests that based from McKinsey's report, the ASEAN member should provide a standardisation and harmonisation of barriers removal and taxation systems, competition principles, and product standards. This involves harmonisation of domestic goods, investors and labour standards.

AEC is an initiative that enforces the members to open their markets and allow free-barrier intra- transactions. However, the harmonisation of free-trade area is not an easy task. There are at least two obstacles facing the integration. First, the liberalisation of intra-ASEAN trade has not been of 'sufficient significance to warrant their expending substantial resources to lobby for deeper integration' (Ravenhill, 2008, p. 482). Moreover, the diversity of tariff dispersion rates is high and vary (Plummer, 2006). This hinder the fact that harmonisation can take decades to happen. In this case, it is a matter of how the executives and leaders of each nation committed to the campaign of such integration. The issue of 'political will' has been a classic excuse as to which commitment and execution are addressed to the higher level of authority. Second, trading between ASEAN members are in a relatively small number. Ravenhill (2008) argues that although the trade inflow to ASEAN has been stable throughout 40 years, the proportion of intra- regional trade amongst the member is one quarter of all of ASEAN's trade. Hence, there is a strong refusal to changes as far as business and political interests are concerned. Unfortunately, a number of issue hinders the process of fundamental change in terms of economic, social, and cultural. The issue of infrastructure and business readiness in the Indonesian businesses support this argument, which eventually impact the free flow of goods and services, as well as the freedom to operate across the region (Benny, Yean, & Ramli, 2015). Specifically, the Indonesian businesses fear on the implementation of AEC, where most of the obstacles faced domestically by micro, small and medium enterprises are infrastructure bottlenecks, credit shortages, limited skilled workers and corruption in red tape customs (Rüland, 2016). On the other hand, some countries such as Singapore and Malaysia are on their visible preparations to harmonize economic policies in accordance with what has been agreed in the Bali Concord in 2003.

A number of studies acknowledge the implication of AEC in the region, as well as to overview in a macro-economic level (Hew & Soesastro, 2003; Soesastro, 2003, 2008), but few studies scrutinise micro- level of analysis in a particular nation. Moreover, numerous research in ASEAN integration and regionalisation are done by employing political economic approach (Jones, 2015; Sukma, 2014), while little found in adapting institutional theory as an alternate insight. To some extent, few exposure and preparation on each of the ASEAN nations are prepared, at least from the business point of view. Less information and socialisation is made throughout the campaign, and there is limited action produced by government as regulator to enhance the merging of one- market economy in the region (Perwita, 2015). It is imperative to determine the level of readiness to implement such new policy and to what extent the ASEAN nations provide such formulation and strategic planning towards AEC. Such study reminds us on the fact that rational study of economics must also be understood by a non-rational approach from the sociological point of view. As Granovetter (1985) suggested, the importance of understanding embeddedness of social behaviour is imperative, in conjunction to rational-economic perspective. Hence, this study attempts to investigate current obstacles through scrutinising the three level of institutional analysis, faced by one of the ASEAN country that hinder the readiness to adopt AEC.

An institutional understanding of a society is, thus, imperative to undergo this study. Institutional logics, as proposed by Thornton et al. (2012) is a comprehensive framework to elaborate micro-, meso-, and macro-level of a society in which institutions are comprehended in a structural mannered. By allowing a reconstruction of identities of institutions based on logics and situated practices in Indonesia, it is expected that this study enable to scrutinise the fundamental

setback, both internally and externally. With over 250 million of population and more than 17,000 islands spread across the archipelago, Indonesia has a great potential in the success of the AEC. In addition, following Rüländ (2016) argument that the majority of Indonesian businesses have less participation to regional decision making in AEC implementation, this study starts with a question, 'How is the perceived logic of the Indonesian institutions to face AEC?' The following sections are institutional logic framework, followed by research method, findings, and conclusion.

*Institutional integration of a region; a comparison between the European Union (EU) and AEC*

AEC can be defined as an attempt of economic unification of the region towards a single-market liberalisation. As a consequence, such integration involves integration and reconstruction of social interaction throughout the region. The extent to which cultural, norms, and business environment are materialised and that are affected by such integration. Studies in politics, public policies, and social sciences confirm that institutional changes exist in the integration process, both socially and economically. According to Perkmann (2002), the EU (or his term: Euroregions) has becoming an institution, due to the fact that the post-war history of European process of institution-building within the specific context of the European polity. Secondly, I argue that this institutionalization of the Euroregion can be attributed to the long-term activities of a trans-European policy network. The strategies and actions of the latter can thus be characterized as institutional entrepreneurship.

Plummer (2006, p. 3) describes three primary motivations for economic integration in European continent: (i) to avoid wars of such magnitude, destruction, and loss of life; (ii) to draw markets and resources together for economic and social reconstruction; and (iii) to build a strong, integrated region as a safeguard against the Soviet Union. Consequently, after the establishment of Treaty of Paris in 1951 of the European Coal and Steel Community (ECSC), the European Economic Community (EEC) was formed in 1957 by the Treaty of Rome. The initial aim of this community was to integrate economy, which consist of common market and common union amongst six members: Belgium, France, Luxemburg, Italy, the Netherlands, and West Germany. Hence, these members allow free goods, services, capital, and labour movement.

The development of EU has developed a new social construction within the continent. Risse (2004) argues that there was a degree of dispute and changes of the European identity that affect each nationalism. This also includes cultural variables such as ethnic groups and collective norms of Europe. Nevertheless, national identity and nation's pride remained challenge to integration process, in which some arguably defined 'no European people' and 'no common European history'. It was thus becoming a burden that European Union became a difficult institutional change throughout the region.

However, based on Perkmann (2002) analysis of institutional change, there is one important element to explicate the integration: the theory of policy networks and policy analysis. Political factor has crucial impact to EU, in which policy makers such as Council of Europe and the European Commission promoted supranational policy. Although the two agencies proved to have weak formal position towards the people, the policy networks enable to incorporate policy makers and the freedom of social changes. Furthermore, Perkmann (2002, p. 126) suggests the construction of institutional framework in the EU as follow:

- a) the institution: The Euroregion is a blue-print for organizing public cross-border intervention, 'invented' in the fifties in the Dutch-German border area
- b) the organizational field: a supranational policy field, EU regional policy, provided the transmission mechanism for the proliferation of Euroregions, that is, their effective institutionalization across the EU and beyond.
- c) the institutional entrepreneur: a transnational policy network in the area of Cross-border Cooperation (CBC) has been crucial for advancing the interests of border authorities on both the national and supranational level in Europe over the last decades, thereby contributing to

the institutionalization of the Euroregion as a legitimate model of public agency.

In contrast, the AEC may be interpreted differently as far as the social interaction is concerned. Studies focus on institutionalised regionalism and its impact to social aspects within the ASEAN region. There also has been strong arguments that ASEAN, as one 'micro' institution, is required to restructure its institutional structure in order to strengthen its members to rely on regional institutions and reduce the domination on nation's sovereignty (Sukma, 2014). Another study by Benny et al. (2015), investigate the extent of public attitudes and aspirations towards AEC from three countries: Malaysia, Indonesia and Singapore. The study shows that although there is a positive sign from the public, the aspiration from these countries differ from those of the EU. Most of the respondents reject features offered by EU, such as common currency, the abolition of passports, the establishment of ASEAN parliament, a stronger executive body, and ASEAN Court of Justice (Benny et al., 2015, p. 105). Other studies by Plummer (2006) suggests that the historical and environmental setting of integration is different from the EU. As described above, the spirit toward EU derives from the devastating memory of the WW2 and the emerging cold war tension against the Soviet Union, whereas AEC stems from geographical proximity and cultural similarity. Hence, the macro- institutional factor can also be perceived differently with AEC. Moreover, ASEAN economic development has more diverse in terms of its members income. Another difference is that at the time of its integration, the EU was dominated by developed countries, whereas ASEAN consists of developing ones (only Singapore and Malaysia are considered developed). There is a high possibility that of complex and difficult process in integrating the ASEAN region compared with EU. This is why many argues that the AEC is considered an 'ambitious' effort (Jones, 2015; Petri et al., 2012).

These studies indicate that the both integration of an economic unity produce different social construction and interaction. The extent to which institutional change occur in different direction, as opposed to EU, has led this study to scrutinise the impact of AEC integration to social environment. A preposition of logics would highly be the outcome of this research, and hence, institutional logics determine the reconstruction of social institutions in a specific setting such as Indonesia, and how these institutions impact the business environment.

#### *Institutional Logics as a tool to understand socio-cultural environment.*

In a country with multi-ethnic, religion, and islands, analysing an Indonesian society may require thorough investigation from a multiple perspective angle. Studies on contemporary institutions confirm that in order to understand a particular society, one must acknowledge the importance of social construction; the relationship of an actor and his/her surroundings (Jepperson, 1991). Individual, as the smallest institution, enable to perform self-activation in social environment and produce a social pattern is in accordance to the values, norms, and cultural symbols embedded in that society (Thornton et al., 2012). By definition, Institutional logic is a socially constructed, historical pattern of material practices, assumptions, values, beliefs, and rules by which individuals produce and reproduce their material subsistence, organize time and space, and provide meaning to their social reality (Lok, 2010; Thornton & Ocasio, 1999).

In an expected 'AEC institutional environment' faced by the Indonesian business society, institutional logic has recently been a useful framework to elaborate socio-cultural interaction in a specific environment. There is a strong indication that regional integration result institutional changes, in which studies have been scrutinising the development by constructivism (Risse, 2004) and of political and economic approaches (Duina, 2006). Other studies in institutional regionalism (Rattanasevee, 2014) and institutional changes in ASEAN (Sukma, 2014) suggest an institutional constructivism in order to strengthen the role of ASEAN to its members. Scholars have been employing the logics in various disciplines on institutional behaviours, such as sociology, psychology, and management sciences (Thornton et al., 2012), which eventually enrich the holistic view of the Indonesian institution subsequent to AEC. Hence, this study offers

factors influencing business practitioners as ‘actor’ in meso- and macro institutions (Thornton & Ocasio, 1999), but also other perspectives offered by Associations, Academicians and Government officials. As such, based on Thornton and Ocasio (2008), the mechanism of institutional logics constructions incorporates two principles:

1. Embedded agency

Institutional logic assumes that interests, identities, values, and assumptions of individuals and organisations are embedded within an institution (Thornton & Ocasio, 2008). An institution is purposed to become the boundary of opportunities and constraints. It is imperative to consider an ‘actor’ as the individually central expression in order to explicate an inductive construction of symbolic culture and practices (Meyer & Höllerer, 2010; Thornton, 2004).

2. Society as an inter-institutional system

The involvement of society is one important factor in institutional logic. Derived from Friedland and Alford (1991) concept of society as marketplace, there are numbers of social constructions developed based on the setting of actor. The development of such constructions is made based from different substantive context in the field in which the actor is located (Thornton, 2015). Thornton (2004) suggests six typologies of society: markets, corporations, professions, states, families, and religious, while Meyer and Höllerer (2010) construct eight frames namely market, stakeholders, labor vs capitalgood entrepreneur, valuation method, synthesis, noneconomic values, and ambiguous. These typologies of society represent a unique characterisation of agencies within societies, which represent a different set of social relations and behaviours. The represented logics can be derived from sources of heterogeneity and agency that caused by contradiction of different institutional orders. In addition, the institutional logics approach posits any context that constitutes contradiction from different societal sectors, rather than emphasise on isomorphism and homogeneity in organisational fields (Thornton & Ocasio, 2008). An example of institutional order is shown in table 1.

Institutional logics offers multiple levels of analysis that enable researcher to observe individual behaviour and consciousness based from the level that individual is ‘nested’ (Friedland & Alford, 1991). These levels can be organisation, markets, industries, inter-organisational networks, geographic communities, and organisational fields (Thornton & Ocasio, 2008). In general, the multiple levels can be classified as three types: Macro, Meso, and Micro levels. The Macro-Societal level consists of the community logic that contributes to the inter-institutional system; the Meso represents the organisational level, and; the micro level emphasises on individual logic. As mentioned earlier the three levels do not individually stand on their own, but rather as an inter-institutional system that correlates closely and generates logics within the organisation. Based on Thornton (2004) interinstitutional system ideal types, this study attempts to construct the institutional orders and the categorical manifestation of individuals and organisations in the Indonesian business context. Provided as a Western-type of institutional, the logics posit a socio-structural composition that consist of Family, Community, Religion, State, Market, Profession, and Corporation. Table 1 defines a complete institutions of an ideal society, which represents categories on how individuals and organisations are likely to understand their sense of self and identity: who they are, their logics of action, how they act, their vocabularies of motive, and what language is salient (Thornton et al., 2012). The category consists of root metaphors, sources of legitimacy, identity, norms, and authority.

In defining institutional legitimacy, Rüländ (2016) conducts a study that observe the regional interest representation of the ASEAN regional decision making, namely non-participatory regional organisation, state-corporatist arrangements, liberal-corporatist institution, and liberal pluralism. These categories are based a degree of participatory settings that either state-controlled or functional cooperation. This study, on the other hand, offers

an exploration of context, where the Indonesian behaviours, cultural symbols, and organisational field practices, fall under the level of institutional logics. Although one suggests the that institutions such as government agencies, sectoral bodies, business associations and civil society will emerge the related ‘institutional orders’ in AEC (Soesastro, 2008), the study allows institutional contradiction and contestation in logics (Thornton, 2015) and transition reconstructed from the data findings. This ensures the current logics experienced by the Indonesian business practitioners, as well as regulators and academicians.

**Table 1. Institutional Logics Framework**

Y-Axis	X-Axis: Institutional orders						
Categories	Family 1	Community 2	Religion 3	State 4	Market 5	Profession 6	Corporation 7
Root Metaphor 1	Family as firm	Common boundary	Temple as bank	State as redistribution mechanism	Transaction	Profession as relational network	Corporation as hierarchy
Sources of Legitimacy 2	Unconditional loyalty	Unity of will Belief in trust & Reciprocity	Importance of faith & sacredness in economy &	Democratic participation	Share price	Personal expertise	et position of firm
Sources of Authority 3	Patriarchal domination	Commitment to community values & ideology	Priesthood charisma	Bureaucratic domination	Shareholder activism	Professional association	Board of directors Top management
Sources of Identity 4	Family reputation	Emotional connection ego-satisfaction & reputation	Association with deities	cial & Economy class	Faceless	Association with quality of craft - Personal reputation	Bureaucratic roles
Basis of Norms 5	Membership in household	Group membership	Membership in congregation	Citizenship in nation	Self-interest	embership in guild & association	Employment in firm
Basis of Attention 6	Status in household	onal investment in group	Relation to supernatural	tatus of interest group	Status in market	Status in profession	Status in hierarchy
Basis of Strategy 7	rease family honor	Increase status & honor of members & Practices	Increase religious symbolism of natural events	rease community good	rease proficiency profit	increase personal reputation	Increase size & diversification of firm
Informal Control Mechanism 8	Family politics	Visibility of actions	Worship of calling	Backroom politics	Industry analysis	Celebrity professionals	Organisation culture
Economic system 9	Family capitalism	Cooperative capitalism	Occidental capitalism	Welfare capitalism	Market capitalism	Personal capitalism	Managerial capitalism

Source: Thornton et al. (2012)

## Methodology

This study complements the use of content analysis and interview analysis in order to construct meanings and sense-making from two different method. The construction of meaning involves interpreting and understanding a set of document and interview transcription, until establishing a concept of thoughts, ideas, and phenomena (Weick, 1995). Following Meyer and Höllerer (2010) the analysis are constructed to explore a “topographic map” of meaning and assisted the making sense of the structured configurations observed.

In a qualitative approach, with interpretivism methodology, the first step is perform document analysis, where the researchers analyse documents originates from online newspapers, magazines, and articles related to AEC and its preparation in Indonesia. There is a growing trend in this method, which enable to capture information generated from people’s behaviour and interests through newspaper text mining (Cheney, 2013). Hence, this method is considered appropriate, giving the fact that text mining enable to reveal sense making through meaning that is contested and negotiated amongst sources, which consequently construct a structured ‘social space with specific logics and characteristics’ (Lok, 2010; Meyer & Höllerer, 2010). In order to present a holistic view of the current issues, the observed documents were taken from three different articles that originates from different languages and domiciles. They are *liputan6.com* (an Indonesian-based news in *bahasa Indonesia*), *the Jakarta Globe* (an Indonesian-based news

in English), and *Channel News Asia* (an international news) from year 2013 – 2016. This method is considered important to the study, in order to gain elicited meaning, gain understanding, and develop empirical knowledge to a particular environment (Corbin & Strauss, 2008). There are reasons of employing document analysis to this study. Firstly, the extent to which AEC phenomenon in Indonesia is relatively new and hence, there is a need to explore further on the new changes of economic integrity. This approach is used by Vaismoradi, Turunen, and Bondas (2013) to identify sensitive phenomena, and to explore unknown phenomenon in a specific setting. Secondly, document analysis is also used to describe missing context, and “possibly finding theme based on frequency of occurrence, division of manifest and latent contents, and non-linear analysis process” (Vaismoradi et al., 2013, p. 399). There is a necessity to explore an in-depth understanding of changes in business process, which will be affected after the implementation of AEC in Indonesia. Thus, document analysis is suitable for this study.

The analysis was based on two framing of interpretation: positive and a negative orientation. Consequently, the documents were analysed sentence by sentence to discover a phenomenon. Similar method of article analysis was performed by Lok (2010) and Meyer and Höllerer (2010) in order to reveal such connotation from the newspaper coverage.

The second step was to undergo interview session, which involves people who are expected to be impacted by AEC. Based from the document analysis from the newspaper coverage, there were for main institutions that were actively commented on the readiness of AEC, namely Business practitioners, Government officials, Associations, and Academics. A semi-structured interview was conducted in order to retrieve a flexible, but related theme to each of the interviewers. The two steps of data collection then were analysed in order to produce coding and to identify the pattern of understanding. It is imperative that these understanding enable to construct prevalent meaning in a particular social field, as well as to capture the sociopolitical environment within the system (Meyer & Höllerer, 2010). Iteration process is needed to gain more understanding, sense-making, and construction of meaning throughout each process. This involves data collection, data reduction, display, and conclusion drawing, which are considered as a cyclical process (Miles & Huberman, 1994). The findings are expected to produce coding and appropriate themes that summoned from the transcription and document analysis.

## Findings

The first step of document analysis was conducted from January until May 2016, which involved 174 online newspaper articles. This consists of 103 Indonesian articles in *Bahasa*, 64 of Indonesian-based newspaper in English, and 7 non-Indonesian-based newspapers in English. The reason to have three different types of newspapers is due to obtain fair and balanced information from national and international perspectives, while gaining fruitful information regarding the AEC and its preparation within the nation. The articles were analysed based on the type sources interviewed by the reporter, and the content orientation towards AEC. The first reflects four institutions (shown on table 2), whereas the latter indicates the positive or negative comments from the sources (Table 3). The type of sources was counted based of the persons who were interviewed by the news, despite having more than one coverage in one article.

**Table 2. Source of Newspaper coverage**

Government/regulator	Association	Practitioner	Academic
106	49	40	6

Based from table 2, the finding shows that the majority of coverage involves government officials, with 106 comments, followed by 49 comments from the association, and 40 comments from the practitioners. Only 6 comments produced by Academics. This analysis shows that the government is imposing the AEC program intensively to the public, while the association supports such promotion. The analysis also business practitioners, with 40 sentences derived

from the business perspective. The regulators and academics seem have less contribution to the AEC perspective.

**Table 3. Orientation of comments from Newspapers**

<b>Comment towards</b>	<b>%</b>	<b>Implemented Action &amp; Strategic Program</b>	<b>%</b>	<b>Casual Comment or Review</b>	<b>Re%</b>	
<b>Advise/Planned activities</b>	136	35.79%	53	13.95%	109	28.68%
<b>Positive orientation</b>						
<b>Negative orientation</b>					82	21.58%

Table 3 shows the orientation towards AEC program, which divides into three categories of positive and negative comments: Comment towards advise/planned activities, implemented action & strategic program, and casual comment or review. These categories represent all five sources in table 2. The first category; comment towards advise/planned, means phrases or sentences that supports advisory and suggested content of AEC. The second category reflects phrases of ‘real’ implementation, executions, and strategic decision for AEC program, while casual comment is for those sentences that do not profound any essential connotation towards AEC.

The finding suggests that the majority of comments favours positive orientation toward AEC program, which consists of 136 sentences of planned activities, 109 casual comments, and 53 on strategic program and actions. On the other hand, only 82 casual comments reflect negative connotation towards AEC, and none from either planned nor action activities. This also suggests that more than 35% of the content are subject to planned activities, while only 13.95% represents program implementation. Hence, the descriptive statistic, as a preliminary finding, shows that the implementation of AEC in Indonesia has not shown a significant implementation towards execution and strategic decision making. Interestingly, only 82 sentences or 21.58% of the overall finding shows negative phrases, such as apathetic, pessimistic, or scepticism on AEC impact to Indonesia. In addition, table 4 provides the six most frequent expression or understanding, both on positive and negative orientation towards AEC.

**Table 4. Summary of Orientation Statements**

<b>Positive orientation</b>	<b>Negative orientation</b>
AEC is an integrated economy in Southeast Asia	Indonesian economic is not ready
Indonesian market has the greatest potential in Southeast Asia	The stability of economy and sociopolitics is questionable
There is an optimistic spirit towards AEC	Local production will be competed
10% of SMEs would fully harness and utilize digital methods in the next 5 years	Incompetent human and natural resource management
Indonesia would likely serve as a ‘market’ in AEC	Certification is only a discourse
AEC should serve as an opportunity for Indonesia to improve firms’ performance and expand beyond Indonesia	Import exceeds exports



The second step involves in-depth interviews to executives from business practitioners and academics. Each group discussion was given an introductory short animation film about AEC in order to provide the atmosphere of the content. The next session was to give the above orientation statements to the group, in which they have to comment based on their understanding on each of the statements. Expression of feeling and thoughts on each group are important for this study, in order to grasp the area of interests and ambiance that underpins the group. The ideal types of institutions vary across setting and thus it reflects different material symbols and practices within a society (Friedland & Alford, 1991). Therefore, the study proposes four institutional logics that derive from the finding, shown in Table 5.

**Table 5. Proposed Ideal Types Institution**

<b>Categories</b>	<i>Academics</i>	<i>Business Practitioners</i>	<i>Association</i>	<i>Government</i>
<b>Root Metaphor</b>	Teacher as nurturer	Core Survival	Communicator	Redistribution Mechanism
<b>Sources of Legitimacy</b>	Academic Qualification Research freedom	Consumer needs	Community Trustworthy	Democratic participation
<b>Sources of Authority</b>	University stakeholders	Ministry of trade & Industry	Commitment to Association Values	Bureaucratic domination
<b>Sources of Identity</b>	Educator to be educated	Business Plan & Ideas	Genuine Reputation Association	Social & Economic class
<b>Basis of Norms</b>	Developing People	Self-Driven motivation	Group Membership	Citizenship membership

Under the Academics institution, the role of academics is heavily influenced by the reputation of his/her expertise and the nature of developing people as basis of norms. Moreover, the fundamental of academic logic is derived from the quest for fundamental knowledge, research freedom, rewards in the form of peer recognition, and open disclosure of research results (Sauermann & Stephan, 2013). Based on the table, it is suggested that academics, as institution, has an important role to educate people, and equip themselves with sufficient knowledge and trainings.

The business practitioner’s institution, on the other hand, represents a pool of entrepreneurs who is closely related to ‘commercial logic’ perspective. The construction logic is developed based on the finding and literatures on corporate and commercial behaviours. Such practices relate to bureaucratic control, restrictions on disclosure, private appropriation of financial returns, and orientation towards managerial capitalism (Sauermann & Stephan, 2013; Thornton et al., 2012). As an entrepreneur, the fundamental concept of business relates closely to its metaphor of ‘core survival’, which inherent almost all profit-oriented business practitioners. The ‘Association’ is included in this research due to the fact this institution contributes closely to the successful of the ASEAN integration. It may seem that the association is a medium of institution for a direct access to the government, in terms of communicating a set of group’s proposition towards AEC. In this case, association is converted from the function of ‘community’ in the ideal institutional orders. Moreover, this paper offers a set of institutions that are highly involves in the discussion of AEC from the newspapers.

In relation to academic institution findings, researchers found that there are four main areas that academician's opinion is strongly focusing in its general macro implication/perspective, implementation, and micro perspective of AEC. The finding below shows some opinions of academics relating to their knowledge in AEC. The notion of an academic is a person who nurtures and develop individuals somehow demonstrates otherwise. Some comments express similar perception in these issues.

*Academics as an institution*

The finding of the academics started with a general knowledge of Indonesia, where they expressed the demographic advantage of the country. In the AEC, generally Indonesia is one of the largest developing countries that is still growing, as its population of about 250 million people in a country with its rich oil and maritime types in natural resources. One academic shows his perspective.

“So, we are considering as the biggest market not the biggest probably, one of the biggest market in the world and knowing that our market is also very consumptive, therefore it forces other country like it or not to have their good partnership with Indonesia” (Academics, Male)

The academic expressed that Indonesia is one of the largest consumption community and it is attractive to other neighbouring countries like Singapore & Malaysia wanting to be Indonesian business partner in providing products and services. Thus, many SME are leveraging on the population “consumers” as their main business opportunity through online business.

“SME really join fully harness and utilize digital method, this will become the main economic driver. However one or another priority is actually integration from the economic to the global economic. Now the only platform business that can easily connect to global is basically online business”(Academics, Male)

Despite the convenience of global connectivity, Indonesian business growth seems to be flourishing with opportunities, unfortunately, is yet to be equipped with the know-how to be self-sustaining economic community as they are still dependent on some imports such as rice from Thailand.

“Yes, we do have more import than export to other countries but that's the consequences of developing countries like in Indonesia, we are still developing, and we have hundred or millions of people who also need lot of products and services meanwhile we don't have yet the capability to be self-sufficient, we have to import, that is the consequences. But we are going to the direction that probably like our president have mention that in the next 10 years, we are going to the direction to be self-sufficient in term of commodity, [such as] rice, sugar and everything. Yes, basic needs, something like that.”

However, it is now believed that with the current president, Indonesia is working towards the self-sustainable community will probably realised in 10 years to come.

In summary, most academics expresses the general AEC implication/perspective in Indonesia rather than its implementation itself as there is no clear academic (as an educator) perspective and positioning. Many of the comment is mainly focusing on economy and its sustainability. The Academics seems to enjoy discussing the general issues of AEC at a more general macro-level. The second issue discussed was the implementation towards AEC. According to this institution, this was not easily demonstrated in this heated discussion amongst fellow academics since the big question is “who is taking charge” of AEC implementation.

“Don't talk about the vision, we kenyang la [an expression of 'fed up'], focus on implementation. What is the gap and how are we going to solve that? [I mean the] Real gap. There is a gap, and the gap will always be the rule game: Procedures, detail procedures. Who is taking in charge of that?” (Academics, Male)

The academics realise that Indonesia is losing out due to the “unknown” rule and the know-how of this project. There is a level of frustrating to witness that the other neighbouring

country such as Malaysia is harvesting the market share by acquiring Indonesian's plantation companies. "Exactly. So okay, there is a pizza, go grab yourself. And people would be like okay, they never taste the pizza before, AEC never been here before. Those smart people from other countries like Malaysia for example they incorporate you see. If you do this then you can go here. That's why for example like the last ten years, they have been buying Indonesia's plantation company. Why are they expecting this? So they already move strategically." (Academics, Male)

The academic express their opinion of AEC has no leadership and priorities, a simple metaphor to compare where Indonesia stands in comparatively to developed neighbouring countries such as Malaysia.

"this presidency or this leader of the country, they have like limited like four years or five years turn. So they will focus only for four years or five on the administration and the ASEAN Economic Community. They never become the first priority of this activity, always like number four number five, not that prioritise. If those leaders don't prioritize that also, how can we believe that this will become reality, so more on that from that." (Academics, Male)

It does not help with the general presidency within this region usually stays only for four years in their tenure. With that, the president focus is usually within his/her administrative role and few is given in developing AEC project. Academics feel that implementation steps are taken lightly that we have no idea on how the implementation can take place in supporting the growth of AEC.

In terms of micro-perspective, the academics highlights that Indonesia government is protecting its businesses yet there were unclear with their regulations and that creates reluctance from foreign investors.

"Why bother discussing product competitiveness, when Indonesia [only] invites foreign investors with the tight entry requirement. That will deter away the possibilities of investment and development of the country itself." (Academics, Male)

Hence, the academic questions the politician priorities in the growth of AEC. This will not create confidence in the nation to follow through.

"Confidence needs to be emphasised if Indonesia want to develop its human resources. And then yes it is also need the human resources also need to have support from the government in terms of the certification. So the competencies need to be standardized. In what area you are good in, it has to be certified. What capability that you are expert in, it needs to be standardizes and certified something like that. And the certification has to be complied with global or international standard by acknowledgement means that we are there, we are equal, we have equal standard of competencies, we have equal standard of ability with other human resources from other country" (Academics, Female)

In summary to these quotations, academics briefly mention that there are some micro details that Indonesia government may need to consider developing its nation readiness for example product qualification/certification standards certification in order to commence "trust" in exporting trades implementation. However, on the hind sight, Indonesia does not open to foreign business trades so easily either as there is many barriers to entry requirement. Thus very little SME's plays a role in contributing to the AEC. To some extent, many of the content were discussing on the macro- level perspective and few discusses on the educational part, as well as the implementation towards people's development. Although some academics addressed the pillars of AEC and certification importance, the other fellow academics have little interests in developing such discussion into these areas.

#### *Business Practitioners as institution*

The other institution finding was within the business practitioner group. The finding suggests two major theme found in the discussion: Culture and adaptation. The former represents the notion that the Indonesian business practitioners are aware of the resistance to change within the society, whereas the latter constitutes the nature of adaptation towards change

due to AEC. In terms of cultural context, the business practitioners argue that cultural mind set is a fundamental perspective towards change, as many of the entrepreneurs have difficulties in changing their mind set to a more flexible manner. One comment expresses this matter:

“I think ... the culture is not ready yet, basically, [and] is not about the economy or the quality or the productivity, production. My point of view is the culture because we are so used to be lazy and we are more to collective people. That’s why one small restaurant can have 10, if we see at Chinese restaurant in Indonesia, they can have people standing around near the tables and basically is actually not comfortable.” (Entrepreneur, Male)

The notion of being ‘lazy’ may also be interpreted as the way in which the Indonesian are common to have many staff working within the same task, and by working collectively in a company. They prefer to have many people working around him/her, which may also be inefficiency from the company’s point of view. On the other hand, the ability to reduce the number of staff is considered ‘unnecessary’ or taboo to terminate a staff. Moreover, the tendency not to change situation is also supported by another entrepreneur:

“I feel that we won’t be able to be ready because we are afraid to change, maybe all of us are scared to change. But overall, we must make our move first, or let say, we just try” (Entrepreneur, Male)

There is a strong tendency that the entrepreneurs have difficulties understanding the situation of change, which results a behaviour of trial and error towards AEC. His expression of ‘we just try’ perceives as a ‘passive’ movement of how he has to run the business. An unclear guidance from the authority may have a contribution of such behaviour. Another similar expression supports this notion of uncertainty. “We are all taking about the same thing: mind set. The second is mental [of readiness]. These cultures what we are going to do. But we believe that the Indonesian middle class group is growing in terms of numbers and capital. Many young entrepreneurs are establishing, they were sent overseas to study, and come back with different mind-set. Overall, there no way except to jump in, otherwise we will be left behind. People will adapt.” (Entrepreneur, Male)

The word ‘adapt’ appears as soon as the expression was forced into a stage where the entrepreneur has no option except to change. To his knowledge, adaptation of change requires a great deal of effort, not only for his ability to run the business, but also throughout the entire company and staff.

Overall, the discussion from the business practitioner’s perspective, in this case the entrepreneurs, shows a common ground of discussion, in which the micro- level perspective is dominant. Nevertheless, the notion of ‘unclear’ and ‘unsure’ connotation remain strong within the topic, which also provide an idea that business practitioners expect of what might happen post-AEC implementation.

#### *‘Association’ as institution*

In general, association can be inferred as a group of society which has collate similar thoughts, goals, and interests. Association is considered as a socially constructed based on people’s interaction that underlies the formation of social institutions. In this case, the ‘association’ is similar to a community, as one institution, to scrutinise the interrelation between institutions which also represent as an interest representation. Moreover, Thornton et al. (2012) argue that the role of community sets out an understanding of local norms and rules that serve as a legitimate model of an organisational- field. There is a high degree of association involvement in terms of communicating messages the AEC project.

Within the Association there are few angles within the various perspectives simultaneously. In view of the economic perspective, should there be a ministry or ministries that can be represented in Jakarta itself in order to derive an angle of navigation keeping in mind on how did the European Union established and founded in Netherlands 1993, worked on incorporating

laws in trades and migration from seven different countries.

“So they would probably give you a better economic perspective. So we are going to be talking with lots of businesses, actually as we speak, I think Alex and Vina maybe finishing their meeting with our donors on this project. So, they will be talking to businesses, they will be talking to different ministries as well as different permanent representatives that are in here Jakarta to talk about, you know how Europeans would be able to navigate this cause this is something that we also try to navigate for our purpose as well, for our knowledge” (Association, Female) Apart from depending on ministries in providing AEC information, the NGO’s are feeling some “push” efforts campaigning AEC from the government, and even more when ASEAN Secretariat is located in the central of Jakarta itself.

“But from our standpoint as non-government organization, as NGO, as well as tink tank, we saw that there are so much being push by government but it was a bit, too little too late, meaning, in terms of preparedness and people hyped it up as a jargon meaning oh AEC AEC, but them really, not really putting it out there as to what it entails.” (Association, Female) Efforts in trying to gather information from the relevant government/ministries, the researcher finds that in this current society feeling “lost” as we were not provided with any information on AEC, how AEC assist the future economy in these 10 ASEAN countries, has the government prepare our future students with the readiness to enable them to work in a different environment, society/community and is our future generation is ready to take up the challenge.

“So, is very little information as to how AEC affect them? So questions that came to us as a center, whereby we distribute information on ASEAN as basically as a messenger, as often messenger. We were often asked by small medium enterprises by even businesses, how this will affect us. That continues to be the question and even until now, how would this affect us?” (Association, Male) During the researcher interview with the business practitioners, many SME/Entrepreneurs expressed their similar concerns in trying to grasp the understanding of the how AEC can and should work collaboratively with 10 different Asian countries however there is no right and wrong answer to this discussion as there were no information and confirmation from any regulated association entailing details of “the how”.

“To be honest, we also don’t know how thus far is affecting any businesses, whether there is anything positive, whether there is negative. But, we know that a lot of people are still asking that question. There is no clear guideline for example as to because you know is still businesses as usual.” (Business Practitioner, Male)

With this study researchers concluded even we as a society and economically we are ready for the challenge yet there were no direction, information and collaborative efforts from the government working at the macro- level to link us with business from other Asian countries. Although many SME are as it is working with businesses from other Asian or non-Asian countries in which covers the micro- level of trades and business. As it is there are many foreigners coming into Indonesia just for business purpose and hence that has demonstrated that we are aware of the resources and expertise that each Asian countries are already providing.

## Discussion and Conclusion

The purpose of this study is to extend further understanding of the ideal type of institution deriving from Academics, Business practitioners, and Association towards AEC changes. The framework designed by Thornton et al. (2012) describe the Western ideal types of institutional logics, whereas the notion of transforming into specific locus in the Indonesian content is imperative to be discovered. The role of two institutions is expected to provide insights of institutional logics that has emerged from the finding, which provide a new perspective of analysis. As previous study illustrate on the horizontal comparison between ASEAN members (Benny et al., 2015), and the institutional representation by Rüländ (2016), this study analyses the impact on the macro and micro- level institutional perspective in a particular country such as Indonesia.

The finding suggests there is a definite gap of orientation between business practitioner and the academics. On one hand, the academics, who are assigned to cater knowledge of AEC, have less involvement to the notion as to what has been the ideal type of its institution. Their expression towards macro-discussion on politics and economic situation post-AEC often suggest holistic view of the Indonesian perspective, whereas the expectation to incline towards a micro- level conversation and implication are somewhat underdetermined. Specifically, business academics play an important role in designing a framework that bridges the gap between business practitioner and the expected outcome of AEC. However, due to unclear vision from the officials on each of the ASEAN member (Ravenhill, 2008) and uncommitted engagement between government agency members (Jones, 2015), the implementation on the micro- level is far from reality. In this in line to which Indonesian business practitioners are facing fear to the implication of AEC (Rüland, 2016) due to unrepresentative and asymmetric interest representation. There is a strong indication that the level of participation of the four institutions may have difficulties in collaborating the notion of AEC project. The 'passive' participation from the business practitioners also suggest that this institution fails to comprehend what is essential for them as 'core survival' mode, and rather to become 'victimised' of such project in this situation (Rüland, 2016). This argument is in line with Ravenhill (2008) in that business sector has little participation in the AEC project and that institutional process is highly involve government-to- government agreement. Nonetheless, the implementation in the micro-level seems to have been 'neglected' in a way that both institutions require a great deal of assistance in this matter. Moreover, as seen on the newspaper coverage analysis in table 2, the participation of practitioner and academics on this project were far less than those commented from government and association. Compared with the EU development described by Perkmann (2002), there is little contribution given from both parties, which consequently explain the narrow vision of this project within the institutional fields. Only association conducts its role in communicating messages derives from the government. This gives an idea that the two institutions are being 'excluded' from the grand scenario of AEC project. As such, the expression of 'ambitious' project is also confirmed by Petri et al. (2012), in that further cooperation and role-strengthening between these institutions is heavily needed.

In conclusion, the construction of ideal types of institutional logics provides a comprehensive analysis of building an understanding of existing institutional change and an attempt to construct a topographic map of Indonesian business society. The framework shows a detailed category that represent symbolic materials and practices that can identify each of the institution represented by academics, business practitioners, associations, and government. Communication is another problem why the AEC project is less implemented in each institution. The inter- institutional ideal systems mentioned in table 5 are not fully manifested within these institutional orders. Thus, further calibration of roles and responsibility are required. Overall, the cultural context in Indonesia can also be accommodated with this framework, in that specific norms and behaviours represents the characteristics embedded within the institution, which often omitted by Western perspective. Hence, institutional logics enable studies from the Eastern view to emerge and contribute positively to the literature.

This study offers theoretical as well as practical contributions. First, institutional logics perspective serves as a comprehensive lens to scrutinise social and cultural construction that not only to discover societal culture of individuals and organisations, but also to identify and integrate multiple level of analysis. Second, by entangling each of the institutions and their institutional nature, this study aids to align the function of each role in the successful implementation of AEC. Institutional logics help to determine the cause of misalignment role of relevant institutions and its capacity to implement the successful of the project. This study also portrays the four designated institutional in which some categories within inter-institutional order cannot be implemented as it should be. The asymmetric system representation initiated by Rüland (2016) and importance of having solid, sufficient and efficient forms of institutions

(Rattanaseeve, 2014) may well be suited within the typology of institutional logics offered in this study.

There are limitations of this study that needs to be described. Firstly, most studies concerning ASEAN integration and regionalisation are within the area of international relation, economics, and policy studies, thus making this study a challenging approach in sociological perspective. However, this study provides an introduction to the use of the qualitative approach for future studies of institutional mapping in Indonesia.

Secondly, due to limitations and difficulty of access to other institutions such as government officials, this study has been cross-sectional in the nature of collecting data. Thirdly, only one researcher was involved in this project and some interviews were conducted and transcribed in Indonesian. As such, there may be a lost- in-translation process that may lose the essence of logics. However, back translation was provided to encounter such problems. Lastly, generalisation issue, as part of qualitative, confirms that this study cannot be compared between academics and/or business practitioners in other settings.

This study suggests avenue of research. First, the application of institutional logics in Indonesia can be extended to the use of ethnic norms and values, which also provide a more Eastern 'flavour' towards understanding in a cultural manner. Indonesia has been acknowledging one of the most various nations of ethnicity, religion, and race, which holds more than three hundreds dialect languages. The utilisation of this framework can enrich the formation and category of the ideal types, dedicated to understand a more comprehensive materials and practices. Second, the additional institutions from the government and association perspectives may enrich the holistic overview of the AEC program within the Indonesia business context. Also, scrutinising other members in ASEAN will acknowledge the variety of issues concerning the changes within each nation.

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**COMPETITIVENESS OF FURNITURE INDUSTRY: THE CASE OF SUKOHARJO, INDONESIA**

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**Abstract**

The purpose of this research is to identify and analyze of rattan furniture industrial competitiveness in Sukoharjo Regency, to analyze factors that affect the amount of rattan furniture industrial competitiveness in Sukoharjo Regency. The method used is analytical descriptive implementation of records techniques. Data analysis methods used are Porter's Diamond, RCA (Revealed Comparative Advantage) and OLS (Ordinary Least Square). The results showed, based on the analysis of Porter's Diamond Theory and the analysis of RCA showed that the Sukoharjo rattan furniture industry has a good condition for the development of rattan furniture industry and classified as having a strong competitiveness. The model function of rattan furniture industrial competitiveness of Sukoharjo is  $Y = -42,801 + 5,074X_1 + 1,719.10^{-5}X_2 + 0,003X_3 + 15,850D$ . This model has a coefficient of determination (R<sup>2</sup>) of 0,643 which means that 64,3% of the variation of the dependent variable ie rattan furniture industrial competitiveness of Sukoharjo can be explained by the independent variables. Based on the results obtained by the F test showed that all variables studied jointly significant effect on the rattan furniture industrial competitiveness in Sukoharjo Regency at 95% confidence level. T test results showed that variable the export price of Sukoharjo rattan furniture (X<sub>1</sub>), the exchange rate of the U.S. Dollar against the Rupiah (X<sub>3</sub>) and the government policy (D) individually significant effect on the rattan furniture industrial competitiveness of Sukoharjo. Based on the standard value of the regression coefficient, variable the exchange rate of the U.S. Dollar against the Rupiah (X<sub>3</sub>) provide the greatest influence with a positive relationship.

**Key Words :** *Competitiveness, Sukoharjo, Rattan, Furniture*

**Introduction**

Indonesia is one country that has long been engaged in international trade (Rahimah, 2012). one of the international trade activity is exports.

Table 1. Exports value of Indonesian oil and gas and non-oil and in 2007 - 2011 (Million US\$)

<b>Year</b>	<b>Oil and Gas</b>	<b>Non Oil and Gas</b>
2007	22.088,5	92.012,3
2008	29.126,3	107.894,2
2009	19.018,3	97.491,7
2010	28.039,6	129.739,5
2011	41.477,0	162.019,6

Source: BPS 2012

Exports in Indonesia are basically divided into two, namely the oil and gas exports and non-oil and gas exports. Based on Table 1 it can be seen that the value of non-oil and gas exports is always greater than the value of oil and gas exports from year to year. The value of non-oil

and gas exports becomes a great potential to be developed. Basri (2001) states that in accumulating foreign exchange through non-oil and gas sector, the agricultural sector has a significant role. One of the considerable agricultural commodities contributing foreign exchange income through exports are rattan commodities.

Rattan is one of the agricultural commodities which are included in non-timber forest products are very often found in Indonesia. Indonesian rattan has a dominant position in the world market, controls 80 percent of the raw materials of rattan world. Indeed Indonesia has a great potential in developing rattan furniture industry. One of the rattan furniture industry, which is still developing is the rattan furniture industry in the district Gatak, Sukoharjo. Rattan industry in there is producing a wide range of rattan furniture products which have world quality. Most of the production of rattan furniture in Sukoharjo was exported to many countries in the world. This makes the rattan furniture industry in Sukoharjo become one of the leading industrial sector compared with other regions that have the same industrial sector in Indonesia. Hence the analysis to determine the extent of the rattan furniture industry's competitiveness in Sukoharjo is needed also the analysis to the factors that influence it, in order to support the competitiveness enhancement of the rattan furniture industry in Sukoharjo.

### Research Method

The basic method used in this research is analytical descriptive by using periodic data (time series) (Nazir, 2002). The purposive method was used for the determining of research location in Sukoharjo Regency. The data used in this research is secondary data, i.e. data derived from several institutions related with the object of research.

#### 1. Analysis of Porter's Diamond Competitiveness

This method is qualitative methods by analyzing each component in Porter's Diamond, it consists of Condition Factor, Demand Condition, Related and Supporting Industries, Firm Strategy, Structure, and Rivalry. In addition there are other components associated with four main components, namely government roles and chance. The fourth main factors and two supporting factors are interacting. The overall result of interaction between the mutual support components really determined the development which can be a competitive advantage of an industry.

#### 2. Analysis of RCA Competitiveness (Revealed Comparative Advantage)

RCA method is based on a concept that trade between regions actually shows the comparative advantages possessed by the region. This study did not use the RCA generally comparing the export of a particular country with export commodities in the world countries, but in a smaller coverage ratio of export of rattan furniture Sukoharjo with Indonesian rattan furniture exports. Performance rattan furniture exports to total exports of Sukoharjo outside the area, then compared with the share of export value of rattan furniture in Indonesia to the total value of exports in Indonesia, used the RCA formula:

$$RCAS = \frac{X / X_t}{Y / Y_{total}} \dots\dots\dots(1)$$

Where, RCAS is the rattan furniture industry competitiveness of Sukoharjo, X is the exports value of rattan furniture of Sukoharjo, total X is the value of total exports of Sukoharjo, Y is the export value of Indonesian rattan furniture and Y is the total value of the total export of Indonesian products. The competitiveness of the value of a commodity, there are two possibilities, namely if  $RCA > 1$ , means the region has a

comparative advantage over the average so that the commodity has strong competitiveness. If  $RCA < 1$ , means that an area has a comparative advantage in the below averages so that the commodity has weak competitiveness. RCA index is the ratio between the value of the current RCA with RCA value of the previous year. RCA index formula is as follows:

$$RCA Index = \frac{RCA_t}{RCA_{t-1}} \dots\dots\dots(2)$$

Where  $RCA_t$  is the value of current year RCA (t), while the  $RCA_{t-1}$  is the value of RCA in previous years (t-1), the data in the year is periodically data from 1993 to 2012. The RCA indexes value ranging from zero to infinity. RCA index values equal to one means that there is no an increase in the RCA or export performance in the market this year is equal with the market in the previous year. RCA values less than one means a decline in RCA or export performance in the market is now lower than the previous year. RCA indexes value greater than one means an increase RCA or export performance in the market this year is higher than the previous year.

3. Multiple Linear Regression Method

The analytical methods used to analyze the factors affecting the competitiveness of the rattan furniture industry Sukoharjo is multiple linear regression, which can systematically formulated as follows:

$$DS = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + D \dots\dots\dots(3)$$

Where, DS is the industrial competitiveness of rattan furniture Sukoharjo (RCA),  $X_1$  is an export price of rattan furniture industry Sukoharjo (FOB) (US \$ / Kg),  $X_2$  is an export volume of rattan furniture Sukoharjo (Kg),  $X_3$  is the exchange rate of the US dollar against rupiah (Rp / US \$) and D is the government policy with a value of 0 to the policy of opening the export of raw rattan and a value of 1 for the policy to restrict the export of raw rattan, while  $\beta_0$  is the intercept. In the use of regression analysis, some values that need to be considered include test the coefficient of determination ( $R^2$ ) that is used to determine the size of accuracy or suitability of a regression line which is applied to a group of observational data.  $R^2$  values indicate how large a proportion (%) variance of the dependent variable can be explained by the independent variables included in the regression model (Gujarati, 2010). F tests is used to determine the level of influence of all independent variables together against the dependent variable with confidence level and a certain significance level ( $\alpha$ ). While the t-test is used to determine whether the independent variables individually significant effect on the dependent variable at a significance level ( $\alpha$ ) and a certain confidence level. For classical assumption test, use test multicollinearity namely the detection of the existence of multicollinearity in SPSS that if  $VIF > 5$  (Sarwono, 2012), Heteroskedasticity test is if the dots spread with not clear patterns above and below the 0 number on the Y axis, so there is no heteroskedasticity problems (Nugroho, 2005), and autocorrelation test means if the DW value is  $1.5 < DW < 2.5$  then there is no autocorrelation (Getut, 2011)

**Result And Discussion**

1. Competitiveness of Rattan Furniture Industrial in Sukoharjo Regency based on the Concept of Porter's Diamond

Rattan furniture industry in Sukoharjo has been basically having a production factor conditions were pretty enough for the development of the rattan furniture industry. It looks at the value of the production of rattan furniture industry Sukoharjo in 2012, which amounted to Rp 285,062,500,000.00. The value of production of the Sukoharjo rattan

furniture industry is affected by sufficient labor resources and sufficient of raw material for the development of the rattan furniture industry there. Recorded in 2012 there were 282 business units of rattan furniture industry in Sukoharjo, with a workforce of 3,105 people, as well as the supply of raw materials of rattan continue to enter the rattan furniture industry, which is the raw material value of Rp 171,637,500,000.00. Rattan furniture industry in Sukoharjo can be categorized have a pretty good production growth in each year, but it is not followed by the development of product design innovation of rattan furniture from the manufacturer. The condition of the domestic demand for rattan furniture products Sukoharjo still quite low when compared with export demands. Where areas of product marketing of rattan furniture Sukoharjo in the country covering two regions, it is in the city and outside the city, for the region in the city covers an area of Solo and the surrounding areas while the outside the city includes Yogyakarta, Magelang, Salatiga, Semarang, Pati, Tuban, Madiun, Ponorogo, Malang, Surabaya, Gresik and Jakarta. Demand in some regions in the country is merely a request from several individual customer orders only, which tend not to be on a large scale. Most entrepreneurs in the rattan furniture industry Sukoharjo itself are not too focused on the domestic share. For the conditions of overseas market demand, product of Sukoharjo rattan furniture industry is quite a lot of demand, especially by the United States, Europe and some countries in the Middle East and ASEAN.

When seen further, it can be said that the Sukoharjo rattan furniture industry is more geared to meet the needs of foreign markets than to meet domestic market demand. Relate and supporting industries in terms of production factors in the rattan furniture industry Sukoharjo include rattan preservation industry, distribution, and training services. In the case of rattan preservation industry, are of national scope in Indonesia actually has a pretty good industrial facility located in areas such as rattan gatherers centers Kalimantan and Sulawesi. One thing that becomes the problem, namely in terms of distribution is relatively inefficient, where the distance to go between raw rattan processing industry to industry craftsmen is very far, from regions outside Java to the Sukoharjo area. The inability of the industry to provide a good service in the distribution of raw materials to industry rattan furniture craftsmen will result in a lack of supply of raw materials so that production will decline even ineffectiveness may also impact the industry. Other supporting industries really important are the service industry, especially training in product design training, and this is a problem that quite a lot by the entrepreneurs of the rattan furniture industry in Sukoharjo. Sukoharjo rattan furniture industry itself still has a standards quality design, and still less able to compete with rattan furniture manufacturers from other countries. Several factors can be categorized into the decisive factor of competition is product differentiation, brand identity, and information.

Product differentiation as part of a strategy to win the market seems still not yet considered from the rattan furniture industry in Sukoharjo. This is evident from the lack of attention of employers to the final design was used, and still seem less likely to attract the market attention. Product differentiation can also be added through the different packaging systems.

The existence of specific brands in a packaging will influence the position and competitiveness of a company, and it is still less attention of most entrepreneurs rattan furniture industry in Sukoharjo. In the current era of globalization, who have access to more information then will be able to win the competition. Likewise, market access for industrial products rattan furniture. The possibility that applied to the issues raised in Sukoharjo rattan furniture industry is foreign importers have a wide enough information about the existing market. As a result, importers bolder to bargain for cheaper products

produced by the rattan furniture industry in Sukoharjo. By law the government has issued policies to support the growth of the furniture industry in Indonesia. One is through Decree No. 28 / M-DAG / PER / 10/2011 on November 30, 2011, which states rattan raw, mixed rattan, rattan W / S and semi-finished rattan prohibited to be exported out of the country. Through the implementation of the new policy, should be an opportunity for the rattan furniture industry Sukoharjo in improving the competitiveness of its industry. Entrepreneurs and craftsmen in Sukoharjo rattan furniture industry is expected to further maximize the chances that there is more to spur the production and export of rattan furniture, as well as improvements in the company as well as the infrastructure, so that later will increase competitiveness in the international market competitive.

2. Competitiveness of Rattan Furniture Industrial in Sukoharjo Regency based on the RCA Method (Revealed Comparative Advantage)

RCA in this study was defined that if the share of export of rattan furniture in the total export of commodities from an area larger than the market share of commodity export rattan furniture in the total exports of the commodity in a country, it is expected the region has a comparative advantage in the production and export of commodities rattan furniture , This study did not use the RCA in generally which is comparing the export of a commodity specific State with a commodity export countries of the world, but into a smaller coverage ratio of export of rattan furniture Sukoharjo with Indonesian rattan furniture exports. Performance of rattan furniture exports to exports total of Sukoharjo outside the area, then compared with the share of export value of rattan furniture in Indonesia to the total value of exports in Indonesia.

Table 2. Development of RCA Value and RCA index rattan furniture industrial in Sukoharjo Year 1993-2012

Year	RCA Value	RCA Index
1993	8,10	0,00
1994	7,97	0,98
1995	9,48	1,19
1996	12,18	1,28
1997	24,73	2,03
1998	34,57	1,40
1999	8,23	0,24
2000	10,27	1,25
2001	6,40	0,62
2002	14,61	2,28
2003	15,00	1,03
2004	8,12	0,54
2005	15,46	1,90
2006	19,92	1,29
2007	21,45	1,08
2008	42,69	1,99
2009	42,69	1,00
2010	42,69	1,00
2011	35,31	0,83
2012	38,53	1,90
Total	418,49	23,02
Rata-Rata	29,92	1,15

Source: Processed Research Data, 2015.

Based on Table 2 can be seen that in the period from 1993 to 2012, shows that the ratio of RCA for rattan furniture Sukoharjo commodity has a value above 1, which amounted to 29.92. This means that commodities of rattan furniture in Sukoharjo have a comparative advantage in the international market compared to competitiveness for the same kinds of commodities. Rattan furniture industry Sukoharjo classified has strong competitiveness. Sukoharjo rattan furniture industry can compete on the international market because in Indonesia has imposed protection on the domestic industry, namely by implementing policies relating to restrictions on the export of raw rattan in 1993 to 1998 also in 2004 and 2011. The value of the rattan furniture industry competitiveness in Sukoharjo also quite influenced by the value exports and total exports of rattan furniture, which were both very dependent on changes in the value of the rupiah against the US dollar. This can occur because the value of the existing RCA influenced by export values is calculated in US Dollars, thereby strengthening or weakening of the rupiah against the US dollar is extremely important influence on the competitiveness of the rattan furniture industry in Sukoharjo.

### 3. Multiple Linear Regression Function

Based on the results of data analysis using SPSS program, the regression equation of rattan furniture industry competitiveness Sukoharjo as follows:

$$Y = -42,801 + 5,074 X_1 + 1,719 \cdot 10^{-5} X_2 + 0,003 X_3 + 15,850 D$$

From the analysis, the value of  $R^2$  is 0.643. This shows that 64.3% of the variation of the dependent variable in this study is the industry's competitiveness of rattan furniture in Sukoharjo can be explained by the independent variables include export price of Sukoharjo rattan furniture ( $X_1$ ), the export volume of rattan furniture in Sukoharjo ( $X_2$ ), the exchange rate of the U.S. Dollar against the Rupiah ( $X_3$ ) and government policy ( $D$ ), while the other 35.7% is explained by variations in other variables outside the model used.

Table 3. Variant Analysis of Factors that Influence the Rattan Furniture Industrial Competitiveness Sukoharjo

Variant Source	Sum of Square	Free Degrees	Squares Average	Sig.
Regression	2207,914	4	551,979	0,003**
Residual	1226,307	15	81,754	
Total	3434,222	19		

\*\* : Significant where  $\alpha = 0:05$ .

Source: Secondary Data Analysis, 2015

F significance is 0.003. The significance value smaller than  $\alpha = 0.05$ . This shows that the independent variables are jointly significant effect on the dependent variable is the competitiveness of the rattan furniture industry Sukoharjo with  $\alpha$  of 0.05 (5%).

Table 4. Variant Analysis of Factors that Influence the Rattan Furniture Industry Competitiveness Sukoharjo

Model	Regression Coefficients	Sig.
Export Prices of Sukoharjo Rattan Furniture ( $X_1$ )	5,074	0,009 **
Export Volume of Sukoharjo Rattan Furniture ( $X_2$ )	$1,719 \cdot 10^{-5}$	0,060 <sup>ns</sup>
Exchange Rate of the U.S.	0,003	0,006 **

Dollar Against the Rupiah ( $X_3$ )		
Government Policies (D)	15,850	0,006**

Description

\*\*: Significant where  $\alpha = 0:05$ .

ns : not significant

Source: Secondary Data Analysis, 2015

The independent variable that has a significance of less than 5%, then individually significant effect on the competitiveness of the rattan furniture industry in Sukoharjo. Independent variables were individually significant effect on the competitiveness of the rattan furniture industry in Sukoharjo variable export prices of Sukoharjo rattan furniture with a significance value of 0.009, the exchange rate of the U.S. Dollar against the Rupiah with a significance value of 0.006 and government policies with a significance value of 0.006. Another variable is the export volume of Sukoharjo rattan furniture has a significance value exceeds the value of  $\alpha = 0:05$  in the amount of 0.06 it can be concluded that the individual has no effect on the competitiveness of the rattan furniture industry Sukoharjo. There are several methods to test the multicollinearity by looking at PC value (Pearson Correlation) and VIF (Variance Inflation factors) Value. Tests using the PC value matrix (Pearson Correlation) have criteria when the PC values  $< 0.8$ , then between independent variables is not happening multicollinearity (Soekartawi, 2001). Results from the study showed that the highest value of the PC, which is 0.525 so that it can be concluded multicollinearity regression model did not happen. According Sarwono (2012), another way to test multicollinearity is to look at VIF (Variance Inflation factors) that has criteria if  $VIF > 5$ , then the regression models occurred multicollinearity. Based on the analysis using SPSS note that the value of the highest VIF, which is 1,571 so it can be concluded multicollinearity regression model did not happen.

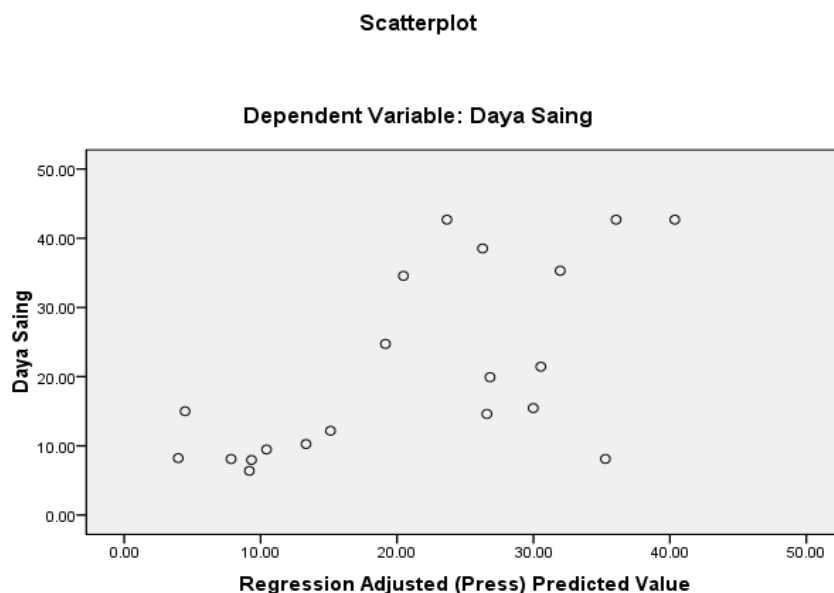


Figure 1. Scatterplot Diagram

Based on Figure 1 shows that the dots do not indicate a pattern that is not clear then there is no problem with heteroskedasticity. According Getut (2011) when the statistic DW



values between 1.5 to 2.5 then there is the symptoms of autocorrelation. Based on Table 3. note that the DW value is 1,516. It shows that there is no autocorrelation in the model, because the condition does not occur the autocorrelation is when the value of the DW statistic lies at 1.5 to 2.5 in accordance with the opinion of the Getut.

4. Most Influential Factors Against the Competitiveness of Rattan Furniture Industry in Sukoharjo

Based on Table 6 it can be seen that the variables that have the greatest regression coefficient standard value is exchange rate of U.S. dollar against the rupiah variable (X<sub>4</sub>), which amounted to 0.626 with a positive relationship. Where it can be concluded that the amount of competitiveness values of Sukoharjo rattan furniture industry is mainly due to the weak exchange rate of the U.S. dollar least against the Rupiah. Positive association explained that if the exchange rate of the U.S. dollar against the rupiah increased by 1 Rupiah, it will increase the competitiveness of the value of the rattan furniture industry in Sukoharjo amounted to 0.626 and vice versa.

Table 6. Regression Coefficients Standard Value of Independent Variables Affecting the Competitiveness of Rattan Furniture Industry in Sukoharjo

Model	Regression Beta Coefficient	Sig.
Export Prices of Sukoharjo Rattan Furniture (X <sub>1</sub> )	0,529	3
Exchange Rate of the U.S. Dollar Against the Rupiah (X <sub>3</sub> )	0,626	1
Government Policies (D)	0,605	2

Source: Secondary Data Analysis, 2015

**Conclusion**

Based on the concept of Porter's Diamond, rattan furniture industry in Sukoharjo has a good conditions for the development. Things that need to be considered are in firm strategy, structure, and rivalry. While based on the concept of calculating the value of RCA (Revealed Comparative Advantage) in research data period 1993 to 2012, rattan furniture industry Sukoharjo has an average value of RCA amounted to 29,92 so classified as having a strong competitiveness and has a specialization in commodities rattan furniture. Factors that significantly affect the competitiveness of the Sukoharjo rattan furniture industry are Sukoharjo rattan furniture export price, the exchange rate of the U.S. Dollar against the Rupiah and government policies. This means that if there is an increase in export prices and the exchange rate of the US Dollar, as well as the implementation of policy restrictions on the export of raw rattan by the government, it will improve the competitiveness of the Sukoharjo rattan furniture industry. The factors that most affect the competitiveness of the rattan furniture industry in Sukoharjo is the exchange rate of the U.S. Dollar against the Rupiah.

The size of the value of industrial competitiveness of Sukoharjo rattan furniture is mainly due to the weak or not the exchange rate of the U.S. dollar against the Rupiah. Advice based on the results of this research that the Government is expected to spur the development of the creativity of the producers in the rattan furniture industry in Sukoharjo, where really need for product design innovation training program for entrepreneurs and craftsmen in Sukoharjo rattan furniture industry.

Rattan furniture industry product of Sukoharjo is much enough in demand by consumers from

abroad, sees the potential development of the market share, hence really need for expansion form of market share through product promotion. One way is by doing exhibitions abroad (importing countries). Given the importance of the availability of raw materials for the continuity and sustainability of the rattan furniture industry of Sukoharjo in the future, it is necessary for consistency of government in implementing policies related to restrictions on raw rattan. Other tasks include the presence of a buffer body that can function as stabilizers availability of the main raw material for the rattan furniture industry in Sukoharjo both in terms of quantity, quality and price.

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**HOW TO ACCELERATE THE PERFORMANCE OF A RESEARCH CENTER: A  
CASE STUDY**

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**Abstract**

Scientific publication in reputable journals as an outlet to disseminate research and proposition has been widely considered to be a main measure of individual and institutional reputation. This paper provides an insight on how to accelerate the performance, especially with regard to scientific publication, of a relatively small research group in university located in an emerging country. Our research center in banking and finance which was established in the end of 2013 has performed progressively. We have accelerated the number of scientific publication in reputable international journals. Our strategies are mainly on the collaboration with international scholars, introducing research group members to the international environment, research collaboration with industry and regulator and providing technical assistance and some guidelines especially for our junior researchers and extensive networking with scholars in the same fields from domestic and overseas universities.

**Keywords:** *Research group, scientific publication, international journals, networking, technical assistance*

**Introduction**

The fundamental concept of a research center in a research-based university is to serve a research mission, is set apart from the departmental organization and to solve complex interdisciplinary problems (Sabharwal and Hu, 2013; Bozeman and Boardman, 2003). More sophisticated, in some countries especially in Europe and the US, research centers are the main army to bolster the number of scientific publications. They are facilitated by substantial budget and facilities. They may also hire PhD students with scholarships.

In the recent years, the Indonesian government has paid much more attention to accelerate the quantity and quality of scientific publications, especially in the universities, as it could be considered to reflect the competitiveness of a country. However, the importance of research centers in universities has not been revitalized.

Indonesian universities contribution to international research environment especially with regards to scientific publication and innovation is far behind some neighboring countries for example Thailand, Malaysia and Singapore. To bolster the quality of research centers or research groups within a university which is ultimately expected to accelerate the publication in international reputable journals; it needs a strong commitment, budget policy, good governance and strong network. Revitalization and restructuring of research centers/ groups could be an appropriate strategy particularly in the social sciences and humanities.

In this present paper, we provide a case study of managing and accelerating the performance of a research group which is the research group of Governance, Banking and Finance (CGBF). This research group is under the Faculty of Economics and Business, Universitas Sebelas Maret (UNS), Indonesia. UNS is a state (public) university which recently occupies 6<sup>th</sup> for top Indonesian universities (awarded by the 4International Colleges and Universities/4ICU). UNS has established its vision to become a center for knowledge,

technology, and art which is leading at international level based on noble values of national culture. It is generally known that to be internationally recognized, scientific publications at the international level should be the main priority. UNS has provided a substantial budget to boost the quality of research and scientific publication in international reputable journals.

Although the research group of CGBF is relatively very young, it has performed very well especially in scientific publication compared to many others research center in the same field in Indonesia. Moreover, this group is the best research group in areas of the social sciences and humanities in UNS.

We expect that our success story could be a benchmark for other research groups or research centers in Indonesia particularly with regards to the policy of Indonesian government to accelerate the number of scientific publication in international reputable journals.

### **Research Group Strategies**

Research group of Governance, Banking and Finance (CGBF) which is under the Faculty of Economics and Business of Universitas Sebelas Maret has a long-term goal to be an internationally reputable research center in the areas of governance, banking and finance. The original name was the Center for Corporate Governance (CCG) which was established in 2012. The research group received its first research project from the USAID through the SEADI (Support for Economic Analysis Development in Indonesia) project on a research entitled "Local governance, rent-seeking and regional economies" in the latter half of 2012.

In the end of 2013, following the policy of UNS to establish research groups within the schools (faculties), our research group then renovated and extended its scope to Governance, Banking and Finance. At that time, the group is strengthened by 10 internal members (only 4 members hold PhD degree). Most of them are junior faculty members with limited experiences in research and publication. The members have diversity in their research interests including banking, corporate finance, corporate governance, Islamic finance, accounting, strategic and human resources management.

Our main strategy, to be much more competitive especially in the international environment, is first, we continuously strengthen our governance and network particularly with regard to the research collaborations and joint papers with overseas reputable scholars. Research collaboration with reputable scholars can help the members of research group to access to expertise, learning tacit knowledge about a technique and methodology, enhancing productivity, pooling knowledge for tackling large and complex problems, obtaining prestige or visibility and access to data sources (Rijnsoever and Hessels, 2011; Bozeman and Corley, 2004).

Taking advantage of the network of some research group members, we have more than 30 partners even though some of them are not actively be optimized. More specifically, this research center is supported by 3 external experts (2 experts from US universities and 1 expert from the Indonesia Deposit Insurance Corporation) and 32 international partners and advisers mostly from reputable overseas universities. By doing such collaborations, we have published 6 joint papers in reputable international journals with scholars from University of Limoges France, Purdue University Calumet USA and Universiti Sains Malaysia. We have also some working joint research projects with University of Twente, University of Limoges, Universiti Sains Malaysia and Purdue University Calumet which will lead to publication in reputable international journals.

Moreover, we also attempt to collaborate with industries and regulators in policy research especially to access to data sources and to get funding. As explained by Kafourous et al. (2015), research collaboration with industry could facilitate funding as well as could lead to innovation. In addition, research collaboration with regulators could be optimized for scientific publication as well. We have done collaboration with some financial regulators in

Indonesia including the Central Bank of Indonesia, the Indonesia Financial Services Authority and the Indonesia Deposit Insurance Corporation (see table 1 for the details).

The other strategy is to extensively provide technical assistance to our junior members and provide and facilitate them with opportunities to present their working papers in international conference. During two years (2013-2015), 31 papers have been presented by the group members in international conferences. By doing so, it is expected that the members, especially junior members, will be familiar and having more international exposure.

Moreover, we also include those junior faculty members in the joint paper projects which subsequently will bring some benefits for them (getting published in journals, having network with international scholars, familiar with scientific writing and publication.....). In addition to publication, we also continuously organize a working paper forum to facilitate members to present their first draft of papers to get inputs and comments from other colleagues before getting ready to be submitted or presented in international conferences. Trainings on methodology and econometric tools have also been conducted. In 2014, we invited Dr. Yun Zhu from Fordham University USA to deliver technical assistance on STATA for research in finance.

After two years of the establishment of this research group, almost all members have published papers in Scopus-indexed journals.

### **Outcomes**

Performance of Research Group of Governance, Banking and Finance in 2013 - 2015 is impressive. 23 papers have been published and accepted to be published in Scopus-indexed Journals; some of them are getting published in higher rank journals. The policy of Indonesian government and UNS is to benchmark Scopus in order to justify the quality of international journals.

Moreover, in 2014 and 2015, this group has received a substantial amount of research funding both research grants from UNS and the Directorate of Higher Education in Indonesia (DIKTI) and research collaboration with regulators and industry. We collaborated with Bank Indonesia, Indonesia Financial Services Authority (OJK) and Indonesia Deposit Insurance Corporation (LPS) in some policy researches including Financial Inclusion and Literacy, Micro Credit and Bank Liquidity. CGBF is also the best (with highest group index/performance evaluation indicator) and the most active research group at the Faculty of Economics and Business of UNS. Most of publications of this school in Scopus-indexed journals are contributed by this research group.

Moreover, this group has actively organized a number of international and reputable events. In 2013, we held a Conference on Risk, Banking and Financial Stability in collaboration with the Journal of Financial Stability. Furthermore, we organized the 2014 Annual Conference of Asian Finance Association in collaboration with the Asian Finance Association (Asian-FA). In January 2015, we hosted the First Conference and Declaration of Indonesian Finance Association (IFA) in collaboration with Indonesian Finance Association (IFA), two larger Indonesian universities (Universitas Indonesia and Universitas Gadjah Mada) and the Indonesia Deposit Insurance Corporation.

Table 1 exhibits the summary of performance of Research Group of Governance, Banking and Finance for the period of 2012-2015.

### **Conclusion**

We have provided a case on managing and accelerating the performance of a research group in the context of Indonesia. During almost three years of this research group, it has performed significantly especially in scientific publication to disseminate the research findings. 23

papers have been published and accepted to be published in Scopus-indexed journals. Almost all of research group members have contributed in writing those papers.

Moreover, this group has successfully granted many research grants from the university, the Directorate of Higher Education in Indonesia (DIKTI) and some international agencies such as the USAID. In addition, research collaboration with industry and regulators have also been done.

However, to be more competitive in the international environment, this research group should accelerate the capabilities and skill of research group members. Extensive international partnership will also be bolstered.

**Table 1. Performance Indicators 2013-2015**

1. Research Activities				2. Scientific Publication				3. Conference	
Research grant funded by the university	Research grant funded by Directorate of Higher Education (DIKT I)	Research grant funded by Foreign institutions	Research Collaboration with Industry / Regulator	Scopus Indexed Journals	Non-Scopus international journals	Nationally Accredited Journals	Non-accredited National Journals	Papers presented in International Conference	Papers presented in National Conference
15	9	3	5	23	2	3	2	31	5

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## THE ALTERNATIVE MANAGEMENT MODEL OF ECONOMIC ACTIVITIES UNIT OF RURAL PNPM MANDIRI AFTER COMPLETION OF THE PROGRAM

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### Abstract

There is still no clarity after the completion of Rural PNPM Mandiri which is ended in 2014. The purpose of this research is to inform to the government about several models that exist in society. The research was done in Kabupaten Banyumas and employed qualitative approach using primary and secondary data which are collected by in-depth interview, focus group discussion, observation and documentary analysis. The findings indicate that there is still a doubt in managing the program because of the following reasons: 1). There is no certainty of the government rules regarding the management pattern; 2). There is no clarity regarding their employment contracts; 3). The spirit of Rural PNPM management in helping and developing poor society. There are four alternative models of economic activity funds management unit of Rural PNPM identified and each model is discussed in depth.

**Keyword :** *program completion, rural PNPM-Mandiri, model, Banyumas, poor society*

### Introduction

National Program for People Empowerment which usually called as Rural PNPM Mandiri (PNPM-MPD) is a program aimed at accelerating poverty reduction and unemployment rate. This program was run since April 30, 2007, at the time of President Susilo Bambang Yudhoyono. In 2014 this program has ended with the issuance of employment contract termination letter to all managers/facilitators PNPM-MPD. The success of PNPM-MPD in reducing the poverty is supported by BPS data, rural poverty rate in Indonesia in September 2013 amounted to 14.42%, decrease to 13.76% in September 2014. But in 2015 after the program ended, the poverty rate increased to 14.09%, and the rural poverty rate increased to 14.11%.

In Banyumas Regency, the PNPM program has succeeded in reducing the poverty rate in 2011 amounted to 328 510 people (21.11 percent), the year 2012 amounted to 309 777 people (19.44 percent), the year 2013 amounted to 296 807 people (18.44 percent) and in 2014 amounted to 281 414 people (17.34 percent). However, Central Bureau of Statistics of Banyumas estimates that in 2015 the number of poor increased by 10% compared to 2011. Due to the large percentage of poor people in Banyumas including 15 regions that are in the red zone or below the national and provincial poverty percentage, then the existence of poverty alleviation programs are still needed. Data reports on the implementation of PNPM-Mandiri shows that on June 30, 2014, total assets of Banyumas Regency PNPM Mandiri Rp 94.993.439.748, -, while the per-October 2014 total assets of PNPM Urban Rp 15.904.264.300, -. Thus the number of PNPM funding is still running in the community is Rp 110 897 704 048, -. The amount of these funds are in the revolving loan in the community and had to be rescued.

Sustainability program until today is still a source of concern as there is still lack of clarity from the government, and perceived by stakeholders former PNPM in Banyumas and even in the whole of Indonesia. At the end of the program, the public assets in the form of capital



revolving fund in Activity Management Unit (UPK) PNPM Mandiri Rural nationally valued at more than Rp 10,450 trillion (ten trillion four hundred and fifty billion rupiah). Implementation of the revolving funds are still scattered in the 5,300 (five thousand three hundred) districts, 401 (four hundred and one) district, one (1) town, and 33 (thirty-three) provinces (Anom Putra Surya, 2015). The funds of such great danger of being lost if not properly managed. Therefore need assessment as to whether the management of these funds at the present time after the program is completed. For this study important to be implemented.

### **Research Method**

Qualitative approach was employed in investigating the research issue. Research was conducted at Banyumas Regency with the population consist of the officer from Central OJK, OJK Purwokerto office, the regent, PNPM stakeholder from 21 district, and the stakeholder of rural PNPM. The informants is interviewed using snowball technique.

### **The Findings**

Banyumas regency consists of 29 districts with 21 districts are classified rural districts. Alleviation of poverty and unemployment in rural districts is carried out through Rural PNPM (PNPM-MPD), which started from 2007 to 2014. The program administratively shown a huge success, namely through increasing the amount of funds that can be used for revolving loans to the poor in order to ensure their productive economic activities. The amount of money that revolving in Banyumas until October 2014 is amounted to Rp 110.897.704.048, -. The success has encouraged the accumulation of funds for program managers to be able to continue to develop a management model in order to improve the ability of fertilization revolving loan fund. This was done because the poor society are expecting the existence of revolving loan program keep running and even providing a loan in a greater amount greater. Besides, the facilitator program managers feel responsible to save funds since the revolving loan has been able to develop very well.

Therefore, by the end of the PNPM-PMD program and the lack of clarity from the government about the management pattern of the revolving loan fund grants, are associated with people's expectations and the sense of responsibility of the former program managers, they still run activities as usual. Nevertheless they are trying to develop a revolving loan activities through models which they can provide a great benefit to support the increased efforts of the revolving loan to meet the demand for funding needs of the poor.

Based on observation from the 21 PNPM-MPD after the program ends, there are four types of models identified which were implemented in Banyumas Regency, namely:

1. The Multifinance Model or PT LKM such as running by PT LKM Kedungmas from Kedungbanteng district.
2. A model that is the same as Rural PNPM at the time is not over (12 districts).
3. A model as at the time of Rural PNPM is not over yet, but with the existence of the Board of Cooperation Intervillage as the association of legal entity (6 districts),
4. A model which is the Activity Management Unit (UPK) entity is transformed into the Board of Cooperation Intervillageas the mandate receiver of the Head of Village Consultative (1 sub-district).

Management model of Rural PNPM Post-completion of the program prepared by transforming the revolving fund UPK PNPM-MP of a program leading to the legislative system in accordance with the Village Law No. 6 of 2014. Under the provisions of Law No. 1 of 2013 every financial institution specialized activity was established to provide business development services and community empowerment, either through a loan or financing for micro enterprises to members and the public, the management of deposits, as well as the provision of consulting services business development that is not solely for profit should be

subject to the Act regulating MFIs. Under this regulation, the legal entity of MFI are limited liability companies or cooperatives. If a Limited Liability Company is a legal entity, the shares are at least 60% (sixty percent) owned by the regency government/village-owned enterprises/, and the rest can be owned by Indonesian citizens and/or cooperative.

In addition of juridical considerations, the transformation of UPK Revolving Fund of rural PNPM into the Unit Usaha Bersama BUM Desa, also considering the provisions of the Guidelines for Planning and Protection Activities Capital of rural PNPM, Ditjen Pembangunan dan Pemberdayaan Masyarakat Desa, dated March 27, 2015 provides that: 1) Revolving funds resulted from rural PNPM is owned by the people represented the government of the village (village head). Revolving Fund, divided by the entire village in the subdistrict (based on assets owned by each group in each village), provided that the division is meant only for recording purposes as an asset/property of the village. Accordingly, there is no physical distribution of funds, or there is no funds from the account transfer process UPK to the village; 2) Revolving Fund is recorded as an asset Village, shall be transferred to the Inter-Agency Cooperation Village (BKAD) through judicial procedure by each village; 3) In order to develop inter-village enterprises, the Revolving Fund can be used as capital for the establishment of BUM Desa and / or inter-village BUM village that belongs Villages in the subdistrict.

Under the provisions of the transformation of UPK Revolving Fund PNPM-MP, set through the stages of grants, which started grants from UPK PNPM-MP to the Agency for Cooperation Between the Village (BKAD) as outlined in the manuscript Grant Agreements, which then BKAD donated back to the Village Government through the mechanism of APB village, according to the provisions set forth in Article 17 and Article 18 of the Regulation of the Minister of Rural, Rural Development and Transmigration No. 4 of 2014 on the Establishment, Management and Management and Dissolution of the village-owned enterprises. Grants were awarded to the village later to investment capital for the establishment of Joint Business Unit BUM village in a limited liability company engaged in Microfinance Institutions. The only institution that village can obtain investment from the village government only village-owned enterprises, so that the transformation UPK PNPM-MP Revolving Fund is more appropriate if turned into a Joint Business Unit BUM Village. Before BUM Village submit capital sourced from Grant Revolving Fund PNPM-MP into the Business Unit bersam BUM village, first was an agreement in the forum of inter-village meetings organized by BKAD to form a Joint Venture BUM village in containers Cooperation Agency, an inter-village in the region Districts.

Based on the above it can be concluded that the UPK PNPM Mandiri in Rural Areas that previously existed will turn into a Joint Venture Unit BUM Village with the legal entity PT. MFI Ek. UPK PNPM-MP. PT MFI's shareholders consist of an inter-village Cooperation Agency (BKAD) the District by 40 percent and BOOM Rural District of Commons by 60 percent. BKAD membership comes from BKD-BKD from each village. Legal Entity Association BKAD shaped and has a unit working together in the areas of social, economic and security. Unit work together in the field of economy including BUM implemented by DESA for PT MFI is a transformation of the UPK PNPM-MP. Stock dividends received from investments BKAD 40% will be used for social activities and security as well as the activities carried out in PNPM-MP program has ended, ie in addition to conducting Revolving Fund also finances social activities and security. However, the first model is facing obstacles with the release of its operational license from the Financial Services Authority PT MFI Kedungmas. Model as usual before the program is finished and an inter-village models Cooperation Agency (BKAD) which is incorporated as a Model The second and third model. Both the model and the third model is substantially similar to the model implemented at the time of the PNPM program has not been ended yet, while on the model BKAD Interagency

Cooperation Agency incorporated the village incorporated in the form of Legal Entity Association. There are six districts that carry out these activities, including that carried out in the District Somagede.

The fourth model is the model where the Activity Management Unit (UPK) transformed into an inter-village Cooperation Agency (BKAD) which implement the mandate of the inter-village meetings. In this model BKAD different from other models where members BKAD a village representative who comes from members of the Rural Cooperation Agency. In this model, all members of the Inter-Agency Cooperation village comes from all members of UPK. In this model BKAD become executive agency, based on the mandate between the Village Council as outlined in the regulations along with the village head.

In choosing the model that will be applied, the program manager, the village government and community representatives should consider several issues related to the purpose and objective of PNPM-MPD is for the economic activity. Some things that could be consider are:

A. In terms of beneficiaries:

1. That the fund is a grant to the community
2. Associated with the wishes and expectations of the beneficiaries, the beneficiaries expecting a revolving loan program was continued and even intensified its lending
3. The public also expects community development activities not only in lending activities but also on training and mentoring of productive economic activities

B. From the management side:

1. During the program, the community grant fund management has been able to develop well
2. Thus, it means that the pattern of management of the programs that run during the program was also very good
3. The amount of funding is limited, it can not cooperate with financial institutions and other third parties
4. Lack of certainty of the rules of the government regarding the management pattern of community grants that can still be continuity

C. From the administrator side activities

1. The spirit of the management of the PNPM-MPD is very high for sustaining the revolving fund keep running.
2. The manager is very eager to develop community empowerment through the revolving loan and further development activities.
3. The manager expects a definite rules of the government regarding the sustainability of the revolving loan fund.

## Conclusions

The existence of five models developed in the community after the end of rural PNPM are based on the following matters:

1. Partially only a few districts that have completed the institutional arrangement BKAD the District are aligned with Act No. 6 of 2014 about the village (some people also have the perception that berbda depending on institutional arrangements BKAD the District are aligned with Law No. 6 of 2014 on the village). Practically in 2015 many districts are still preoccupied with it. Even the delay arrangement that is legitimized by the publication of two times the guide arrangement and the termination of the PNPM program MPd from the related Ministry.
2. National issues relating to the clarity of the regulation, certainty BKAD as subjects of law and government interventions are done partially institutional (expl: Secretariat of the Central Java held Farum its own, the State Secretary with the "intervention in

Lampung, Ungaran and Sragen, and the last intervention Regency Banyumas in the year 2016).

3. Different interpretation of the former rural PNPM actors which lead to conflicts both horizontally between operators and across districts, as well as vertically with institutions that "feels" has the authority to "regulate".

4. The diverse of perception and the spirit of each rural PNPM in securing and sustaining asset after the program is ended. This may cause procedural and technical constraint in every district.

5. Arrangements BKAD aligned with Law No. 6 of 2014 should be completed by the end of 2014. Hence in 2015 fell 2 guideline for structuring and termination of the program of the ministry for many who have not implemented. Psychological factors, political status and sustainability of the contract of rural facilitators also contributing to the delay. The situation above give impact on BKAD performance and stimulating the five model of post-completion rural PNPM.

6. The government immediately follow up by issuing regulations related to the institutional arrangement of the activity management unit ex-rural PNPM program to meet society's expectations.

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**THE ACCELERATION OF TRADITIONAL BATIK (CREATION AND COMBINATION) THROUGH INTEGRATED MANAGEMENT TO SUPPORT THE ACCELERATION IN REGIONAL ECONOMIC DEVELOPMENT**

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**Abstract**

In the longterm, this study aims to increase the income and welfare of batik craftsmen, support the development of creative industry, and support the regional development aimed to the acceleration and the expansion of national economic development.

Specifically, this study aims to: (1) explore the potency of traditional batik (creation and combination) to support the development of creative industry based on local wisdom, (2) identify the contribution of traditional batik, both creation and combination in strengthening the economy in batik community and regional economics development, (3) explore the supportin factors in the acceleration of traditional batik industry, both for creation and combination batik in Sragen district, (4) explore the factors that hinder the acceleration of traditional batik industry in Sragen district, (5) identify the management in traditional batik industry in Sragen district, (6) prepare a model of integrated management to support the acceleration in traditional batik industry, both batik creation and combination. This study is a descriptive study and uses qualitative approach.

The data are gathered using several methods that consist of observation (field observation), interview (Focus Group Discussion), and content analysis method (content or document analysis). The data are analyzed using several techniques including interactive analysis technique (Miles & Huberman, 1984), internal-external analysis technique (MSG, 2013), and supply-demand analysis technique (Blank & Stigler, 1957).

The result shows that Sragen district has potency in batik that can be developed as local product excellence. Batik industry has contributed in strengthening the local economy. On the one side, there are several factors that support the acceleration of traditional batik industry in Sragen district, which include municipal government policy, banking facilities through capital loan from banks, contribution from NGO (Non-Governmental Organization), and private contribution through foster father system. On the other side, there are several factors that hinder the acceleration, such as the fluctuation of foreign exchange, unhealthy price competition among producers, non-optimal current batik association, limited number of experts, limitation in working capital, difficulties in finding raw materials especially silk, the fluctuation in synthetic color quality, erratic weather that affect the process of batik production using cold wax printing technique, non-optimal role of current batik cooperation, and the lack of training aimed to improve batik quality. Sragen district government has formulate the policy regarding the development of batik industry through micro and medium enterprises (MME) and small and medium enterprises (SME) strengthening program.

The batik SME management in Sragen still employs conventional management in term production management that includes product diversification, production mechanism, quality control, marketing management that covers selecting target market, marketing area, and promotion media; and human resource management that covers productivity improvement, employee turn over, and financial management. Based on the result of analysis on the potency, barriers, supporting factors, and government policy regarding batik industry, we formulate a model to accelerate the traditional batik industry in Sragen through intergrated

management to support the acceleration of regional economic development. The model is then named IMBE (Integrated Management for Batik Enrichment) model.

**Keyword:** *traditional batik creation, combination batik, integrated management.*

## Introduction

### 1. Background

Batik is a unique craft that represents the great culture and local wisdom owned by Indonesian. Indonesian batik is widely known in the international level and has received an acknowledgement from UNESCO by includes it in the Representative List of the Intangible Cultural Heritage of Humanity in October 2<sup>nd</sup>, 2009. This acknowledgement represents international acknowledgement on one of Indonesian cultures, and is expected to motivate and increase batik craftsmen welfare, reduce unemployment, reduce poverty, and support the effort to improve people welfare.

Sragen district is one of the centers for batik business. This can be seen from the number of batik SME in Sragen district. In order to improve regional economy, Sragen government has promoted entrepreneurship program for their resident.

The entrepreneurship in Sragen has developed rapidly; this can be observed from the increasing number of SME from time to time. In 2011, Sragen has 13,418 SMEs (BAPPEDA Sragen district, 2012). These SMEs run in various businesses, including batik. In batik industry, there are 4,702 companies/traditional batik industries in Sragen with total investment of Rp. 169,574,000,000,-. The industries can produce 4,287,405 packs of batik (a pack = 20 sheets) (BAPPEDA Sragen district, 2012).

Batik is art made thoroughly and carefully to produce the combination of style or special motive and colors. Batik style and color has symbolic and philosophical meaning. Batik is also an expression of creativity and cultural and spiritual values of Indonesian people. Thus, all components of the community, together with the government should take continuous steps to protect and conserve batik.

The development of batik should be directed to change the old mindse about batik, which consider batik as old, traditional, and non-modern style. Batik desain should be developed, so that it become more flexible and can be used by all social layers in the community, for all age groups, and for all occasions. That's why batik industry needs an effort to initiate the production of creative batik. The development of traditional batik creation starts from the effort to diversify batik products to fulfill consumer's needs and demand. With the optimum creation, it is expected that batik will attract young people interest to wear batik. This is important to change the image of batik as older generation dresscode to a flexible dresscode for all age group.

The proper and professional development of batik industry, including developing batik creation and combination in Sragen, will contribute in the increase in community income and development of regional economy. However, there are several problems regarding the production and market and marketing context of traditional batik creation business (See Figure 1). In the production context, the problems include the limited creativity and innovation of the craftsmen in developing batik creation and combination; in style or motive, design, or coloring process. In the market context, there is no market research on what consumer actually wants from batik industry. Thus, currently, product development is not fully based on market demand. Similarly, the promotion and marketing for traditional batik creation and combination is very limited. A thorough study is needed to solve the problem and to provide insight in accelerating the traditional batik creation and combination industry, so that they can make a diversification to fulfill market taste by directing batik into creative industry.

## 2. Problems

The problems are formulated as follows: what is the potency of traditional batik creation and combination in supporting the development of creative industry based on local wisdom, what contributions does traditional batik creation and combination have in strengthening batik community financial and regional economic development, what are the factors that support and hinder the acceleration of traditional batik creation and combination in Sragen district, how Sragen government formulate their policy to support the acceleration of traditional batik industry, both creation and combination, to encourage the acceleration in regional economic development, how is the management of traditional batik industry using creation and combination in Sragen currently, and what does the draft of integrated management model to support the acceleration of traditional batik creation and combination industry.

## 3. Research Purposes

This study aims to explore the potency of traditional batik creation and combination industry in supporting the development of creative industry based on local wisdom, to identify the contribution of traditional batik contribution in strengthening batik community economy and regional economic development, to explore the factors that support and hinder the acceleration of traditional batik industry in Sragen district, to study governmental policy in Sragen district in supporting the acceleration of traditional batik industry to encourage the acceleration of regional economic development, to identify the management of traditional batik industry in Sragen district, and to formulate the draft of integrated management model to support the acceleration of traditional batik industry.

## Research Method

This study is a descriptive research that employes qualitative approach and has generated the description about the potencies and problems regarding the development of traditional batik industry as local special product. This study is conducted in Sragen district, Central Java province. The selection of this area is due to the consideration that Sragen district is the center of batik industry.

The source of data analyzed in the first year consist of batik community, including the businessmen in batik or batik craftsmen as well as policy maker in Sragen district, especially Industrial Bureau, Cooperation and SME of Sragen district, Development Planning Agency at Sub-National Level (Badan Perencanaan Pembangunan Daerah-BAPPEDA) Sragen District, Tourism and Culture Bureau of Sragen District, Community Empowerment Bureau of Sragen District, Trade Bureau of Sragen District, and PPKAD Bureau of Sragen District.

The other sources of data are the written documents regarding batik industry in Sragen district and all environments (location and events) in each batik SME in the area. In this study the data are gathered through several methods, including observation, interview, focus group discussion, survey, and content analysis method. While to test the validity of the data, we employ source triangulation technique (Moleong, 2000). Each data from a source will be cross checked with the data from another source.

The techniques used to analyze the data on the acceleration of traditional batik creation and combination through integrated management to support the acceleration of regional economy consist of interactive analysis, internal-external analysis, and supply-demand analysis. Interactive analysis (Miles & Huberman, 1984) underlines three main components, data presentation, data reduction, and verification/drawing conclusion. Thus, this method focuses on the relationship among each research process that starts from data collection, data presentation, data reduction, and verification/drawing conclusion. Data presentation is organizing the information in the classification or categorization that enables us to draw conclusion. Data reduction is the process of selection, focusing, simplification, and

abstraction of raw data from field record that will be transcribed and reduced to avoid overlapping. Inferences is organizing the data gathered so that we can draw the final conclusion from the study, in this case is the study on the acceleration of traditional batik creation and combination through integrated management to support the acceleration of regional economic development.

In this study internal-external analysis focuses on the internal and external factors that affect the acceleration of traditional batik creation and combination in order to support the acceleration of regional economic development. Basically, internal-external analysis supports the effort from a company in MSMEs (micro, small, and medium enterprises) category to achieve the success in their business. In this case, all strengths and weaknesses or internal and external factors of a business have to be analyzed thoroughly.

The internal factors include the capability, main competence, and resources owned by an industry or IMKM. On the other side, all variables of an industry or external variables of an industry must be analyzed as well. The external variables of an industry are the external factors that consist of the opportunities and threats. These external factors are the factors that cannot or hard to be controlled, thus if a company wants to control these variables, they have to perform an anticipation. This is the reason as why an industry needs longterm strategy to anticipate and control the external factors (MSG, 2013).

Supply-demand analysis is a tool to find the components in the production process and in the market. Two main components in this analysis is the supply in the form of production and the demand in the market (Blank & Stigler, 1957). The law of demand mentions that: the number of product demanded is the inverse of price; it means that the increase in price will reduce the number of demand and vice versa. The law of supply mentions that: the product offered will grow in line with the price; it means that the increase in price will increase the number of product offered by company and vice versa. In the context of of this study, supply-demand analysis is used to find the components of supply and demand in the development of traditional batik creation. The market component in SME and traditional batik craftsmen in all over Sragen district supports the development of batik industry in Sragen.

## **Literature Review**

### **A. Batik**

Batik comes from the combination of two words in Javanese language "amba", which means "writing", and "titik" which means "dot". The word batik refers to the fabric with motive made by applying wax on to the fabrics, thus straining the dye from entering the fabric. Make batik means painting complicated pattern (dots) on the fabric using wax and a tool named *canting* (Sariyatun, 2006; Cahyani, 2009).

Batik is an art that has high aesthetic value that has become an important part of cultural life in Indonesia (especially Javanese). In the past, Javanese women use their skill in making batik as a source of income, thus, in the past batik crafters identical with exclusive job for women. Batik as one of cultural art has an ability to become national identity. It has unique cultural values inherited from generation to generation, so that we have to preserve it. We do expect that batik will always exist and become the identity of local or national culture (Rara Sugiarti, 2010).

### **B. Management**

Management is a process to plan, organize, direct, and control the efforts from organization members and the use of other organizational resources to achieve the predetermined organizational objectives (Handoko, 2010). From its character, management has three characters: it is a process of continuous activities, it concentrated to achieve organizational objectives, and gaining result from cooperation with several people and utilizing resources owned by an organization. Management has several main pillars: production management,



marketing management, distribution management, financial management, human resource management, and organizational management. In management, we know five tools known as 5M (Man, Money, Machine, Method, and Market) (Umam, 2012: 13). While integrated management is a process to manage production sector and market sector aimed to reach balance and success in organizational performance.

### C. Creative Industry

According to Simatupang (2007), creative industry with creativity, expertise, and talent as the main components, has a potency to improve people welfare through the offer of intellectual creation. The basis for creative industry is intellectual capital manifested in arts, cultures, technologies, and businesses (See Figure 5). Creative industry consists of the provision of direct creative product for consumers and the support to create creative value in the other sectors with indirect relationship with customers “...industries which have their origin in individual creativity, skill & talent, and which have a potential for wealth and job creation through the generation and exploitation of intellectual property (Indonesia Chamber of Trade, 2008).

According to the Department of Trade of the Republic of Indonesia, crafts is one of the creative industry besides the other 13 kinds of creative industries that consist of advertising, architecture, art and antique items, arts performance, design (graphic, interior, etc.), fashion design, video-film and photography, interactive game, music, publisher-offset, computer service and software, television and radio broadcast, and research and development (Indonesia Chamber of Trade, 2008).

Creative industry has strong relationship with creative economy. The development of creative economy has been stated in Presidential Instruction Number 6 of 2009. Serious commitment from all stakeholders is needed in the development of creative economy. Stakeholder is the main pillar in implementing creative economy. This group is the main element known as The Triple Helix (See Figure 6) that consist of intellectuals, business, and government.

## Result And Discussion

The analysis result shows that batik has been developed in Sragen since long time ago. Currently, Masaran and Plupuh are the sub-districts that developed into a centre of batik in Sragen district. These two sub-districts has long become the centre of batik. The batik production from these two sub-districts has been distributed to all over Indonesia and even abroad. The distribution of Sragen batik is conducted through various techniques and supported by the existence of brokers. As one of the local potencies owned by Sragen district, batik has become the source of income for large number of people in Sragen.

Various jobs that are included in the primary process of batik production including making the design/pattern, drawing the design/pattern, mencanting (applying wax), coloring, *melorod* (washing the wax from the fabric), packing, and marketing, has become the source of income for people in Sragen. Beside those primary jobs, there are als secondary jobs that support batik production, such as gawang (fabric holder) production, canting (wax applicator) production, special pan for wax production, stove, and container for lorod, as well as other tools. There are also industries that produce the raw materials, such as fabric/textile, syntethic or natural colors, and wax. On the one side, the various jobs in batik industry have provided large employment opportunities. However, on the other side, eventhough batik industry has a good growth; there are several SMEs or businessmen who experience unfortunat condition. Thus, the condition and growth of batik producers in Sragen are varies. Following is the decription of the current condition of batik SMEs in Sragen.

The supporting factors for the acceleration of traditional batik industry both in creation and combination in Sragen are government policies, private sector contribution, facilities from banking service, and NGO contribution. In order to support the development of batik industry

as unique product, Sragen district government has formulate the policies to strenghten SMEs and IKM in Sragen.

The policy is implemented into related program such as the creation of conducive environment for SMEs. The program is then further duedcribed into several activities such as granting working capital for cooperation and SMEs, granting equipments for SMEs, SMEs development facility, and assistance and development program for cooperation. Besides, there is also a program for IKM improvement, industrial technology improvement, and potential industry center improvement. These programs are implemented into several activities, including IKM assistance, equipment grants for IKM, facility and working capital grants for IKM, and the development of potential and local industrial centre. Besides the mentioned factors, there are another factor that support the development of traditional batik industry in Sragen district, such as grants for production equipment, training, comparative study, internship, existing showroom, and exhibition.

To increase batik production, both in quantity and quality, Sragen district through its industrial, cooperation, and UKM bureau has provided feeder machine for batik SMEs. The machine has a function to reduce the risk of ruggedness in the coloring and increase the efficiency in economic and human resource terms. With the feeder machine crafter can produce better color. The machine work with dynamo and should be operated by three people. The machine can be operated as follow: the fabric is tied at each tip with rope, then an operator stand in the other side of the machine. The other operator inside the machine has a duty to make sure that the fabric that will be colored enter the machine straightly, and pass over the coloring tube before it is dischrgeed from the machine. While the other operator in the outer side of the machine have to pull the tied rope so that the fabric does not stuck inside the machine. The coloring process with this machine usually uses remasol dye mixed with waterglass, so that coloring process with this machine does not need separate color lock process.

Besides the grants of feeder machine, SMES in Sragen also get another production machine, such as canting, press tools, and screen or printing table for printing batik. In order to develop batik industry in Sragen district, local government through industrial, cooperation, and small enterprises bureau provides assistance in technique in the form of training to improve batik quality and marketing network expansion.

The training to improve product quality includes natural dye, diversification of syntethic dye using naphтол, rhemasol, and indigosol. The bureau together with tourism and culture bureau has tried to facilitate SMEs to conduct comparative study to other batik SMEs outside Sragen. This activity wants to facilitate batik SMEs in Sragen to learn from experience and knowledge from other SMEs that also produce batik. With enough experience and knowledge, batik SMEs in Sragen district are expected to produce higher quality of batik.

The facilities provided by Sragen district government to develop batik potency also includes internship program. The internship program is aimed to add more knowledge, experience, and improve skills in other batik SMEs, for example in discipline, health, and work safety. Besides that, intership program also aimed to understand the process of batik production, especially the ones performed by batik SMEs to produce high quality products. Generally, intership program is conducted in relatively longer period than comparative study. The period of intership depends on the types of knowledges and skills that an intern wants to learn about. Other facility provided by Sragen district government is the existence of showroom located near to the city square. The building is built for batik SMEs in Sragen. The location of this showroom is strategic because it is located in the main street conneting Solo and Surabaya. Batik with various motives, materials, sizes, and colors can be seen in the showroom. These batiks are also sorted based on certain criteria, especially it's price.

To expand the marketing area, Sragen district government facilitates the SMEs to join exhibition. Exhibition is an effort to increase the sales because it is an effective promotion for batik SMEs to introduce their products. However, besides to increase sales, exhibition has many other benefits.

First, through exhibition, SMEs can gather information from their competitors. The information that can be gathered from competitors are price, new design, materials, and equipments. Second, through exhibition, SMEs can measure their sales success during the exhibition. This also shows whether customers like their product. Short-term sales can become a measure or prior evaluation of long-term sales. Exhibition can be used to reflect SMEs products, and the result of sales during exhibition can be used as an evaluation for future sales. Third, exhibition is a mean to introduce new product. Batik businessmen have to be active and proactive in offering their products in the exhibition to achieve the effective marketing in the exhibition. Fourth, exhibition can provide correction for the products they produced, to evaluate the shortcomings, so that in the future it will become the base for them to make an innovation for their product, and to fulfill consumer's taste. Fifth, exhibition can build and strengthen SME's image, so that people will consider the SMEs as the producer of high quality batik. Sixth, through exhibition, SMEs can gather information about their competitors, including the information about price, equipment/machinery, newest batik, new outlet/branch/agent, superior products, etc. Seventh, exhibition can be used to test teamwork in marketing, quality control, production or even packaging. Eighth, exhibition is a mean of direct selling because exhibition is the only advertising media that touch all senses; eyes, ears, nose, and skin, so that it is more realistic to be used in making purchase decision.

These activities prove that Sragen district government has tried to empower SMEs in order to encourage the development of populist economics, so that it can be integrated into regional and national development. This also aims to protect SMEs so that they are not exploited by larger and modern formal business. In order to develop batik business, SMEs in Sragen received low interest loan from banks. The grant in the form of waste water management installation (Instalasi Pengolahan Air Limbah-IPAL) is also granted by GTZ, an NGO from Germany. IPAL has an important role to reduce pollution in the soil and water as a result of batik production. The high volume of batik production in Sragen will have a negative effect toward the environment if the waste is not handled properly.

The role of private sector is vital in supporting the development of batik SMEs in Sragen. One of the systems employed in this process is foster father system in which large company takes a role as the foster father and the SME takes a role as a foster child. The foster father company is a company that functioned as trustee, while the foster child is the fostered (target). The benefit of this system is the improvement of SMEs quality. All this time, large batik company in Surakarta, such as Dinar Hadi and Batik Keris act as foster father for SMEs in Sragen, eventhough this sistem is not implemented officially. Foster father system based on the interest toward the business that has important role because it is a form of cooperation between large or medium industry with small industry.

This system can become a bridge for small companies to utilize the economic facilities such as provision, technology, and marketing, which in turn will be able to preserve small industry, so that they will become tougher and actively participate in the development, especially in the batik development. In the system, foster father provides a direction and assistance for small industry to improve their quality, financially through loan, and non-financially through the provision of raw materials, acts as guarantor for small industry in finding loans, provides hardware or software for training to improve quality and skills, as well as providing aids for marketing.

Despite of the factors that support the development of batik in Sragen, there are also factors that hinder the acceleration of batik industry development in Sragen district. The obstacles are

the fluctuation in foreign exchange, unhealthy price competition or no standard in product price, non-optimal support from batik community, limited working capital, limited experts, difficulty in finding raw materials especially silk, the fluctuation in synthetic dye quality, unpredictable weather in the cold printing batik production, non-optimal role of current cooperation, and the lack of training in order to improve batik quality.

One of the factors that hinder the development of batik industry is the fluctuation of exchange, which has serious impact on the price of raw materials such as textile and synthetic colors that must be imported. In this case, batik SMEs have weak bargaining power and most of the time are forced to giving up with the current situation.

Another obstacle in the development of batik industry is the unhealthy price competition among batik SMEs in Sragen. In order to sell their products, several SMEs sell their batik with very low price, so that they only receive small amount of profit. Currently, there is no standard for batik price to avoid unhealthy price competition among batik SMEs.

That is why currently each SME makes their own pricing system. Thus, there is an impression that some SMEs sell their product with very high price while other SMEs sell their product with very low price. The other problem is the non-optimal support from existing batik community. Several batik SMEs in Sragen have form a community that is aimed to reach efficiency both in production and marketing sector. However, this community is not functioned optimally.

Another obstacle is the limited experts in batik. Eventhough human resource in Sragen is overabundance, but it is relatively hard to find labor who has expertise in batik. As an example, the number of people who can create batik motive is very limited. This affects the lack of uniqueness in batik motive, because they employ the same person to draw their motive. Similarly, in traditional batik production, the numbers of people who have expertise in applying wax into the fabric keep decreasing from day to day.

Besides the limitedness of experts, batik businessmen also experience the limited working capital. Batik production demands high capital because producers cannot directly sell their products upon completion. They have to wait until there are customers who are interested with their products and bought them. This causes batik businessmen have to have extra capital to produce product stock so that customers have wide variety of choices. Batik industry also experiences difficulties in finding raw materials, especially silk. Recently, due to the low exchange of rupiah, batik industry finds that silk is unaffordable for them. This also causes the increase of silk batik price in the market because silk batik becomes rare. The same case happens to the synthetic dye, which increases during the weak currency exchange. This in turn will force IKM to adjust their product price, or increase their product price.

As an addition to the high price of synthetic dye, the quality of this dye also affects batik quality. As the effect the increase in price, a few producers can only afford the cheap dye, which in the end resulting in dissatisfaction because the color of their product wear off when customer wash it.

Another obstacle for batik industry is the erratic weather which has severe effect on the production of batik using cold wax printing. The erratic weather will affect the quality of batik. From the organizational side, there is an obstacle in the form of non-optimal role of batik cooperation. The SMEs in Sragen has initiated a batik cooperation named Koperasi Batik GIRLI. The word GIRLI is an acronym from pinggir kali (riverside). This name is selected because the centre of batik industry in Sragen located in Masaran and Sragen sub-districts, which both located on the riverside of Bengawan Solo. Eventhough it has long put into realization, this cooperation does not functioned optimally. Another obstacle is the lack of training to improve batik quality. Sragen district government, university, and private sectors have tried to conduct a training to improve the quality of batik Sragen. However, the

training is not intensive and tends to be incidental. The training includes batik production with various techniques and coloring training, both using natural color or synthetic color.

Sragen district government has formulated policy regarding the development of batik industry through SMEs and IKM strengthening program. Batik industry is one of business/small and medium industry in Sragen. The development of SMEs, including batik, has been formulated in Local Government Development Plan (Rencana Kerja Pembangunan Daerah-RKPD) of Sragen district 2015. In Chapter V regarding Program Plan and Priority Activities of Sragen 2015 Table 1 there is Point 1.15 regarding cooperation and SMEs. The priority program in cooperation and SMEs in the creation of conducive environment and the improvement of organizational quality for cooperation. While the priority activities in the plan is providing capital grants for cooperation and SMEs, providing equipment grants for SMEs, SMEs development facility, and supervisory and development of cooperation. Another policy and program including the Point 2.7 regarding industry with priority program to increase IKM, improving industrial technology, and improving potential industrial centre.

The priority activities mentioned in the program including IKM supervision, equipment grants for IKM, facility and capital grants for IKM, and the development of potential and local industrial centre.

Management of an industry/business is one of the keys to achieve success or the business. In this study, management refers to two main sectors, production and marketing.

The production sector includes all activities related with production: production process, human resources, quality control, and financial management. While marketing sector focuses on the market: both the existing market and potential market. The management implemented by SMEs in Sragen is still traditional management. Even these SMEs do not understand the management term, such as integrated management, production management, human resource management, etc. Some of them manage their business based on the experience they get when they worked as employee in another SME. Following we describe each management sector that have been implemented by batik SMEs in Sragen in managing their business.

### **Production Management**

Production management is an activity which aims to organize and coordinate resources utilization, including human resource management, assets management, as well as finance and material management, effectively and efficiently in order to create and increase certain goods utility as well as improving productivity. The SMEs in Sragen Municipality generally have not implementing management in broad term. The management model that is implemented is mainly the traditional and family based management. In term of production management, there are three points that are already managed i.e. product diversification, production mechanism, and quality control. However, such management remains traditional.

A sector that should be considered in production management is product diversification. Batik product diversification is an effort taken by batik SMEs to maintain their product uniqueness and quality. Diversification is needed to give consumers alternative in choosing the product they want to buy. Batik SMEs in Sragen Municipality have managed their product diversification traditionally by creating batik motif manually. There is a batik artisan in Sragen who is excelling at creating batik motif. Thus, there are many SMEs that use the artisan's service in preparing their batik motif in different version, thus the uniqueness is preserved, because they had specified the motif they want when placing the order.

Another important matter is production mechanism. All of the SMEs in Sragen Municipality organize their own production process for all of batik product. The production mechanism varies from one to other SMEs. Some products are produced in main production site which is belonged to certain SME. Some other products is produced in batik artisan's house. When there is a huge order, a SME usually will collaborate with other SMEs based on agreed upon system.

Quality control is another important matter in production management. Several SMEs in Sragen Municipality have conducted a quality control on their product. However, such quality control is conducted traditionally. Several SMEs conducted self-quality control and relying on wholesaler or buyer to do the quality control. Thus, if there is no product is rejected by wholesaler and buyer it would mean that the product has meet market requirement.

### **Marketing Management**

The marketing management in the most of SMEs in Sragen Municipality is not based on the marketing theory. The marketing management is a management process which covers several activities such as analyzing, planning, implementing, and monitoring of marketing activities in a company (in this study a SME). The focus of marketing management is fulfillment of market demand, pricing, communication, and efficient and effective distribution in providing information, encourage, and serving the market. In marketing its product, the SMEs in Sragen Municipality depend on traditional marketing such as putting their product in the intermediaries' outlet. These intermediaries seller are the seller who have outlet in Pasar Klewer, Pusat Grosir Solo (PGS), Beteng Trade Center (BTC) and other place.

An important aspects that should be considered in marketing management is market target. In marketing management, most of the SMEs in Masaran Municipality have not been determine their market target. Market target is a group of consumer that has a same characteristics which make it to be an independent target. Market target gives a good prospect, thus producer could marketing its products to several places or regions. Market target will narrow down the mass market into several segments. With the absence of detailed target market, it seems like the SMEs in Sragen Municipality is competing in the same segment, which is general market segment. Beside target market, a company should also consider marketing area. Most of the SMEs distributing their product to Surakarta (Solo), Malang, Surabaya, and other islands such as Bali, Sumatera, Kalimantan, Sulawesi, and Papua. The focused management activity in term of marketing area is covering several aspects such as implementing competitive pricing and producing high quality product.

Promotion media is a part of marketing management. Most of the SMEs in Sragen have not promoting their product independently. Most of them are promoting their product with assistance from other institution such as governmental institution and universities. The Government of Sragen Municipality encourages the promotion of batik product by organizing exhibition and showroom in Sragen. Meanwhile, some universities are assisting the SMEs in promoting their product through electronic media such as website, which leads to online marketing.

### **Human Resource Management (HRM) •**

The success of batik SME is, one of many aspects, determined by the success in term of human resource management (HRM). HRM is a measure to organize the relation and role of human resource (employees) owned by a company. Thus, through HRM a company can manage its human resource efficiently and effectively and maximizing the advantage to achieve company's objective. HRM involve all management decisions and implementations which will affect human resource activities directly. The role of human resource in a company is in the form of their involvement in a planning, system, process, and establishment of company's objective. There are several aspects that need to be considered in HRM such as improvement in productivity, turnover rate, and employees' incentive.

One of important aspect is productivity improvement. Productivity is a ratio between the output and the cost needed (input) to reach such output. Input includes production cost and equipment cost. While output includes sales, earnings, market share, and defects.

Human resource productivity is a unit of measure to determine company's outcome relatively with its objective set. Productivity has an important role in improving profitability and strengthens competitiveness. The productivity in batik SMEs in Sragen can be considered

excellent. SMEs' batik artisan in Sragen is known as one of the most highly productive artisan. This can be viewed from the quality and quantity of batik product in Sragen. Batik SMEs in Sragen can fulfill the demand from several well-known batik companies such as Dinar Hadi and Batik Keris and many other batik entrepreneur in Surakarta.

Besides that, employee turnover should be considered as well. This is important especially in traditional batik SMEs which rely on human resource capability. Human resource of employees are one of many factors that determine the success of a company (SME). Therefore, a company is required to maintain its employees to minimize turnover rate. Turnover refers to a condition when an employee resigned from their workplace. There are some factors that affect turnover rate such as labor market condition (external factor), internal factor (workplace condition, wages, skills and supervision), and personal factor (intelligence, attitude, personal experience, gender, interest, age, tenure, and personal reaction to their job). Turnover in batik SMEs in Sragen is relatively low. This is because of the implementation of traditional HRM which is based on kinship. Therefore, human touch is more dominant and creating a strong interaction between owner and employees, which will lead to respect.

#### **Financial Management**

Financial management is a process of organizing company's finance. This process involves planning, finance analysis, and financial control by finance manager. Financial management can be viewed from fund source, fund adequacy, and bookkeeping which also covers cash book.

Based on the analysis on the potential, constraint, supporting factors, and the policy of Sragen Municipality Government, which related to batik, a model is established to accelerate traditional batik growth through integrated management to support regional development acceleration. The model called IMBE (Integrated Management for Batik Enrichment).

IMBE model is a draft because it was established by researchers' team based on the above mentioned factors. The establishment of the model involves all stakeholders of batik SMEs because the model is focused on the findings or result of analysis which is not final.

The establishment of model draft is conducted along with the analysis process during the first year, thus the draft model is developed near the end of the first year. The IMBE model consists of several aspects such as context, integrated management, and enrichment (batik enrichment).

The main foundation of IMBE model is context which include all atmosphere (which related with batik potential), problems (which related with batik development in Sragen Municipality), policies (either in the Sragen Governmental or Central Java Governmental, and Central Government), and a strong networking. Context should be managed by integrated management, which involve the management of production and marketing sectors equally. The outcome of 'context' management is a long term result that should be achieved together and based on synergy and good collaboration of stakeholders. A detailed figure of IMBE model is depicted in Figure 1 as follow. Figure 1: IMBE Model.

#### **Conclusion**

The research result shows that Sragen Municipality has a potential in batik, which can be developed as regional featured product. The existence of batik industry has providing a contribution to the local economy strengthening. On one side, there are several factors that supporting the acceleration of traditional batik (creation and combination) in Sragen Municipality such as government policy, banking facilities (capital fund), LSM contribution, and private parties contribution through foster father program.

On the other side, there are several constraints such as fluctuation in currency exchange rate (rupiah on dollar), unhealthy price competition between SMEs, the existence of batik community, which is not optimal yet, lack of experts, lack of capital, the difficulty in finding

the raw material (especially silk) fluctuation of synthetic dye, erratic weather (in the cool wax technique), the role of batik cooperation which is not optimal yet, and lack of training in the development of batik quality. However, Sragen Municipality government has established a policy which is related to the development of batik industry through Micro and Medium batik enterprise, and Small and Medium batik enterprises reinforcement program.

The management of SMEs in Sragen Municipality is conducted conventionally, either in production management (such as product diversification, production mechanism, and quality control), marketing management (such as target market, marketing area, promotion media), HRM (such as improvement in productivity, turnover rate), and financial management. Based on the result of analysis on the potential, constraint, supporting factor, and government policy, a model is established to accelerate traditional batik growth through integrated management to support regional development acceleration. The model called IMBE (Integrated Management for Batik Enrichment).

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**A MODEL OF UTILIZATION OF MAY DAY CELEBRATION THROUGH “NOJTP”  
(A CASE IN CENTRAL JAVA PROVINCE, INDONESIA)**

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**Abstract**

In Indonesia, May Day Celebration is always colored by mass demonstration and prosecutions, that celebration is of course will give negative impact in many ways, such as disturbing the economic and social activities. To reduce it, the author try to provide an alternative solution through National On The Job Training Program (NOJTP). NOJTP is a program that provides training to workers on May Day celebrations in order to improve the quality and competitiveness of Indonesian workers. According to Gomes (2002) providing on the job training will at least contribute 90% of the skill and labor competitiveness. Based on survey on opinion to 40 workers in Central java Province, it is found that 95% need this program. To run NOJTP, there are four steps to implement. First, establishing the regulations of NOJTP program; second, socializing NOJTP; third, running the training provision (such as training on language, technology and entrepreneurship) and social; monitoring is held during the implementation and evaluating the whole of activities is done at the end of the training. Some benefits of running these programs are the increases of the productivity, labor competitiveness, the spirit of entrepreneurship, also promoting the sense of social communities, reducing demonstrations, and minimizing the risk of employment termination.

**Keywords:** *may day celebration, competitiveness, labour, training*

**Introduction**

Indonesia is country which is rich in resources, both the natural and human resources. Different with natural resources are limited, human resources are increased over time. Based on data from Statistics Indonesia (BPS) it is found that Indonesian population is increasing significantly from year to year [1], even the International Labour Organization (ILO) predicts the Indonesian population in 2019 reach 131 million [2]. The Indonesian labour growth shown as graph in Figure 1.

In quantity, the number of Indonesian population is more higher than other countries in ASEAN, but the competition in quantity will not win when the quality is still far below. Therefore, the problem of Indonesian labour is low quality. The quantity of qualified labor is still very low in Indonesia. Many Indonesian workers do not have special ability or skill to work [3]. Supports from the government are needed to promote them to compete in AEC (ASEAN Economic Community) in which workers from different countries may fill job opportunities in Indonesia.

Entering the first year in the era of AEC, freedom is wide open for labour coming from any country to fill job opportunities. This threat should be taken seriously, unless we will not be the host in our country. And the impact of this threat is will increase the poverty and decrease in prosperity. In addition, May Day celebration, 1<sup>st</sup> May, is very often colored by mass demonstrations and prosecutions. That celebration will give the negative impacts in many ways, such as disturbing the economic and social activities. In economic side, it is will disturb the company's productivity, and in social side is disturb the traffics.

The existence of labour compete is still rare, it is because most of Indonesian labour are

Elementary School graduate. Beside it, the unemployment of Indonesian population is increasing significantly. Rate of unemployment in Indonesia shown as graph in Figure 1.

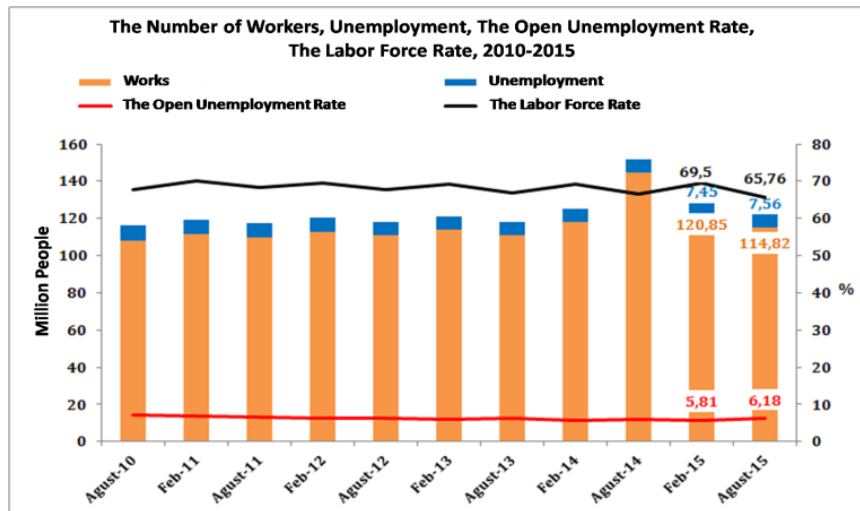


Fig. 1. Labour and Rate of Unemployment in Indonesia

Fig. 1 show that the total of Indonesian labour has increased from 2010 to 2015. Where the total of Indonesian labour in 2015 reach 144,82 million, it is because the growing of population in Indonesia. In addition, the unemployment rate in Indonesia is increasing from year 2010-2015, where the total of unemployment in 2015 reach 7,56 million, it is because the lack of employment opportunities and the difficulty of finding work, especially entering the era of AEC, where based on data from Ministry of Manpower of the Republic of Indonesia show that employment opportunities is only 43% of the labour force [1]. Therefore, it is needed the preventive effort to reduce the negative may day celebration and improving the quality and competitiveness of the labour sector, so the author try to provide an alternative solution through “NOJTP” (Natoinal On The Job Training Program).

## Material dan Methods

### 1. Literatur Review Methods

Study of literature is a literature review focused on a research topic about the condition of Indonesian labour and workers, the competitiveness and may day celebration.

### 2. Data Collection Techniques

Data colleque techniques that author use is qualitative study such as study of literatur and library research. Data colleque based from Statistics Indonesia (BPS) and International Labour Organization (ILO). Beside it, the author conducted the interview and observation to Central Java Province’s workers in may day celebration. The research method is carried out by observational studies and interviews directly. The technique of direct observation and interviews is done in several stages, including:

- Observing the phenomenon and learn the information about labor and concerning about the international may day from various mass media,
- Compile a list of questions,
- Interview directly. In this step, the author conducted the interviews in person without providing a questionnaire, so we get more detailed information about the condition of the workers.

The population of workers in Central Java province was more than 11,000 inhabitants, the sample used by the author was 40 workers, it is because it has represented the several cities and companies in Central Java.

## References Citation

### 1. Labour Trends in Indonesia

According to Law No. 13 of 2003 Chapter I Article 1 Paragraph 2 states that labour is any person who is able to work in order to produce goods and services to provision their own needs as well as for society. While in Law No. 21 of years 2000 on the union/labor union defines that labor is any person who works for a wage or remuneration in another form.

Based on result of the projection of the International Labour Organization (ILO) shows that Indonesia's labor market continues to experience growth throughout 2014 and 2015, it is proved by the increasing number of employment and decrease in the number unemployment [2]. Nowadays, the Indonesian labour has increased significantly from year to year, data form Statistics Indonesia show that per August 2015 the total of Indonesian labour reach 114,82 million. If we now look at the economic theory, should Indonesia be a rich country, along with increasing the number of workers are nearly half of the total of Indonesian population.

### 2. Wage Trends and Level of Education

The existence of wages is the main objective of the labour in Indonesia, however, it had become one of trigger for negative action on May Day celebration, where the first demands is the increase in wages. The high incidence of low wages in Indonesia may be associated with the issue of compliance with minimum wage regulations, where 51.7% of permanent workers earned below the lowest wage required by law in February 2015 [1]. Based data from ILO show that the average of wage in Indoensia is only USD 174, and it is the lowest if compared by the main country in ASEAN (Singapore, Malaysia, Thailand) [2].

One of aspects of the competitiveness is education. In Indonesia, the most of labour are elementary school graduated. The level of education for labour shown in Table 1.

Table 1. Level of Education of Indonesian Labour

No	Level of Education	Total (Labour)
1	Not/Have not been to school	4.387.904
2	Not/Do not complete the Elementary School	14.951.112
<b>3</b>	<b>Elementary School</b>	<b>31.487.578</b>
4	Junior High School	20.698.644
5	Senior High School	19.813.373
6	Vocational High School	10.837.249
7	Diploma	3.086.444
8	University	9.556.895
	<b>Total</b>	<b>114.819.199</b>

Table 1. shows that the majority of Indonesian workers are an elementary school graduate (45.50%), This certainly will be affect the level of productivity and performance of the workforce.

### 3. Review of Training

The existence of the company is highly dependent on the good and the bad performance of companies where in a company, that important is the quality of human resources in the company itself. The training process will be the starting point for the labor in getting an overview will act or work that should they traveled later [4]. Training

is any attempt to improve performance worker to a particular job being be responsible or a specific job to do with their work [5]. Based on the definition above can be concluded that the training is an activity carried by the company as an effort to improve the capabilities, performance and achievements of it is employees.

4. Review of Labour Competitiveness in Indonesia

Results of research by Ari (2015) showed that the level of competitiveness in terms of labor productivity was ranked 4th (in 2012) of some of the main countries in ASEAN such as Singapore, Malaysia and Thailand [5]<sup>24</sup>. The labour competitiveness shown in Table 2.

Table 2. Labour Competitiveness

Country	% of Productivity	% of Education	% of Wage	Rank
Indonesia	10,003	7,02	31,57	4
Singapore	47,671	26,92	74,37	1
Malaysia	23,603	23,00	74,94	2
Thailand	15,477	16,06	41,73	3

Based on Table 2, it can be seen that the competitiveness of Indonesian workers from three aspects (productivity, education levels and wages) is still far compared with the main countries in ASEAN such as Singapore, Malaysia and Thailand. Therefore, efforts are needed to improve the competitiveness of the workforce, especially workers, is not only on three aspects but in all aspects.

**Result and Discussion**

The existence of may day celebration is always colored by mass demonstration and prosecution, like in Central Java Province, there are more than 11.000 workers were conducted the may day celebration at Tri Juang Lomba Semarang. Based on survey and interview on opinion of 40 workers at 1<sup>st</sup> May 2016, it is found that there are 95% of them need this program. They think that this program is the one of way to improve their skill and competitiveness, because the worker unions (company) only give the induction training. Actually, giving training is the one of company's responsibility. According to Letter No. 13 of 2013 of Training Article 10 Paragraph 3 it is said that the training is conducted in phases.

Based on survey, the responden profile in this case is classified by some group, it is the level of education, ages and gender. The level of education shown in Table 3.

Table 3. Level of Education

No	Level of Education	Total (Labour)
1	Elementary School	10
2	Junior High School	4
3	Senior High School	18
4	Vocational High School	7
5	Diploma	1
<b>Total</b>		<b>40</b>

[1] <sup>24</sup> Ari, Sabilah. M.R. 2015. "Daya Saing Tenaga Kerja Indonesia dalam Menghadapi Masyarakat Ekonomi ASEAN (MEA)". Jurnal Ilmu Hubungan Internasional. Vol. 3. p. 122-126.

Table 3. above shows that the average level of educational by labour or workers in Central Java province is a high school graduate or equivalent with SMA. It can be seen that graduates high school/high school is not competitive and specialized skills. The results of the interview, average of position or the occupied areas in their work have a lower position, like the packing, labeling, finishing and others. While the profil of responden based on age shown in Table 4.

Table 4. Group of Ages

No	Ages (year)	Total (Labour)
1	≤20	2
2	20 – 30	12
3	31 – 40	20
4	41 – 50	4
5	>51	1
<b>Total</b>		<b>40</b>

Table 7. shows that all respondents (employment and labour) are in the productive age. However, in the absence of the provision of education and training that is intensive, this has an impact on the productivity of the companies concerned. The results of the interview, showed that the training received by the workers are only given when the first work or during the training process. This is certainly an impact on quality and performance. If the provision is given intensive training, then predicted to be able to increase the competitiveness of the workers. Therefore, the need for the provision of intensive training through NOJTP. while, the profil of responden based on gender shown in Table 5.

Table 5. Group of Gender

No	Gender	Total (Labour)
1	Male	17
2	Female	23
<b>Total</b>		<b>40</b>

Table 5. shows that the average worker is female. This means many companies that did not experience an increase in productivity that may be caused by the existence of counter between the genders and type of work.

For example jobs destined to men actually given to women workers. In addition, if the dominance of female workers contribute to the decline in the productivity of a company, this may be because women workers have more time off than male workers.

The problem of Indonesian labor is not only about number and unemployment, but also the low quality of the workers. Therefore, it is needed preventive efforts in order to improve the competitiveness of Indonesian workers by utilizing May Day celebration. The idea of conducting National On The Job Training Program (NOJTP) may become a viable solution to solve the problem. NOJTP is a program that provides training to workers in utilizing the may day celebrations in order to improve the quality and competitiveness of Indonesian workers. According to Gomes (2002) providing on the job training will at least contribute 90% of the skill and labor competitiveness [6]. NOJTP program will be integrated with Indonesian Presidential Instruction No. 6 of 2014 on Enhancing National Competitiveness in the framework of the Asean Economic Community.

The alternative solution I suggest for the problem is providing intensive basic training on

entrepreneurship to the labor on two days each quarterly. The reason why the author recommend to providing intensive basic training, it is because the company only give the induction training (training when newly entering the workforce) to the workers (this statement is based on interview to the 40 workers), and it certainly very contrary to law number 13 of 2013, article 10, paragraph 3 explains that the job training is given in phases. It is because will affect the labor productivity in Indonesia

The training is designed interestingly and it includes challenging small competitions which involve prizes (such as giving appreciation to the best labour, exemplary labour, and others). So, the workers may have difficulties in deciding whether they want to join the training programs or street demonstrations. The program will be supervised by related parties such as the government (in this case the Ministry of Manpower of the Republic of Indonesia and the Ministry of Industry of the Republic of Indonesia), the employers and the worker union.

Based on survey on opinion to 40 workers in Central Java Province, it is found that 95% workers need this program. It is because the companies only give the induction training. It means, this NOJTP program will improve their competitiveness. While 5% did not answer, 5% think that this program will disturbe their times. To run NOJTP, there are four steps to implement. First, establishing the regulations of NOJTP program; second, socializing NOJTP; third, running the training provision (such as training on language, technology and entrepreneurship) and social activities (look Figur 2); monitoring is held during the implementation and evaluating the whole of activities is done at the end of the training.

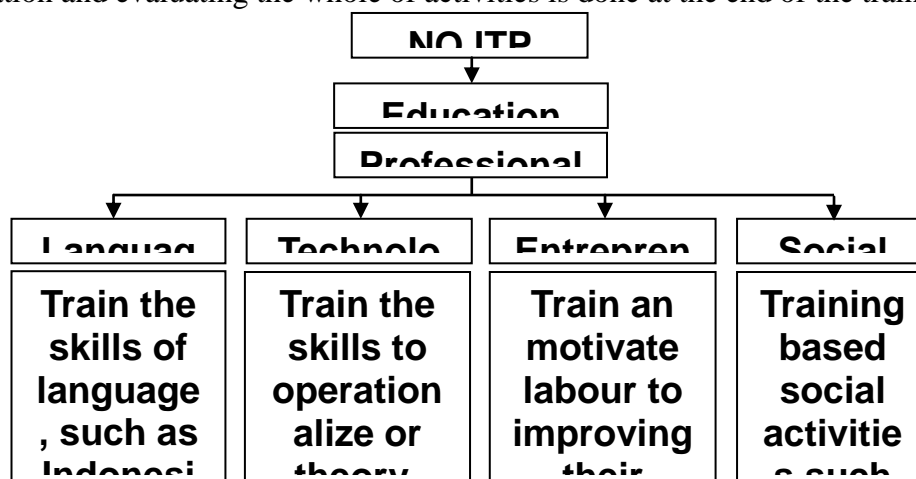


Fig. 2. Concept of NOJTP

Fig. 2. shows that the concept of this program will provide the usefulness for all parties. The process of training is given directly by the party who professionals and other parties (such as governments and competent parties in the field). The aims of this training provision are to support the professionalism on communication, to improve how to operationalize the machine or technology, improving the worker’s creativity not only as labor also as an entrepreneur and to utilize celebrate the May Day celebrations with more meaningful activities. Corporate Social Responsibilities or CSR and the government are responsible for providing the funds. Some benefits of running these programs are the increases of the productivity, labor competitiveness, the spirit of entrepreneurship, also promoting the sense of social communities, reducing demonstrations, and minimizing the risk of employment termination. All seven outputs are predicted to bring Indonesian labors much better. Offering workers beneficial and motivating on the job training programs on the week of May Day celebrations will surely improve the competitiveness of Indonesian labors playing in AEC, which started in 2015.

With the skill improvement through NOJTP program, are expected to increase in average target of company's profit by 10-20%, or more increased significantly compared with the training provided before the NOJTP program.

### **Conclusion**

The exitance of labour compete is still rare in Indonesia, it is because minimal training that given to the labour, beside it, may day celebration is always colored by mass demonstration and prosecution. Therefore it is need the effort to reduce it. And one of way to reduce it is through NOJTP. NOJTP is a program that provides training to workers on May Day celebrations in order to improve the quality and competitiveness of Indonesian workers. The author suggest that this paper can be implemented in a broad realm, so as to improve the quality and competitiveness of the workforce that impact on increasing Indonesian labor welfare.

### **Acknowledgement**

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**FLEXIBILITY OF ADEMPIERE FREE OPEN SOURCE ERP, SOLUTION TO CAR  
– RENTAL SME**

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**Abstract**

Today's business environment has become extremely competitive, the ever changing economic tide, other various factors such as globalization, customers' high expectations may lead to uncertainty and unpredictability for business organizations. Business are forced to be more competitive, flexible, and scalable to drive growth and opportunity through the tight competition among other businesses. Tools enabling organisations to become more competitive is enterprise resource planning (ERP). The benefit resulted from ERP implementation will narrow the choice for companies, from whether they need an ERP into how much will they spent on that particular solution, especially for Small and Medium Enterprise. ERP systems are basically divided into two types, The Proprietary ERP and the Open Source ERP. The focus of this research is to investigate the flexibility in ADempiere, the Open Source ERP with hypothesis of whether ADempiere has the flexibility to accommodate the SME needs sample and whether ADempiere can be modified without having a programming skill.

**Keywords:** *Enterprise Resource Planning, ERP, Flexible, Flexibility, Small and medium enterprise, business applications, information technology*

**Introduction**

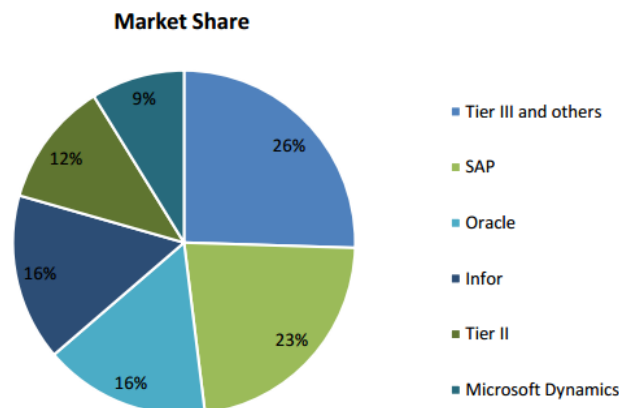
Today's business environment has become extremely competitive, the ever changing economic tide, other various factors such as globalization, customers' high expectations may lead to uncertainty and unpredictability for business organizations. Business are forced to be more competitive, flexible, and scalable to drive growth and opportunity through the tight competition among other businesses. They need to act quickly and adapt to unexpected changes in order to achieve and maintain sustainable competitive advantages. One of the best way to do so is lying on technology adoption to strengthen the business process to be more efficient and makes decision making a lot easier, even for small and medium size business. The capacity to adapt new technologies is a strategic advantage that acts as an enabler for companies.

There are a wide variety of tools and systems that have been developed to enable organisations to become more competitive, one of these tools is enterprise resource planning (ERP). When successfully implemented ERP will bring about competitive advantages (Maguire, S., Ojiako, U. & Said, A. 2010). (Zeng, Y., Chiang, R.H.L. & Yen, D.C. 2003) and improving company's business performance (Abdelmoniem, E.M. 2016). ERP becoming one of the most important IT initiatives and it is in its nature to bring in benefit to companies who implemented it solution. (Giovani JC, d.S., Snider, B. & Balakrishnan, J. 2013).

Some of the benefit findings in ERP implementations are, (Velcu, O. 2007) "improved service time in accounting tasks" as an internal efficiency benefit, "faster response to business change" as customer benefits, and financial benefits in terms of other improved efficiencies. Companies that have a business-led motivation perceive "economies of scale" as an internal efficiency benefit, and financial benefits in terms of "lower headcount costs" and "lower selling, general and administrative costs." (Yang, C. & Su, Y. 2009) Operational, tactical, and strategic benefits of ERP for the firm performance of Supply Chain Management in the

internal and external business processes, customer service, and cost management,(Spathis, C. &Ananiadis, J. 2005)increased flexibility in information provision, through effective monitoring and exploitation of assets and revenue-expenditure flow, and improved decision making.

The benefit resulted from ERP implementation will narrow the choice for companies, from whether they need an ERP into how much will they spent on that particular solution,especially for Small and Medium Enterprise. ERP systems are basically devided into two types, The Proprietary ERP and the Open Source ERP. The Proprietary ERP systems, for example SAP and Oracle have long led the industry ERP and controls about 39% of the ERP software market.



Source: Panorama Consulting (2016)

The Proprietary ERP are known to have a pricing structure of a license, annual maintenance and implementation fee. In conterary, almost all of Open Source ERP comes with free license fee, and they are providing source code and license for user to use and modify it. Some of the leading Free Open Source ERP are ADempiere, Adaxa, ERP5 and ERPNext. And there are also an Open Sorce ERP with combined GPL and commercial license, Compiere, Scipio ERP and Odoo (Kowanda, Firdaus and Pasariibu, 2015).

Open Source is a software or program where the source code is available for other developers to use, modified and given enhancements. And the product associated revenue streams is shifted toward the auxiliary products such as support, training, documentation, and others (Kowanda et.al).In this researh we will be focusing on ADempiere free open source working on a specific case on car rental SME/Start-ups

By definition, TheSmall and Medium Enterprise term according toEU definition is: “companies that employ less than 250 persons and which have an annual turnover not exceeding € 50 million euro and / or number of annual balance sheet not exceeding € 43 million”. Indonesia’s defition of SME, according to UU No. 20/2008 on SMEs are; productive business unit with assets up to a maximum turnover of Rp. 10 billion and Rp 50 billion per year. The next question is the free open source is flexible enough to accomodate SME needs?

Today's rapidly changing business environment means survival of the fittest. Only the most fit are the ones that are most flexible (Newcomer, B. 2004). Flexibility is the keyword that people, companies are looking for besides cost savings and efficiency. Competition had become a major factor forcing them to adjust and finding new way of doing things cheaper and faster to stay in the business.

Information System (IS) flexibility has been regarded as an important indicator of information technology success, encompassing all stages of IS implementation and usage(Chen, R., Sun, C., Helms, M.M. &Jih, W, 2009).IT flexibility have direct impacts oncompetitive advantage

(Tian, J., Wang, K., Chen, Y. & Johansson, B. 2010), and flexibility in information systems has been recognized as an important subset of flexibility in business (Fitzgerald, G. & Siddiqui, F.A. 2002). Flexible software might assist organizations in adapting systems to meet business requirements (Gallagher, K.P. & Worrell, J.L. 2008).

A flexible ERP system brings processes adaptation that support diversification strategy and ensure rapid response to changing business needs. Flexible ERP aims at delivering an open source ERP that's affordable and scalable enough to meet the unique needs of businesses. Companies need a truly adaptable and sustainable IT mechanism, since they compete with a combination of both efficient scale and business agility, and since they need to consistently capture market opportunities and execute business strategy with effectiveness (Dataquest 2013).

### Research Objective

The aim of this study was to evaluate the flexibility of ADempiere Free Open Source ERP system to accommodate Car Rental SMEs needs. The following hypotheses were identified:

1. ADempiere has the flexibility to accommodate the SME needs
2. ADempiere can be modified without having a programming skill

### Methodology

This section describes the methodology used to evaluate ADempiere as the free Open Source ERP system chosen. This study is a mix of theoretical and practical hands-on research. The theoretical research focuses on doing a comprehensive review of relevant academic work in order to build a model that will be used as a basis for evaluation criteria used in the Free Open Source ERP systems in the specific case in a Car rental SME.

The model for evaluating Open Source ERP system is built based on the dimension and characteristic that have been identified through literature and previous study. The model serves as the guiding principle. The evaluation is done by way of qualitative and self-performed after the download and install using any available guides.

### Literature Study

#### 1. ERP Systems

By Definition, Enterprise Resource Planning (ERP) is an enterprise level system that integrates all the business processes of an organization into a single database. ERP System enables all the departments of an organization to share and manipulate the data. ERP system has a centralized structure consisting of one single central database which can be accessed by all the departments (Batada, I. & Rahman, A. 2011), Systems integrating product that manages most of the operations in a company (Alshawi, 2004), essential tool enabling organisations to effectively process their business and manage their resources as a result of the unification of business units (Alhirz, H., & Sajeev, A. S. M. (2015), A packaged business software system that lets an organisation automate and integrate the majority of its business processes, share common data and practices across the enterprise and produce and access information in a real-time environment. The ultimate goal of an ERP system is that information must only be entered once (Marnewick, C. & Labuhagne, L. 2005).

In terms of ERP business model there is a selection to choose from, both open source and proprietary (Klaiss, D. 2008). Proprietary ERP, lead by SAP, Oracle, and Microsoft usually had an expensive licenses. A rule of thumb puts them at between one-sixth and one-third of the implementation project costs. And usually need expensive hardware to run (Johansson, B. & Sudzina, F. 2008). On the other hand open source software is proving to be a credible alternative to proprietary software. When

compared to proprietary software, open source software can offer a number of benefits such as stronger customer involvement, lower costs and better quality (Bruce, G., Robson, P. & Spaven, R. 2006). Especially superior in meeting ease of customization (i.e., extensibility and adaptability) and cost criteria (i.e., acquisition and maintenance cost) (Benlian, A. 2011). Companies can download a free system, try, evaluate and run the demo; they allow a reduction in the license fee and certain flexibility is more difficult to be found in proprietary ERP (Kowanda et.al, 2015).

## **2. Advantages of Open Source ERP System**

With Open Source ERP we can expect savings associated with license fees and costs are made visible and clear, transparent from the beginning of the process of integration than proprietary ERP (Valyi, 2008). In addition to cost advantages, a white paper released by Smile (a French company that specializes in implementing Open Source solutions) in 2008, Valyi (2008) noted some of the advantages of Open Source ERP:

- a) Flexibility: the source code itself are made available free of charge and thus open to be modified and developed internally.
- b) Quality: Valyi (2008) argues that the Open Source ERP is distinguished by superior quality to technical challenges.
- c) Ability to adapt to the business environment: for the proprietary ERP vendors, clients are directed to adapting business processes with the opinion that the system they have implemented best business practices. Open Source ERP system offers the possibility to adjust to the environment and business practices they do.
- d) Infrastructure Model in accordance with the SME: proprietary ERP system has a model of expensive infrastructure, charging high integration. Although trying to get in on the SME segment with a new lower-cost solutions such as for example SAP Business One. But according to Valyi (2008), the offers are still limited.
- e) There are no hidden costs: many proprietary ERP vendors attract clients by proposing a package at a price that is acceptable but the system limit for example in terms of number of users.
- f) The possibility of certain developments: proprietary ERP vendors maintain the control over the ensemble of functional modules. Specific development of the system is limited by the system flow
- g) Vendor Independence: by adopting Open Source ERP, client has a strong position to exert pressure on vendor's proactiveness and support of the product can be provided by the "community".
- h) Freedom to upgrade: in adopting Open Source ERP client can choose to upgrade, either alone or with the

## **3. ADempiere ERP**

The ADempiere project was created in September 2006 after a long running disagreement between ComPiere Inc., the developers of Compiere™, and the community that formed around that project. The community believed Compiere Inc. placed too much emphasis on the open source lock-in/commercial nature of the project, rather than the community sharing/enriching nature of the project, and after an impassioned discussion decided to split from Compiere™ giving birth to the ADempiere project (Anonim 2016).

ADempiere is licenced under GPL and its source code is widely available so it may be used, copied, modified, and redistributed. It is licensed with certain common restrictions, which generally differ from proprietary software (Anonim 2016).

ADempiere also comes with complete features, from Sales up until various financial report.

Table 1. ADempiere Features

Features Categorization	Features List
ERP Features	Sales: Quotes to Invoice, Proposals, POS, Sales Orders, Work Orders, Invoicing, Shipment Purchasing: Purchase Requisition, RFQ, Purchase Order, Material Receipt, Invoicing Manufacturing Management: Product Life Cycle Management, Pool Resource Management, Manufacturing Workflows, Forecast Management, Planning Management, CRP, MRP, DRP, Discrete Manufacturing Maintenance Management, Quality Management, Costing Management Material Management: Inventory Control, Warehouse Management, Replenishment, Stock Movement, Stock Count, Price List, Bill of Materials Finance: General Ledger, Accounts Receivable, Accounts Payable, Financial Reporting, Cash Management Budgeting, VAT/TAX/IVA Human Resource: Payroll, Payroll Concepts, Payroll Rule Engine Project Management, Manufacturing, Customer Relationship Management (CRM), POS, ecommerce Maintenance Management System Admin, Application Dictionary, Partner Relations, Quote To Invoice, Requisition to Invoice, Returns, Open Items, Material Management, Project Management, Performance Analysis, Assets, Manufacturing Features by ADempiere Menu (User Interface) Management*, Human resource and Payroll*
OLAP & Reporting	Business Intelligence, Financial Reporting, Extending Reports, Exporting Reports, JasperReports
Other Features	Platform independent, Extendable, Pluggable, Touchable, Callable and Self-installable
Features by ADempiere Menu (User Interface)	System Admin, Application Dictionary, Partner Relations, Quote To Invoice, Requisition to Invoice, Returns, Open Items, Material Management, Project Management, Performance Analysis, Assets, Manufacturing Management*, Human resource and Payroll*

Source: Anonim(2010)

In Venn and Nuffel (2013), ADempiere poses very complete features compare to other 36 Open Source ERP as stated on the table

Tabel2. Feature comparison between Open Source ERP

Product	Features	Ledger	Financial Reporting	Account Receivable	Account Payable	Multicurrency	Invoicing	Order Processing	Inventory	Purchase Order	Warehouse Management	Manufacturing/Bill of Material	Production Planning	Human Resource Management	Contact Management	Customer Relationship Management	Business Intelligence	Business Process Management	Supplier Relationship Management	Supply chain Management	Procurement	Marketing
Adempiere		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ApacheOFBiz		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
CK-ERP		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Compiere		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ERP 5		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
GNU Enterprise		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Open Bravo		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Open ERP		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Opentabs		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Postbooks		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
WebERP		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Source: VenndanNuffel (2013) (processed)

ADempiere provides a complete framework that can be used to customize the software to suit business needs (Athena Information Solutions, 2015), and it can be used as a framework for rapid application development and its upswing (Ghatrei, S. 2013).

### The Flexibility Evaluation Model

In evaluating the flexibility of Free Open Source ERP system in this designated case, a model implemented are including evaluation criteria from a comprehensive literature review assessing information systems flexibility

In Al-Mashari, M. (2003), Stedman, (1999) one of the major challenges in ERP adoption is flexibility assurance. The flexibility of ERP systems refers to the extent to which an ERP system may be dynamically reconfigurable to define new business models and processes.

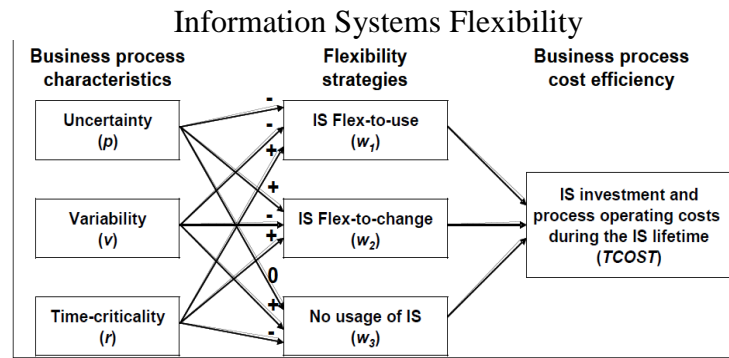
According to Jen-Her Wu & Yu-Min, W. (2006), flexibility of the ERP system is measuring ultimate user satisfaction, and the flexibility in the system comes from the ability to connect applications together with user-defined rules, as well as the type of applications that can be connected together," (Violino, B. 2008)

Model in evaluating ERP flexibility are using 3 flexible parameter principle by Newcomer, B. (2004): First, the parameterization is flexible, meaning that it is user-definable rather than fixed. Second, new parameters can be easily defined and linked to applications or business workflow without the need to perform program modifications. Third, parameters can be set at different organizational levels, down to the lowest level possible.

1. Literature Study

According to Webster’s dictionary, the term flexible is defined as ‘capable of responding or conforming to a changing or new situation’.

There are two types of Information Systems flexibility: (1) IS flexibility for use is the range of possibilities provided by an information system until a major change is required, and (2) Flexibility to change or the potential adaptability for further changes of a given information systems (Gebauer&Schober, 2006);



Source:Gebauer&Schober(2006)

According to Kumar, R.L. & Stylianou, A.C. 2014, based on Research by Fitzgerald (1990) and Land (1982), Techniques used for analyzing system flexibility during systems development are Flexibility Analysis and Future analysis.

Flexibility Analysis techniques



Source:Kumar, R.L. & Stylianou, A.C. 2014

In his research, flexibility is needed to anticipate, respond, or adapt to change, it is important to understand the possible sources of such change. Land (1982), and Fitzgerald (1990) suggested various types of change affecting IS. These changes include: changes in technology (hardware, software, and computing paradigms), laws, the economy, the environment, the organization (structure, policies, and strategies, processes, finances, mergers and acquisitions), the users (attitudes, expectations, tastes, and requirements), interfaces (internal and external systems, customers, suppliers), and IS personnel (skill sets, turnover). Fitzgerald argues that 'a large proportion of major changes to our IS are potentially predictable'. He suggests the use of a technique he termed 'Flexibility Analysis' to analyze the impact of such changes and take necessary action during the systems development process. He emphasizes the need for flexibility analysis despite some practical reasons why such an analysis might be difficult. These reasons, which are in effect challenges to managing IS flexibility, include management commitment, organizational politics, additional time and resource requirements, and lack of analyst/designer experience. Similar to the concept of flexibility analysis, Land (1982) suggests a technique called 'future analysis', which aims to identify 'systems features which are vulnerable to possible changes' and provides guidance in the development of flexible systems able to accommodate such changes. A risk of not

performing such an analysis, according to Land, is having inflexible systems that perform well under the current circumstances but whose performance degrades as those circumstances change. Land also describes the designer's dilemma in deciding the amount of flexibility to build into a system given the cost and development effort necessary. Characteristically, he gives the example of a real case where 'the designer is involved in a trade-off between the extra development and operational cost of designing a system which is adaptable and flexible - a very general system - or of designing a very specific system dedicated to the needs existing at the time of implementation, but which may be incapable of modification, and may have to be replaced if requirements change'. Further in Kumar, R.L. & Stylianou, A.C. (2014) concept of IS flexibility into three major categories containing 10 flexibility types

### IS flexibility types and categories

Flexibility categories	Flexibility types
Flexibility in Information Systems Operations	<ul style="list-style-type: none"> <li>• <i>Volume flexibility</i> – Ability to vary the level of support and/or quantity of IS products/services (reports, data, CPU time, bandwidth, transactions, etc.).</li> <li>• <i>Operating flexibility</i> – Ability to meet commitments (service levels) by: (a) temporarily maintaining (in spite of negative events), (b) redistributing or (c) changing the focus, mix, role/functionality, location, or workload of IS resources.</li> <li>• <i>Input/Output flexibility</i> – Ability to vary the timing, content, format, location, and producers/consumers of system input and/or output.</li> <li>• <i>Integration flexibility</i> – Ability to efficiently access and use a variety of data formats and/or applications.</li> </ul>
Flexibility in Information Systems & Services Development and Deployment	<ul style="list-style-type: none"> <li>• <i>Development flexibility</i> – Ability to quickly and easily develop, maintain and/or redesign systems and/or services.</li> <li>• <i>New technology deployment flexibility</i> – Ability to quickly and effectively evaluate and deploy the appropriate new technology choices.</li> </ul>
Flexibility in Information Systems Management	<ul style="list-style-type: none"> <li>• <i>Financial flexibility</i> – Ability to reallocate financial resources among activities of the Information Systems Department.</li> <li>• <i>Sourcing flexibility</i> – Ability to obtain necessary IS resources from multiple sources as needed.</li> <li>• <i>Staffing flexibility</i> – Ability to meet commitments by maintaining, or varying the mix of existing IS personnel resources, or by hiring new resources.</li> </ul>

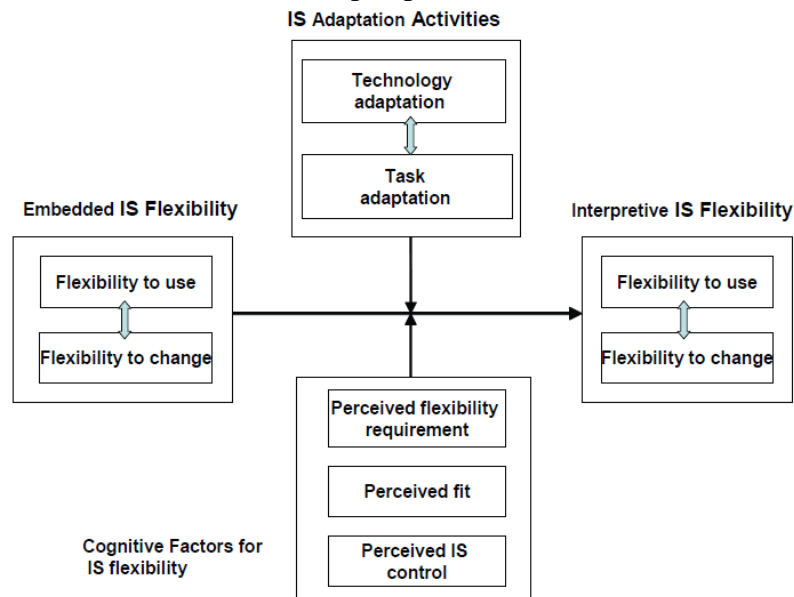
Source: Kumar, R.L. & Stylianou, A.C. 2014

The roles of an IT organization can be conceptualized as (a) the operation of existing systems to meet business requirements, (b) the development of systems (either new or redesign/maintenance of existing) and deployment of new technologies, and (c) the management of financial and human resources.

Information System (IS) flexibility has been regarded as an important indicator of information technology success. This article provides a model of IS flexibility encompassing all stages of IS implementation and usage. The model considers the cognitive factors from IS staff and users as important leveraging IS flexibility with adaptation activities.

In this research we are going to focus on analyzing information systems flexibility in terms of flexibility to change and with focus in the development stage.

A theoretical model of information system flexibility with interpretive flexibility perspective



Source:Chen, R., Sun, C., Helms, M.M. &Jih, W (2009).

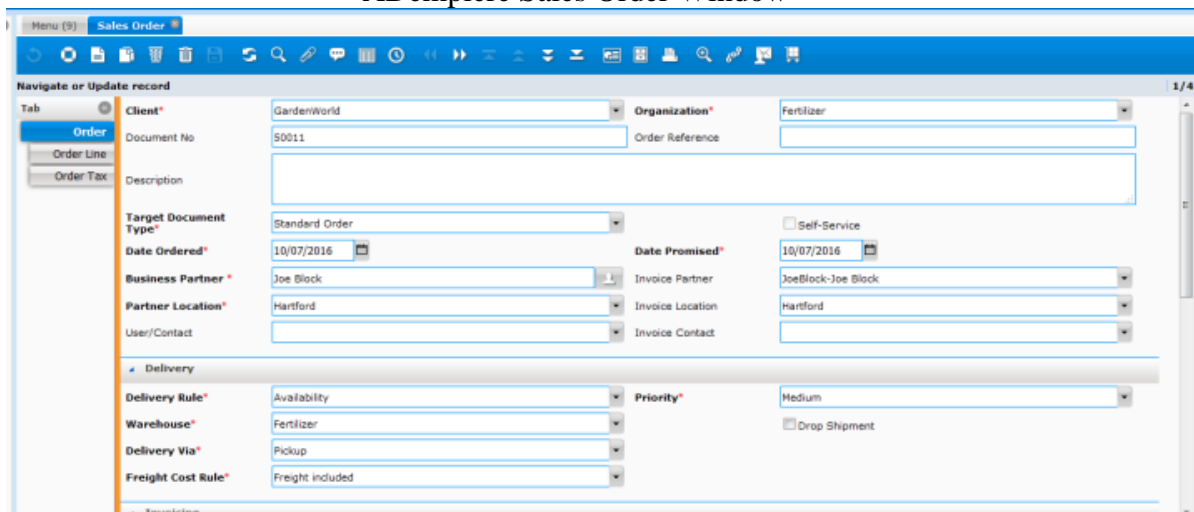
**Results And Discussion**

ADempiere as the free open source erpin this research is carefully installed in an Intel® Core™ i5-2520M processor (dual-core, 2.50GHz, 3MB Cache), with 8GB RAM and 320GB HDD, ntel® Core™ i5-2520M processor (dual-core, 2.50GHz, 3MB Cache), using Windows 7 Pro, with Java 1.7, JBoss and Adempiere 3.8 and Postgress 9.1

Modification case used on this standard ADempiere ERP are on a specific business process as a sample, which is in a case of a Car Rental business Sales Order Process. In generating sales order, the car rental business needs to point out which car (asset) that are rented. The Car itself are registered in the asset module.In the basic Sales Order windows there is no field available to select which car/asset being rented.

ADempiere Sales Order window is used to registered sales in the business. In the sales order window there are field to register business partner detail, delivery detail and so on.

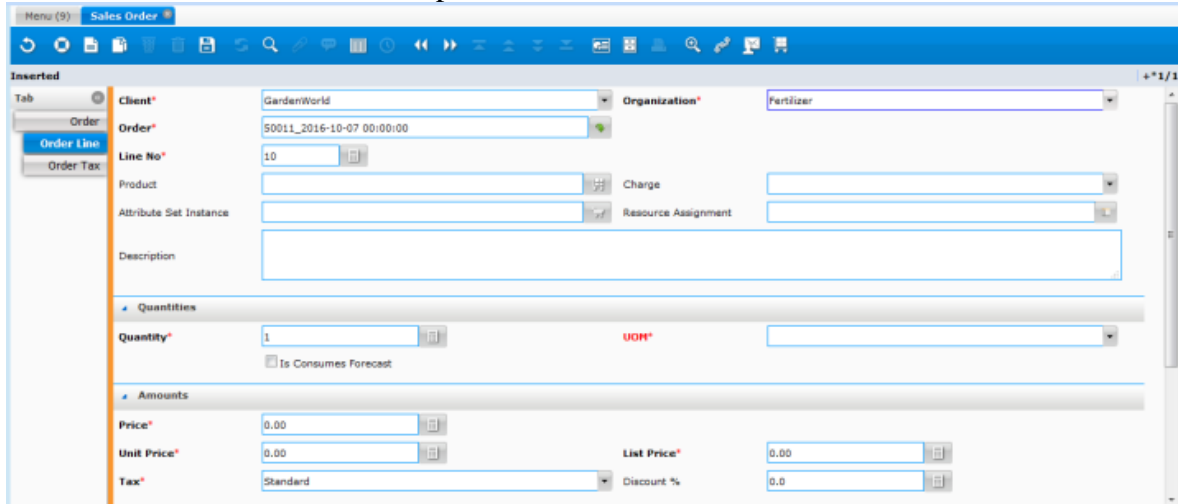
ADempiere Sales Order Window





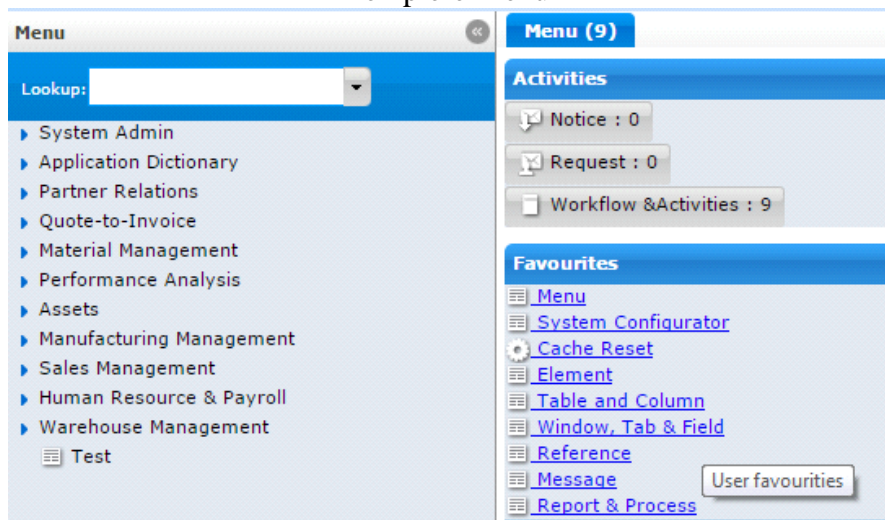
In the tab Sales Order Line, there is a selection of product/services used, for example in this Car Rental business it is used to registered hourly, daily, weekly or monthly car rental services. The business model requires to have a car/asset selected in the transaction

### ADempiere Sales Order LineWindow



Based on that requirement there is a need to add Car/Asset field in the Sales Order Line Tab. ADempiere as stated by Athena Information Solutions (2015) and Ghatrei, S (2013) provide with a “software development” tools to configure the application.

### ADempiere Menu



In the favourite menu there are “Table & Coloum” and “Windoe, Tab & Field” that allow us to configure/modify the application.

Based on the requirement the steps for creating a new “Car Rental – Sales Order” window is creating new field called Asset that integrates with Asset Module. And the steps taken in ADempiere are:

1. Idetifies table used in Asset Module and Sales Order
2. Add new coloum at Sales Order table
3. Add new field/dropdown menu ar Sales Order Window

For starter, we need to log in as system administrator so we can access the tools.

For Table Identification, we just need to access "menu" on favorite menu and we can zoom in details over details without having knowledge of the database structure. We can identify the primary key by looking at a "check" sign on Table and Column menu to determine the Table ID that we are going to use to combine in the Sales Order screen.

To add Asset table into Sales Order line window, we can repeat the step as we identify Asset table, which is go to menu, zoom on window, choose the Tab, Choose the window we want to integrate the table with, in this case Sales Order Line, we zoom in table, and we choose Column in the following menu.

The process of integration is as simple as pressing add new record on the menu and we just type in the DB Column name that we acquired previously, A\_Asset\_ID, the name, description and the standard settings are already being added into Sales Order Line Window. To confirm the addition we need to press synchronize column to add the created column on the window. The last step is create field button on previous Sales Order window that we open previously, we can even modify the position of the column by modifying the Field sequence.

Modified ADempiere Sales Order Line Window

With this result the answer for this research hypothesis are 1. ADempiere has the flexibility to accommodate the SME needs and 2. ADempiere can be modified without having a programming skill. Using the given software development framework, the flexibility of the ADempiere is very good. This result is aligned with research by Gao, Y. & Feng, X.Z. (2012), ADempiere development framework, providing the developer a full play in the software development. Using a framework mode in software development, "flexibility" of software development embedded in the process implementing the method. The application of this software development framework offers the possibility of fast, flexible, and "tailored" business information systems. It is the effective and efficient creation of application systems within a full-fledged strategy (Jain, R. & Chandrasekaran, A. 2009). This Prefabricated framework that can be quickly and easily customized for specific solutions. It increases flexibility by providing the ability to adapt rapidly to change while reducing costs and time to market. (Hewlett-Packard, 1997).

### Conclusions, Implications, And Recommendations

Having successfully modified (configure) ADempiere as an ERP, without using any software development skill is quite interesting enough to see the horizon beyond that. The possibilities to develop further when goes in to the depth of the source code could be limitless.

Open Source is a software or program where the source code is available for other developers to use, modified and given enhancements. And the product associated revenue streams is

shifted toward the auxiliary products such as support, training, documentation, and others (Kowanda et.al). This result is interestingly prove that open source software, in this case ADempiere could be a credible alternative to proprietary ERP software. Align with research by Benlian, A. (2011), superior in meeting ease of customization (i.e., extensibility and adaptability). ADempiere software development framework also confirm Valyi (2008), which argues the Open Source ERP is distinguished by superior quality to technical challenges. The result also answer Al-Mashari, M. (2003), quoting Stedman, (1999) one of the major challenges in ERP adoption is flexibility assurance, having source code available and embedded software development framework there is a high possibilities to have a flexibility assurance.

Model in evaluating ERP flexibility are using 3 flexible parameter principle by Newcomer, B. (2004): First, the parameterization is flexible, meaning that it is user-definable rather than fixed. Second, new parameters can be easily defined and linked to applications or business workflow without the need to perform program modifications. Third, parameters can be set at different organizational levels, down to the lowest level possible. Evaluating ADempiere in this research using ERP flexibility evaluation model by Newcomer, B. (2004), ADempiere have flexible parameterization, new parameters can be easily defined and linked to applications or business workflow without the need to perform program modifications. As for the third criteria as it is not part of the research, is already embedded in the standard matrix authorization menu of ADempiere.

#### Implications and Suggestions

Open Source ERP in this research represent by ADempiere have a good flexibility in terms of parameterizations and modification of window in the case. The possibilities to develop further more than using embedded software development framework/configuration and touching the source code could be limitless. This study concludes that ADempire could flexibly “modified” to required business needs using embedded tools. Based on the case ADempiere would be able to suit flexibly for SMEs needs. For further research, there is a lot of horizon to look into, it would still make sense to repeat this similar study for different cases and probably in different company scale/business. Another suggestion is to make a comparative study between the leading Open Source ERP and Proprietary ERP.

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## PRELIMINARY MARKET ANALYSIS FOR DEVELOPING GAS STATION BUSINESS IN THAILAND

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### Abstract

In terms to enter the business in international market, company should prepare strategies that will be implemented and give the chance to strengthen company brand globally. International expansion is further step for any business, but international expansion moves must be slowly considered and well planned. This plan is important for companies that are looking for growth opportunity, acquaint company brand, and generate greater profit in international market.

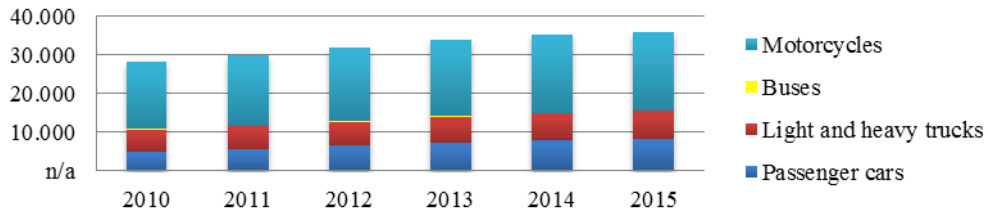
For oil and gas company, one of the strategy to do their entry market is either upstream or downstream business. In this research, author will be provided analysis to do entry market in downstream business, such as gas station. Asia has numbers of developing country that suitable to be invested. Thailand is one of the developing countries in south east Asia and they provide huge opportunity to do entry market gas station.

Thailand GDP and Total Population is quite high than other Asia countries, following with the total of primary energy consumption per Capita. Apart of their GDP and primary energy consumption per capita, one of the most important variables to know to develop gas station is the number of vehicle growth. The number of vehicles increases each year followed by the growing demand of fuel product. Since there are huge opportunities to expand the international market, the Company can decide to expand its gas station business in Thailand. In order to meet its plan, the companies need to analyse the problem identification that may be occurred. In order to meet the best strategy to develop business in international market, company should be started to analyse the Thailand gas station market with SWOT analysis, IE matrix, tows matrix and Ansoff matrix. Those analysis generate strategies that suitable are market penetration, market development, and product development.

**Keywords:** *International Expansion, Downstream Business, Ansoff Matrix, Expansion Strategy, Thailand.*

### Introduction

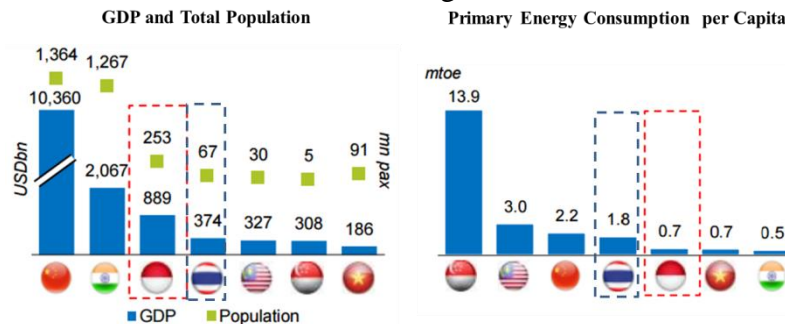
Thailand GNI per Capita is quite higher than another countries, include Indonesia. Thailand GNI per capita showed that the ability to buy in Thailand is also high. Supported by the data of vehicle growth in Thailand, this analysis will be completed each other with Thailand GNI per capita. As shown in Figure 1, the growth of vehicle in Thailand increase each year in each type of vehicle. Therefore, this background and opportunity will get the company to take penetrate Gas Station in Thailand.



Source: IHS, 2016

Figure 26 Number of Vehicle Growth

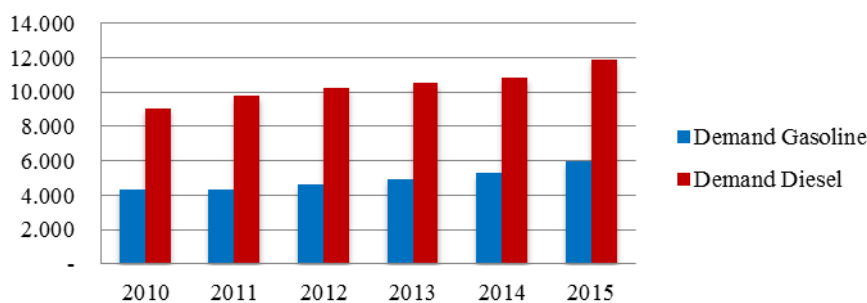
As shown in Figure 2 below, Thailand GDP and Total Population is quite high than other Asia countries, following with the total of primary energy consumption per Capita. Apart of their GDP and primary energy consumption per capita, one of the most important variables to know to develop gas station is the number of vehicle growth.



Source: Pertamina Highlights, 2015

Figure 27 Comparing Factor between Thailand and Indonesia

The number of vehicles increases each year shown by Figure above, followed by the growing demand of oil fuel described by Figure 4 below. Since there are huge opportunity to expand the international market, Company can decide to expand its gas station business in Thailand. In order to meet its plan, Company need to analyze the problem identification that may be occur. In order to meet the best strategy and prepare the financial posture to develop business in international market, company should started to analyze the Thailand gas station market and calculate the feasibility gas station in Thailand.



Source: EPPO, 2014

Figure 28 Demand Gasoline and Diesel

## Methods

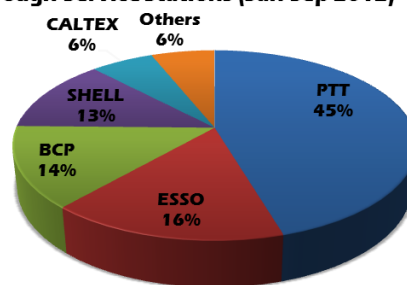
These research focus to the strategy formulation that conducted with market analysis of variable that will related to downstream business in Thailand. This research mostly used the secondary data includes study literature as well from Thailand government and also other supporting data such as interview with related company. This research limited to determine the feasibility international expansion downstream business in Thailand.

## Results and Discussion

Market Needs, Wants, and Demand is use to determine the market analysis of product. Needs is basic human requirements. Needs become wants when they are indicated to particular objects that might satisfy human needs. Wants can be shaped by society in specific place. Whereas demands are wants for particular products backed by an ability to pay (Kotler and Keller, 2009).

In this analysis, the author will evaluate about the market segment and need of gas station market in Thailand based on sales of vehicles and sales, demand, consumption of fuel using secondary data. This market understanding having purpose to know the market potential changes through macro environment that could influence market segment and market needs of gas station, as well as consumer behavior toward gas station in Thailand. Therefore, the author will be provide about the factors that will impacted toward market segment gas station in Thailand through below explanation. As shown by Figure 2.10 below, describe market share of gas station in Thailand. Those market share will indicate how much Company can grab the opportunity to take the 'others' market share of gas station in Thailand. The strong existing competitor is automatically PTT as the state-owned company in Thailand.

**Market Share by Average Monthly Sales Volume through Service Stations (Jan-Sep 2012)**



Source: EPPO, 2015

*Figure 29 Market Share Gas Station in Thailand*

Almost all of the gas station competitor in Thailand sold gasohol as their products, following the government regulacy. Currently, oil traders sold oil, gas, gasohol number nine persons, including the company PTT, Bangchak, Shell, Caltex, Esso, Jet TPI Petronas and Siam United Services by a number of gas stations. In this section, author provide informatin about market size and growth, market trends, and market potential. This information helps company to aware of the market analysis gas station in Thailand.

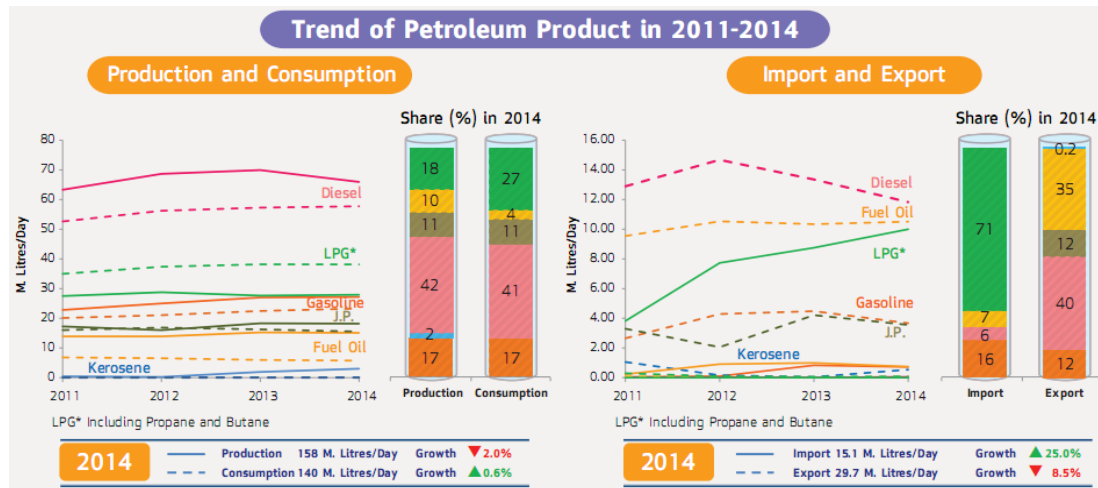
### 1. Market Size and Growth

The total primary energy consumption in 2014 increased by 2.6% from that in 2013, or at a level of 2,053 thousand barrels per day (KBD) of crude oil equivalent. Oil consumption was the second largest, held share of 36%, or an increase of 0.6% shown by Table 2.10. The total primary energy production in 2014 decreased by 0.4% from that in 2013, or at a level of 1,073 thousand barrels per day (KBD) of crude oil equivalent. A total of THB 2,280 billion was spent on energy consumption, an increase of THB 58 billion or 2.6% compared to the previous year. The consumption value of petroleum products, electricity, natural gas and lignite/coal increased when compared with the 2013 level. Those information above indicate that the market growth rate of oil consumption is quite huge and it has opportunity to support company that having plan to develop gas station in Thailand.

### 2. Market Trends



As shown by Figure 5 below, describe picture about the fuel product consumption and production. Growth of product consumption increase 0,6%, following Diesel and gasoline product. Different from product consumption, the growth production decrease 2,0% in 2014. This figure indicate that the interest and need of fuel product is higher than production.



Source: Energy Statistics of Thailand, 2015

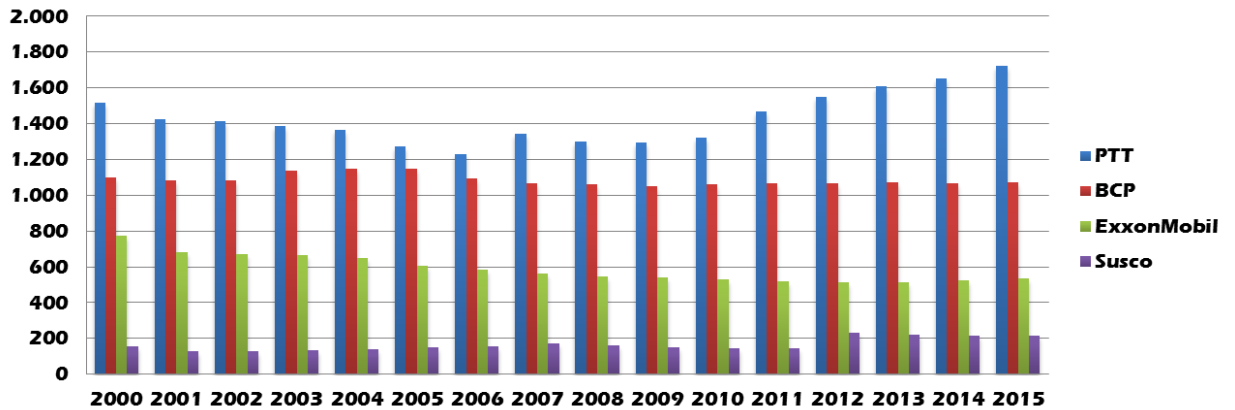
Figure 30 Trend of Petroleum Product in 2011 – 2014

### 3. Market Potential

The average consumption of gasoline in 2014 was at a level of 23.3 million litres per day or an increase of 3.7% compared with that in 2013. The consumption increased in all type of gasohol because of lower price than gasoline. Diesel consumption in 2014 was at an average of 57.8 million litres per day or an increase of 0.8%. The effect to diesel consumption was not only GDP growth, but also NGV. Since it had become a fuel substitution for diesel, this gave diesel pressure to its growth as shown by Table 2.12 The consumption increase of fuel product both gasoline and diesel support the opportunity to develop gas station.

There are competitors that has been established at Thailand. In order to enter the international market gas station in Thailand, Company should determine the competitive benchmarking analysis and competitor's marketing mix analysis. These analysis provide the analysis that will help Company to determine whether what kind of strategy include product type, price, location that will implement into Company gas station in Thailand. As shown by the Figure 6 below, the leading competitor was PTT, because PTT is the state owned-company of Thailand.

There are nine company listed in EPPD; PTT Co., Ltd, Bangchak Petroleum Public Co., Ltd, Shell, Esso (Thailand) Public Co., Ltd, Chevron Thailand, IRPC Public Co., Ltd, PTG Energy Public Co., Ltd, Siam United Service Public Co., Ltd (SUSCO), and RPCG Public Co., Ltd. Those of companies has much of gas stations spread all over area at Thailand. Each of company has different strategy to service their customer. The main focus on this section will be 4 competitors, such as PTT Co., Ltd, Bangchak Petroleum Public Co., Ltd, Esso (Thailand) Public Co., Ltd and Siam United Service Public Co., Ltd (SUSCO). Each competitor has different value proposition for the customer. Competitor's Marketing Mix Analysis.



Source: IHS, 2016

Figure 31 Competitor's Gas Station

Gas Station in Thailand sell 5 type of fuel, they are Diesel, Gasoline 91, Gasoline 95, Gasohol E20 and Gasohol E85. Company need to determine the price of fuel that will be sold with the competitive price towards another competitor. Meaning of Determination price is to determine the profit margin that will be included into the final price. Therefore, author will analyze the marketing mix of each competitor.

Each competitor has various products especially gasoline and diesel vehicle. Each competitor has differentiation strategy on its product and has specification for specific vehicle in its gas station. Competitor's value proposition is intended to all types of vehicles, specifically on gasoline and diesel vehicle. As shown by Table 1 below describes the product differentiation of gasoline and diesel product in gas station competitor.

Table 25 Competitor's Product Differentiation

Company	Product Differentiation
PTT Thailand Public Co., Ltd.	For this product differentiation, almost there is not differentiation among each competitor. This condition occur because of the government regulation about green technology and it cause almost all of the competitor change the products into gasohol product, mixture between gasoline and ethanol
Bangchak Petroleum Public Co., Ltd.	
ESSO (Thailand) Public Co., Ltd.	
Siam United Service Public Co., Ltd.	

Source: Author Analysis, 2016

As shown by Table 2 below, the competitor doesn't have quite different price among each other. From all of the products, almost all the product has the same price each other. Only the gasoline price that has different price among each other. This condition indicate that the competition among each other competitor was quite high. It also might be indicate that in Thailand, the price structure was conduct by the government. So, this condition occur because of the retail price was the same of each product.

Table 26 Competitor's Product Price

Company	Price
Bangchak Petroleum	Gasoline 95 : Gasohol E20 : Gasohol 95 : THB
	THB 31.36 : THB 21.84 : 24.40
	Gasohol 91 : Gasohol E85 : Diesel : THB

	THB 23.98	THB 18.39	24.59
<b>PTT Thailand</b>	Gasoline 95 : THB -	Gasohol E20 : THB 21.84	Gasohol 95 : THB 24.40
	Gasohol 91 : THB 23.98	Gasohol E85 : THB 18.39	Diesel : THB 24.59
<b>ESSO (Thailand)</b>	Gasoline 95 : THB 31.81	Gasohol E20 : THB 21.84	Gasohol 95 : THB 24.40
	Gasohol 91 : THB 23.98	Gasohol E85 : THB -	Diesel : THB 24.59
<b>Siam United Service</b>	Gasoline 95 : THB 31.36	Gasohol E20 : THB 21.84	Gasohol 95 : THB 24.40
	Gasohol 91 : THB 23.98	Gasohol E85 : THB -	Diesel : THB 24.59

Source: EPPO, June 2016

As shown by Table 2.15 below, PTT has the higher number of gas station than other competitor. This condition occurs because PTT was the state-owned company of Thailand. Competitor operated their gas station into two type, they operated their owned gas station and operated by the third parties. They also provide one stop service concept to satisfy lifestyle of modern consumers. Just drop by their gas station, consumer can enjoy any other facilities, i.e. ATM Machine, convenience store, vehicle service and any other facilities.

*Table 27 Competitor's Place Strategy*

Company	Place Strategy
<b>PTT Thailand Public Co., Ltd.</b>	PTT Retail Marketing distributes refined fuels and lubricating products through PTT network of over 1,180 service stations nationwide (excluding PTT service stations run by PTT Retail Management Co.,Ltd).
<b>Bangchak Petroleum Public Co., Ltd.</b>	Over 76% of finished products from Bangchak's refining processes were sold through the retail network of over 1,072 stations, Of the total number, 457 were standard stations, while 615 were community stations (as of the end of December 2015).
<b>ESSO (Thailand) Public Co., Ltd.</b>	ESSO retail network includes 500 Esso branded retail service stations nationwide – the largest international branded network of retail service stations in Thailand. Network of Esso branded service stations includes stations operated by subsidiary, Thai-C Center Company Limited ("TCC"), and third-party dealers.
<b>Siam United Service Public Co., Ltd.</b>	The Company and its subsidiary companies have total scattering almost 223 petrol stations throughout the country; 72 petrol stations are operated by the Company, 66 petrol stations are leased for operation by SUSCO Retail Co., Ltd., its subsidiary company, and 79 petrol stations are permitted to be operated by dealers.

Source: Competitor Website and Annual Report, 2016

As shown by Table 2.16 below, the competitor provide attractive service to attract and promote their gas station towards their consumer. They provide the latest technology towards its product and provide comfortable service towards their consumer. They want to attract their consumer towards promotion with attractive service and product. This condition occur because they can not compete with price. It cause since government conduct the retail price of product, so that they can not generate diversification high margin from its product price. In order to generate more profit from consumer, they create different strategy of each competitor through their strategy promotion towards their product and gas station.

*Table 28 Competitor's Promotion Strategy*

<b>Company</b>	<b>Promotion Strategy</b>
<b>PTT Thailand Public</b>	To maximize customer satisfaction, PTT has modernized its potential service stations into the complete new look of "PTT Park" with an integration of related services offered such as retail convenient stores located in the same compound of service stations.
<b>Bangchak Petroleum Public</b>	Bangchak stations are positioned for selling fuels from renewable energy, namely Gasohol 91, Gasohol 95, Gasohol E20, Gasohol E85, and Hi-diesel, and are equipped with stores to provide customers with utmost convenience: Baichak Store and Lemon Green Store selling general goods.
<b>ESSO (Thailand) Public</b>	Esso make their promotion with deal towards third parties, i.e Tesco visa card. Esso also actively participate in safety promotion campaigns to support road safety.
<b>Siam United Service Public</b>	In expanding the petrol station network, the Company and its subsidiaries concentrated on the large communities in upcountry and Bangkok Metropolis. The Company and its subsidiaries provided comprehensive services in the large petrol stations in the urban area or on the main roads needing lots of fuel oils, and invested in the medium size petrol stations which gave good return by selecting the form of construction appropriate for each locality and in small petrol stations with small investments and short payback period on feeder roads connecting the districts which did not need so much oils.

Source: Author Analysis, 2016

### **Conclusion**

Related to the market analysis above, Thailand is the suitable country to do company market entry towards its downstream business especially gas station in Thailand. This opportunity supported by the Thailand economic condition, vehicle growth demand and fuel product demand. The competitive situation among competitor should be considered before doing the market entry. Because the existing competitor has been stable and having much of numbers gas station in Thailand. Consumer also more knowing the existing competitor. Based on this condition, company should prepare the suitable and best strategy to do market entry in Thailand.

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**THE INFLUENCE OF *ENTREPRENEURIAL LEADERSHIP*, MOTIVATION AND DUAL ROLE CONFLICT OF BUSINESS PERFORMANCE AND ITS IMPACT ON THE SUCCESS OF WOMEN ENTREPRENEURS PANGKALPINANG CITY**

Reniaty, UBB, Indonesia  
Khairiyansyah, UBB Indonesia

**Abstract**

The woman turns to give a significant contribution in moving the economy. The purpose of this research is to know and analyze the influence of *Entrepreneurial Leadership*, motivation and dual role conflict of business performance and its impact on the success of Women Entrepreneurs in the City of Pangkalpinang. This research method using descriptive approach quantitatively with the number of samples as much as 62 women entrepreneurs. Data analysis techniques using the Path Analysis is obtained from questionnaire.

The results of the study showed that the *Entrepreneurial Leadership* and motivation and achievement have positive significant impact on the performance of the business. Dual role conflict significant negative effect on the performance of the business. *Entrepreneurial Leadership*, motivation and dual role conflict has the role of 88,9% ddalam explain business performance.

*Entrepreneurial Leadership* have positive significant impact on the success of the business. Now the dual role conflict and negative effect motivation significantly to Business Success. Business Success variables can be explained *Entrepreneurial Leadership*, motivation, dual role conflict, and business performance of 99.4%. Business Performance have positive significant impact on the success of the business.

**Keywords** : *Entrepreneurial Leadership, Motivation, Dual Role Conflict, Business Performance and the success of Women Entrepreneurs Business.*

**Introduction**

a. The Background

Micro Small and Medium Enterprises (MSMES) has become the backbone of the Indonesian economy. History has proven when monetary crisis in 1998 many big business that wind mats because of the crisis. But MSMES exist and sustain the continuation of the Indonesian economy. Recorded 96% MSMES in Indonesia still survive from the shock of the crisis. The same thing also happened in the year 2012-2013, when a crisis comes and resulted in the slowing economic growth, MSMES into the business sector who rescues the Indonesian economy.

In Bangka Belitung Islands Province the number of MSMES also reached 99 percent from the existing business scale, surely this must be a special attention to the Local Government to develop economic business people. The city as the capital of Provinisi Pangkalpinang has 7 (seven) sub-districts each of which has a variety of MSMES that are registered in the district of Industry, Trade Cooperation and SMBS (City Pangkalpinang Disperindagkop). Follows the number of MSMES in the town Pangkalpinang in 2015 served on the table 1.1

As seen in the table 1.1, the number of MSMES unit producers in the city found in the sub-district Rangkui Pangkalpinang which totaled 2.708 units of the number of the next most unit is located in the sub-district Gerunggang with number of 2.168 units, third sequence there are in the sub-district Girimaya, and the sequence of the lowest level there are in the sub-district of Balam with number of 1.315 units number of micro scale business reached

3.744 units, small scale business totaled 1.613 units and the densest populations found on medium scale business as much as 7,406.18 business units.

**Table 1.1 the number of MSMES Unit Based on some of the Sub-district of the City of Pangkalpinang 2015**

<b>Sub-districts</b>	<b>The Business Micro</b>	<b>The Business Small</b>	<b>The Business Medium-sized businesses</b>	<b>The number of</b>
Bukit Intan	552	127	804	1.483
Gabek	555	146	853	1.554
Gerunggang	530	315	1.323	2.168
Grimaya	517	287	1.109	1.913
The stem Balam	497	113	891	1.315
Rangkui	562	489	1.657	2.708
Taman Sari	531	136	955	1.622
<b>The number of</b>	<b>3.744</b>	<b>1.613</b>	<b>7,406.18</b>	<b>12.763</b>

Source: Provincial Industry, Trade cooperatives and SMES, 2015

Research Reniati dkk (2015) shows that businesses MSMES in Bangka Island 65% dominated by women entrepreneurs with their characteristics are dominated by the young age and tingkat senior high school education. The woman turns to give a significant contribution in moving the economy. Unfortunately they do not have the entrepreneurial leadership that has not been high and low achievement motivation and conflict between the jurisdiction of domestic and public high so that can impede the performance of the business and business success. Therefore this research attempts to examine the **influence of Entrepreneurial Leadership, motivation and dual role conflict of business performance and its impact on the success of Women Entrepreneurs Pangkalpinang City**

b. The aim of the Research

The purpose of this research is to know and analyze :

- a. The influence of entrepreneurial leadership of business performance
- b. The influence of the motivation of business performance
- c. The influence of the conflict of the dual role of business performance
- d. The contribution of the entrepreneurial leadership, motivation achievement and conflict multiple roles to the performance of the business.
- e. The influence of entrepreneurial leadership to business success
- f. The influence of the motivation of business success
- g. The influence of the conflict of the dual role of business success
- h. The influence of entrepreneurial leadership, motivation conflict double role to business success
- i. The influence of business performance to business success

## Literature Study

### 1. Entrepreneurial Leadership

- a. The definition of Entrepreneurial Leadership

According to Corbin (2007:61), *Entrepreneurial Leadership* is a leadership style that is able to delegate, able to build employees behave responsible, able to create and assign the decision, and working independently. From this understanding, visible that there is leadership on the people who have positive influence to others who worked with him and also seen in the work of the full which he has been assigned and the decision that he take.

According to Thornberry (2006:24), *Entrepreneurial Leadership* is more as entrepreneurs who usually create change from transact with another company, Because with the change will make the changes are more developed and followed market trends that apply.

According to Goosen (2007:104), *Entrepreneurial Leadership* , both individuals and organizations to create cultural *entrepreneurs* to develop entrepreneurship culture training and the completion of the merger process of *entrepreneurs* , and the new initiatives that brilliant visuals.

So it can be concluded that the *entrepreneurial leadership* is the attitude and ability of the person in the lead an organization and are able to create the changes including the new culture in the organization.

b. An important dimension in the Entrepreneurial Leadership

According to Thornberry (2006:24), there are 5 dimensions of entrepreneurial leadership, namely:

- Able reserves to motivate  
An entrepreneurial leader can motivate people to not only work correctly but also can work together in the best.
- The Visionary  
An entrepreneurial leader must be able to describe and explain about the future of the business.
- Proactiveness  
An entrepreneurial leader have a proactive in order to facing the changes of the business.
- Risk-taking  
An entrepreneur is a brave man in taking the decision.
- Persistent  
An entrepreneurial leader is able to survive in every challenge that exists and is not easy to give up on the circumstances.

2. The motivation

a. The theory of motivation

- The hierarchy needs ( *Hierarchical Theory of Need Thry* )  
The theory of motivation that is very popular is the theory of the needs of advanced by Abraham Maslow. According to Maslow that on every soul of man consists of five needs namely, needs physiologically, safe feeling, social awards, and actualisation of themselves,
- The basic pattern *Content thinking Theory*  
This theory emphasized the importance of understanding the factors that exist in the individual that caused them to behave in particular. This Theory attempts to answer questions such as the needs of what is trying to be satisfied by a person? What causes them to do something?
- The basic pattern of *Process thought Theory*



*Process Theory* rather than emphasize on the contents of the needs and the nature of encouragement from the needs, but this approach stresses on how and with what purpose each individual motivated to carry out its tasks with the best.

- The basic pattern *Reinforcement Thinking Theory*

This theory does not use the concept of a motive or the process of motivation. On the contrary this theory explains how the consequences of the behavior in the past affect the actions in the future will come in a cycle of learning process. In view of this theory, individual specific behave because in the past they learn that certain behavior someone will be associated with the result that fun to others, and certain behavior will also produce a result that is not fun.

- b. The motivation dimension

1. The needs in achieve success ( *Need for achievement* )
2. The needs of the power or the authority of the work ( *Need for power* )
3. The Needs To Affiliate ( *Need for affiliation* )

### 3. Dual Role Conflict

- a. Understanding the Conflict

The conflict has different meanings according to some experts namely:

- According to Scannell (2010:2), the conflict is a natural and normal that arise because of the different perceptions the purpose or value in a group of individuals.
- According to Muchlas in Sofiyanti (2011:3), the conflict is seen as the behavior of the conflict is an interactive form that occurs on an individual level, interpersonal, groups or on the levels of the organization. This conflict is especially on the individual level is very close relation with stress.
- According to the pace and Faules in Sofiyanti (2011:3), conflict is akspersi dispute between individuals with other individuals, groups with other groups for a number of reasons. In this view the dispute shows the difference between the two or more individuals who expressed, remembered and experienced.

So it can be concluded that the conflict is a dynamic process and its existence more regarding the perception of incompatibility purpose and the emergence of various conflict behavior among the parties or more experience and feel that other people as spoilers that potential to achieve their aims.

- b. Understanding the dual role Conflict

There are various definitions are expressed by the experts about the dual role conflict. Including revealed Grenhouse and Beutell in Ginting (2011:45) stated that the dual role conflict is a conflict that arise as a result of the pressures from the work and family.

According to Hennessy in Madziatul Churiyah (2005:407) then define the dual role conflict when conflicts that occur as a result from the obligation to work that interfere with the household life.

Paden and Buchler in Simon (2007:101) define the dual role conflict is a role conflict that appears between the hope of two different role that is owned by a man. Dipekerjaan, a woman that is professional is expected to aggressively competitive, and can run its commitment to the work. In houses, women are often expected to take care of children, mercy and keep her husband.

- c. Types of dual role Conflict

Dual role conflict appears when women feel the tensions between the role of the work with the role of the family. In Triaryati Grenhaus and Beutell (2005:10) There are three kinds of dual role conflicts:

- *Time-based conflict* of time needed to run one of the demands of family or work) can reduce the time to run the demands of others (work or family).
  - *Strain-based conflict* occurred under pressure from one of the role of affect the performance of the role of the other.
  - *Behavior-based conflict* related to the incompatibility between the pole with the desired behavior by both parts (work or family).
- d. The dimensions of the dual role Conflict
- Research Reni Yuliviona ( 2011 : 2 ) states that the relationship between family and work is a two-way street, therefore the work can influence on the family and vice versa, so that the two components of the dual role conflict can be described as follows:
- FIW ( *family interference with work* ). Dual role conflict can appear as a result of family affairs interfere with work it means that the shape of the conflict between the role of where the demands that appears in the family interfere with the implementation of the responsibility in the work.
  - WIF ( *work interference with family* ). Dual role conflict can appear as a result of work interferes with family affairs, this means that the form of the conflict between the role of where the demands that appears in the work of the interfere with the implementation of the responsibility in the family.

#### 1. Business Performance

##### a. The definition of Business Performance

According to Torang (2014:74) define protocol performance ( *performance* ) is the quantity and or quality of the work of the individual or group within the organization in implementing the main tasks and functions are modeled on the norms of standard operating procedures, the criteria and the size of which has been assigned or that occurs in the organization.

According to Subekhi and Jauhar (2012:19 5 ) , the performance is the real behavior is displayed each person as the achievements of the work that is produced by a businessman in accordance with entrepreneurs statement.

##### b. Assessing Performance

Assessing performance (*performance appraisal*) is a method of comparing the various work with the use of formal procedures and sitematis to determine a sequence of the level of the work of the work to be able to determine the performance of a person with so provide the basis for a system of fair wages. In the beginning should be held a clear distinction between the assessment of the work and assessment of employees. Assessment of the work is about the work and the task is not about a man. But the assessment of the employees is about the skills and achievements of the holders of office, to distinguish it from the assessment of the level of the level of assessment of the work.

##### c. The Benefits of Assessing Performance

The contribution of the results of the assessment is something that is very useful for the planning policies of the organization.K ebijakan organization policies can be related aspects of individual and organizational aspects. In general the benefits of assessing performance according to Furtwengler (2000) in Sinambela (2012:116) is as follows :

- The adjustment of the adjustment of compensation

- The performance improvement
- Exercise needs and development
- Decision-making in the case of the placement of the promotion, mutation, dismissal, dismissal and labor planning
- For research interests staffing
- Help the diagnosis of the design error employees.

d. The purpose of Performance Assessment

According to Sinambela (2012:59) demonstrates its three purposes for assessing performance that influence the rating:

- The purpose of the assessment can directly affect the assessment
- The purpose of the assessment is not directly affect the assessment, through basic cognitive process, including *obsevasi* , *encording* and calling, and
- The purpose of the assessment can affect where appraisers entering the information behavior that was considered when making *judgment* about its performance.

2. Business Success

a. The definition of Business Success

According to Kadek Agus Suarmawan (2015:3) a successful business in the business when after a certain period of time the business has increased both in the capital expenditure, the scale of business results or spider, business type or management.

According to Hendry Faizal Noor (2007:59) revealed that business success on the fact of the matter is that the success of the business reached tujuanya. Business Success is the home of a company where all the activities that are therein is intended to achieve a success. In the general sense, success shows a better circumstances or unnggul from on the previous period. a successful business when have a advantages compared with the previous period or with the company classmates.

b. The dimensions of Business Success

According to cashmere feel in Eva and Lia (2013:45) business success can be indicated in the five things, namely : The amount of the sales increase, Results increased production, Benefit or profit increased, Business Growth, The Development of the fast growing business and satisfying.

In Pickle Suyanto (2010:3) in the research carried out to 97 manager of small businesses produce 5 personality characteristics that contribute to small business success, namely: Drive, Mental ability, Human relations ability, Communications ability and technical knowledge.

According to Algifari in Suyanto (2010:3) business success can be seen from the efficiency of the production process are grouped based on the efficiency of technically and economically efficiency. While Jane in Suyanto (2010:3) said that the assessment of the capacity can be measured using several dimensions namely effectiveness and efficiency equities/fairness price.

## Research Method

1. Research approach

The type of research method used researchers in this research is a quantitative descriptive method. Sugiyono (2014: 81), quantitative descriptive research is the

method used to describe or analyze a research results but not used to create a broader conclusion.

Quantitative descriptive method used to explain how the influence of each of the independent variables against the dependent variables namely analyze and investigate the influence of Entrepreneurial Leadership, Motivation Achievement and dual role Conflict Women Of Business Performance and its impact on the success of *entrepreneurs* women in the City of Pangkalpinang.

2. The population and Samples

a. The population and Samples

The population is a region generalisations that consists of the object/subjects that have the quality and certain characteristics specified by the researchers to learn and then drawn conclusion (Sugiono, 2014: 148). The population in this research is 7 sub-districts in the City of Pangkalpinang with number of business as much as 471 MSMES woman . The following are the data MSMES women that were in the cities Pangkalpinang.

No	Name of sub-districts the	number of MSMES Unit	Number Of Samples
1	Bukit Intan	54	16
2	Gabek	58	8
3	Gerunggang	59	12
4	Taman Sari	107	10
5	Rangkui	83	7
6			4
7	Pangkalbalam Girimaya 26	84	3

The table III.1 Data MSMES women that were in the cities Pangkalpinang 2013

Source: data processed,

2016

The sample is part of the number and characteristics

which dimiliki by populations (Sugiono, 2014: 149). Now the sampling method in this research using the technique is using *purposive sampling probability sampling* . Sugiono, (2013: 151) *purposive sampling* is a technique selection of samples with specific considerations ( *judgment sampling* ). Criteria used in the consideration of the namely:

- IKM must be owned by a woman and a family.
- IKM must have employees/workers at least 5-40 people.
- IKM must have stood for at least 2 years.

3. The technique of Data Collection

The method used in the data collection in this research is to use the method questioner, observation, interview and bibliographical studies.

4. Data Analysis Methods

Analysis of the data used is by using the *Path Analysis* (Analysis of the band) . Analysis of the path is the extension of the double linier regression analysis, analysis of the path is the use of multiple regression analysis to assess the relationship of causation between the variables have been assigned previously based on the theory of the arrow will show the relationship between the variables. To test the influence of the intervening variable and use the path analysis method. Intervening variable is a variable influenced by the exogenous variable and which can also affect the endogenous variable.

**The Results And Discussion**

1. Model regression analysis

Multiple regression analysis model 1 (a) used to know the strength of the relationship of the free independent variables against the dependent variable . On multiple regression analysis model 1 (one) its structural equation is :

$$Y_1 = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + e_1$$

**Coefficients<sup>a</sup>**

The Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	6,460	1,710		3,778	,000
The Cell	,363	,041	,714	8,818	,000
Bce	,087	,036	,195	2,392	,020
SKPG	-,122	,052	-,117	-2,368	,021

A. Dependent Variables: SKU

a. The relationship between the entrepreneurial leadership , motivation , dual role conflict with business performance

Based on the test results above, SPSS regression equation that reflects the variables in this research is:

$$Y_1 = 6,460 + 0,363 X_1 + X_2 + -0,1220,087X_3 e_1$$

Description :

Y<sub>1</sub> : Business Performance

X<sub>1</sub> : *Entrepreneurial Leadership*

X<sub>2</sub> : The Motivation

X<sub>3</sub> : Double Role Conflict

E<sub>1</sub> : A Residual

Based on the test of SPSS individual parameters, obtained the results of individual tests *Entrepreneurial Leadership* shows the value of 0,363 unstandardized beta coefficients and also significant at < 0.05 which means the ***Entrepreneurial Leadership* have positive significant impact on the performance of the business.** The results of the individual testing the motivation show *unstandardized beta coefficients* of 0,087 and also significant at < 0.05 ,which means the **motivation have positive significant impact on Business Performance** . The results of the individual testing dual role conflict shows *unstandardized beta coefficients* of -0,122 and also significant at < 0.05 ,which means the **conflict peranganda significant negative effect on the performance of the business.**

**The Model Summary**

The Model	R	R Square	It said the R Square	Std. The error of the Estimate
1	A ,943	,889	,883	1,270

A. Predictors: (Constant), SKPG, CELLS BCE

The results of the analysis SPSS *summary model* shows that the greatness of R Square is 0,889 or 88,9%. Business Performance variables can be explained by the *Entrepreneurial Leadership* , motivation and conflict multiple roles of 88,9% and 11.1% the rest is explained by other variables outside the model.

2. Multiple regression analysis Model II

Multiple regression analysis model 2 (two) used to know the strength of the relationship of the free variable (independent) against the variables bound (dependent). On multiple regression analysis model 2 its structural equation is:

$$Y_2 = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + e_2$$

**Coefficients<sup>a</sup>**

The Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	-,541	,937		-,577	,566
The Cell	,985	,031	,894	31,864	,000
Bce	-,044	,019	-,046	-2,363	,022
SKPG	-,008	,027	-,003	-,298	,767
SKU	,324	,064	,149	5,029	,000

A. Dependent Variables: SKEP

- a. The relationship between the entrepreneurial leadership , motivation , dual role conflict , business performance d etrieve business success

Based on the test results above, SPSS regression equation that reflects the variables in this research is:  $Y_2 = -0,541 + -0,044 0,985 X_1 + X_2 + X_3 + 0,324 - 0,008 X_4 + e_2$

Description :

$Y_1$  : Business Performance

$Y_2$  : Business Success

$X_1$  : *Entrepreneurial Leadership*

$X_2$  : The Motivation

$X_3$  : Double Role Conflict

$E_1$  : A Residual

Based on the test of SPSS individual parameters, obtained the results of individual tests *Entrepreneurial Leadership* shows the value of 0,985 unstandardized beta coefficients and also significant at  $< 0.05$  which means the ***Entrepreneurial Leadership* have positive significant impact on the success of the business.** The results of individual tests shows *unstandardized beta coefficients* motivation of -0,044 and also significant at  $< 0.05$  ,which means **significant negative effect motivation to business success** . The results of the individual testing dual role conflict shows *unstandardized beta coefficients* of -0,008 and not significant on  $> 0.05$  ,which means the **dual role conflict negative effect and not significant for the success of the business.** Test Results of individual business performance shows *unstandardized beta*

coefficients of 0,324 and also significant at  $< 0.05$ , which means **business performance have positive significant impact on the success of the business.**

**The Model Summary**

The Model	R	R Square	It said the R Square	Std. The error of the Estimate
1	A,997	,994	,994	,623

A. Predictors: (Constant), SKU, SKPG, BCE, CELL

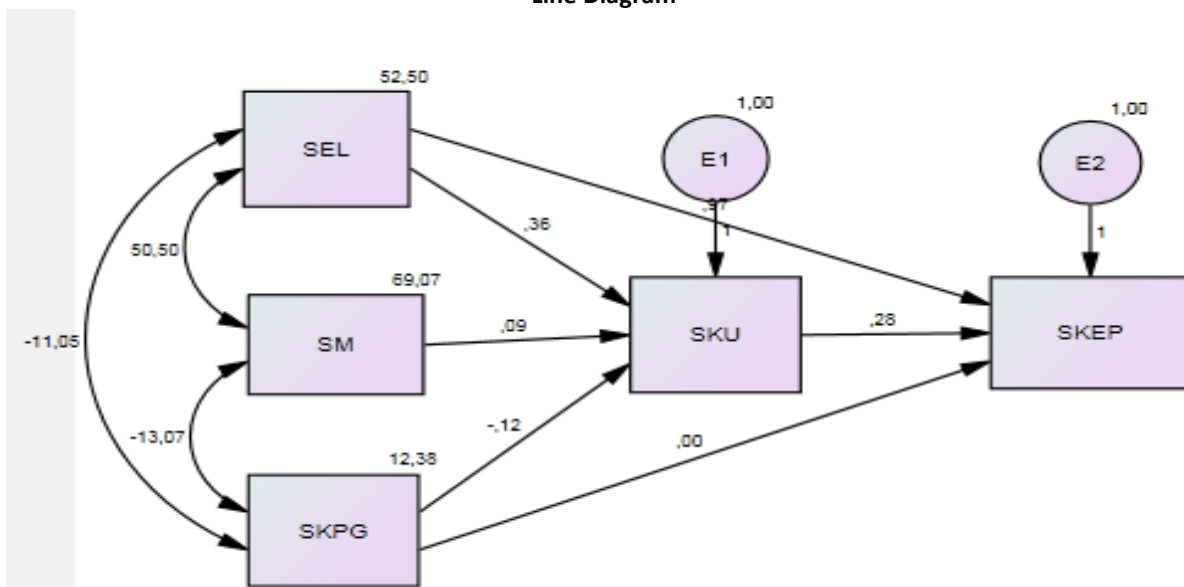
The results of the analysis SPSS *summary model* shows that the greatness of R Square is 0,994 or 99.4%. Business Success variables can be explained by the *Entrepreneurial Leadership*, motivation, dual role conflict, and business performance of 99.4% and 0.6% the rest is explained by other variables outside the model.

**Intepretasi Line Analysis**

Based on t tests that appear on the pictures obtained the value:

- P1 = 0,363
- P2 = 0,087
- P3 = -0,122
- P4 = 0,985
- P5 = -0,044
- P6 = -0,008
- P7 = 0,324

**Line Diagram**



**The influence of individual Variables  
 Regression Weights: (Group number 1 - Default model)**

		Estimate	S.E. crown ed	C.R.	P	The Label
SKU <---	The Cell	,363	,033	11,109	***	
SKU <---	Bce	,087	,029	3,014	,003	

	Estimate	S.E. crown ed	C.R.	P	The Label
SKU <--- SKPG	-,122	,041	-2,983	,003	
SKEP <--- The Cell	,965	,056	17,142	***	
SKEP <--- SKPG	-,004	,044	-,086	,932	
SKEP <--- SKU	,278	,119	2,331	,020	

Source : *Text Output* , Amos 22, primary data processed, 2016.

**Standardized Regression Weights: (Group number 1 - Default model)**

	Estimate
SKU <--- The Cell	,728
SKU <--- Bce	,199
SKU <--- SKPG	-,119
SKEP <--- The Cell	,872
SKEP <--- SKPG	-,002
SKEP <--- SKU	,125

Source : *Text Output* , Amos 22, primary data processed, 2016.

**Correlation relationship between the variables  
Covariances: (Group number 1 - Default model)**

	Estimate	S.E. crowned	C.R.	P	The Label
The Cell <--> Bce	50,504	10,063	5,019	***	
Bce <--> SKPG	-13,070	4,101	-3,187	,001	
The Cell <--> SKPG	-11,049	3,557	-3,106	,002	

Source : *Text Output* , Amos 22, primary data processed, 2016.

**Correlations: (Group number 1 - Default model)**

	Estimate
The Cell <--> Bce	,839
Bce <--> SKPG	-,447
The Cell <--> SKPG	-,433

Source : *Text Output* , Amos 22, primary data processed, 2016.

**Age gap Multiple correlation between the variables  
Variances: (Group number 1 - Default model)**

	Estimate	S.E. crowned	C.R.	P	The Label
--	----------	-----------------	------	---	--------------



	Estimate	S.E. crownd	C.R.	P	The Label
The Cell	52,501	9,506	5,523	***	
Bce	69,068	12,506	5,523	***	
SKPG	12,378	2,241	5,523	***	
E1	1,000				
E2	1,000				

Source : *Text Output* , Amos 22, primary data processed, 2016.

**Squared Multiple Correlations: (Group number 1 - Default model)**

	Estimate
SKU	,923
SKEP	,984

Source : *Text Output* , Amos 22, primary data processed, 2016.

**Total Efek,influence directly and indirectly  
The Total Effects (Group number 1 - Default model)**

	SKPG	Bce	The Cell	SKU
SKU	-,119	,199	,728	,000
SKEP	-,017	,025	,963	,125

**Direct Effects (Group number 1 - Default model)**

	SKPG	Bce	The Cell	SKU
SKU	-,119	,199	,728	,000
SKEP	-,002	,000	,872	,125

**Indirect Effects (Group number 1 - Default model)**

	SKPG	Bce	The Cell	SKU
SKU	,000	,000	,000	,000
SKEP	-,015	,025	,091	,000

Source : *Text Output* , Amos 22, primary data processed, 2016.

**The conclusion and Suggestions**

1. Conclusion

The conclusions from this research are :

- Entrepreneurial Leadership have positive significant impact on the performance of the business.
- The motivation have positive significant impact on Business Performance .
- Konflik peranganda significant negative effect on the performance of the business.
- Entrepreneurial Leadership , motivation and conflict multiple roles of 88,9% and 11.1% the rest is explained by other variables outside the model.
- Entrepreneurial Leadership have positive significant impact on the success of the business.

- Significant negative effect motivation to business success .
- The conflict peranganda significant negative effect on the performance of the business.
- Business Success variables can be explained by the Entrepreneurial Leadership , motivation, dual role conflict,and business performance of 99.4% and 0.6% the rest is explained by other variables outside the model.
- Analyze how the influence of business performance to business success business performance have positive significant impact on the success of the business.

## 2. Suggestions

- To improve the performance of MSMES in the City Pangkalpinang, then must be improved through increased market share, capital access and central and regional government policy to increase the performance.
- In order to improve business success MSMES so performance must be improved through entrepreneurial leadership, motivation to achievement in business and reduce the conflicts that occur in running its role as a momtrepreneur.

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## STRENGTHENING ENTREPRENEURIAL CHARACTER THROUGH FAMILY EDUCATION

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### Background

Global development has given opportunity and threat all at once to Indonesian nation. Through global development, this nation has shown its ability of taking opportunity in promoting product trading and tourism in all areas throughout world. On the other hand, through this global development as well, this nation has been exposed to multicomplex virus befalling adolescent such as free sex, individualism, egoism, reduced caring about others, reduced nationalism and patriotism, reduced independency, reduced entrepreneurial spirit, reduced mutual cooperation spirit, and other reduced characters.

Recently, many parties require the improvement of character education implementation in family education institution, in the term of both intensity and quality. Such the requirement is based on social phenomenon developing, including juvenile delinquency, massive quarrel and other moral decadence case. Even, in certain big cities, those phenomena have reached the very worrying level. For that reason, family education institution as the first and primary education institution for children character building is expected to improve its role in establishing the child personality by improving character habituation in daily life.

Education practitioners generally have a consensus on the importance of character education improving attempt in family education channel. However, there are different opinions among them regarding their education approach and mode. Regarding the approach, some practitioners recommend the use of moral education approach developed in western countries such as cognitive model development, value analysis and value clarification approaches. Some others recommend the use of traditional approach such as certain social value impartment into children through habituating it in family life.

In recent context, the implementation of character education is the uncompromising need. The nation's youths have achieved many medals in every international science Olympic competition. They need reward was the part of character education implementation. On the other hand, the cases of moral-deficient students such as those who got married by accident, involved in drug abuse, plagiarism in examination, and the similar illustrate a number of media. Not only students but also education institution and government institution occupied with those with academic degrees are exposed to moral decadence virus.

The striking reality can be analogized to a hard slapping to the nation. Stakeholders and educators formerly expected to be *ing ngarsa sung tulada, ing madya mangun karsa, and tut wuri handayani*, (in front gave the modal, in the middle develop the work, and behind gave urging) even cultivate sarcastic slogan: *guru kencing berdiri, murid kencing berlari* (monkey see, monkey do).

It is this environment "unhealthiness" that finally encourages the trend of homeschooling and virtual education to occur. This new education model makes the family education system more marginalized. Many student families switch to homeschooling program to give their children an education because they are worry about the effect of no longer sterile school environment. Additionally, many students experience psychological pressure in non-virtual schools due to too rigid interaction with the authoritarian teachers and inter-student intercourse. Unfortunately, virtual education does not give solution but deprives the students from their social reality contact.

This study focuses on one character value only, entrepreneurial character. This entrepreneurial character is chosen because when every adolescent has entrepreneurial character, precision, criticality, persistence, and independency will grow inside them. Those characters will contribute to dealing with global development currently. Entrepreneurial character should be built earlier not only in school education but also in society and family educations. This research focuses on entrepreneurial character through family education. The problem statement formulated is “How to strengthen the entrepreneurial character value through family education. The objective of research is to describe the strengthening of character value through family education.

### **Method**

This study was a qualitative research departing from data and ending up in a conclusion (Bungin, 2001: 18). The target or object of research was limited to explore as much as possible data in order to prevent the widening of research object, so that the author’s credibility determines the quality of research (Bungin, 2001:26). This research also interprets the author’s language about the result of research obtained from informant in the field as the discourse to get explanation about the existing condition. This research also employed the descriptive type of research, the one only describing, summarizing a variety of existing condition and situation. The writer tried to explain the concrete condition of research object and then a description of research object resulted.

This study described how to strengthen character value through family education. For that reason, the data derived from families in Wirogunan village, Kartasura Sub District, Sukoharjo Regency, Central Java Indonesia and data from the children in the same villages. For that reasons, the qualitative analysis was very appropriate for this research. This research was taken place in Wirogunan village, Kartasura Sub District, Sukoharjo Regency, Central Java Indonesia particularly concentrated on RTs (neighborhoods) considered as having the information needed. The instrument of collecting data used was questionnaire (Kountur, 2004, 113). Thus, the only instrument in qualitative was the author himself (Bungin 2001:71) because the author served as data collector affecting the instrument factor.

The informant selecting technique was the one of determining the sample called informant in qualitative research. In the qualitative research, sample was taken purposively so that it should not represent entire population, but the sample should had adequate knowledge to explain the actual condition of research object. If interview was used, the sample would be taken from some events (occurrences), while if observation was used, the sample would be taken from the result of field observation. If documentation technique was used, the sample could be in the form of documentary material, inscription, legend, and etc (Bungin, 2001:173).

The author selected the informant by deepening the representation of entrepreneurial character education in corresponding family education to be the sample of research. The author also employed certain approaches to child and other family to obtain information that will represent those selected as the sample.

Next, the author explored deeper information to get some persons considered as adequate to be the sample of research. With original information, the author conducted observation through in-depth interviewing those selected as the sample. It was intended to test the validity of information obtained and to obtain sample and categorization certainly using interview technique. From the information and explanation obtained, it can be ensured that some persons can be the sample and their categorization can be made from both other family or children.

In obtaining the necessary data as the material of research report writing, there are some techniques, ways or method the author used corresponding to qualitative research type:

Interview, according to Lexy J. Moleong (1991: 135) is the conversation with certain purposes. In this method, the author and respondent meet face to face to get oral information in the objective of obtaining data that can explain the research problem. The author conducted observation to collect the data corresponding to the research characteristics because he conducted direct or participatory observation in which the author served as research instrument as well. Thus, the author should search for the data himself or observe and search for directly from the informants selected to be data source. In this method, the author becomes a part of any activities existing in the targeted organization. In line with this, Faisal (1990: 78) stated that in this observation method, the author selected participatory observation. Participatory observation is the one involving an individual in certain situation. It facilitates the author to obtain data or information easily and discretionarily. However, in other situations, the author serves as outsider to maintain the objectivity of data needed in solving the existing problem, because the depth of participatory observation result is highly dependent on the author's opportunity or time in the field. In some certain conditions, the author should use straightforward by explaining the purpose and the objective of research first and to facilitate the acquisition of intended data.

The data obtained was then analyzed qualitatively through data classification, data interpretation and data analysis. The descriptive analysis is presented in the form of narrative that will tell about the strengthening of entrepreneurial character value through family education.

### **Result and Discussion**

Thomas W. Zimmerer stated that "Entrepreneurship is a product of a discipline, a systematic process of applying creativity and innovation in meeting the need and market chance. Basically, entrepreneurship is not an innate ability or field experience but it is a discipline taught and learnable. Richard Cantillon (1775) defined entrepreneurship as self-employment. An entrepreneur buys some product currently in certain price and sells it in the future in uncertain price. So this definition emphasizes on how an individual deals with risk or uncertainty. In contrast, Penrose (1963) stated that entrepreneurship activity includes identifying the opportunities in economic system, while Harvey Leibenstein (1968, 1979) argued that entrepreneurship included any activity needed to create or to operate a company when all markets have not been established or identified clearly yet, or its production function component had not been identified completely. The individual undertaking entrepreneurship activity is called entrepreneur. From some concepts above, it can be confirmed that Entrepreneurship has varying definitions among the practitioners or reference source because of different emphasis and focus.

Considering some concepts mentioned above, it can be summarized that there are 6 important essences of entrepreneurship (Suryana, 2003: 13): 1. Entrepreneurship is a value manifested in the behavior becoming the basis of resource, activator, objective, tactic, strategy, process and result (outcome) of business (Acmad Sanusi, 1994). 2. Entrepreneurship is an ability of creating something new and different (Drucker, 1959). 3. Entrepreneurship is the process of applying creativity and innovation in solving problem and finding the solution to make the life better (Zimmerer. 1996). 4. Entrepreneurship is a value needed in start-up phase and venture growth (Soeharto Prawiro, 1997). 5. Entrepreneurship is the process of working on something new (creative) and different (innovative) that is beneficial to give added-value. 6. Entrepreneurship is the attempt of creating added-value by means of combining sources through new and different ways to win the competition. Such added-value can be created by means of developing new technology, finding new knowledge, finding new way of producing

more efficient new product and service, and improving the existing product and service and finding the new way to make the consumers satisfied.

In principle, Entrepreneurship is the process of identifying, developing and bringing vision into life. The vision can be innovative idea, opportunity, and better way of undertaking something. The end product of such the process is the creation of new business established in the risky or uncertain condition. Viewed from its origins, there are three types of entrepreneur (Ir. Ciputra): 1. *Necessity Entrepreneur*, becoming the entrepreneur because of compulsion or urgency of life need. 2. *Replicative Entrepreneur*, an entrepreneur tending to imitate the trending business thereby vulnerable to competition and collapse. and 3. *Innovative Entrepreneur*, the entrepreneur keep thinking creatively in seeing opportunity and improving it. Some characteristics of entrepreneurial character are summarized by Vernon a Musselman (1989:155), Wasty Sumanto (1989), and Geoffrey Meredith (1989:5) as follows: 1. Strong will to stand alone. 2) Ability of taking risk. 3. Ability of learning from experience. 4. Self Motivation. 5. Competing Spirit. 6. Hard-Work orientation. 7. Self Confidence. 8. Achievement Motivation. 9. High energy level. 10. Firmness and 11. Belief in self-ability.

From some characteristics of entrepreneurial spirit, basically the entrepreneurial spirit can be created and strengthened through family education as well.

The finding of research shows that the adolescents in Wirogunan have high laziness level to be small entrepreneur because most adolescents are dependent on parents in choosing the job. There are some factors affecting it: prestige, will to live well quickly, laziness, and etc. Meanwhile, family gives the adolescents less freedom of determining the type of job they should choose, and family intervenes too deeply with their children in determining the job. It will suppress their creativity and innovativeness, thereby attenuating the entrepreneurial spirit. In such the real condition, the author interviews parents and some adolescents related to entrepreneurial spirit. It is intended to obtain valid information about adolescent entrepreneurship in Wirogunan Village, in order to be reference to find the solution.

The result of interview with parents and adolescent in Wirogunan village can be described in the table 1 below.

Table 1. Result of interview parents and adolescent in Wirogunan village about the entrepreneurial character

No.	Questions	Answers	
		Parents	Adolescents
1.	Do you understand the concept of entrepreneurial character?	Out of 20 parents, 4 answer that they understand and 16 do not understand	Out of 20 adolescents, 8 answer that they understand and 1 understand poorly
2.	If you understand, where do you acquire your knowledge on entrepreneurship?	Out of 4 parents, 4 answer that they acquire it from reading books and 1 from television	Out of 8 adolescents, 6 answer: from lesson in the school and 3 answer from reading books
3.	Do you understand the meaning of entrepreneurial character?	Out of 20 parents, 7 answer that they understand and 13 understand poorly	Out of 20 adolescents, 10 answer that they understand and 10 understand poorly
4.	In your opinion, what is the essence of	Out of 20 parents, 12	Out of 20



	entrepreneurial character?	answer: independency, creativity, innovativeness, persistence, hard work, and readiness to deal with risk and 8 answer: independency	adolescents, 10 answer: independency, creativity, innovativeness, persistence, and sturdiness, and 10 answer: not dependent on others
5.	Do your parents teach you to be an entrepreneur?		Out of 20 adolescents, 3 answer yes and 17 answer: never at all.
6.	As parent, have you ever taught your children to be entrepreneurs?	Out of 20 parents, 5 answer yes, 15 answer no because they want more prestigious job for their children's future	
7.	As parent, how do you impart entrepreneurial spirit to your children	Out of 20 parents, 15 answer: making cakes to be entrusted to stalls, inviting the children to <i>wedangan/HIK</i> (Special Kampong Meal), inviting children to go to village cooperation, and 5 answer: yes, by making small business at home	
8.	In your opinion, should the entrepreneurial spirit be strengthened by parents?	Out of 20 parents, 19 answer that it is very desirable and 1 answer: do not know.	

Considering the result of interview, the following explanations can be given:

1. Generally, the parents and the adolescent's understanding of entrepreneurial character concept in Wirogunan village are very limited, so that they do not understand the entrepreneurial character correctly.
2. Because of poor understanding on the entrepreneurial character concept, parents cannot motivate their children to develop entrepreneurial character maximally. Meanwhile, for adolescents, the poor understanding on entrepreneurial character concept makes them unaware of how to develop and to empower their potency maximally.
3. Because of parents' less motivation, the entrepreneurial character of Wirogunan adolescents is weak (poor).
4. Because of limited entrepreneurship opportunity, the entrepreneurial character of Wirogunan adolescents is low.

The result of interview is in lie with some previous studies' findings. Ruba'i (2012) studying on the correlation between parent motivation and entrepreneurial character in MAN (Islamic Senior High School) concluded that parent motivation contributes positively to growing the entrepreneurial spirit in the students of MAN. Similarly, Lena (2013) studying on the role of parents in strengthening the children's entrepreneurial character in Bandung City found that

parents play a very important role in strengthening the children's entrepreneurial character. Joko Mursitho (2015) studying on building children's entrepreneurial character through simple independent business for Senior High School students in metro found that independent business such as canteen, street sellers, vegetable vendor, and *HIK* (Special Kampong Meal) can be the means of building the entrepreneurial character.

Considering the result of research and interview, it can be confirmed that the responsibility of building entrepreneurial character lies on family as well. For that reason, there should be family motivation to grow and to strengthen the entrepreneurial character. The entrepreneurial character can be built with simple and practical models, for example through school canteen, school cooperatives, street sellers, vegetable vendors, product sellers in education exhibition, and *HIK* (Special Kampong Meal).

### Conclusion

Considering the result of research and discussion, it can be concluded that the strengthening of adolescents' entrepreneurial character is very important in Wirogunan Village, Kartasura Sub District plays a very important role and should be strengthened through family education. Strengthening entrepreneurial character can be done through family education in the form of: small business, vegetable vendors, village cooperatives, *HIK* and etc.

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## TRAVEL BEHAVIOR AND MOTIVATION OF EUROPEAN AND INDONESIAN INTERNATIONAL STUDENTS

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### Abstract

The international students represent a large and promising market for tourism industry but study on this market is limited. Previous researches found differences in travel behavior based on nationality, most of them studied students from UK, US, Australia, and China. The aim of this study is to identify European and Indonesian international students' travel behavior in the host country where they study as an international student. To achieve that, this study used mixed methods approach with qualitative interview to twenty respondents and quantitative survey to two hundred thirty two respondents. The findings showed the differences on the importance of travel motivation and the participation of leisure activity between European and Indonesian students. This study provides better understanding on the international student market and gives strategic recommendation to target European and Indonesian students. Collaboration to create innovative initiative in tourism products and development between tourism operators, university, and the policy makers of the host country is suggested.

**Keywords:** *International students, European, Indonesian, travel behavior, travel motivation, travel preferences, leisure activity*

### Introduction

The youth and student travel is a growing market in the travel industry that worth 20% of global international expenditure (IPK International, 2013). In 2024, there will be 3.85 million mobile international students (MacGregor, 2013). In spite of the big opportunity and the significance of this market, little research has been done on international student market. A study on their travel behavior has less attention. The majority of tourism industry in the global world still sees international student travel as a homogenous market and ignoring cultural preferences. Therefore, international student market needs further research.

According to the UNESCO Institute for Statistics' (UIS) Global Education Digest in 2006, an international student is someone who has left his or her country, or territory of origin, and moved to another country or territory with the singular objective of studying but not permanent residents (Clark, 2009). Besides full-time students, exchange student could also be categorized as an international student. Exchange student is someone who studies at an overseas university with transfer credit to the home university, usually for a period of one semester or one year (Llewellyn-Smith and McCabe, 2008).

While the opportunities on student travel market are growing, there is lack of understanding on travel behavior of international student travel market from different nationality. As each individual has unique motivation and preferences, international students display different travel behavior. Previous researches found differences in travel behavior based on nationality, most of them studied students from UK, US, Australia, and China. It showed that every nationality has a unique behavior that requires adapted marketing mix strategies and communication channels.

Indonesia is a potential student source of global student travel in the future and Europe is a potential student source for Indonesian universities and tourism market. They are source of potential present and future income for tourism industry. Thus, an understanding of travel

behavior of the next Indonesian and European generation will benefit tour operators and tourism business on this market. The aim of this research is to identify international student's behavior in the country where they study and the differences between European students in Indonesia and Indonesian students in Europe on travel motivation, preferences, and leisure activity.

## Literature Review

### 1. Travel Motivation

Motivation is the fundamental starting point in studying travel behavior, why and how individuals make travel decisions to preferred destinations (Kim, Jogaratnam, and Noh., 2006; Heung and Leong, 2006; Hawkins and Mothersbaugh, 2013, p. 352). Since travelers are diverse and have a wide range of motivation which is influenced by many factors and may change over time based on individual's travel experiences, it would be best explained not by only one static models. Concept from Maslow's Theory of Need Hierarchy, Travel Career Ladder (TCL) and Travel Career Patterns (TCP), Push and Pull Factors, Plog's Psychocentric-Allocentric Models, and a categorization of travel motivations from previous researches were used.

There are five different levels of motivation from physiological needs, safety, belongingness and love, esteem, to self-actualization by Maslow (Hsu and Huang, 2008). TCL model was developed from Maslow's Need Hierarchy Theory then modified into TCP that emphasized the pattern of motivations and its structure by Pearce and Lee (2005). Novelty, escape/relax, relationship, and self-development were mentioned as the core of travel motivation that remain dominant and constant along with the travel experience level. However, as the travel career level develops and the experience increases, travelers' dominant motivation may change.

Tourist are motivated by a combination of push and pull factors (Klenosky, 2002; Uysal, Lee, and Turk, 2008). The concept describes individuals are pushed by internal motives or forces, into making a travel decision and how they are pulled or attracted by external forces, which are the destination attributes. The pull factors of destination can be driven by multiple motivations (Klenosky, 2002). Stanley Plog's model of psychocentric/allocentric implies the existing interaction between push and pull factors in travel behavior by classifying tourist based on personality (as cited in Hsu and Huang, 2008).

Several researchers developed classifications in an attempt to standardize measures of leisure motivation into some dimensions. Beard and Ragheb developed Leisure Motivation Scale (LMS) that classify tourist's intrinsic motivation into four elements which are "intellectual, social, competence-mastery, and stimulus-avoidance" (Ryan and Glendon, 1998). McIntosh, Goeldner and Ritchie divided motivation into four categories, "physical, cultural, interpersonal, status and prestige" motivators (Cooper *et al.*, 2005). Other researchers combined the motive items obtained from the previous tourism and leisure literature and the interview results (Kim and Jogaratnam, 2003; Pearce and Lee, 2005). Even though those results were not identical, they showed common important top main motivation such as "novelty", "escape/relax", "relationship", and "self-development".

International students' top motivations to travel during study abroad are related to culture, social interaction with locals or friends, relaxation, and increasing knowledge (Field, 1999; Richards and Wilson, 2004; Payne, 2009). Besides similarities, there are differences between different nationalities and cultural background. Most of European students rated high importance on discovering new places, culture (Horak and Weber, 2000; Bicikova, 2014) and adventurous motivation. Chinese and other Asian students rated higher

importance on seeing famous sights (Kim and Jogaratnam, 2002; Xu, Morgan, and Song, 2009) and relaxation motivation (Heung and Leong, 2006).

**H1: There is difference on motivation between European students in Indonesia and Indonesian students in Europe.**

## 2. Travel Behavior

Travel behavior shows how tourists behave before, during and after travelling towards the destination and tourism products (Vuuren and Slabbert, 2011). An understanding on travel behavior will benefit tour operators and tourism business on this market in making marketing strategy, product planning, and product development which can increase the number of visitors to the destination. They will get information about what kind of activities tourist wants to undertake, with whom and where those activities are being undertaken, and how tourist makes a decision to buy the product and service.

In the travel decision-making process, travel desire is followed by searching for information then followed by choosing the final destination including other important aspects that determine the potential tourist for future trip decision (Minciu and Moisa, 2009). Analyzing tourist behavior starts with individual's characteristics that lead to understanding travel motivation and perception on destination as the consideration to make a decision. Activity, as one of critical destination attributes to satisfy tourist's needs, connects travel motivation and destination choice (Moscardo *et al.*, 1995). In order to create the most suitable product development and campaign programmes, tourism marketers should understand the leisure activity preferences and the actual participation in the destination.

Previous research on student travel behavior found that students not only have similarities but also differences in planning the trip, choosing different attractions, information source, trip features, preferred activities, type of accommodation, mode of transport, and type of meals during leisure trip (Field, 1999; Kim and Jogaratnam, 2003; Payne, 2009; Xu, Morgan, and Moital, 2011). Most of international students enjoyed city and culture-based activity (Shoham *et al.*, 2004) and socially satisfying activity (Richards and Wilson, 2003). European and Asian students showed differences in choosing leisure activity during their trip. Asians put more importance on relaxation activities and seeing famous sights than Europeans who prefer to participate in outdoor and adventurous activities. The nationalities, the study place, and the travel destination influenced the way student travel during their study period.

**H2: There is difference on leisure activity between European students in Indonesia and Indonesian students in Europe.**

## Research Methods

### 1. Research Design Methods

This study adopted a mixed methods approach, by conducting a qualitative study prior to the quantitative one. The rationale for this approach is to provide a more complete understanding of a research problem. The qualitative phase used semi-structured interview to collect data and aimed to explore emerging themes in travel behavior and motivation using thematic analysis. The result of qualitative interview and literature review were used to develop questionnaire items (Davidson *et al.*, 2010; Gardiner *et al.*, 2013). For interviewee validation, researcher asked two interviewees, one Indonesian and one European, to give feedback on both the preliminary list of themes and interpretations as a reliability check. The quantitative phase using self-administered surveys aimed to measure and tests the differences between European and Indonesian students (You *et al.*, 2000; Kozak, 2002; Xu, Morgan, and Song, 2009; Wang and Walker, 2010).

The interviewee's result showed a link between motivation and activity preferences. Some of interviewee's statements supporting Maslow's theory that one act has multiple motivations. They were motivated by a combination of push and pull factors. Push factor as internal motivation while pull factor as activity in the destination choice. The result showed not only the difference travel motivation between European and Indonesian students but also an explanation that motivation might change because of their travel experience.

In the qualitative phase, the thematic analysis found four emerging themes divided into two stages, which were before travel and during travel. First stage has two themes which were travel motivation divided into 4 main dimensions (novelty, relax/escape, social/relationship, and self-development) and planning on trip features such as travel constraints, travel time, travel companions, expenditures, and destination. Second stage was the activity in the destination choice and travel preferences such as mode of transport, accommodation, and food. The interview result was used to develop questionnaire items. The questionnaire used 12 leisure activity items and 14 motivational items derived from interview results and literature review. The items were initially subject to expert opinion to establish validity.

## 2. Sample

A purposive sample was used by choosing respondents with specific criteria. They are European students who study in Indonesia and Indonesian students who study in European countries in the year between 2013-2014. The quantitative survey with questionnaire was submitted by email which has a link to a web-based survey to European students in Indonesia and Indonesian students in Austria, Germany, Netherlands, Sweden, and UK between December 2014 to February 2015. There were 232 usable questionnaires (82 European and 150 Indonesian) which were analyzed using Statistical Package for Social Sciences (SPSS) version 17.

## 3. Data Analysis Methods

This study used descriptive analysis using frequency tables and percentage to provide data in European and Indonesian student's profile and travel behavior on trip features. To identify the travel preference between students in the destination choice, this study used mean value. In order to determine if any significant differences between European and Indonesian students related to leisure activity and travel motivation and leisure activity, independent t-test was performed between nationalities as the independent variable and motivation/leisure activity as dependent variable. The p-value was used to test the null hypothesis.

## Results And Discussion

### 1. Sample Profile

From 232 respondents, there were 82 European respondents and 150 Indonesian respondents consisted of 103 male students and 129 female students. Most of them were graduate students and exchange students in a group of age between 20 to 30 years old with main financial source from scholarship and family/parents. Table 1 presents the profile of European and Indonesian students group in frequency and percentage.

Table 1. Profile of Samples

Profile	European (n=82)	Indonesian (n=150)	Total (n=232)	Percentage (%)
<b>Gender</b>				
Male	43	60	103	44.4
Female	39	90	129	55.6
<b>Age</b>				
Less than 20	-	2	2	0.9
20 to 22	25	24	49	21.1
23 to 25	34	39	73	31.5
26 to 30	20	56	76	32.8
Over 30	3	29	32	13.8
<b>Program of Study</b>				
Exchange Program	50	9	59	25.4
Bachelor Degree	14	37	51	22.0
Master Degree	11	78	89	38.4
PhD	3	21	24	10.3
Other	4	5	9	3.9
<b>Financial Source</b>				
Personal savings	22	14	36	15.5
Family/parents	29	50	79	34.1
Scholarship	23	57	80	34.5
Loan	3	1	4	1.7
Income from working	5	28	33	14.2

## 2. Travel Behaviors on Trip Features

Almost all the respondents (97.4%) plan to travel during study in the host country. The results supported previous studies (Field, 1999; Kim and Jogaratnam, 2003; Michael *et al.*, 2004; Richards and Wilson, 2004; Heung and Leong, 2006). Students visit important tourist sites while studying abroad to take better advantage of the limited time abroad. The preference to travel in a group with other international students (69.4%) and particularly from the same nationality supported previous studies (Horak and Weber, 2000; Shoham *et al.*, 2004; Davidson *et al.*, 2010; Gardiner, King, and Wilkins; 2013). Most respondents traveled during semester break and holidays (66.8%), with travel duration between 1 to 6 nights (72.4%). It showed the need to balance between travel and study in their limited time.

Internet (91.4%), advice from friends and family (65.1%), and guidebooks (31.9%) were their important sources of information. The high use of advice from friends/family as main information source indicated that students chose familiar or considerably safe travel destinations. It can be categorized as psychocentric/dependables characteristic in Plog's model. Time (34.1%) and cost (36.2%) as the main travel constraints for students supported previous studies (Field, 1999; Michael, *et al.*, 2004; Ryan & Zhang, 2007; Nyaupane and Andereck, 2008; Payne, 2009). Table 1 presents overall student's travel behavior on trip features in frequency and percentage.



Table 2. Overall Students's Travel Behavior on Trip Features

<b>Travel Behavior on Trip Features</b>	<b>Total (n=232)</b>	<b>Percentage (%)</b>
<b>Plan to travel</b>		
Yes	226	97.4
No	6	2.6
<b>Travel Companion</b>		
International students from my nationality	112	48.3
International students from other nationality	49	21.1
Local students	10	4.3
Family/friends/relatives who are not students	37	15.9
I am on my own	24	10.3
<b>Time to travel</b>		
On the weekend	18	7.8
Over long weekend	54	23.2
On semester break	86	37.1
On holidays	69	29.7
Other	5	2.2
<b>Travel Duration</b>		
Day visit	7	3.0
1-3 nights	81	34.9
4-6 nights	87	37.5
1-2 weeks	41	17.7
More than 2 weeks	16	6.9
<b>Source of Information*</b>		
Internet	212	91.4
Advice from friends/family	151	65.1
Guidebooks	74	31.9
Travel Brochures	18	7.8
Newspaper/Magazines	13	5.6
Tour Operators	10	4.3
Other	8	3.4
<b>Travel Constraint</b>		
Lack of money	84	36.2
Lack of time	79	34.1
Health and physical limitations	1	0.4
Family circumstances	7	3.0
Government restrictions	14	6.0
The absence of student specific discount and packages	10	4.3
Study commitment	37	15.9

\* multiple responses were possible

### 3. Travel Motivation

Table 3 shows significant difference between European and Indonesian students in most of the motivation items (with  $p < 0.05$ ), except on motivation to discover new things/new places, to learn something new or increase knowledge, to have fun and be entertained, to

experience a new culture and history, and to visit a place recommended by friends (with  $p > 0.05$ ). The high rate on motivation to discover new things/places and to learn something new/increase knowledge supports previous studies (Field, 1999; Richards and Wilson 2004; Payne, 2009) and confirms the importance of the novelty factors (Kim and Jogaratnam 2003; Pearce and Lee, 2005). The positive t-values mean that European students have higher mean scores than Indonesian students.

Table 3. The Differences in the Importance of Travel Motivation

Travel Motivation <sup>a</sup>	Europe Mean (rank), n=82	Indonesia Mean (rank), n=150	t-value	Sig. Level
To discover new things or new places	4.45 (1)	4.21 (1)	1.825	0.069
To learn something new or increase knowledge	4.06 (3)	4.11 (2)	-0.394	0.694
To relax after my studies	3.63 (7)	4.10 (3)	-3.116	<b>0.002</b> **
To have fun and be entertained	3.95 (5)	4.01 (4)	-0.487	0.627
To experience a new culture and history	4.24 (2)	4.01 (6)	1.691	0.092
To see famous sights	3.52 (8)	4.00 (5)	-3.221	<b>0.002</b> **
To escape from everyday routines	3.30 (10)	3.69 (7)	-2.405	<b>0.017</b> **
To do things with my friends	3.12 (12)	3.53 (8)	-2.670	*
relatives or family	4.00 (4)	3.30 (9)	4.825	<b>0.008</b> **
To visit a place recommended by friends	3.10 (13)	3.14 (10)	-0.299	<b>0.000</b> *
To interact with local residents	3.76 (6)	3.09 (11)	4.270	0.765
To visit my friends, relatives, or family	2.70 (14)	3.04 (12)	-2.296	<b>0.000</b> *
To meet new people and the locals	3.45 (9)	2.97 (13)	2.995	<b>0.023</b> **
To do outdoor/sports activity	3.24 (11)	2.49 (14)	4.531	*
				<b>0.003</b> **
				<b>0.000</b> *

<sup>a</sup> Importance of each variable was measured using a five-point Likert scale (1= not important at all, 5= highly important), \*  $p < 0.001$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.05$

European students (Mean=4.00, 3.76 respectively) put more importance on motivation to do things the locals do ( $p = 0.000$ ) and to interact with local residents ( $p = 0.000$ ) as very important motivation compared to Indonesian students (Mean=3.23, and 3.07 respectively). It confirms the importance of self-development dimension in travel motivation. Indonesian students (Mean=4.10, 4.00, 3.69, and 3.53 respectively) put more importance on motivation to relax after study ( $p = 0.002$ ), to see famous sights ( $p = 0.002$ ), to escape from everyday routines ( $p = 0.017$ ), and to do things with friends, relatives, or family ( $p = 0.008$ ) as very important motivation compared to European students (Mean= 3.63, 3.52, 3.30, and 3.12 respectively). It confirms the importance of social/relationship and relax/escape dimension on travel motivation. From these findings, tourism operators can create marketing strategies that emphasize on student's need with nationality basis.

From result, the first hypothesis ( $H_1$ ) is supported because there are many statistically significant differences (with  $p < 0.05$ ) on travel motivation between European and Indonesian students. Travel motivations between European and Indonesian students

confirms the motivational theories in the literature review. Travel can be seen as self-actualization needs, to discover new things/places, to experience new culture, gain knowledge, to meet new people, and to interact with the local residents. The motivation to be free and escape from everyday routines can be seen as the esteem needs. The motivation to visit place recommended by friends and to do things with friends/family implies the safety needs in Maslow's hierarchy of needs.

#### 4. Travel Preference and Leisure Activity

Using mean value, there were differences on the type of accommodation, transportation modes, and meals between students (Table 4). In Indonesia, European student used motorcycle and plane frequently (Mean=4.02 and 3.58 respectively) and boat/ship (2.55) sometimes. They preferred to stay in homestay/guesthouse and hostel/dorms (Mean=3.30 and 3.00 respectively). Indonesian students used train frequently (Mean=4.21), bus and plane (Mean= 3.46 and 3.26 respectively) sometimes. In European countries, they preferred to stay in house of friends/relatives and hostel/dorms (Mean=3.17 and 3.15 respectively). Local style food was the most popular type of meals among European students (Mean=4.28) and Indonesian students (Mean=3.27).

Table 4. Travel Preferences of European and Indonesian Students

<b>Travel Preferences</b>	<b>European Mean (rank), n=82</b>	<b>Indonesian Mean (rank), n=150</b>
<b>Transportation Modes</b>		
Motorcycle	4.02 (1)	1.06
Car (rented and private)	2.62 (3)	1.73
Bus	2.56	3.46 (2)
Van	1.61	1.19
Train	2.07	4.15 (1)
Plane	3.58 (2)	3.26 (3)
Boat/Ship	2.55	1.65
<b>Type of Accommodation</b>		
Hotel/Motel	2.78 (3)	2.83 (3)
House of friends/relatives	2.21	3.17 (2)
Hostel/Dorms	3.00 (2)	3.15 (1)
Campground	1.18	1.26
Homestay/Guesthouse	3.30 (1)	1.63
Self-catering accommodation	1.74	1.79
<b>Type of Meals</b>		
Formal restaurant	3.01 (2)	2.30
International fast-food	2.48	3.20 (2)
Local style	4.28 (1)	3.27 (1)
Self-prepared	1.84	2.65
Convenience Stores	2.60 (3)	2.93 (3)
Deli/Supermarket	2.13	2.77

Table 5 shows the preference of leisure activity which was grouped by response mean for frequency of participation by Indonesian students into frequently (3.5 and higher), sometimes (2.5 to 3.49), rarely (1.5 to 2.49), and never (under 1.5). Using independent t-

test, almost all the leisure activities showed statistical significant difference between European and Indonesian students (with  $p < 0.01$ ) except visiting historical monuments and cultural sites and attending festivals and events. Both groups were frequently taking pictures/video ( $p = 0.009$ ) and visiting place with beautiful scenery and landscape ( $p = 0.001$ ) during travel. Indonesian students far more interested in city sightseeing (Mean=4.51), visiting museums/theaters (Mean=3.38), and shopping (Mean=3.22) compared to European students. European far more interested in activities such as trying local foods and drinks (Mean=4.17), hanging out on the beach (3.76), trekking/hiking/climbing (Mean=3.26), doing sports/physical activities (Mean=3.07), doing nightlife and entertainment activities (3.07) compared to Indonesian students. Because there are many differences in the participation of leisure activities, the second hypothesis ( $H_2$ ) is supported.

Table 5. The Difference on Leisure Activity Preference of European and Indonesian Students

Preference of Leisure Activities <sup>a</sup>	Europe Mean (rank), n=82	Indonesia Mean (rank), n=150	t-value	Sig. level
<b>Frequently</b>				
City Sightseeing	3.94 (3)	4.51 (1)	-4.027	<b>0.000*</b>
Take pictures/videos	4.02 (2)	4.45 (2)	-2.784	<b>0.006**</b>
Visiting historical monuments and cultural sites	3.93 (4)	4.15 (3)	-1.769	0.078
Visiting place with beautiful scenery and landscapes	3.59 (6)	4.00 (4)	-3.229	<b>0.001**</b>
Trying local foods and drinks	4.17 (1)	3.61 (5)	4.228	<b>0.000*</b>
	2.22 (12)	3.38 (6)	-8.171	<b>0.000*</b>
<b>Sometimes</b>				
Visiting museums/theaters	2.52 (11)	3.22 (7)	-4.903	<b>0.000*</b>
Shopping for pleasure	2.68 (10)	2.80 (8)	-0.658	0.511
Attending festivals and events	3.76 (5)	2.33 (9)	9.498	<b>0.000*</b>
<b>Rarely</b>				
Hanging out on the beach	3.26 (7)	2.25 (10)	6.837	<b>0.000*</b>
Trekking/hiking/climbing	3.07 (8)	1.93 (11)	7.146	<b>0.000*</b>
Nightlife and Entertainment	3.07 (9)	1.07 (12)	6.913	<b>0.000*</b>
<b>Never</b>				
Doing sport/physical activities				

<sup>a</sup> Frequency of each variable was measured using a five-point Likert scale (1= Never, 5= Almost always), \*  $p < 0.001$ , \*\*  $p < 0.01$

International students from different nationalities shows similarities and difference in choosing modes of transport, accommodation type, type of meals, and leisure activities during travel in the host country they study. These findings supported previous study on travel preferences (Field, 1999; Kim and Jogaratnam, 2003; Shoham *et al.*, 2004; Payne, 2009; Xu, Morgan, and Song, 2009) and supported the notion that activity connects tourist motivation and destination choice (Moscardo *et al.*, 1995). It is very important for

marketers to focus on strategy to attract international student market with complete information about “what to do” and “what to see” in the country’s destination.

## Conclusions, Limitations, And Implications

### 1. Conclusions

As a young traveler, international students show similar travel behavior in the host country. They are likely to travel with other international students from same or other nationalities. The use of internet as popular information source shows international students are a technology savvy. The most important motivation, “to discover new things or new places”, shows that international students are likely more adventurous than general tourist. They are also more likely to be involved socially with local culture and people. The preference in choosing local-style meals shows that students often avoid large chains and, instead, spend their money directly with local business.

Returning to the initial hypothesis, the results confirm that European and Indonesian students have different motivations and travel preferences in leisure activity. Each nationality should be viewed differently. However, these behaviors may vary because of market conditions and cultural factors. The differences will change as the economical situation of the destination country grows and foreign travel becomes more common. International student’s travel career also gives influence on how they travel in the future. The result of this study confirmed previous studies’ views that the global student market is not a homogenous group (Richards and Wilson, 2003; Kim and Jogaratnam, 2003). It contributes to the effort in understanding travel preferences and behavior of international student travel market, especially European and Indonesian students market. Tour operators and marketers can use the findings into their strategy because every nationality has a unique behavior that requires adapted marketing strategies and communication channels.

### 2. Limitations

There are three main limitations which suggest that the findings should be viewed with caution from the number of sample, the length of study period, and the impact of location. This research only studied two nationalities (European and Indonesian) in two different regions (Europe and Indonesia). The number of sample from European was small (n=82) from 14 countries and did not cover all European student nationalities in Indonesia. The sample for Indonesian respondents was only students from five countries in Europe, which were Austria, Germany, Netherlands, Sweden, and UK. Therefore, the results is not a representative of the population of international students, specifically European students in Indonesia and Indonesian students in Europe but can be treated as further research material. The length of study period in the host country might influence the way students travel. They might travel as a resident, not a visitor anymore. European countries and Indonesia have varied level and qualities in travel mechanism and destinations. They have different topography and cultures so the result cannot be generalized to all international students’ population. Further research about international students in same specific region is needed.

### 3. Implications

Student travel market is a niche market that needs to be further developed. International students not only gain self-benefit from their experience but also give benefit to the host country. The implication of the findings can be categorized into three important

stakeholders, which are the host university, the host country, and tourism destination. Recommendations for each stakeholder are included.

1. International students affair in host university can create programmes and services to help students adapt easily such as buddy network, orientation program, assistance in sourcing and the availability of accommodation and sporting clubs. A country and university can employ outgoing students as an ambassador for tourism and university promotion.
2. Host country should provide an easy information access on student visa, student housing, student transportation information, and student bank account.
3. Tourism operators can create tour packages for international student market to some destinations that suit student's needs. These packages can offer basic or top-up package tours that include accommodation, tasting local meals, transportation and offer reasonable price with wider range of leisure activity arrangements. To minimize the barriers to travel in time, the travel itinerary should be more flexible. To target different market, tourism marketers should provide information that illustrates their preference and most important motivation for the advertising campaigns. The main leisure activity that needs to be included are exploring and experiencing new things. The main motivations need to be emphasized are novelty, social/relationship, relax/escape, and self-development.

For European student market in Indonesia, tourism marketers should emphasize more on cultural immersion. The activities should be focused more on cultural and outdoor/sports activities (e.g., surfing class and trip, diving course and trip, hop on and hop off islands with snorkeling, bicycle tour to villages, jungle trekking, volcanoes hiking, temple tour). Tour operators could create student package with longer trip period, provide accommodation that involve cultural immersion to local people, such as homestay and public transportation, and offer local guide.

For Indonesian student market in Europe, tourism marketers should emphasize on famous destinations and learning experiences. Indonesian student shows similar travel behavior like other Asian students that focus more on doing things with friends and family, cultural exploration, and relaxation activities. Tour operators should focus on group travel with shorter period of travel (e.g., multi day or extended tours, day tour, and excursions) and give special deals or discounts. Thematic-based tour packages that may suit with the needs of Indonesian students are shopping experience tour, historical and heritage tour, tour with scenic landscape destinations, and relaxation (e.g., thermal bath and spa tour).

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**ANALYSIS OF LOCAL COMMUNITY PERCEPTION TOWARDS  
SUSTAINABLE TOURISM DEVELOPMENT CONCEPT WITH TRIPLE BUTTOM  
LINE APPROACH AT BUKITTINGGI, WEST SUMATERA**

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**Abstract**

The research is motivated by the fact that the current tourism industry is one sector that is rapidly growing in the era of the global economy . But tourism that promotes mass tourism will give a negative impact to the environmental balance . Bukittinggi as a destination for major tourist destination in West Sumatra is feared will cause a negative impact as well as Bali when it is not immediately administered to the concept of Sustainable Tourism Development through Triple Buttom Line Approach. Research in order to assess the perception local community towards Sustainable Tourism Development Concept at Bukittinggi. The results showed that among the three aspects were analyzed , namely the economic, environmental and social aspects , then the highest ratings given by respondents to the environmental aspect. But social aspects show the lowest ratings of the three aspects. Therefore, the local government of Bukittinggi should focus on city tourism development to environmental empowerment programs that involve the active participation of the local community in the town of Bukittinggi. This type of research is explanatory research . The research used a questionnaire to 195 local community who stayed in Bukittinggi. The sampling technique is purposive sampling with a cross-sectional coverage that reflects a picture of a situation in Juni-August 2016. The unit of analysis is the local communities of Bukittinggi . The analysis tool is using the frequency distribution .

**Key words:** *Sustainable Tourism Development Concept, Triple Buttom Line, Local communit*

**Introduction**

**1. Research Background**

The tourism industry is one sector that is rapidly growing in the era of the global economy and become one of the foreign exchange earnings of non oil and gas in Indonesia's third largest. According to the Ministry of Tourism and Creative Economy in October 2015 tourist arrivals reached 6.27 million, this figure has increased by 8.65% from the previous month. In addition to providing foreign exchange contribution to the country's tourism sector which is not vulnerable to the crisis, potentially a seat belt at the time of the national economy of the global economic slowdown due to the global economic crisis. This is because Indonesia has natural resources, human and culture is very rich, so that Indonesia has a unique comparative advantage as a tourist destination.

When masiv tourism development takes place, do not walk in a focused and comprehensive will encourage the paradox, as happened in Bali. Inability to keep pace with the environment in the physical development of tourism led to a conflict which is sad as overexploitation of the environment where the physical resources. On the other hand, tourism development, economic improvement, increase employment opportunities, the lifestyle changes led to changes in the physical environment and the carrying capacity and occupancy capacity on tourist destinations. Globalization and modernization led to a number of important issues on tourism in Bali such as the degradation of cultural elements and the hybrid culture

Budiarta and Kanca (2012: 96) states that the mass tourist visit have a negative impact on the physical environment and the social community in Bali. Bali is becoming increasingly congested, causing traffic jams and air pollution, agricultural land is converted into construction of tourism facilities such as hotels, golf courses, restaurants, art shops, villas and other tourism supporting the construction of accommodation. This research was supported by Suandi and Suarna (2007: 7-21) stating mass tourism impact of forest destruction, decreased biodiversity and critical lands. Wijaya (2012: 88) sataes the impact of the construction of a villa in North Kuta result of agricultural land conversion, pollution, coastal erosion, floods and the accumulation of garbage and waste in the region. Not to mention the social and cultural impacts posed, as expressed Budiarta and Kanca (2012: 97) resulting in commoditization and exploitation of tourism culture of Bali, causing degradation of values of Balinese culture. This situation makes the Balinese people become individualistic and materialistic, declining attitude to hospitality among others. The development of mass tourism is also causing a population explosion, live competition, jealousies, economic disparity and social inequality.

Bukittinggi as a major tourist destination and a major tourist destination in West Sumatra is feared in the long term will also experience the same thing if it is not managed in a planned, comprehensive vision and a clear mission. At the time of Bukittinggi vacation to tour the city crowded and congested, with garbage strewn along the landmark Clock Tower surrounded by modern Mall and the unavailability of parking space. Empty land increasingly met by new hotels and inns. Building and population growth are getting solid results in the carrying capacity and occupancy capacity of Bukittinggi heavier. Contour Bukittinggi hilly growing increasingly crowded with buildings accompanied by the emergence of clusters exclusively from the developers . Bukittinggi long-term concern is no longer a comfortable tourist city and a nickname Bukittinggi as the dream land of Sumatra for its natural beauty will be a memory. Because it is necessary to study in order to London remains the leading tourist destination areas that are environmentally friendly, maintained uniqueness, naturalness and a source of pride for future generations.

Based on the background and issues that have been pointed out above, the problem can be formulated as follows: how the local perception of the concept of Sustainable Tourism Development based on Triple Bottom Line approach proposed by Elkington

## 2. Purpose of Research

This study aimed to: know the local community perception of the concept of Sustainable tourism Development through Triple Bottom Line Approach proposed By Elkington

## Literature Review

### 1. Concept of *Sustainable Tourism Development (STD)*

According to Cortes and Maya (2010: 3075) Sustainable Tourism Development concept is tourism activities that bring together the needs of travelers with local community needs today and in the future. Development of Sustainable Tourism Development based tourism is tourism development that is based on economic, social empowerment and ensure the preservation of the environment.

According to Yoeti (2008: 242) sustainable tourism development brings needs of tourists and tourist destination in the rescue efforts and provide the opportunity to become more attractive again in the future. Daminik and Weber (2006: 26) states tourism development is sustainable resources (attractions, accessibility, amenities) tourism which aims to provide optimum benefits to stakeholders (stakeholder) and the value for the satisfaction rating in the long term. This is consistent with research Rotich et al (2012: 109) states the concept of Sustainable Tourism Development implemented as a policy, planning and activities in the

context of tourism which aims to ensure the development of tourism without damaging the economy, the environment and social welfare.

According to the UNWTO (United Nations World Tourism Organization) in Myra and Oliner (2012: 29) Sustainable tourism is tourism that takes into account the full impact of the economic, social and environmental present and future and answer the needs of visitors to the tourism industry, the environment and the local community. To measure the concept of sustainable tourism can be used several indicators, as shown in the following table.

According to Myra and Oliver (2012: 3) with good planning and effective management, tourism can generate positive benefits in terms of economic, social / cultural and natural environment. Conversely possible leakage of economic value, the extent of the negative impact of social and cultural and environmental degradation. Measures to encourage the tourism industry environmentally sustainable and socially is an important step that would contribute to inclusive social development and preserve the environment of capital, so that the industry can flourish in the medium and long term. The concept of sustainable tourism in Indonesia is already outlined in policy documents and laws, but does not need to be implemented by international minimum standards that have been agreed.

According to the Global Sustainable Tourism Council in Myra and Oliner (2012: 40) that the criteria is an attempt to reach a common understanding on sustainable tourism, which are grouped into four main themes, namely: 1) sustainable planning of effective, 2) maximizing social and economic benefits for local communities , 3) strengthening the cultural heritage, 4) reducing negative impacts on the environment. These criteria can be applied to the entire tourism industry or destinations. To support sustainable pariwisata, need a good carrying capacity management, technology, human resources and government policies. For example, the carrying capacity can be ecomanagement with the principles of reduce, reuse, recycle (3R), ekofiseinsi also be applied in the fields of transport, accommodation, accessibility and amenities. In the field of technology weapons can implement environmentally-friendly economy adapted to the climate, local culture and the local labor

**Table 2.1.**  
**Monitor and Evaluation Indicators for Sustainable Tourism Development**

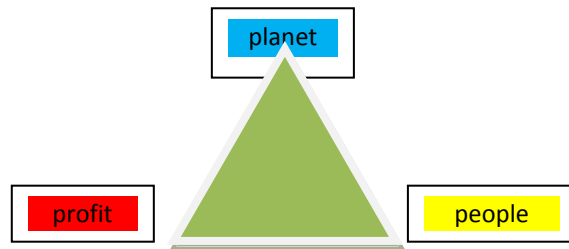
No	Indicator	Special Measurements
1	Location protection	carrying capacity and occupancy capacity, pressure to destination area, destination attractiveness
2	Pressure	Amount of tourists to revisit to destination/ <i>peak season</i>
3	Benefit intensity	Intensitas pemanfaatan pada waktu puncak
4	Social Impact	Ratio tourist to local community
5	Pengawasan Pembangunan	Formal procedure to develop
6	Waste management	The percentage of the waste management capability, ratio requirement and the supply of clean water
7	Planning process	Consider regional planning including travel planning (regional)
8	Critical ecosystems	Number of species are still rare and protected
9	Visitor Satisfaction	Level of satisfaction of visitors to Attractions (by questionnaire)
10	Satisfaction local community	The level of satisfaction to the local population (based on questionnaires)
11	The contribution of tourism to the economy of local communities	The proportion of total tourism revenue
12	Destination image	Persepsi wisatawan terhadap citra destinasi (kuesioner)

Source : UNWTO (2001)

## 2. Concept of *Triple Bottom Line (TBL)*

Based on the approach of some members who have previously submitted the concept of Sustainable Development Tourism can be concluded in general that the approach they express reference to the concept of the triple bottom line uttered by Elkington. According to Tyrrell et al (2012: 4) The concept of TBL (Triple Bottom Line) is a concept that is consistent with sustainable development (sustainable development) emerged in the 1980s were initiated by Elkington is conducting a comprehensive approach to sustainable development with regard to economic, social and environmental protection.

According Slaper and Hall (2010: 4) TBL is also known as the three P's, namely people, planet and profit as in the picture below.



**Figure 2.1. Triple Bottom Line**

Source: Slaper dan Hall (2010:4)

Three concepts put forward by Elkington can be measured using indicators as follows.

**Table 2.2.**  
**Aspect dan Indikator Sustainable Tourism Development**

No	Aspect and Indicator
1	<i>Economic : tangible assets, intangible assets</i>
2	<i>Environmental: natural environment (all the resources provided to a firm of raw materials, plants and animals, and including climate)</i>
3	<i>Social : firm's relationship with employess customers, the legal system, local community as well as educatuional, government and infrastructure institutions</i>

Source: Elkington (1998)

In contrast to Elkington, Tyrell et al (2012: 7) grouped into 10 attributes TBL as shown in the table 2.3.

Based on research conducted by Tyrell et al (2012: 7) approach to sustainable tourism helpful to assess perbedan value of groups of different stakeholders (ie tourists, government institutions, industry pelalu tourism services, local residents and the environment). The tourism sector is a sector that is unique to boost sustainable development by incorporating a system of economic, social, environment becomes a community system.

Based on the concepts put forward by Elkington on the concept of sustainable tourism development, it can be combined several indicators to measure the performance of sustainable tourism that will be studied in the city of Bukittinggi.

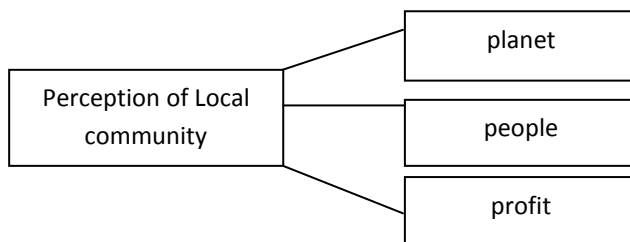
**Table 2.3.**  
**Ten Triple Bottom Line Attribute**

No	Dimension	No Attribute	Attribute
1	<i>Social</i>	1	<i>Comunity charity (percentage of gross revenue provided for local charitable contribution)</i>
		2	<i>Community health, safety and security (traffic congestion), security on property, health measures on prpperty</i>
		3	<i>Openness to public and local culture (openness to the nonguest to general public)</i>
2	<i>Economic</i>	4	<i>Local supplier and customers (good produced and purchased locally)</i>
		5	<i>Average hourly wages and benefit (compared to national average)</i>
		6	<i>Employment of local residents (employees who maintain a local residence)</i>
		7	<i>Local taxes paid (as a percentage of gross revenues)</i>
3	<i>Environmen tal</i>	8	<i>Water, energy and material practices (energy conservation, use of environment- friendly product)</i>
		9	<i>Green building and infrastructure (environment- friendly management, policies and governace)</i>
		10	<i>Waste management and reduction (recycling, wasted reduction)</i>

Source : Tyrell *et al* (2012:7)

3. Framework

To overcome the negative impacts of tourism activities on the town of Bukittinggi in need of comprehensive studies using TBL concept as seen in the research paradigm below:



**Figure 2.1.**  
**Research Model**

**Research Methods**

This research conducts to strategic management approach and marketing management Research method that used survey method and explorative reseachn types. The sampling

technique is purposive sampling with a cross sectional coverage that reflects a picture of a particular moment. The unit of analysis is the local population living in the town of Bukittinggi. The analysis tool is kuantitatif analysis using frequency distribution analysis.

1. Variable Operationalization

Operationalization of variables there are on table 3.1. :

**Table 3.1.**  
**Variable Operationalization**

No	Dimension	Indicators
1	Social	<i>Community charity (percentage of gross revenue provided for local charitable contribution)</i>
		<i>Community health, safety and security (traffic congestion), security on property, health measures on property</i>
		<i>Openness to public and local culture (openness to the nonguest to general public)</i>
2	Economic	<i>Local supplier and customers (good produced and purchased locally)</i>
		<i>Average hourly wages and benefit (compared to national average)</i>
		<i>Employment of local residents (employees who maintain a local residence)</i>
		<i>Local taxes paid (as a percentage of gross revenues)</i>
3	Environmental	<i>Water, energy and material practices (energy conservation, use of environment- friendly product)</i>
		<i>Green building and infrastructure (environment- friendly management, policies and governance)</i>
		<i>Waste management and reduction (recycling, waste reduction)</i>

2. Data collection technique

Primary data was collected by a questionnaire distributed to local residents who live in the city of Bukittinggi is considered capable of providing precise and accurate information

**Result**

This study analyzed the perceptions of the local population on the concept of tourism development based on sustainable tourism development using a concept put forward by Elkington namely 3P namely: Profit (economics), planet (environment) and People (social). Researchers deploy 195 questionnaires to local people who live in the city of Bukittinggi. The survey was conducted for 3 months starting in June-August 2016. A questionnaire was directly given to respondents selected. The sample in this study was 195 people. Characteristics of the sample was processed using SPSS 16.

The following characteristics of respondent. From of the 195 people sampled in this study, 54% of respondents, or as many as 105 persons of the male and the balance of 46% or 90 persons are female.

The percentage of respondents age is the age range of 17 years to 21 years with a percentage of 41% and was followed by the age of 22 years to 26 years with a percentage of 22%. Respondents have at least 17 years were assumed to have been able to provide precise and accurate information about assessing / their perception of the concept of sustainable tourism.

Based on the characteristics of the type of work, the results obtained from this study that the majority of respondents are students of this type of work by 34% and the percentage of 16%, followed by the type of work as private employees. Based on revenue sharing can be seen that

most respondents had a monthly income of about Rp 500,000, - to Rp 1.000.000, - and samples income above Rp 5.000.000, - the least encountered in this study. This indicates that the people of the city of Bukittinggi has varying income levels.

1. Response Respondents by Economic Aspects.

**Table 4.1.**  
**Response Respondents by Economic Aspects**

No	Indicator	Respondents Answer					Total	Mean
		1	2	3	4	5		
P 1	Bukittinggi tourism development attention to the carrying capacity of the city	11	44	53	67	20	195	3,21
P 2	Bukittinggi has a carrying capacity sufficient to accommodate tourist visitors	3	31	70	78	13	195	3,34
P 3	Bukittinggi city government supports the authenticity and naturalness of Attraction	1	4	38	115	37	195	3,94
P 4	The city government supports the preservation of the environment Bukittinggi attractions	1	2	29	94	69	195	4,17
P 5	Bukittinggi city government supports environmentally friendly public behavior	2	8	39	104	43	195	3.94
P 6	Bukittinggi tourism development to increase revenue and community businesses	18	47	47	68	15	195	3.08
P 7	Bukittinggi tourism development reducing the unemployment rate	1	5	32	79	78	195	4.17
P 8	Tourism development, creating new jobs for the community	2	7	44	108	34	195	3.92
P 9	Bukittinggi tourism development to support the emergence of new companies the field of tourism	2	7	44	108	34	195	3.85
P10	Tourism development to support the increase regional revenue	0	3	20	85	87	195	4.31
Rata-rata								

Source: questionnaire (2016)

Based on the questions P1, that the city community Bukittinggi give an assessment agree that the development of the city of Bukittinggi attention to the carrying capacity of the city (carrying capacity) which indicates that respondents are aware of the development of sustainable tourism should pay attention to the carrying capacity of the city so there is no damage to the city of London as a destination in a magnet The main in West Sumatra



province. This is in accordance with the question which is the city Bkt P2 has a carrying capacity sufficient to accommodate tourist visitors, the community provides appraisers agree, with an average of 3.34.

This is in line with research Tyrrell et al (2012: 4) that the concept of TBL (Triple Bottom Line) is a comprehensive approach to sustainable development with due respect to the environment as one important indicator in addition to economic and social aspects. Local residents agree that tourism development Bkt raise revenue businesses and communities (P6), tourism development Bkt will reduce the unemployment rate (P7), tourism development, creating new jobs for the community (P8), tourism development Bukittinggi support the emergence of new companies the field of tourism ( P), tourism development plan to raise revenue (P10). Statement P 10 memperlihatkan average rate is the highest compared with other statements. It is indicating the that the people of Bukittinggi considered that the concept of tourism sustainbale well-planned development will be able to raise regional revenue through growth in service industries and trade.

2. Response Respondents by Environment Aspects.

**Table 4.2.**  
**Response Respondents by Environment Aspects**

No	Indicator	Respondents Answer					Total	Mean
		1	2	3	4	5		
P11	Tourism development support Attraction keasrian	1	0	15	78	101	195	4.24
P 12	Tourism development support municipal waste management Bukittinggi	7	8	34	69	77	195	4.03
P 13	Tourism development to support the quality of natural resources (air, water)	2	4	28	68	93	195	4.26
P14	Tourism development to support the use of saving electric energy sources	10	10	31	60	84	195	4.02
P15	Tourism development support the preservation of the surrounding natural attractions	0	6	53	99	37	195	3.86
P16	Tourism development, improve the function of idle land into productive land	0	1	33	104	57	195	4.11
P17	Tourism development create air pollution	1	5	43	114	32	195	3.88
P18	Tourism development increase temperature and humidity of the city	2	7	42	104	40	195	3.89
P19	Bukittinggi tourism development to support the natural beauty	0	2	38	114	41	195	3.99

Source: questionnaire (2016)

Based on descriptive analysis on environmental aspects, local communities Bukittinggi agreed with the statement that supports the development of tourism attractions keasrian (P11) and the development of tourism support the management of municipal solid waste (P12). Community Bukittinggi provide answers and the highest ratings on the stationing P 13 which supports tourism development quality of natural resources (air, water, etc.) and P16 statement that improve the function of tourism development of idle land into productive land. Tourism development to support the use of saving electric energy sources as well as P15. Tourism development support the preservation of the surrounding natural attractions. This indicates that the urban community Bukittinggi assess Bukittinggi city government has not seriously consider the environmental aspects affecting the sustainability of tourism in the statement Bukittinggi. Sementara P17, P18 and P19 showed a relatively flat at around 3.89 that tourism development creates air pollution, increase tourism temperature and humidity of the city, tourism development Bukittinggi supports natural beauty.

In a statement tourism development, improve the function of idle land into productive land (P16), tourism development creates air pollution (P17), Tourism development raises the temperature and humidity of the city (P18), tourism development Bukittinggi supports natural beauty (P19), most of the tourists leave assessment agrees. The results of this study are supported by Suandi and Suarna (2007: 7-21) stating mass tourism impact of forest destruction, decreased biodiversity and critical lands. It aligned with that expressed by Wijaya (2012: 88) that the impact of the construction of a villa in North Kuta result of agricultural land conversion, pollution, coastal erosion, floods and the accumulation of garbage and waste in the region.

3. Response Respondents by Social Aspects.

**Table 4.3.**  
**Response Respondents by Social Aspects**

No	Indicator	Respondents Answer					Total	Mean
		1	2	3	4	5		
P 20	Tourism development, increase of crime	11	44	53	67	20	195	3,21
P 21	Tourism development to increase women who work in the tourism sector (selling, sewing embroidery and sells snacks)	3	31	70	78	13	195	3,34
P 22	Tourism development can improve the household economy	1	4	38	115	37	195	3,94
P 23	Tourism development, reducing poverty	1	2	29	94	69	195	4,17

P 24	Tourism development create a good social interaction between individuals	2	8	39	104	43	195	3.94
P25	Tourism development, improve the quality of life	18	47	47	68	15	195	3.08
P26	Tourism development to improve the welfare of society Bukittinggi	1	5	32	79	78	195	4.17
P27	Boost tourism development of education of the city of Bukittinggi	2	7	44	108	34	195	3.92

*Sumber : data di olah (2016)*

According to the people of Bukittinggi that tourism development increase criminality (P20), and also in accordance with the statement P21 that tourism development Bukittinggi increase women who work in the tourism sector (selling, embroidery and snacks), able to increase pekonomian households (P22) and reducing poverty (P23).

Tourism development create social interactions both among individuals (P24), it is approved by the respondents, as well as tourism development, improve the quality of life (P25) and improve social welfare Bukittinggi (P26), and the development of tourism boost education townspeople Bkt (P27 ). This indicates that the development of sustainable tourism is able to humanize the man became man more responsible towards themselves, the environment and future generations. This is in line with research Budiarta and Kanca (2012: 97) states that uncontrolled tourism makeover will lead to commoditization of social and cultural exploitation of Bali, causing degradation of values and culture in Bali. This situation makes the Balinese people become individualistic and materialistic, declining attitude to hospitality among others. The development of tourism that does not matter to kulaitas social life also led to a population explosion, live competition, jealousies, economic disparity and social inequality

Based on the above table, the highest ratings given by the people of the town of Bukittinggi in the statement P23 that tourism development to reduce poverty by 4,17dan P26 is a statement of tourism development to improve the welfare of society Bukitinggi. Because berkembangnya tourism sector-based sustainable tourism development will encourage the community to be actively involved in promoting their tourist destinations with an excess of care to the concept of sustainability and will be visible from souvenir products are been created concept of green product in the form of souvenirs and art works. ,This is in line with research Swanson danTimothy (2012: 492) states tourists will make a purchase souvenirs or cenderamta as a sign / evidence that they have done perjalananke a travel destination and has pengalamanistimewa in a privileged spot / special anyway (had a extraordinary experience inextraordinary space ). Souvenir reflect on the experience of travel and save a nice memory can be eco-friendly handicraft products (wood waste or waste fabric) can be kerajiana unique hand produced by the local community that describes the integrity of Cultural Studies and the history of the place.

## **Conclusion**

This study analyzed the perceptions of local residents Bukittinggi town tourism development based on the concept of sustainable tourism development using a concept put forward by Elkington namely 3P namely: Profit (economics), planet (environment) and People (social).

Based on research conducted on three aspects: economic, social and environmental, local residents expressed that the economic aspects of tourism concept based kebelanjutan considered able to reduce unemployment, increase of informal employment in industries such as handicrafts / souvenirs and transportation services. The local population is also considered that the concept of sustainable tourism to support the emergence of businesses in the services and trade in Bukittinggi.

In a second aspect, namely planetary aspects (environmental) local residents considered that the development of sustainable tourism can support the beauty of a tourist destination because of the awareness of personnel involved in the tourism industry both active and inactive. This concept can also support the quality of natural resources such as water and electricity which will be saving resource usage tersebut. Pada third aspect which aspects of people (social), local residents considered that the concept of sustainable tourism can reduce the crime rate in Bukittinggi and this concept can improve labor force participation rates of men and women in the various sectors of the economy so that the level of the family also increased.

Based on the analysis using frequency distribution that the concept of Sustainable Tourism Development, which consists of economic, environmental and social can be used to measure the perceptions of local residents against the concept of triple bottom line proposed by Elkington. Of these three aspects reveal that environmental aspects have value and contribute most to the continued development of tourism in the city of Bukittinggi. This means that the local population gives the perception that environmental aspects become important for the assessment of local residents to the development of sustainable tourism that is concerned with the sustainability of future generations. This aspect was rated by locals as an important part to promote sustainable tourism by combining this approach with the local wisdom of local communities. While the economic aspect is the perception of the lowest rated by locals. This means that the economic aspect is the second choice after environmental aspects. This means that people appreciate that the environment adalah important part to promote tourism in Bukittinggi.

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## IMPROVING THE COMPETITIVENESS OF TRUSMI BATIK-CIREBON THROUGH THE ENTREPRENEURIAL ORIENTATION

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### Abstract

SMEs (Small and Medium Enterprises) are pillar of the country's economy which can play an important role in the development and growth of a country's economy, followed by the increasing population. As how Trusmi batik industry is trying to face MEA depends on how the industry's actors prepare for it. So Trusmi batik can compete with other companies, which in turn it can maintain the existence of SMEs. It indeed takes a strategy, one of which is by creating competitiveness of Trusmi batik in Cirebon through entrepreneurial orientation, characterized by sustainable innovation, creativity, and risk consideration. Entrepreneurial orientation is an ability owned by a business actor to create something new and different from competitors. In other words, the entrepreneurial orientation is the goal of an entrepreneur to take an opportunity in opening new markets and apply updates from the existing operating with three indicators, namely: being innovative, creative and having risk consideration to improve business competitiveness.

This study explores entrepreneurial orientation on the creation of business competitiveness in the batik industry. In this study, there are 145 respondents surveyed and all of them are the SME owners of Trusmi batik. It is found that the entrepreneurial orientation characterized by innovation, creativity, and risk considerations can increase the competitiveness of the industry to be better. This means that the resilience of batik SMEs is greatly determined by entrepreneurial orientation.

**Keywords:** *Innovation, creativity, risk considerations and competitiveness*

### Introduction

Small and Medium Enterprises (SMEs) are playing an important role in the economy of a country, especially in Indonesia. This is because SMEs can absorb a lot of labors to avoid the emergence of unemployment in each region. SMEs, as which has been proved, are able to save the nation's economy during the economic crisis in 1998, it also proved to have relatively better endurance compared to the bigger business scale. That is why it is not surprising that in times of crisis and recovery period of Indonesia's economic like now, SMEs have a major role which is very strategic in the national economy.

Based on the latest data released by the Central Bureau of Statistics and the Ministry of Cooperatives and Small and Medium Enterprises (BPS and Kemenekop & SMEs RI) in 2009 there were at least three (3) indicators showing that the existence of Micro, Small and Medium Enterprises in Indonesia has such important position. First, there are a large number of SMEs found in every sector of the economy. The total population of SMEs in 2008 reached 51.2 million units, or 99.99% of the total business units in Indonesia, with the number of their employees reached 90.9 million people, or 97.04% of the entire workforce in Indonesia. Second, it has a great potential in solving unemployment problem which absorb 79.04 million workers, or 99.4% of the total labors. Third, it has a significant contribution to the formation of the Gross Domestic Product (GDP), which contributed up to 55.56% of the total GDP.

Trusmi batik is one of the SMEs coming from the area with the biggest Batik product in West Java, Cirebon. The center of Batik production in Cirebon is located in the village of East Trusmi and West Trusmi, Plered. Batik Cirebon is often referred to Trusmi batik because there is only one center of batik production, which is in Trusmi area. The example of famous batik products are Batik Pesisiran, Batik Mega Mendung, Batik Sawat Panganten, Batik Urang Jejer.

For most of the people in Trusmi, working for batik industry is one of the main livelihood. Trusmi batik itself is classified into a labor-intensive industry because it requires quite a lot of human labors with some special skills. Therefore, Trusmi batik industry also has contributed a lot, especially to the district administration of Cirebon. However, based on the phenomenon that occurred a few years ago (since 2010-2014), there was a decrease in form of the employment absorption and sales. It can be seen from the table below:

**Table 1**  
**Export Data of Cirebon Batik in 2008-2010**

Year	Job lot	Export Value (US \$)
2008	7200	1,008,000.00
2009	7500	1,410,973.50
2010	8500	2830333 , 00

Source: Department of Industrial and Trade of Cirebon regency 2015

The data above shows that the growth of export value of Cirebon Trusmi Batik in 2010 increased significantly compared to the year 2009 that is from 13.3% to 2.8 billion in 2010. the value, however, is still relatively low, if compared to the national export value. In

2010, national batik exports amounted to 22 million USD ([www.sinarharapan.co](http://www.sinarharapan.co)), when assuming the value of the dollar in 2010 was 10 thousand rupiah, the total value of national batik exports in 2010 amounted to 220 billion rupiah. It means that the value of Cirebon batik exports is only 1.27% of the total export value of the national batik. Based on this, it is necessary to have steps to optimize the value of Cirebon batik export to continue its efforts to improve the business competitors, particularly those in Trusmi batik industry. One of the attempts is by seeing the capabilities of SME actors from their entrepreneurial orientation. Since it is through the implementation of the ASEAN Economic Community in 2016 that the opportunity for the nationwide batik industry, especially Trusmi batik industry can enhance its competitiveness so as to increase the value of exports. After the introduction of the MEA, there will be ease in conducting export and import of goods (Agi Syarif , 2015).

However, even in the era of MEA batik industry gets opportunities to continue growing, there are several obstacles faced by the Trusmi batik producers such as economy crisis and globalization that is the agreement of ASEAN - China Free Trade agreement (ACFTA). The next obstacle is the illegal circulation of batik into the Indonesian market in 2008 indicated originating from China smuggled products which is estimated amounted 290 billion rupiah. The spread of those foreign batik can take over the market share of local batik which has become the foundation of income for local batik entrepreneurs, including

Trusmi batik of Cirebon.

The entry of foreign batik from China, which has been widely distributed in Indonesia become the concern of local batik entrepreneurs. It encourages them to compete not only with any similar local but also with foreign competitors. Thus, the local batik entrepreneurs should be able to provide innovation and creativity in order to remain competitive in the market.

The competitiveness of an organization depends highly on the individual, who must have speed, ability of responsiveness, agility, learning ability and competences; which are knowledge, skill and ability related to the job (Uirich, 1998). The managers of the organization must think how to build and maintain a sustainable competitiveness. Barney (1991) states that in order to achieve competitiveness and sustainable profits, the company must seek out and cultivate the special capabilities of all its human resources.

Theory of Competitive Strategy (Porter, 1980) suggests that companies should create a special competitive edge in order to have a strong bargaining position in the competition. Further Porter (1991) states that the company can achieve success if three conditions are met: 1) having the purpose of a strong company in the market; 2) paying attention to the company's strength dynamically by taking into account the opportunities and threats of the external environment; 3) having and digging distinctive competency as the driving force. Meanwhile, according to Mahoney and Pandian (1992), to face the increasingly complex competition and internal crisis, small companies can use the theory of resourced-based strategy. This theory assesses the potential to maintain the company's success in fluctuating external conditions and prioritizes the development of superior internal capabilities. It is not transparent, difficult to be imitated or diverted by competitors, and it also provides long futuristic competitiveness and resistant toward recession.

The competence built from an organization's internal asset utilization through continuous organizational learning ability will produce a sustained competitive advantage and superior business performance. In accordance with the theory of resource-based view (RBV), Barney (1991) stated that resource competency can become a source of sustainable competitive advantage if the Micro, Small and Medium Enterprises provide customers with the valuable competence and resource which are rare, difficult to imitate and difficult to replace. This will be able to maintain a good position in the competition in the industry. The RBV approach also states that high-performance businesses will be more easily achieved if the company has the resources competency and reliable competitiveness (Wernelfelt, 1984; Barney, 1991; Amit and Schoemaker, 1993). Coordination of strategic resource as the result of a mix of entrepreneurial orientation, creativity and innovation will support the resource which is non-imitability, non-transferability and non-substitutability as the source of sustained competitive advantage stated by Durand (1999: 45).

In addition to creativity, a factor that is influential in the rise of a business performance is innovation. Innovation of the production process nowadays uses machinery and technology. The previous production process was done manually such as by direct hand-drawing for batik. Then, considering the economic reason, batik was produced on a large scale by means of printing in factories although the patterned fabric of Mega Mendung batik produced with such process cannot actually be called batik. Mega Mendung motif which was previously only known in the form of batik clothe, can now be printed in a variety of goods such as glass painting, interior products such as carved wood and household appliances such as pillowcases, bed sheets, tablecloths and others. Based on the phenomenon and some results of the researches, there are still differences as Barney (1991) stated that competitive advantage belongs to the company which provides the costumers with valuable competence and resource which are rare, difficult to imitate



and to replace. The same thing were mentioned by Wernelfelt, (1984); Barney, (1991), Amit and Schoemaker (1993) that the high operating performance will be more easily achieved if the company has the resources competency and reliable competitiveness. While Durand (1999: 45) stated that entrepreneurial orientation, creativity and innovation will support the creation of resources which are non-imitability, non-transferability and non-substitutability as the source of sustainable competitive advantage. It is different from the findings of Mahoney and Pandian (1992), which explained that to face the increasingly complex competition and internal crisis, small companies can use the theory of resourced-based strategy.

While Ulrich, 1998 mentioned that the company's competitiveness depend on the individuals themselves, who must have speed, responsiveness ability, agility, learning ability and employee competences, namely knowledge, skills and abilities related to the job. Based on the above phenomenon, this study aims to find out whether there is a relationship among innovation, creativity, and risk considerations and to find out whether there is an influence of entrepreneurial orientation (innovation, creativity, and risk considerations) on the competitiveness of SMEs of Cirebon Trusmi Batik either partially or simultaneously.

## **Literature**

### **1. Entrepreneurial Orientation**

The consensus in strategic management and the process of entrepreneurial management as studied by Matsuno et al. (2002) and Schindehutte et al. (2008) consists of: Innovativeness, risk-taking and proactive. They studied deeply about the thoughts of Barringer, and Bluedorn 1999; Caruana et al. (1998); Covin and Slevin, 1989; Jennings and Young, 1990; Khandwalla, 1977; Miller, 1983; Miller and Friesen, 1982; Morris et al. (1993). While Matsuno et al. (2002) in his research tended to use the terms of entrepreneurial Proclivity defined as processes, practices and decision-making based on a preference to perform innovativeness, risk-taking and proactive.

According to Slater and Narver (1995) a business can reach its full potential of its market orientation when it is caused by the tendency of the nature of appropriate entrepreneurial orientation in accordance with the design and structure of the organization. Several studies on entrepreneurial orientation show that entrepreneurship is a major attribute to achieve a high performance of a company. The approaches to explain the entrepreneurial orientation can be viewed from several classifications, among others are in the perspective of the individual, organizational and environmental factors. And, the study of entrepreneurship continues to thrive in describing the characteristics of an entrepreneur.

Drucker (1994) suggested that the entrepreneurial orientation as the nature, character or characteristics attached to someone who has a willingness to realize innovative ideas into real business world and can develop it well. Entrepreneurial orientation is the ability to create something new and different.

Scarborough and Zimmerer (1993: 5) proposed a definition of an entrepreneur as someone who creates new business by considering the risks and uncertainties to achieve profit and growth by identifying opportunities and combining them with the resources needed to take the advantages.

From those opinions, the concept of entrepreneurial orientation can be synthesized as a mental attitude, outlook, insights and thought of someone to do his tasks and responsibilities which are always oriented to the customers. In essence, entrepreneurial

orientation is the characteristics and attitudes of the individual who has the willingness to realize innovative ideas creatively into the real world.

Dimension of entrepreneurial orientation by Lumpkin and Dess (1996) in his article stated that there are five (5) dimensions that characterize and distinguish the entrepreneurial orientation, namely: autonomy, innovativeness, risk taking, proactive and competitive aggressiveness. While Miller and Friesen (1982) identified 11 dimensions of the strategy-making process for the entrepreneurial orientation, among of them are adaptiveness, analysis, integration, risk taking and product market innovation. Frederickson (1986) proposed another dimension, namely: proactive, rationality, comprehensiveness, risk-taking and assertiveness. While Hart (1992) developed a framework for integrative in five dimensions: command, symbolic, rational, transitive and generative and Miles and Snow (1978) considered several dimensions covering prospectors, defenders, analyzers and reactors.

Thongvanh Sirivanh et al (2014) mentioned that entrepreneurial orientation is a significant contributor to the success of a business organizations since the success of a business activity is strongly associated with environmental factors both internally and externally. External environmental factors include the economic and social conditions, political and technological factors. Internal factors include entrepreneurial management consisting of an emphasis level on strategic orientation, resource orientation, structure of entrepreneurial culture management, reward philosophy and entrepreneurial orientation related to the personal characteristics of entrepreneurs (Isalam, 2011). Entrepreneurial orientation consists of attitudes toward business innovation, proactiveness in business operations and risk taking (Miller, 1983 ;. Lumpkin & Dess, 1996, p.137 ;. Gurbuz, & Aykol

2009; Kuratko & Hodgetts, 2004, p. 130

).

From those several opinions, it can be said that the entrepreneurial orientation describes the purpose of an entrepreneur to take opportunity in opening new markets and apply updates from the existing operation with three indicators, namely: innovation, creativity and risk considerations.

## 2. Competitive Advantage

The fundamental concept of competitive advantage can be traced from the concepts revealed by Chamberlin (1939); Selznick (1957); Hofer and Schendel (1978) which describe a competitive advantage as a unique position developed by an organization directly compared to the competitors through its resource usage patterns. Day (1984) and Porter

(1998) revealed the next generation conceptualization which states that a competitive advantage is a goal of the strategy to achieve superior performance.

Bharadwaj *et al.*,(1993, p83-84) explained that the competitive advantage is the result of implementation of the strategy utilizing the various resources of the company. Unique expertise and assets is viewed as a source of competitive advantage. The unique expertise is the company's ability to make its employees as an important part in achieving competitive advantage. The company's ability to develop the skills of its employees properly will make the company become superior, and the implementation of strategies based on human resources will be difficult to be imitated by competitors. While the unique assets or resources are the real resources needed by the company to execute it's competitive strategy. Both of these resources should be directed to support the company's performance which takes low-cost and has difference from other companies.

This is supported by the opinion of Styagraha (1994, p.14) stating that competitive advantage is the ability of an enterprise to provide more value to its products compared to its competitor's, and that value does bring benefits to customers. Some indicators used to measure competitive advantage are: unique, rare, not easily imitated, not easily replaced, and competitively priced. The product uniqueness is the company's unique product combining the art value and customer's taste. Competitive price is the company's ability to adjust product prices to general prices in the market. Not-easily-found product means that its presence is rare in the middle of competition. Not-easily-imitated product means that it can actually be imitated, but imperfect. Hard to replace means there is no similar substitute.

The competitive advantage is the ability of a business to achieve abnormal profit in the competitive industry through strategy of creating value. Competitive advantage will be sustained when the advantage is resistant to eradication from competitors who can do the duplication of benefits from existing strategies (Barney, 1991).

A company should be able to be superior compared to the competitors. The company requires to create competitive strategic by formulating and implementing the strategy of creating value. Competitive advantage is obtained when the company is able to make a lot of different activities carried out by companies incorporated in a chain that can contribute the value which gives maximum margin to the company. Those activities should be carried out strategically with lower cost or better result compared to the competitor's.

Porter (1998) stated that business positional advantage directly achieved by a company represents barriers of competitive mobility in the competition because it may constitute a barrier to new competitors. Porter further differentiated the company's strategic advantage for the first two things because firms have a unique (different from others) seen by customers and because the company has the advantage of relatively low cost position compared to competitors. This strategy should be designed to achieve continuous competitive advantage that the company can dominate both markets and new markets. Competitive advantage basically grows out of the values or benefits created by the company for its customers. They generally prefer to buy products with more value than what they expect. However, that value will also be compared with the price offered. Purchasing will occur if customers consider that the price of the products is appropriate with the value offered.

The purpose of competitive strategy is to obtain sustainable competitive advantage and in turn to increase the business performance. Unique expertise and asset are used as a source of competitive advantage. Porter (1998) stated the competitive advantage is the result of the implementation of value creation, not the simultaneous result of implementation from potential competitor or existing ones, or through the superior execution or strategy application which is similar to competitor's. However, sustainable competitive advantage is obtained when profits can be gained and sustained.

According to Barney (1991) and Baum et al, (2001), the resource-based theory consists of capacity and resources becoming the basis for business organizations to build the rare capacity with high added value. This is a very specific resource for a company so that other companies get difficulties to imitate and find a substitute factor.

The core competence of business is directly related to technical knowledge, reputation, brand awareness, manager's ability, patents and trademarks (Fahy and Smithee

1999). Prahalad and Hamel (1990) stated that the capacity of individual staff is a major determinant of a company's production. It leads to a company's difference (Porter,

1985; Prahalad and Hamel, 1990).

The dimensions of competitive advantage refers to the dimensions adopted from Barney (1991), namely: valuable resource, rare resource, and that which is difficult to imitate and hard to replace.

### 3. The Influence of Entrepreneurial Orientation on Competitive Advantage

Study by Mohammad Arief et al (2013) analyzed the influence of entrepreneurial orientation on firm performance through flexibility strategies conducted by taking sample of

140 small business owners in Malang. The results showed that there is a direct influence of entrepreneurial orientation on firm performance. However, the influence of entrepreneurial orientation will not be significant through a flexibility strategy so that the variable of the flexibility strategy plays a mediating role in the relationship of entrepreneurial orientation on business performance.

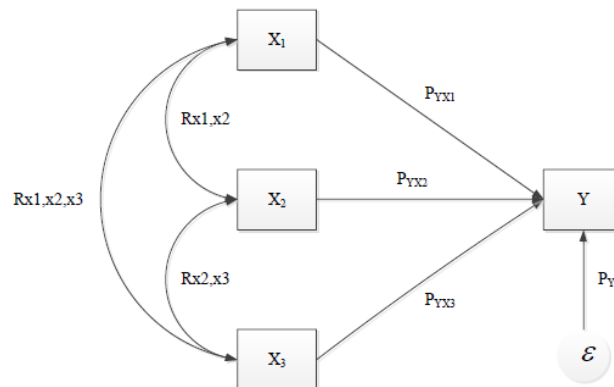
Thongvanh Sirivanh et al (2014) studied the factors influencing the growth of SMEs through sampling as many as 331 entrepreneurs in Laos and using *Structural Equation Modeling* (SEM) analysis. The results showed that there is a positive effect of entrepreneurial orientation on competitive advantage. While competitive advantage and entrepreneurial orientation significantly and positively influence the growth of SMEs.

Li, et al, (2009) analyzed the relationship between entrepreneurial orientation and entrepreneurial performance conducted on 165 companies in Taiwan based on primary data collected through questionnaires. His research found that entrepreneurial orientation is positively related to business growth. Entrepreneurial orientation will initiate changes to continue meeting the customers' desires including how to use either tangible or intangible resources they have. Continuous innovation applied has an effect on the asset. It is then used to form the core competence becoming a source of competitive advantage.

The continuous innovation conducted will form the efficiency of input use and the effectiveness of the business result achievement. The products produced have better quality, customer satisfaction can be met through the product with competitive prices, product demand will increase which ultimately improves competitiveness. The increase of proactive thinking also will improve the ability to capture new business opportunities; the excellence to recognize the customer's expectation and develop the business capacity earlier than the competitors will allow the company to create more superior products.

Entrepreneurial orientation triggers the desire to improve business competitiveness by seeking the resources which are valuable, rare, difficult to imitate and difficult to replace compared to its competitors to gain superiority in business result. It was concluded that entrepreneurial orientation is an antecedent of sustainable competitiveness. The higher the entrepreneurial orientation will be, the higher the competitiveness will be achieved.

So, the research model can be described as follows:



**Figure 1.**  
**Research Model**

**Methods**

This study used a descriptive-analytic method through surveys and the characteristic is *grounded*. The survey in data collection is conducted by spreading questionnaires either by sending them or directly visiting the respondents.

The time period used is *cross sectional* which is a moment fact with only one form of data collected in a period of observation in order to answer the research questions (Sekaran, 2009). The unit of analysis in this study is the SMEs of Cirebon Trusmi Batik with 45 respondents as samples using *random sampling*, which means sampling of the population that is done randomly without considering the strata in the population, since members of the population considered homogeneous (Sugiyono 2005 ).

The type of the relationship between the variables examined in this study is a causal relationship. According to Sugiyono (2004), a causal relationship is cause and result relationship, if X then Y; so that an analytic instrument used in this research is regression with SPSS. Therefore, in this study is expected to clarify whether entrepreneurial orientation as an independent variable has influence on competitiveness as the dependent variable.

**Results**

1. Descriptive Analysis

Characteristics of respondents based on their latest education are presented in the table below;

**Table**  
**2**  
**Respondents by Education**  
**Level**

No.	Last Education	Frequency	Percentage
1 .	High School	68	46.89
2.	Diploma	28	19.31
3.	Undergraduate	49	33.79
<b>Total</b>		145	100%

Source: Primary data, processed (2016)

From the table it appears that respondents with high school education amounted to 46.89%, followed by 33.79% of undergraduate education. While the smallest number of respondents have diploma level that is 19.31%. Mostly, the businessmen of SME of Cirebon Trusmi Batik with high school education are those who have been running the business for long time. Some of them continue running the business from their parents. That is why, they are mostly self-taught businessmen with no particular experience in education or other schools. In conclusion, the business actors of Cirebon Trusmi Batik should improve their knowledge or get additional education in order to increase capacity and capability in running the business.

This analysis was conducted to obtain an overview of the variables used in this study. This study used two independent variables, namely innovation (X1), creativity (X2), risk consideration (X3) and one that is already bound i.e. business competitiveness (Y). The explanation of categorization used 145 respondents and the scale used is a Likert scale with a score of 1-5. The classification criteria of innovation, creativity, risk consideration and business competitiveness is obtained from:

$$\frac{(145 \times 5) - (145 \times 1)}{5} = 116$$

Range Score = 5

From the above calculation, the range score is 116. Thus, classification range of each variable can be seen in the following table:

**Table 3**  
**Classification**  
**Criteria**

Variable	Score		Number of Classification & Interval Class	Variable score	classification range	
	Highest	Lowest				
Innovation (X1)	30	17	5 (116)	379	Very high High Fair Low Very low	609 – 724 493 – 608 377 – 492 261 - 376 145 – 260
Creativity (X2)	30	14	5 (116)	386	Very high High Fair Low Very low	609 – 724 493 – 608 377 – 492 261 - 376 145 – 260
Risk consideration (X3)	30	11	5 (116)	392	Very high High Fair Low Very low	609 – 724 493 – 608 377 – 492 261 - 376 145 – 260

Business competitiveness (Y)	25	16	5 (116)	379	Very high	609 – 724
					High	493 – 608
					Fair	377 – 492
					Low	261 - 376
					Very low	145 – 260

Source: research results 2016

The table above shows that some variable such as innovation (X1), creativity (X2), risk consideration (X3) and businesses competitiveness (Y) are in the category is fair. This is important for any organization facing the tightening competition to have the capability of innovation, creativity, and risk considerations (Ulrich, 1998). To obtain a sustainable competitiveness, businesses should be able to grow the capabilities of all of the resources owned by the firm (Barney, 1991). Wernelfelt, (1984); Barney, (1991), Amit and Schoemaker (1993) mentioned that the high operating performance will be more easily achieved if the company has the resources competency and reliable competitiveness. While Durand (1999: 45) stated that entrepreneurship orientation, creativity and innovation will support the creation of non-imitability resources, non-transferability and non-substitutability which are the source of sustainable competitive advantage. Agi Syarif (2015) also stated that business competitiveness of SMEs can be seen from the capabilities of SME businesses like entrepreneurship orientation. It can be used to improve the competitiveness of businesses in the era of MEA as today. SMEs now have greater chance for export market if they have willingness for innovation, creativity and risk consideration.

2. Test of First Hypothesis: Relationship between Innovation (X1), Creativity (X2) and Risk Consideration (X3)

The test results of the first hypothesis by using program SPSS 19.0 are as follows:

**Output of Hypothesis 1**

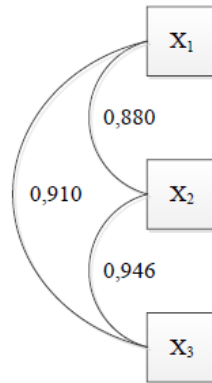
**Correlation**

s

		Innovation	Creativity	Risk consideration
Innovation	Pearson Correlation	1	.880*	.910*
	Sig. (2-tailed)		*	*
	N	145	145	145
Creativity	Pearson Correlation	.880*	1	.946*
	Sig. (2-tailed)	*		*
	N	145	145	145
Risk consideration	Pearson Correlation	.910*	.946*	1
	Sig. (2-tailed)	*	*	
	N	145	145	145

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The test results of correlation between the variable of innovation, creativity and risk consideration indicate that these three variables are significantly correlated. Of the value of correlation coefficient generated, the structural relationship reflected in the first sub structure is as follows:



**Figure 2. The first sub structure**

Correlation tests among variable X1, X2 and X3 indicate that there is a significant correlation among innovation, creativity and risk consideration. The correlation score of innovation and creativity is 88%, creativity and risk consideration is 94.6%, while innovation and risk consideration is 91%. Based on these results, the first hypothesis stating that there is a relationship among innovation, creativity and risk consideration is acceptable or cannot be rejected.

3. Testing of Hypothesis Two: innovation (X1), creativity (X2) and risk consideration (X3) have simultaneously and partially Influence on competitiveness (Y)

Simultaneous Hypothesis Testing (Test F-statistics)

The F-statistic test basically indicates whether all the independent variables included in the model together (simultaneously) do not have a significant effect on the dependent variable. F value is derived from the table ANOVA (analysis of variance).

The calculation result of the value of F-count for a regression model can be seen in the table below:

**Table of F-test  
 Result  
 ANOVA  
 b**

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	49.430	3	16.477	6.646	.001 <sup>a</sup>
Residual	101.646	141	2.479		
Total	151.076	144			

a. Predictors: (Constant), X3, X1, X2



b. Dependent Variable: in percentage (%)

Source: attachment of output result of SPSS 19.0

From the data processing shown in the above table, it can be seen that the value of F-count equal to 6.646 with a p-value of 0.001. Therefore, the p-value (0.001) is smaller than a predetermined value  $\alpha$  (0.05). It can be concluded that the independent variables (innovation, creativity and risk consideration) have simultaneously significant effect on the dependent variable (competitiveness) on the level 95%.

Partial Hypothesis Testing (Test t-statistic)

To determine whether or not there is a significant influence of the independent variables partially on a dependent variable, statistical t-test was used. Partial hypothesis testing was done by comparing the value t count with t-table value for the error rate of 5% and degrees of freedom (db) =  $nk1 = 145-2-1 = 142$  is 1.682.

The calculation result of value t count for each independent variable in the regression model was examined and the decision of partial test is presented in the following table:

**Table 3**  
**Partial Hypothesis Testing (t-test)**

<b>Variable</b>	<b>t-count</b>	<b>t-table</b>	<b>P-value (sig)</b>	<b>Decision</b>	<b>Note</b>
Innovation (X1)	3,741	1,682	0,000	H0 is rejected	Significant on $\alpha = 0,05$
Creativity (X2)	1,608	1,682	0,115	H0 is not	Not significant on $\alpha = 0,05$
Risk Consideration (X3)	-3,331	1,682	0,002	H0 is rejected	Significant on $\alpha = 0,05$

Source: processed data (2016)

Partial testing result (t-test) to see the significance of each independent variable in the regression model can be described as follows:

1. The significance of innovation on competitiveness

From the calculation, the value of t-count for innovation variable (X1) is 3.741 with a p-value of 0.001. Therefore, the p-value (0.001) is smaller than a predetermined  $\alpha$  (0.05), it can be concluded that partially innovation has a significant effect on the competitiveness with the 95% confidence level. This means that the results of this study manage to reject H0.

2. The significance of creativity on competitiveness

From the calculation, the value of t-count for creativity variable (X2) is 1,608 with p-value of 0.115. Therefore, the p-value (0.115) is greater than a predetermined  $\alpha$  (0.05), it can be concluded that partially, there is no significant impact of creativity on the

competitiveness with the 95% confidence level. This means that the result of this study does not manage to reject H0.

3. The significance of risk consideration on competitiveness  
 From the calculation, the value of t-count for the variable risk consideration (X3) is 3.331 with a p-value of 0.002. Therefore, the p-value (0.002) is smaller than a predetermined  $\alpha$  (0.05), it can be concluded that partially, risk consideration has a significant effect on the competitiveness with the 95% confidence level. This means that the results of this study manage to reject H0.

To see the influence of innovation (X1), creativity (X2) and risk consideration (X3) on competitiveness (Y), a multiple regression analysis was employed.

**Table of Coefficient of Multiple Regression**  
**Coefficients**  
 a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	16.855	1.316		12.803	.000
X1	X2	.519	.139	1.169	3.741	.001
	X3	.201	.125	.642	1.608	.115
	X3	-.305	.092	-1.526	-3.331	.002

a. Dependent Variable: in percentage (%)  
 Source : attachment of output of SPSS 19.0

Based on the above calculation, from three independent variables, creativity (X2) is not significant. This can be seen from the probability of significance for creativity (X2) is 0,115 and far above 0.05. While the innovation (X1) and risk consideration (X3) are significant at 0.05. Thus, it can be concluded that the competitiveness variable is influenced by innovation and risk consideration with the following equation:

$$Y = 16,855 + 0,519 X1 + 0,201 X2 - 0,305 X3 + \epsilon$$

Regression coefficient value on the independent variables describes when the independent variable is expected to rise by one unit and the value of other independent variables is estimated constant or equal to zero, then the value of the dependent variable can be expected to rise or fall in accordance with the sign of regression coefficient of the independent variable.

The constant of 16.855 means that the assumption of independent variable is considered constant, then the average competitiveness will be 16.855. The regression coefficient for the variable X1 is positive, indicating the existence of a direct relationship

between innovation (X1) and competitiveness (Y). The regression coefficient for variable X1 is positive implying that each additional value on innovation will improve the competitiveness (Y).

The regression coefficient for the variable X3 is negative, indicating that there is an opposite relationship between risk consideration (X3) and competitiveness (Y). the regression coefficient for the variable X3 indicates that each any reduction in risk consideration performed by a company will reduce competitiveness.

The coefficient of determination (R<sup>2</sup>)

The influence of innovation, creativity and risk considerations on the competitiveness is shown by the coefficient of determination for the regression model obtained. The calculation of the coefficient of determination (R<sup>2</sup>) can be seen in the following table:

**Table of Coefficient of determination  
(R<sup>2</sup>) Summary Model**

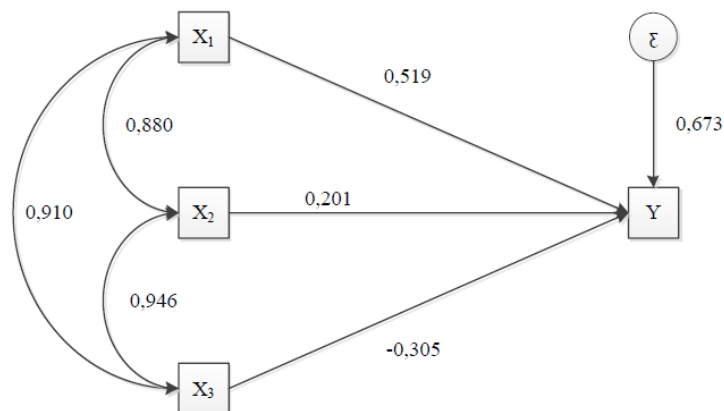
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.572 <sup>a</sup>	.327	.278	1.57454

a. Predictors: (Constant), X3, X1, X2

Source : attachment of output of SPSS 19.0

The table above shows the coefficient of determination (R Square) of 0.327, meaning that 32.7% of competitiveness can be affected by the innovation, creativity and risk consideration. While the remaining amount (100% - 32.7%) = 67.3% can be affected by other variables not examined in this study.

The description of the structural relationship is reflected in the structure of the second sub image which shows the influence of innovation, creativity and risk consideration on the competitiveness, both simultaneously and partially. This is shown as follows:



**Figure 3. Output of the second sub structure**

From the picture of the substructure, it can be said that the entrepreneurial orientation measured by an indicator of innovation ability and creativity can affect the competitiveness of SMEs of Cirebon Trusmi Batik . This empirical study supports the

previous theories by Hult and Ketchen (2001), Matsuno et al. (2002), Naman and Slevin (1998), Lumpkin and Dess (1996), Miller (1983), Naman and Slevin (1993), Ferrera et al. (2007), Zhou et al. (2005) and Jay and Mort (2001). While Tayebbeh Gheydar, et al, (2015) conducted a study on the relationship between entrepreneur's innovative capabilities and competitive advantage with an empirical result showing that the innovative capability may affect the sustainable competitive advantage of a business organization. Li, et al, (2009) in their research found that entrepreneurial orientation is positively related to business growth. Thongvanh Sirivanh et al (2014) showed that the factor of entrepreneurial orientation positively affects competitive advantage. The study by Harper (2003), Griffin et al., (2004), Longenecker et al., (2000) mentioned that entrepreneurship can enhance trade performance.

But, this study shows a different result from the previous studies where the entrepreneurial orientation indicator, i.e. risk consideration does not affect the competitiveness of SMEs. The risk consideration (X3) is not in line with the competitiveness (Y). This is in accordance with the characteristics possessed by the SMEs of Cirebon Trusmi Batik where in running the business, they often do not use risk factors. So, the efforts to in creating competitiveness still need continuous learning in order the SMEs can make decisions appropriately and carefully. Other factors showing that SMEs of Trusmi Batik have less risk consideration in running the business are, the business is run by family management, business is a legacy in its nature and the managerial competence is not good yet. These factors make them run the business without a wide business target. This is influenced by experience, educational background, capabilities, and competencies. The weakness of batik micro businesses is entrepreneurial orientation, therefore it requires serious attention. Batik micro businesses should proactively deliver their needs of training associated with entrepreneurial orientation in order to improve their business performance.

## **Conclusion**

Based on the results and discussion, the conclusions are drawn as follows:

1. Partially, innovation has significant influence on competitiveness, showing that to acquire business competitiveness, innovation capability is highly needed by the businesses actors. This result is consistent with several studies previously conducted, because basically business innovation is the ability to create something new and different from competitors.
2. Creativity has no significant effect on competitiveness. It is clear that building business competitiveness needs entrepreneurial orientation, in this case is creativity ability. But the business actors of Trusmi batik have a low level of creativity so the business competitiveness has not been seen. It is caused by several factors such as; business of Trusmi batik is a legacy in nature so it is running already and has existing markets. This makes the business actor does not seek extra thought on how to develop the business.
3. Partially, risk consideration significantly influences competitiveness. In this case, SMEs of Trusmi batik need courageous to take decision so they can expand their business and compete with the competitors. This contrasts with the creativity ability that has no effect on competitiveness. In fact, being dare to take decisions has relationship with aspects of business development that will increase profits. So, the businesses try to develop themselves by paying attention to the risks.
4. There significant correlation among innovation, creativity and risk consideration. The correlation between; innovation and creativity is 88%, creativity and risk consideration is

94.6%, innovation and risk consideration is 91%. This means that in order to build

competitiveness on the batik industry, entrepreneurial orientation is needed which is manifested in the capability of innovation, creativity, and risk consideration.

5. Business competitiveness is highly influenced by various factors, among them is entrepreneurial orientation manifested in innovation, creativity and risk consideration.

This is evidenced in the research results simultaneously saying that innovation, creativity and risk consideration influence the level of competitiveness. From this study, it appears

that the effect of entrepreneurial orientation on business competitiveness is still relatively small. This shows that the actors of SMEs of Trusmi batik do not yet use their

entrepreneurial capability to develop their business, so there is a need to provide managerial training so they can run their business in a better and more modern way.

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## **ONLINE MAIL HANDLING PROBLEMS AND SOLUTIONS IN KARANGANYAR REGENCY**

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### **Abstract**

Online administration services are already applied in the information technology era. Officers involved in services of administration no need face to face communication to complete daily works. This research aims to analyze the implementation of online mail handling in Karanganyar Regency and to solve its obstacles based on educational perspective. This research used inductive-deductive approach. The procedure of this research consisted of three phases; disseminate system of online mail handling, focus group discussion (FGD), and discussions and question. Participants of the FGD comprised 33 officers; 28 males and 5 females. The result of this research shows that there are three main problems related to the implementation of online mail handling: local regulation, hardware maintenance, and officers' skill. A periodical leader in the region applies periodical regulation that has different orientations of the government's performance. All problems above will be discussed in this paper.

**Keywords:** *online mail-handling, government performance, officers' skill*

### **Introduction**

Online administration services are popular in the information technology era. Front officers of public service agile to serve customers using compatible technology. Expert in administration is the most evident in government departments and agencies, then followed by strategic human resource specialist, and strategic business partner (Salleh, Rosline, & Budin, 2015).

Internal procedure of administration for each department can be completed by a system while it does not need different follow up or feedback. The work of the system reduces the workload. Computers are not a novelty for all levels of government officer.

However, system uniformity, officers' competency and completeness of equipment need to be synchronized. Identifying the correct resources leads efficient and quality of performance (Thorwarth, Rashwan, & Arisha, 2016). For instance, an emergency department of hospital needs an accurate action to rescue an incidental patient.

An online procedure of administration service is already proven to support governmental tasks. Not only supporting the paperless program, but also the quick service within the unrestricted range. This kind of workflow needs to be reinforced by regulation or policy which pushes officers to update their skills and competencies. Otherwise, they will lack of skill using technology to support their task.

This research aims to analyze the implementation of online mail handling in Karanganyar Regency and to solve its obstacles based on educational perspective. This paper is organized as follows. In section 2, government and bureaucracy as procedural work is explored. In section 3, the methodology is presented. The result and discussion are also presented in section 4. Finally, our work of this paper is summarized in the last section.

### **Government And Bureaucracy**

Public administration influenced various external factors that influence management action and behavior through different means and channels. External factors are societal value, legal norms, politics, international-global accords, culture, and the state of economy (Jreisat, 2012). Each factor has specific powers to the administration. It depends on the kinds of public administration and country. Traits of public administration in developing countries are overlapping and heterogeneity, formalism, diffusion, particularism and ascription, imitation rather than development, deficiency of skill, nonproduction-oriented bureaucracy, autonomy, over staffed public organization, underpaid public employee low productivity, centralized decision making, corruption, administration mirrors the political context (Jreisat, 2012).

Innovation is a phenomenon that has happened in public sectors. Hierarchical and long procedural services initiate to support innovation. Borins (2014) categorizes innovation into five components: a crisis, a problem, political influence, new leadership, and new opportunity. A crisis arises when government's performance fails in service or people are dissatisfied with the government's performance. In this case, problems will appear five times. Slow response because of political influences also leads the government breaks down to visible crisis. Political influences can be categorized: new regulation, lobbying, and an election mandate of the winning candidate's platform (Borins, 2014). New leader applies new regulation.

The features of administrations have common characteristics, namely: a balanced system of power distribution, a focus on results, technology at the service of management, a profound concern for ethics and accountability, and redefined the role of public administration and its linkages with private sectors (Jreisat, 2012). Bureaucracy often follows the political order and turn into either of an overpowering institution.

Government defined success bureaucracy based on outputs and outcomes. Performance of bureaucratic management aims to increase accountability, reducing errors, minimizing customer's complaint, improving officers' skill, and developing management. The performance enables to adapt and to apply appropriate technology that improve services and decision making process. Policies and commitments have been made and dedicated to suitable decision. The policies also enhance ethics accountability of government. Another alternative has been considered in the policy to the possibility of joint public-private services.

### **Methodology**

This research used the inductive-deductive approach. The procedure of this research consisted of three phases; disseminate system of online mail handling, focus group discussion (FGD) of officers in Karanganyar regency, and discussion and question phase. Total participants of FGD are 33 respondents who consist of 32 officers and the head of administration division; 28 males and 5 females. The range of age is 24 to 56 years old (mean = 44.1) and their working experience between 1 to 35 years (mean = 18.7). Dissemination session was started with the researcher's presentation and practice of the online mail handling system; then followed up by a question and answer. In presentation and practice session, participants followed the steps of online mail handling instruction using their laptop. Some participants gave suggestions about the system of online mail handling based on their experience. They suggested the maintenance of the system should be done continuously. The result of FGD was analyzed to improve the system of online mail handling and to solve the problems based on educational perspective.

## Results And Discussions

The implementation of online mail handling has three phases: practice exercise, real practice, and discussion and question phase. The first phase, practice exercise, is not easy as theoretical review. For instance, when a mail comes, it will be opened and sorted by the incoming mail receiver. Then, to be identified the addressee and recorded in a system. Next an archivist gives a mark and the letter forwarded to the leader to get a disposition. The disposition will be followed up by an executor to give feedback or response. This procedure can work well if all employees have the same knowledge to handle incoming mail. In practice, they have not same background of knowledge. It takes time to explain about the procedure of work and to make sure that they are in the same perception of mail handling. Fortunately, it covered during practice exercise session.

The second phase is the practice of online mail handling. The system of online mail handling has been set up in Indonesian language. It makes them familiar with a command button. However, they are still having problems. Some of them are; internet connection, unfamiliar code, and unsure of the correct procedure. Sometime, they are still awaiting feedback from a partner. All problems are recorded by researcher to improve the system of online mail handling.

The last phase is discussions and questions. In this phase, researchers found three main problems that are local regulations, maintenance schedule of computer, and officers' skill. Local regulation almost changed every five years because a regent in this regency is elected every five years. Each regent cannot be elected more than twice periods. Hardware maintenance relates the local regulation. Of course, it deals with financial department. Budgeting every year depends on the local council and local government decision. Furthermore, officers' skill cannot be improved as fast as technological development. It needs a solution to improve their skill without leaving their office for a long time. The three problems above will be discussed based on educational perspective.

The first problem is local regulation often changed. Inconsistent regulation can be anticipated through project orientation and interest group lobbying. Hellowell & Vecchi (2015) state when the goal of the firm's manager is inconsistent with the firm's owner, manager may prioritize and structure projects, for instance, choose project that offers the most prestigious, most career-enhancing rather than offer the biggest increase in the value. The interest group can influence decision makers to a certain policy. Grossmann (2012) states the changes of federal policy in certain areas, covered by the policy history 1945-2004, is influenced by interest group. Advocacy groups are more influential than business interest, professional associations or unions. The groups use a specific tactic, for example, political action committee (PAC) contribution or lobbying expenditure, to influence policy makers.

The second problem is hardware maintenance. Maintaining hardware of Computers can be done in three ways; maintenance contract, individual service call, and company-operated service (Sutaryadi, Wagimin, Subarno, & Martini, 2007). Maintenance contract means a maintenance machines agreement between buyers and sellers that sellers will be required to maintenance machines for a certain period. This agreement can be done during the payment is processed. Individual service call relates a technician service. He or she will be asked to come when machine is broken. There is no agreement before. Company-operated service refers to the officer's ability. The officer will be sent to join a short course or training program about how to maintain computers or machines. The three kinds of maintenance machines can be chosen one of them or combined. It depends

on institutional needs.

The new trend of maintenance is integrated in planning procurement. Total productive maintenance (TPM) and reliability centered maintenance (RCM) that involves internal and external stakeholder should be mentioned in integrated planning (Al-Turki, Ayar, Yilbas, & Sahin, 2014 ). This trend results big budget, but it will cover all maintenance cost. TPM and RCM should be checked carefully and clearly to anticipate complaint each other later.

The third problem is the lack of officers' skill. Officers' skill or competency needs to be updated to follow the technological development. As mentioned before, the key point of successful administrators is agile with appropriate technology. Expert in administration is the most evident in government departments and agencies. Officers' skill can be improved in three ways: push human resource development facility, online learning, and informal learning. Push human resource development facility can be done in two models: providing equipments and providing short course programs. Providing equipments means the human resources department has to have facilitated development to develop officers' competency. Providing short course programs mean the human resource department should facilitate the development of personal goals and the company's goals, the need of new competency, competency based benefit, identification of competency need, and method of training (Pandey & Guha, 2014). In this case, human resource development must have full facilities. Morris, Snell, & Bjorkman (2016) state that human capital can be developed from the individual level, the unit level, and the firm level. The individual level means companies hire an individual who has experience about the company's need to develop internally. It relates to the employee engagement of interaction to the local constituencies. The unit level relates to the aggregated knowledge and experience among individuals while they interact each other in the local environment. Strong local human capital may push the local unit to understand their local environment. The firm level refers to the challenges to control and coordinate the employee. Companies emphasize the importance of knowledge as a foundation for the organization. The second solution to improve officers' skill is online learning. Macleod, Haywood, Woodgate, & Alkhatnai (2015) state massive open online courses (MOOCs) is a partnership to develop career enhancement and professions. Learners can learn without leaving their daily activities. They can follow the course synchronous and asynchronous. They also can manage the course according to their own times. The last solution to improve employees' skill is informal learning. The definition of informal learning is a learning process that takes

place outside specifically designed to result in learning outcomes (Allen, 2007). In this situation, learners never feel learning, but they are discovered real-life experience from coworkers, coaches, and mentors. These interactions are effective to improve employees' capability. The three solutions to improve employees' skill is applicable. They have not left their office to study on campus.

### **Conclusions**

Expert in administration is very important to support government's performance. Bureaucracy often follows the political order. It leads slow response of the government's performance that makes government breaks down to visible crisis. Otherwise, government performance can be built through good services of administration.

The working of administration service is influenced by supporting regulation, compatible technology, and officers' skill. Unfortunately, the three factors are obstacles in implementing of online mail handling.

Inconsistent regulation can be anticipated through project orientation and interest group

lobbying. The advocacy group is the most influential local regulation. The groups use a specific tactic, to influence policy makers. Maintaining hardwares and equipments need to be paid attention.

The four alternative ways to keep equipment in good condition: maintenance contract, individual service call, company-operated service, and integrated planning procurement. An update knowledge of officers is required to comply the Technological development. Officers' skill can be improved in three ways: push human resource development facility, online learning, and informal learning. The best solution to update officers' skill does not refer to certain way, but it depends on the financial support of government, human resource, non-human resource, and other capability.

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## MANAGEMENT EDUCATION IN INDIA: QUALITY ISSUES AND CONCERNS

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### Abstract

Management education till recent past was one of the most sought after professional streams of education to be pursued by bright young minds of India. Despite the facts that: (i) the nation needs a good number of professionally competent managerial manpower to manage its affairs and (ii) there has been a steady growth in the number of management education institutions set up by the government as well as private bodies in the recent past, the interest level to pursue management education has faded over the years. The paper attempts to illustrate as to how continuous degradation of 'quality' in terms of 'input', 'process' and 'output' at such institutions, particularly at tier two and tier three levels, has been a prime factor responsible for such a down-trend. An attempt has also been made, in the paper, to suggest measures to bring in and build on the element of 'quality' in all these three critical components in a management education institution, so that they live up to the expectations of all the stakeholders by producing, nurturing and grooming industry-ready professionals.

**Keywords:** *Management Education, Management Institutes, Quality Concerns in Education, Systems Approach*

### Introduction

In 700 BCE, the world's first University was established at Takshila in India and in 400 BCE, it was the Nalanda University. Nalanda University hosted 10,000 students and 2,000 teachers (often from foreign lands) exchanging knowledge across countless disciplines, including science, astronomy, medicine, metaphysics, philosophy, Samkhya, Yoga-shastra, the Veda, and the scriptures of Buddhism and foreign philosophy (Ministry of Human Resource Development, Govt. of India, 2016). Indian education system has been influenced by Mughal and British thought. This perhaps marked a declining trend in the standards of quality education as far as Indian wisdom goes. Post-independence, the concern for improving education has always remained as a top priority in the developmental agenda. However, for various reasons, the quality and outcome of the Indian education system, the trust it invokes among stakeholders and its stature globally, have not shown positive signs. In 2016, there are only two Indian institutions that barely make it among the top 300 institutions in the world. In management education, premier Indian institutions feature between 51-100 among 200 institutions of the world (Quacquarelli Symonds Limited, 2016).

Despite starting first, the Indian education system could not sustain as a leader of educational delivery in the world. The Indian education system is ranked 24 among 50 countries of the world (Quacquarelli Symonds Limited, 2016). The argument that modern Indian education system gained autonomy only about 70 years ago to have affected a turnaround is refuted by countries such as South Korea and Finland, which have transformed their education systems within half a century (Choi, 2014) and are ranked higher than India (Quacquarelli Symonds Limited, 2016). Internally as well, among the institutions accredited by National Assessment and Accreditation Council (NAAC), 68 per cent of the Universities and 91 per cent of the colleges are rated average or below average in terms of the quality parameters specified. The quality of education provided in a large number of higher education institutions is a matter of great concern. (Ministry of Human Resource Development, Govt. of India, 2016).

The admissible evidence against higher education quality in India is available in superfluity. In the management education realm, qualitative deficit has set off a negative spiral. Only 7 per cent of the graduates from 5,500 business schools excluding IIMs are employable. This leads to dissatisfaction in the corporate sector which translates into decrease in campus recruitment by 45 per cent YoY. The dwindling placement records discourage students from choosing a post-graduate management program, resulting in a surplus of seats over takers in many colleges, which adversely impacts their sustainability; 220 business schools have shut down within the last two years and another 120 are likely to follow the suit (ASSOCHAM Education Committee, 2016). The aftermath is a downtrend in the popularity of postgraduate management studies in India. Majority of students think that opting for a management course was a wrong decision. Students are dissatisfied with the academic scenario and placement capabilities of their colleges (Raina, Alam, & Siqddiqui, 2014).

It is imperative and urgent to address these quality concerns in business schools. Only then the B-schools can be expected to significantly improve people's lives and at the same time ensure sustainable growth for themselves (Comuel, 2010). In a developing country like India, with huge inequalities in income, institutions providing business education need to meet developmental goals (Gupta & Kamala, 2005). It is only necessary to ensure that such institutions meet the quality standards requisite in as much they discharge their developmental duties whilst satisfying the stakeholders – students, faculty, society, industry, government and global community at large (Shweta & Kumar, 2011).

Since quality in a B-School is multidimensional (Shahaida, Rajshekhar, & Nargundkar, 2007), it is a challenge to measure and remedy the quality deficits in the management education system. This paper assumes the said challenge, and seeks to develop a better understanding of the subject by application of systems theory, and derive possible rectification strategies.

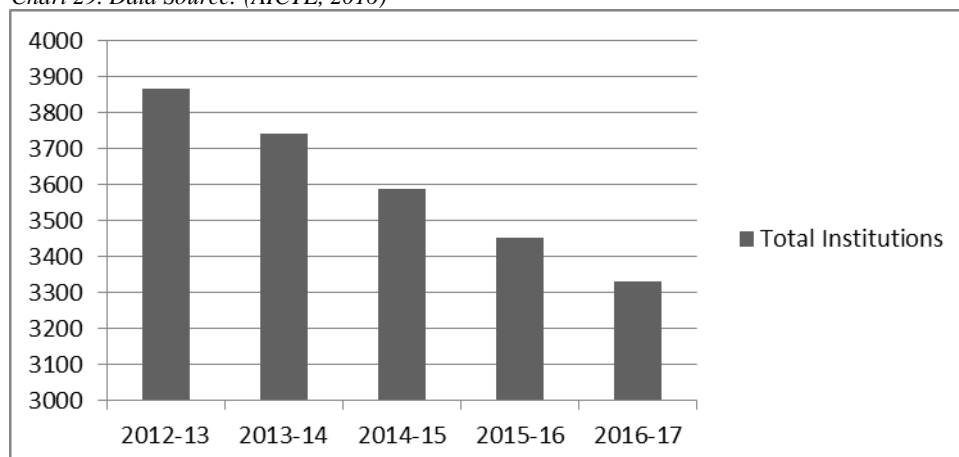
## Literature Review

### 1. Management Education in India

#### 1. *Timeline*

Management education in India formally began in 1953 at the Indian Institute of Social Welfare and Business Management (IISWBM) –the first B-School established by Government of West Bengal and Kolkata University. IISWBM experiment of

Chart 29. Data Source: (AICTE, 2016)



offering two-year, full-time MBA program was followed by Delhi University (1955), Madras University (1955), Bombay University (1955) and Andhra University (1957).

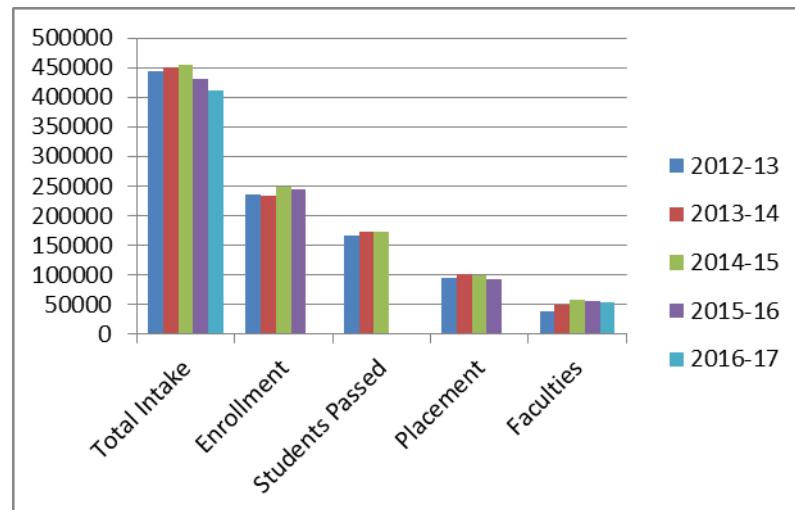
The Government of India established Indian Institutes of Management (IIMs) as center of excellence in Management education in early 1960s.

The first Indian Institute of Management was set up in Kolkata in 1961 and the second in Ahmedabad in 1962. Elite club of IIMs added new members in 1973 (Bangalore), 1984 (Lucknow) and 1997-98 (Kozhikode and Indore). By 1980, several state universities across the country started offering MBA programs. Private sector entered the Management education domain after liberalization of economy in 1991. Regulation of Management education began in 1987 when All India Council for Technical Education (AICTE) was formed and management education was taken as part of the technical education. AICTE helped in regulating the B-Schools in terms of governance, accountability, transparency in admission and program administration, infrastructure, students-faculty ratio, curriculum, library, laboratories, grant-in-aid for organizing seminars, conferences, faculty development programs, setting up of entrepreneurship development cell, institute-industry interface cell, etc. (Shweta & Kumar, 2011)

2. **Statistics**

The early years of management education witnessed an incremental growth in the number of management institutes of the nation, until 2009, whence a decreasing growth began, but more were still added (Raina, Alam, & Siqddiqui, 2014). However, in the last five years, India has seen a persistent decline in the number of institutions offering post-graduate management programs. In past four years, the number has reduced by 3.5 per cent every year. On an average, 31 new institutes were approved every year during 2012-16 (as of August 31<sup>st</sup> 2016) against 56 institutes being shut down on average every year during the same period (AICTE, 2016).

**Chart 30. Data Source: (AICTE, 2016)**



The total intake (capacity) of postgraduate management programs has drastically declined after 2014-15. The past two years have recorded a negative growth rate of 5 per cent in the number of seats offered in AICTE approved institutions. Similarly, enrolment numbers that showed a steady increment as high as 7 per cent in 2014-15, have fallen by 2 per cent in 2015-16. Number of students successfully graduating has also declined by 1 per cent in 2014-15. Even placements records, which witnessed a steady increase before 2013-14, flat-lined in 2014-15 before finally dwindling with a negative 7 per cent growth rate in 2015-16. The numbers of faculty in approved postgraduate management institutions exhibited vehement growth – as high as 28 per



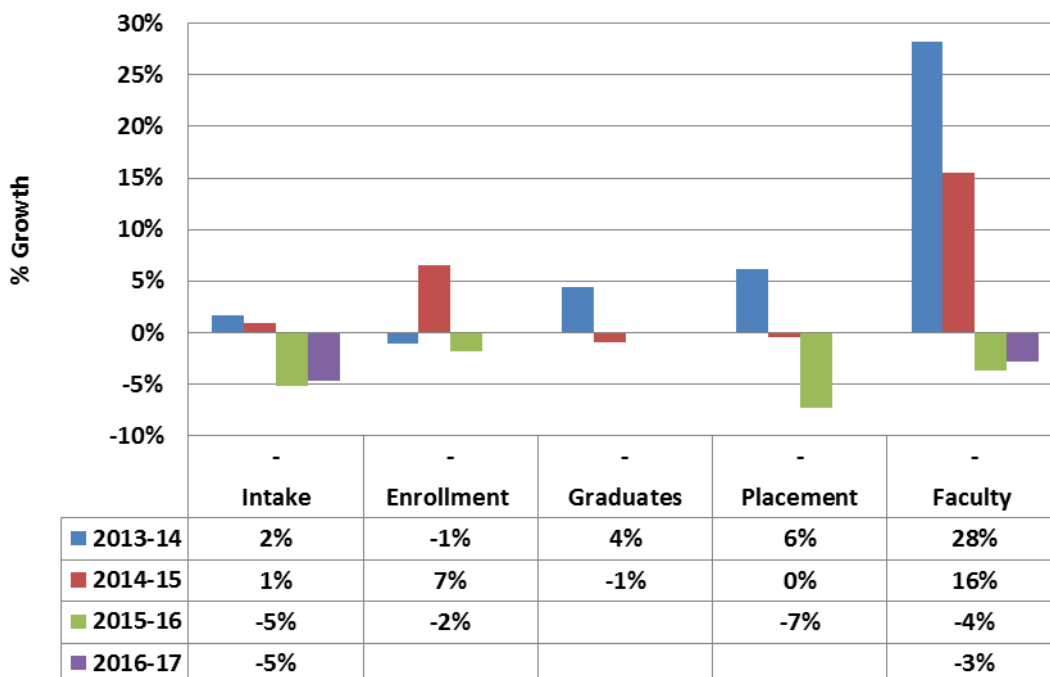
cent - during 2012-14, after which set upon a decreasing trajectory, falling by 3.5 percent every year up to the current period. (AICTE, 2016). It is evident from the given statistics that postgraduate management education has entered a phase of negative growth after 2014-15.

3. **Issues**

Though, India produces a large number of graduates, perhaps next to U.S., a scholarly debate on curriculum pedagogy and innovation is negligible. Most institutes depend on curricula and materials developed elsewhere and have not developed on intrinsic capacity to respond and evolve to changing needs of various sectors of industry. Many institutions still are unable to fulfill the mandatory changes imposed on them, such as upgrading of the curriculum by the universities or the board of management studies (Saha, 2012). MBA students reported that there were huge gaps between what was promised and what the actual delivery was. They complained that the teaching methodology was poor, with no practical exposure and training. They expressed dissatisfaction over the quality of the faculty too (Bhagwath, 2013). In the backdrop of declining enrolments, Indian management education is also plagued by a lack of student engagement. Higher education institutes suffer from insufficient understanding of student engagement, and therefore face deviant student behavior (Sharma & Awasthi, 2016).

A skills gap analysis was carried out to discover the differences in employers' expectations and the actual performance of MBA graduates. The sample recruiters were of the opinion that on the parameters of knowledge, skills and attitude, there were remarkable differences between the expectations they (recruiters) had and the actual delivery. Majority of the recruiters blamed the colleges - more than 80 per cent stating that the choice of college made a huge difference. Expressing their views on coursework, majority of the respondents felt that barring the Tier 1 institutes, rest all were extremely weak in terms of the knowledge and skills being imparted.

**Chart 31. Data Source: (AICTE, 2016)**



They stressed upon the need to have industry-exposed faculty so that practical knowledge may be imparted to the students. (The Higher Education Forum, 2010) as cited by (Raina, Alam, & Siqddiqui, 2014). The existing teaching pedagogy is responsible for the students' inability to understand the limitations associated with the theories that they are taught in the classrooms. Additionally, they can't practically apply these classroom theories. This happens because they lack the requisite skills and attitudes to apply the theories. (Datar, David, & Cullen, 2010).

Over the past decade, Indian institutes have made huge investments towards increasing their effectiveness. However, in majority of cases, the focus has been on infrastructural development, and not competency building in terms of teaching and research. Students, not getting quality education, have developed aversion towards management courses, and are constrained to go for other conventional courses (Ranjan & Khalil, 2007). Shortage of qualified faculty in Indian B-Schools is also a major concern.

Currently the institutions are facing 30 per cent shortage of faculty and it might rise up to 50 per cent by 2020 if the scenario does not improve (Shweta & Kumar, 2011). Faculty in most B-schools do not have a doctoral degree (Shahaida, Rajshekhar, & Nargundkar, 2007). There is a pronounced lack of research infrastructure (Shukla, 2013). Unfortunately, most of the B-schools have thrived on marketing gimmicks and advertising budget rather than intellectual endeavors (Shweta & Kumar, 2011). Often, critical elements, such as infrastructure, faculty-student ratio, number of PhD faculty in an institute only feature in plans, to get AICTE approval (Shahaida, Rajshekhar, & Nargundkar, 2007).

4. *Systems Approach to Management Education*

A system can be defined as an entity, which is a coherent whole such that a boundary is perceived around it in order to distinguish internal and external elements and to identify input and output relating to and emerging from the entity (Irene & Yip, 2009). Systems theory is hence a theoretical perspective that analyses a phenomenon seen as a whole and not as simply the sum of elementary parts. The focus is on the interactions and on the relationships between parts in order to understand an entity's organization, functioning and outcomes (Mele & Pels, 2010).

The benefits of applying systems theory to management education have been outlined by Gupta and Gupta (2013). It provides a framework for planning, decision-making control and problem solving. It throws light on the dynamic nature of management, provides a unified focus to institutional efforts, and helps to look at institution as a whole instead of parts. It also helps the administrator to identify the critical sub systems and their interaction with each other, and bring efficiency. It aids systematic educational planning and maximum utilization of resources, and helps in improving examination and evaluation system. It also improves the teacher training programs. Applying systems theory to management education administration also helps in improving the overall quality of the system.

5. *Quality in Management Education*

Quality is complex and difficult to measure in service sectors. Quality can be defined as the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied need. Applying industry-type quality programs in education may be very difficult, and a holistic perspective for measuring quality of management education is needed, which addresses all aspects including academic, non-academic, admission process, placements, perspectives of parents, faculty,

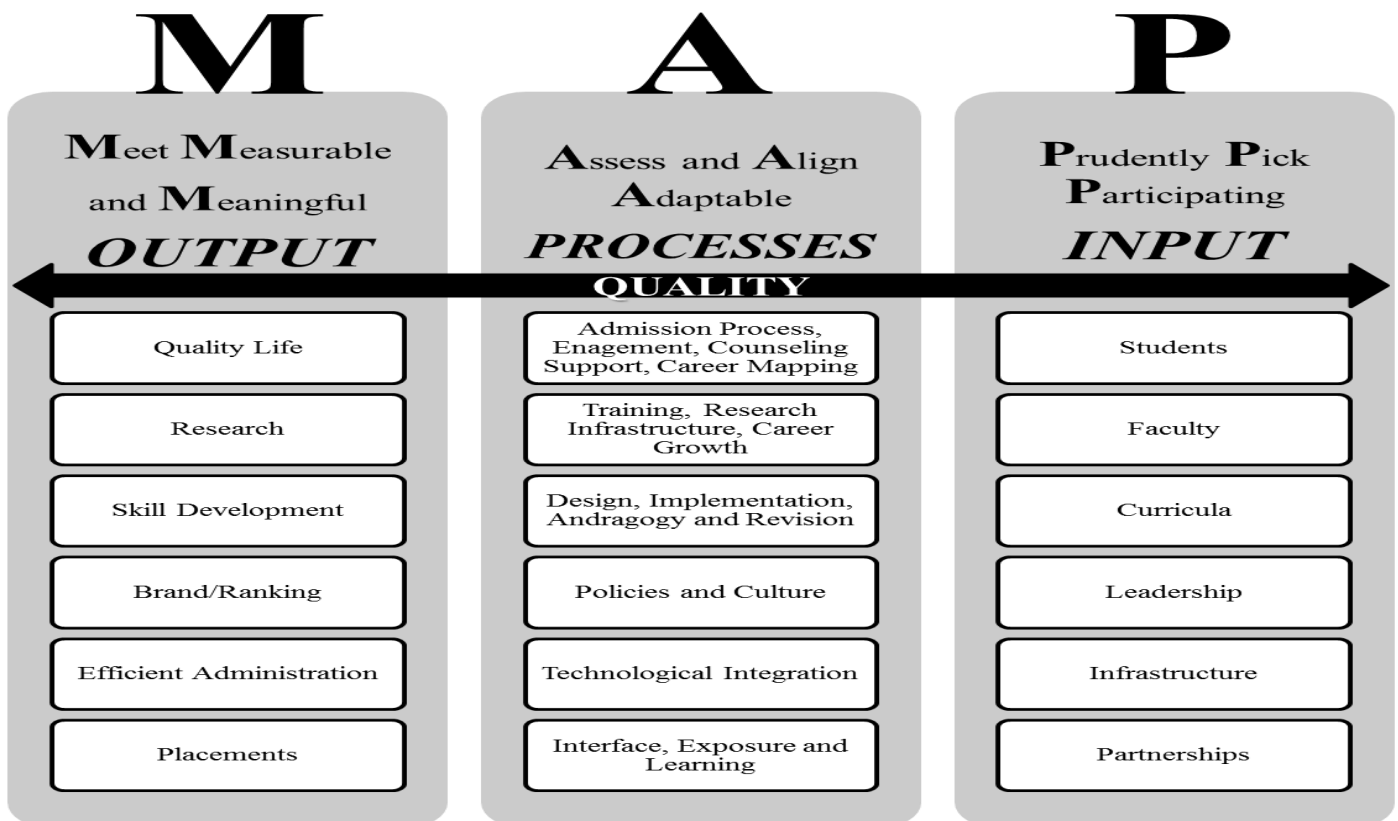
students, government, external bodies and the like (Shahaida, Rajshekhar, & Nargundkar, 2007).

Abundance of research has been conducted in defining parameters of management education quality. Laha (2002) as cited by (Shahaida, Rajshekhar, & Nargundkar, 2007), has identified academic environment, intellectual capital, physical infrastructure, industry interface, placements, innovation and stakeholder satisfaction as the key indicators of quality. Quality of students and admission process, pedagogy, placements, faculty development and infrastructure, have been collectively proposed as a measure for B-School quality. (Gupta & Gollakota, 2003). Shahaida, Rajshekhar and Nargundkar (2007) have proposed a framework based on systems theory, for measuring quality in B-school through three constructs – quality in inputs, quality in processes and quality in outputs.

### The Quality Map

We have built upon the existing research in system science approach to modeling management education to develop a better understanding of stakeholders and processes involved in achieving quality outcomes.

However, we posit a counter-intuitive approach, and suggest a three-step model:



The motivation behind revisiting the systems model in reverse order lies in the evidence that most institutes that focus their efforts on procuring high-quality output, i) do not focus on building processes to attract such input, ii) cannot utilize such output due to absence of effective processes and ambiguity of output definitions and iii) often compromisingly switch to quantity-focused approach at their inability to attract quality-input. We suggest reverse engineering the systems model, to use effective processes that are based on clearly defined outputs to attract desired inputs.

The advantage of MAP model as proposed by us, in addition to the benefits that ply with systems approach, lies in its insight into the implementation of the systems model – Outputs must be meaningful and measureable, processes must be adaptable, and must be assessed and aligned with the multiplicity of outputs, and inputs that can participate in qualitative institutional development must be picked with prudence.

Quality is the soul of the MAP model. Foremost, the MAP framework helps in defining quality standards translated into measureable outputs, which also serve as a yardstick for quality deviations. These outputs can be used to develop an institutional culture replete with processes that inspire, foster and reward high-quality performance. These processes can be leveraged to invite high-quality inputs, which appreciate the value of such processes, are compatible with them and identify with the quality outputs that serve as the rationale behind the process.

*“Meet Meaningful and Measureable Outputs  
By  
Assessing and Aligning Adaptable Processes  
&  
Prudently Picking Participating Inputs”*

1. **Outputs**

The MAP model brings the impetus on defining the sought outputs, at first. These outputs can include providing the means to lead a quality life for students, developing skills among students, enabling and empowering faculty to conduct high-quality research, ensuring efficient administration, creating a brand for the institute – supplemented by high rankings in global forums – which beckons integrity and accomplishment, satisfying needs of corporate, parents and other stakeholders by preparing a student to work, earn and contribute to the society.

The MAP model recommends that quality outputs must be meaningful to the institute and its stakeholders since satisfaction is the central indicator of quality. Students and faculty often misidentify with the goals set by the institution, or due to the absence of a formal definition of such outputs. The industry has regularly protested the gap between corporate expectations and the academic goals of an educational institute. Such resentment can be addressed and prevented by deriving output standards that are centered on inclusive benefit for all stakeholders involved. Each of these outputs must echo with one or more individual objectives of the stakeholders, which will create a sense of citizenship and encourage synergistic partnership to achieve such output.

Measurable to analytically reinforce or rectify corresponding processes. The objectives of a plan serve as the benchmark for assessment of performance during plan implementation. Pre-defined output objectives help in assessing compatibility of people and processes with organizational expectations, vivid role-and-task descriptions, scale for measuring deviance and overall, a calm and productive work environment. Measurability of outputs also allows stakeholders to assess the achievements and limitations, which will form the basis of discussions and support towards quality increment. Furthermore, an output that can be measured is an output that can be communicated and compared – output expectations can be used to display competitive advantage over other institutes, as well as assuage the anxiety of students and parents. These measurements can be as simple as a student balancing the amount paid as fees against the packages offered during campus placements, and as complicated as the measurement of institutional contribution to global research and development.

Students regard the ability of an institute to provide them a quality life as the primary purpose behind the educational experience. A stable and positive intellectual, financial, physical and emotional growth through management education carries a lot of meaning for students. These sentiments reverberate with their parents. To that effect, quality of life can be measured in terms of skills possessed, or salary or designation, etc., as per the orientation of the students. These measures themselves serve as outputs desired by a higher education institute. The faculty as well as corporate desire that a graduating student is compatible with the industry. Additionally, both the stakeholders are interested in research – the former needs a research-focused environment to enhance their knowledge, and the latter needs high-quality research to help solve practical problems. The institution regards success in its ability to differentiate itself from the competitors, and establish itself as a preference among elite-quality faculty, students and corporates. This is usually measured by its standing in national and international rankings, which primarily study the qualitative strength of a management institute.

2. Processes

Processes – as per the MAP model – are derived from the desirable output definitions. The MAP framework uses processes to meet two-fold objectives, i) to ensure institutional activities are coherent with desired outputs and, ii) to derive an appreciable filter to assess inputs that will be compatible with the quality standards of such processes.

We have identified an exhaustive list of processes, which include, admission procedures, engagement, counselling support, career mapping, training, research infrastructure, career growth for faculty, curriculum design, implementation, pedagogy and revision, institutional policies and culture, technological integration, industry-academia interface, exposure and learning exchange.

The MAP framework provides two distinct insights into processes for qualitative betterment of management education, which recommend that the processes be:

- a. Assessed and Aligned with the academic and non-academic vision of the institution. More often than not, institutional processes are actuated in isolation. In fact, the motivation to actuate institutional processes rests in the need to conform to traditions, rather than to achieve institutional goals. Classroom teaching and curriculum design are seldom aligned with placement objectives. Training and placement efforts are hardly aligned with andragogy. Industry has a limited say in academic experience of the students, which is counter-intuitive because the same academic experience is responsible for developing skills in students, which are required in the industry. Furthermore, the academic experience is often irrelevant or redundant, due to lack of regular assessment of the curriculum. This misalignment is also evident in the low levels of student engagement – engaging students is often seen as a departmental or individual responsibility, rather than an institutional objective. Collectively, ad hoc efforts not only prevent success of quality-effort, they deplete the quality of individual efforts in the institution. Aligning these processes will result in an integrated effort towards quality-deliverance, which will be reinforced with every interaction between stakeholders and institutional departments, as well as within departments.
- b. Adaptable to dynamic and often volatile trends in the environment. Management education in India is regularly accused of not updating itself, which also explains the lack of quality. It is imperative for the primary and

support processes of imparting education to be reviewed and revised as per changing requirements of the society, at large. Consequently, the cursory processes must be adaptable to allow for such change. The leadership must put-in-place processes that are flexible – but not casual – to address changes in the future. Adaptability is a measure of process quality, since it determines the system’s ability to withstand changes without falling apart. Imbibing adaptability in andragogy, co-curricular development as well as in admission process and placement efforts allows the institution to pursue a multitude of objectives, without compromising the quality. Furthermore, adaptability of processes is essential in aligning the processes with one another, to achieve all-round integration in the scope of quality-deliverance.

It is obvious for admission process to be aligned with the classroom experience, to take into account faculty’s teaching abilities and levels of engagement prerequisite to the classroom, to prevent incompatibility between the institutional culture and students enrolled. Similarly, andragogy, placement efforts and industry input must be aligned to ensure minimal deviance in development of skills in students. Internships and projects must be aligned with curriculum to ensure reinforcement of learning. Curriculum must therefore allow room for changes, since professional world’s requirements from academic world continuously change. Therefore, agile processes are a priority in quality deliverance in management education.

3. Inputs

“Quality in, quality out” forms the fundamental assumption in the systems model. While, it is congruent in the context of management education, there is often a dilemma in ascertaining the quality of an input. We see students, faculty, curricula, leadership, partnerships and infrastructure as the common inputs in all management institutes. The declining quality of management education is often attributed to the declining quality of input available to these institutes. However, it is irrational to disregard any input as low-quality – it is often the institutions themselves that lack the quality-enhancing infrastructure to optimally harness the potential of available inputs. There are successful institutes which only permit intake of highly-qualified students, but there are also institutes which cater to low-scoring students but are successful in developing a rewarding career. We, thus, posit two categories of input “high-compatibility input” and “low-compatibility input.”

Compatibility of input cannot be measured without comparison with processes and desired outputs. The MAP framework aids the choosing inputs, which are compatible, i.e. possess the ability and intention to participate in institutional processes, and identify with institutional objectives. This fact reinforces the need to begin by mapping the desired output first.

We also lay down two assumptions in choosing the inputs:

- a. Prudence in selecting inputs. Most institutes aim for high-scoring students in the beginning, but towards the end of admission process enrol low-scoring students due to surplus of seats. Instead, the institutes should assess their processes and outputs, and form a real profile based on compatibility. Prudence also lies in looking beyond scores – the institutes should diversify parameters and include characteristics such as creativity and innovative ability, manners, family background, and aptitude for management education in choosing students, primarily because they collectively govern the success of a student in time spent at the institute. Similar prudence must be applied while selecting faculty – faculty must be compatible with the culture of the institute, as well as with the cadre of

students enrolled. Faculty with research-orientation should be preferred, to create an intelligent culture in the classroom. The curricula and the partnerships with industry must be carefully assessed. Most institutes imitate the curricula and industrial alliances from top management institutes, but end up failing to leverage the benefits offered to a complete extent. It is vital to be prudent in choosing curricula and partnerships that are compatible with institutional processes and desired outputs, to create an ecosystem that benefits all its components.

- b. Participating inputs, to foster qualitative growth. Participation herein indicates engagement, which is a crucial parameter in judging input quality and compatibility. Students and faculty must be engaged in institutional building processes, curricula development, infrastructure augmentation, leadership and partnerships reinforcing positive levels of engagement.

### **Conclusion**

Conclusively, it is evident from the review of literature and statistics, that management education needs a quality transformation, lest it loses its popularity and trust among the student audience. Urgent focus must be on quality, and the MAP framework proposed by us, can serve as a wholesome navigation system during the process of improving quality. The MAP framework ensures that quality outputs are achieved through quality processes that invite quality-inputs.

The MAP framework acts as a complete guide to assist a management institution in redefining and re-engineering processes that are aligned with the overall objective of quality-deliverance. The following suggestions can be made, towards the application of the said model:

- Outputs should be well-defined in terms of institutional capabilities. Most institutes pursue outputs set up by top-management institutes but with less than half the resources or the talents, which ends up being a wild goose chase. Stakeholder expectations at different sections in the society are different. Management education should focus on defining outcomes based on stakeholder needs relevant to the section that the institute caters. Similarly, faculty research output from the management schools needs to be more contemporary, localized and solution providing to a country's native problem areas in various domains, rather than being restricted to high impact-factor journal publications.
- Processes must be aligned with objectives, and must be compatible with input quality. Instead of imitating best-practices as is, management institutes must assess the extent to which processes can be replicated and the extent to which they need to change as per context. Partnership with seasoned industry professionals and renowned industry associations in delivery of program can never be overemphasized. This needs to be embedded in the course-delivery itself rather than as a sporadic intervention.
- Inputs' quality is a factor of input compatibility with the institutional processes and desired outputs. Management institutes must segment and target inputs that are compatible with its culture and vision, instead of blindly following general standards of measuring quality. More often than not, general standards such as test scores for students' selection, alma mater for faculty recruitment, foreign case studies for curricula and popular companies for partnerships and placement, do not serve as an appropriate filter for choosing inputs for institutional system. Institutes with humbler processes and low expectations from society lose focus and get demoralized from rejections faced by high-quality input. Such institutes should assess quality input in terms of compatibility with institutional ecosystem.

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**ATTITUDES OF STUDENTS WHEN USING LEARNING MANAGEMENT SYSTEM  
(LMS)**

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**Abstract**

The development of technology has shaped the nature of the education. Learning Management Systems (LMS) of one of the applications in e-learning is widely accepted by undergraduates. The LMS help students and lecturers by facilitating alternative way to learn, communicate and time saving as well as making the learning content easier to be accessed. The users of LMS have reported that the current systems are used mainly as a tool for communication and it was unable to fulfill desired expectations of students. The findings of the previous studies of students' attitudes towards use of LMS are inconclusive. Therefore, the objective of this study is to investigate the students' attitude towards the use of LMS in Sri Lankan Universities. 120 undergraduates of Rajarata University of Sri Lanka was used for the study using purposive sampling. The results reveal that the variables Perceived usefulness and Perceived ease of use have significant effects to the attitude towards use of LMS. Also, the study confirms that the students have positive attitudes towards use of the LMS. Therefore, university should create an e-learning culture through use of LMS by providing useful content with ease of access to the students.

**Keywords:** *Learning Management System, Attitude, Usefulness, Ease of use, External Factors*

**Introduction**

The growth of Information and Communication Technology (ICT) has dramatically changed the way people share their knowledge. The Internet is the most popular ICT application is used by students in higher education and it plays a vital role in University Education. One of the most popular ICT applications is available through the web is Learning Management Systems (LMS) and Suorsa and Eskilsson (2014) highlighted that LMS intended to help students by facilitating learning and communication. Also, it provides a lot of functionality including tools for communicating with teachers and other students, assignment management, calendars, file sharing and many more. Adzharuddin and Ling (2013) have strengthen the above idea by expressing LMS is an essential tool for university students as not they can keep updated with their coursework, but get instant notifications pertaining to their daily assignments. In turn, lecturers have an easier time reaching out to their students out of class hours and can instantly update them over the LMS about issues regarding their coursework. More, it mentioned that LMS in the community of higher institutions is an online portal that connects lecturers and students. It provides an avenue for classroom materials or activities to be shared easily. It is also a gateway that enables lecturers and students to interact out of the classroom, having discussions through forums that could otherwise take up too much of the time supposed to be spent learning in the classroom.

Almost all the national universities of Sri Lanka have introduced LMS through MOODLE platform. Yapa et al. (2012) has mentioned that in the Faculty of Medicine, University of Colombo, access is given to all the students from the second year onwards. Rajarata University of Sri Lanka has an e-learning system calling as LMS also called as virtual university. However, there was not a satisfied number of students visited the LMS. Pilot survey was carried out and known to that only a few students get the benefit from the LMS of

the university even most of the students used some kind of e-learning systems but in here some are not known about LMS. Yapa et al. (2012) stated that use of LMS was the weakest method in students' online learning even though they had mentioned that they would have been on supplementary learning materials to be made available through the Faculty MOODLE platform. According to the Suorsa and Eskilsson (2014) LMS does not appear to meet the students' needs and expectations because the system was underutilized and in many case ignored by the students. Their attitudes of their LMS are negative and systems were only to use for one purpose; only to handle the communications between the teachers and the students. Therefore, the objectives of this research study is to investigate the students' attitudes towards the use of LMS and to find out the major factors affecting to the students' attitudes toward the use of LMS in Sri Lankan Universities with the special reference to the Rajarata University of Sri Lanka.

The rest of the paper is organized as follows. Next section reviews the literature that relates the present inquiry followed by the methodology used in study together with data collection and analysis procedures. Final section concludes the study along with the implications of the study.

### **Literature Review**

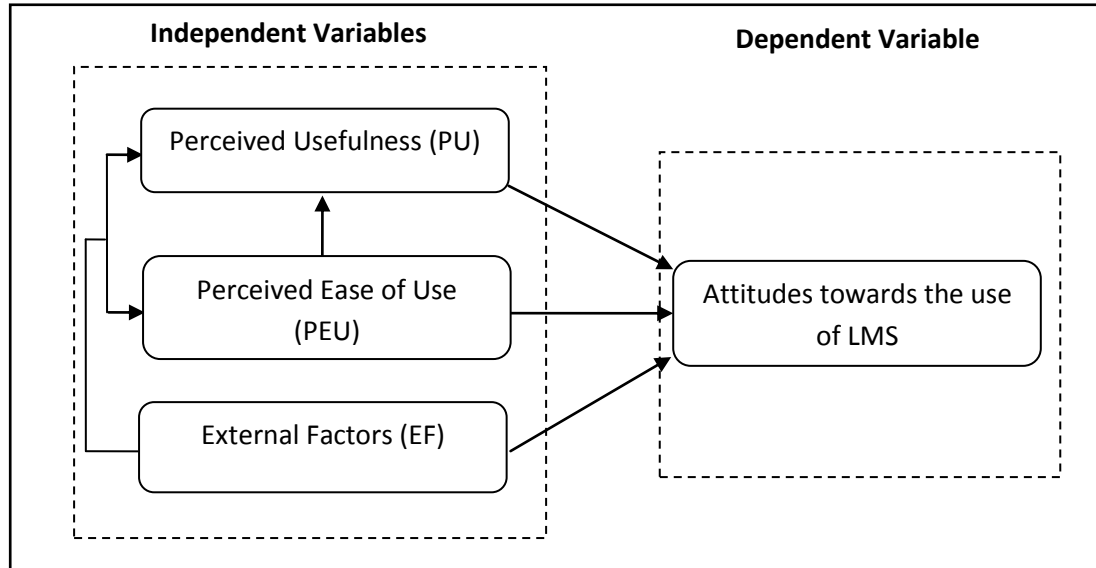
Universities have shown a great interest adoption of new technologies. Many research studies that conducted about adoption of new technologies had used Technology Acceptance Model (TAM) which was developed by Davis et al. in 1989. The web technology (LMS) which was used by many universities to deliver learning and teaching besides the usual face-to-face classroom. The research studies of Trayek and Hassan (2013) and Majdalawi et al. (2014) concerning students attitude towards using of LMS have used the core constructs: perceived ease of use, perceived usefulness of TAM.

The research study of Trayek et al. (2013) defined LMS was a software application enable users or learning manager to disseminate information from systematic planning by adopting appropriate pedagogical approach. It allows users to share information and collaborate online. The attitude toward use of LMS defined as the positive or negative feeling of individuals in performing and how this feeling can affect the particular behavior. Perceived usefulness refers as to how much the user believes that he or she can get help and benefits his or her performance from the use of technology. Perceived ease of use denotes to how easier the user will perceive the using of technology.

In the research study which conducted by Majdalawi et al. (2014) has emphasized how students receive and used LMS in the MOODLE platform. This research used core constructs: perceived ease of use, perceived usefulness of TAM towards attitudes and behavioral intention to use LMS. Davis et al. (1989) reasoned that Perceived usefulness is a major determinant of people's intentions to use computers and Perceived ease of use is a significant secondary determinant of people's intentions to use computers. The research added perceived ease of use as to the degree to which the prospective user expects the target system to be free of effort and perceived usefulness as defined as the prospective user's subjective probability that using a specific application system will increase his or her job performance within an organizational context. Alharbi and Drew (2014) have developed a theoretical framework of Using the TAM for attitudes and Behavioral Intention to Use LMS and argued that the ease of use and usefulness constructs may not be sufficient, and therefore other variables may be needed as cited in the research King and Gribbins (2002). Thus, after reviewing the relevant studies, this study suggests three external variables: LMS usage experience, job relevance, and lack of LMS availability.

Some research studies considered demographic factors of acceptance of LMS. The study of Claar et al. (2014) has said that demographic factors such as age, race, gender, and education levels contribute on student acceptance of LMS. In this study shows the different relationships among variables such as Perceived Ease of Use has a significant positive influence on perceived usefulness of LMS, Perceived usefulness and Perceived Ease of Use has a significant positive influence on attitude toward using LMS, Perceived Usefulness and Attitude toward using has a significant positive influence on behavioral intentions to use, The higher the educational level, the more likely new LMS systems will be accepted and the higher a person’s age, the more likely he/she is to perceive a new LMS more negatively. External factors such as influence from administrative staff, ICT skill and available facilities are important factors to adopt LMS. Macharia and Nyakwende (2010) confirmed this idea by saying that Vice Chancellor of the university influence is significant on ICT development. Furthermore, the study discussed importance of the leadership to adopt to LMS in higher education. In addition to the influence for the LMS the other factors such as organizational variables of Subjective norm, availability of ICTs (infrastructure), Organizational support, Organizational readiness, and top management support were related to behavioral intentions to use LMS in teaching and learning. Liyanagunawardena (2008) also found that some other constructs such as access of the Internet; as there was a significant relationship was found between having internet access away from university and the student perception about the LMS.

Based on the reviewed literature Perceived usefulness, Perceived ease of use and External factors have been identified as independent variables and Attitudes towards the use of LMS as dependent variable and five hypotheses have been formulated.



**Figure 32- Researchers Model/ Conceptual Frame Work**

- H1: Perceived usefulness has significant positive influence on the attitudes toward use of LMS.
- H2: Perceived ease of use has significant positive influence on the attitudes toward use of LMS.
- H3: External factors have significant positive influence on the attitudes toward use of LMS.
- H4: Perceived ease of use has significant positive influence to the Perceived Usefulness.
- H5: External factors have significant influence on the Perceived usefulness and Perceived ease of use of LMS.

**Methodology**

The study uses a quantitative approach to address the problem of present study. A structured questionnaire was specially designed and employed in data collection. Empirical studies in similar context were employed in identifying key constructs for the research variables and constructing the questionnaire. The questionnaire consists of two major parts out of which the first part is reserved for collecting the demographics of the respondents and the second part for the gathering of data relating to three independent research variables: perceived ease of use, perceived usefulness, and external factors: influence of administrators and teachers, ICT skills of undergraduates and infrastructure facilities in the university and the dependent variable of attitudes towards the use of LMS by undergraduates. All the questions relating to the research variables were set in five-point Likert scale and the demographics data were collected through close ending questions.

The population of the study is the students of Rajarata University of Sri Lanka. Samples of 120 students were selected from the target group using the purposive sampling from considering all the faculties: Agriculture, Applied Sciences, Management Studies, Medical & Allied Sciences and Social Sciences & Humanities. To ensure the reliability and the validity of the research instrument, it was piloted and adjusted accordingly with correct wording and logical ordering of the questions. In the data analysis, descriptive statistics, correlation coefficients and regression analysis were performed.

**Results And Discussion**

In this study there were 63 (52.5%) male students divided in to five faculties; 12 Management, 20 Applied Sciences, 15 Social Science and Humanities, 9 Medical and 7 Agriculture. There were 57 (47.5%) female students divided in to five faculties; 18 Management, 15 Applied Sciences, 10 Social Science Humanities, 6 Medical and 8 Agriculture. Moreover there were 24 first year students, 36 second year students, 31 third year students and 29 fourth year students. The 100 students (83.3%) out of 120 were using the LMS and 20 students (16.7%) were not using LMS in the university. Usage of computer ours by students is given in table 1 below.

**Table 32- Student usage of computer hours per week**

Non-educational purpose			Educational purpose		
Hrs	Frequency	Percent	Hrs	Frequency	Percent
1 - 5	31	25.8%	1- 3	9	7.5%
5 - 10	31	25.8%	3- 5	31	25.8%
10 - 15	27	22.5%	5- 7	23	19.2%
15 - 20	21	17.5%	7- 9	22	18.3%
More than 20	10	8.3%	More than 9	33	27.5%

When consider the usage of computers for non-educational purposes in the above table; the 25.8% students from 5 to 10 hours, 25.8% students from 1 to 5 hours, 22.5% students from 10 to 15 hours, 17.5% students from 15 to 20 hours and 8.3% students more than 20 hours use computers for non- educational purposes. According to the table 1, the computer use for the educational purposes shows that 7.5% students are use computers for educational purposes between 1- 3 hours, 25.8% between 3-5 hours, 19.2% between 5-7 hours, 18.3% between 7-9 hours and 27.5% students are use computers for educational purposes more than 9 hours. The outcome of the reliability test carried out is given in table 2 below.

**Table 33-Reliability Test of research variables**

Variables	Cronbach's Alpha Value	No of Items
Perceived Usefulness	0.872	5
Perceived Ease of Use	0.790	5
External Factors	0.792	13
Attitudes toward the use of LMS	0.878	14
Overall Value	0.908	46

In the study Cronbach's alpha values were used to assess the reliability of variables as it is very important to the researchers to ensure the internal consistency of the questions which was used in the questionnaire. Table 2 presents the result of the each independent and dependent variables reliability test. Theory of research methodology says about reliabilities: less than 0.6 are considered to be poor, those in the above 0.7 ranges are acceptable, and those over 0.8 are good. The table 2 shows that reliability is up to the acceptable level of all constructs.

The final column of the following table (Table 3) indicates that mean and correlation values of the research variables. It may be mentioned that all variables were tapped on a 5-point Likert scale and all the mean values were having above the average. This means that Perceived Usefulness, Perceived Ease of Use, and External Factors have positive affect to use of LMS and finally the respondents have positive attitudes toward the use of LMS in the Rajarata University of Sri Lanka. Correlation data output is given in table 3 below.

**Table 34-Correlation Analysis of Research Variables**

		PU	PEoU	EF	A	Mean
Perceived Usefulness (PU)		1				3.8240
Perceived Ease of Use (PEoU)	Pearson	.675**	1			3.9520
	Correlation	.000				
	Sig.					
External Factors (EF)	Pearson	.483**	.586**	1		3.7031
	Correlation	.000	.000			
	Sig.					
Attitude (A)	Pearson	.624**	.710**	.492**	1	4.0607
	Correlation	.000	.000	.000		
	Sig.					

\*\* . Correlation is significant at the 0.01 level (1-tailed)

As shown in the above table (table 3) correlation coefficient for the relationship between Perceived Usefulness and Attitude towards use of LMS is 0.624( $p < 0.01$ ). So, it could conclude that there is a positive and significant relationship between Perceived Usefulness and students attitudes toward the use of LMS. The correlation coefficient of the relationship among Perceived Ease of Use and Attitude towards use of LMS is 0.710( $p < 0.01$ ). It could indicate that there is a positive and significant relationship between Perceived Ease of Use and Students Attitudes toward the use of LMS. The correlation between External Factors and Attitudes towards use of LMS was 0.492( $p < 0.01$ ) means there was a positive significant relationship between External Factors and Attitude towards use of LMS. The correlation coefficient between Perceived Ease of Use and Perceived Usefulness is 0.675( $p < 0.01$ ). It

could conclude that there is a positive and significant relationship between Perceived Ease of Use and Perceived Usefulness. The relationship between External Factors towards Perceived Usefulness and Perceived Ease of Use are 0.483(p<0.01) and 0.586(p<0.01). So, it could conclude that there are positive and significant relationships between External Factors towards Perceived Usefulness & Perceived Ease of Use towards the use of LMS.

Regression analysis was further employed to examine the predictive power of independent variables attitude towards the use of LMS and to validate the results of correlation analysis. The relevant results are reported in table 4 below.

**Table 35- Results of the Regression analysis**

	Coefficient	Std. Error	t	P
Constant	1.497	0.280	4.828	0.000
Perceived Usefulness(PU)	0.187	0.069	2.395	0.010
Perceived Ease of Use (PEoU)	0.390	0.087	3.556	0.001
External Factors (EF)	0.830	0.088	0.575	0.349
R <sup>2</sup> = 0.569      F = 38.679      Sig F = 0.000				

Dependent variable: Attitudes toward the use of LMS

According to the regression analysis the significance values of the constructs of Perceived Usefulness (PU) and Perceived Ease of Use (PEoU) are less than 0.05. This could conclude that Perceived usefulness and Perceived ease of use were affected towards attitude use of LMS, but External factors were not influenced attitudes towards use of LMS because significant value is greater than 0.05. The coefficient (B) values of Perceived Usefulness (PU):0.187, Perceived Ease of Use (PEoU): 0.390 and External Factors (EF): 0.830. So, this could represent the following equation.

$$Y = 1.497 + 0.187 \text{ PU} + 0.390 \text{ PEoU} + 0.830 \text{ EF}$$

The above equation expresses every unit increase in PU, PEoU and EF are expected to increase attitude towards the use of LMS with the magnitude of 0.187, 0.390 and 0.830 respectively with the constant 1.497 when other two variables (variables which magnitudes are not increased) are unchanged. The F value of 38.679 and p vale of 0.000 indicates that model fit for the data and R<sup>2</sup> is 0.569 which suggests that constructs of the research model PU, PEoU and EF has explained 56.9% of attitudes towards use of LMS of the students in the Rajarata University of Sri Lanka. Based on the above results formulated hypotheses can be evaluated as follows. The summary of hypotheses are given in table 5 below.

**Table 36- Summary of hypotheses Testing**

Hypotheses	Mean	Correlation	Regression
H1: Perceived usefulness has significant positive influence on the attitudes toward use of LMS	Supported	Supported	supported
H2: Perceived ease of use has significant positive influence on the attitudes toward use of LMS	Supported	Supported	supported
H3: External factors have significant positive influence on the attitudes toward use of LMS	Supported	Supported	Not supported
H4: Perceived ease of use has significant positive influence to the Perceived Usefulness	--	Supported	--
H5: External variable has significant influence on the Perceived usefulness and Perceived ease of use attitude to use of LMS.	--	Supported	--

The above table considered means values of on a 5-point Likert scale, Pearson correlation values and coefficients of regression analysis to check the hypothesis. Correlation values support all the hypotheses. Means of constructs were above the average values of PU, PEOU and EF. Therefore, H1 to H3 were supported by the mean values. Even though correlation result supports three hypotheses (H1, H2, H3) but the regression analysis confirmed only two hypotheses (H1, H2).

### **Conclusion And Recommendations**

The students' attitude towards LMS is inconclusive and the objective of this research study is to investigate the students' attitudes towards the use of LMS in Sri Lankan Universities with the special reference to the Rajarata University of Sri Lanka. The result indicates the students' attitude toward the use of LMS is positive and perceived usefulness and Perceived ease of use will have positive significance attitudes towards the use of LMS of the undergraduates. More, perceived ease of use and external factors positively affects the perceived usefulness of LMS. Furthermore it is necessary to create learning objects of e-learning to improve the attitude towards the use of LMS and separate web accessible computer units should be set up in each faculty with technical support. Students should be trained at the beginning of academic activities. Faculty wise LMS administration such as student registration and account management is needed instead centralized control.

The implication of the results of this study is limited in general context. Thus, future study may validate result of the study in similar and different context. Furthermore, more constructs should be considered to measure the attitudes towards use of LMS by students since the developed model is explained just over the 50% variation by the used constructs: perceived ease of use, perceived usefulness and External factors.

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## THE EFFECTS OF HRM PRACTICES ON EMPLOYEE SERVICE QUALITY PERFORMANCE IN THAILAND'S CHAINED-BRAND HOTELS

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### Abstract

The key objective of this study is to determine the effects of human resource management (HRM) practices on employee service quality performance in Thailand's chained-brand hotels that had been located in Bangkok, Thailand. Eleven theoretically based hypotheses have been developed that point to possible positive and negative relationships between HRM practices, mediating variables and service quality as an employee performance. A total of 450 managers, consisting of top management, HR leader and Line Hotel Operation manager that include Restaurant manager, Engineering manager, Executive Chef were examined and then empirically tested using SPSS AMOS for Path Analysis. The results show that HRM practices have no direct relationship with Employee service quality as an employee performance. But they have an indirect relationship, meaning employee performance cannot be determined solely by the use of HRM practices. Out of the five mediating variables in this study, the one that has the strongest effect on employee performance is employee motivation.

**Keywords:** *HRM Practices, Employee service quality performance, Thailand's chained-brand hotels*

### Introduction

Organizations success depends on the performance of employees. As such, employees need to be managed, which is regarded as an essential function for managers (Gentry et al., 2008, Kraut et al., 1989). Managers are responsible for ensuring that organizations succeed and achieve high-performance levels (Daft, 1988). Amos et al. (2004) further state that performance cannot be left in anticipation that it will develop naturally, despite the employee's natural desire to perform and be rewarded for performance. The desire to achieve needs to be accommodated, facilitated and cultivated. As a result, most organizations have made significant financial commitments, through Human Resources Management (HRM) practices, to manage employees' performance (Chow & Kleiner, 2002). The importance of employee performance to the success of organizations could partly explain why numerous methods for monitoring, managing and improving employee performance have been developed (Schraeder & Jordan, 2011).

Most researchers consider HRM practices to be a very common way to manage employee performance (e.g. Munjuri, 2011). But recently, some researchers have argued that there are other factors besides HRM practices that can have an effect on employee performance. Guest (2002), for instance, explained that the impact that HRM practices have on employee performance will depend on how the practices are perceived by employees. Huselid (1995) found that the effectiveness of employees will depend on the impact of HRM practice on the behavior of employees. Thus literature shows that not only should organizations be equipped with the right HRM practices to increase employee performance, but they should also take into account other factors like employee behavior. While most studies focused on one of these behaviors (e.g. Morrison, 1996), this study will look at five types of behaviors; organizational citizenship, job satisfaction, employee engagement, employee motivation and HR flexibility. These five factors will mediate the relationship between HRM practices and employee performance.

Thailand is destination country for tourists around the world and one of the most famous of city tourism. Hotel industry in Thailand is significantly impact for Thailand economics growth. There are many Thailand's Chained-Brand Hotels. Competition in the Thai hotel industry is very high. Therefore, highly staffs service quality to achieve customer satisfaction, and professional hotel HRM practices are needed.

### **Theoretical Background**

For organizations to succeed, they must have a competitive advantage over their rivals. To understand where this advantage is derived from, it is necessary to look at an organization's resources. Several studies – based on Barney (1991) resource-based view (RBV) – have suggested that HRM is a source of competitive advantage in a company.

#### **1. Resource-Based View (RBV)**

Barney (1991) RBV theory claims that a company must have valuable, rare, inimitable and non-substitutable resources to have a sustainable competitive advantage and that these resources include everything internal to the firm. Barney (1986) listed all of the assets, capabilities, organizational processes, firm attributes, information, knowledge, and so on, as resources. The application of RBV theory to HRM illustrates the role that people play in building a company's competitive advantage. To explain how RBV theory can be applied to HRM, Wright and McMahan (1992) referred to the following four features that people, as resources, must have for the company to be competitive. First, they must give value to the company's production processes, meaning the level of individual performance must be significant. Second, the skills that the corporation looks for must be rare. According to Wright and McMahan, all human resources should meet these two criteria, since they are evenly distributed. Third, the combined human capital investments of a company's employees cannot be easily imitated. Some argue that other types of resources in a company, such as technology and natural resources, are available to anyone and easy to copy. On the other hand, human resources – particularly HR systems – represent a complex social system (Ulrich and Lake, 1990) and are regarded as intangible assets. Finally, a company's human resources must not be substitutable or replaceable by technological alternatives; however, the high levels of automation in many industries and the continuing shift towards a service economy have made substitution less likely.

Overall, the resource-based theory provides a useful basis for understanding the value that HRM adds to the performance of the organization. But, beyond RBV, it is important to discuss ideas that involve HRM practices to truly understand the effects that HRM have on organizations.

#### **2. Human Resource Management (HRM)**

Guest (1997) and Boselie et al. (2005) have both categorized existing HRM theories. According to Guest (1997), there are three types of theories. The first type is known as Strategic Theories. In the UK, this category means that firms are adhering to good HR practices internally and externally will perform superior to those that do not. In the USA, strategic theories suggest that companies striking a balance among business strategies, structure and HRM policy will have superior performance. The second type is known as Descriptive Theories, which either lists areas of HR policy and outcomes (Beer et al., 1984) or adopts a system-based approach that describes the relationships among levels (Kochan et al., 1986). Descriptive theories are mainly non-prescriptive. The third type is known as Normative Theories, which means that firms establish a norm (or standard pattern) in the form of a prescribed best practice.

According to Boselie et al. (2005), there are three types of HRM theory. The first type is the Contingency Theories, in which HRM is influenced by an organization's environment and circumstances (for example, Legge, 1978). The second group is Resource Based, which states that HRM delivers added value through the strategic development of the organization's rare, hard-to-imitate and hard-to-substitute human resources (for example, Barney, 1991, 1995). The third set is the Ability Motivation Opportunity (AMO) theories, which can be defined by the formula: Performance = Ability + Motivation + Opportunity to Participate. AMO theories provides the basis for developing HR systems that will cater to employees' interests, namely their skill requirements, motivations and the quality of their jobs (for example, Appelbaum et al., 2000; Bailey et al., 2001; Boxall and Purcell, 2003).

### 3. Models of Human Resource Management

Numerous models of HRM have been developed to help Human Resources (HR) practitioners effectively manage human resources. Foremost among them is the Harvard Model (Beer et al., 1984), which guides all managers in their relations with employees and concentrates on the human, or soft, aspect of HRM. The Harvard Model focuses on employee commitment, concluding that employees need to be congruent, competent and cost effective. Another prominent model is the Michigan Model (Devanna et al., 1984), which focuses on hard HRM, meaning, people should be managed like any other resource: obtained cheaply, used sparingly, developed and exploited fully. Then, there is the Guest Model (Guest, 1997), which operates on the belief that a set of integrated HRM practices will result in superior individual and organizational performance. Finally, there is the Warwick Model (Hendry and Pettigrew, 1990), which recognizes the impact of personnel on HR strategy content and emphasizes identifying the inner (organizational) and external (environmental) context.

### 4. Human Resource Management Practices

To effectively manage human resources, organizations will have to implement innovative HRM practices. However, HRM practices may differ from one organization to another and from one country to another.

### 5. Types of Human Resource Management Practices

Researchers have classified HRM practices using various terms; 'best practice,' or 'high-performance' (Huselid, 1995), 'formal' (Aldrich and Langton, 1997; De Kok and Uhlaner, 2001; Heneman and Berkley, 1999), 'sophisticated' (Golhar and Deshpande, 1997; Goss et al., 1994; Hornsby and Kuratko, 1990; Wagner, 1998) and 'professional' (Gnan and Songini, 2003; Matlay, 1999). But Pfeffer (1994, 1998) argued that the most appropriate term is 'Best HRM Practices.' According to Chandler and McEvoy (2000), one question remains in HRM research: is there a single set of policies or practices that represent a 'universally superior approach' to managing people? Theories on best practices or high commitment theories suggest that certain HRM practices, either separately or in combination, are associated with improved organizational performance across the world. Pfeffer (1994) identified seven practices as best practices: employment security, selective hiring, self-managed teams/team working, high compensation contingent on organizational performance, extensive training, reduction in status difference and sharing information. Redman and Matthews (1998) identify an 'HRM bundle' of essential practices, which support service organizations' quality strategies. Saxena and Tiwari (2009) also identified training and development, employer-employee relations, recognition through rewards, culture building, career development, compensation, and benefits as important HRM practices.

## **Literature Review And Hypotheses**

In this section, a review of the literature concerning the relationship between HRM practices and employee performance is presented. Particular focus is on variables such as organizational citizenship behaviors, job satisfaction, employee engagement, employee motivation and HR flexibility. Studies have shown potential hypothetical associations among the selected variables. Altogether, 11 hypotheses were formulated, which are explained below.

### **1. Human Resource Management System**

To understand the importance of HR and its role in determining the performance outcome of organizations, the HR process must be viewed as a whole. So far, there have been limited research to measure the impact the entire HRM system has on a firm's performance. In measuring the impact, consideration must be made to human resource inputs, processes (and practices) and outputs, leading to sustained competitive advantage (Lado & Wilson, 1994). A model of the HRM system was developed by Ferguson (2006), based on Barney (1991) resource-based view of the firm. Barney's view is explained in the theoretical background section.

### **2. Employee Performance**

In line with the systems view of HR (Lado & Wilson, 1994), a firm's performance serves as an outcome of an effective HR system. An indicator of a firm's performance is employee performance which can have two meanings. Employee performance is a rating system used by organizations to decide on the abilities and output of an employee, and the record of outcomes achieved per job function during a particular period. Also, employee performance can also mean employee productivity and output as a result of employee development. The performance of employees can be in the form of the quantity or quality or timeliness of output, presence at work and cooperativeness (Güngör, 2011). Macky and Johnson (2000) stated that improved employee performance could also lead to better firm performance.

### **3. Human Resource Management (HRM) Practices**

This study will examine HR practices (Lado and Wilson, 1994) using the system-based view of HR. HRM practices are a set of distinct yet interrelated activities, functions, and processes aimed at attracting, developing and maintaining a firm's human resources. In most studies, HRM practices are viewed as the independent variable (Becker and Huselid, 1998; Rizov and Croucher, 2008; Sang, 2005). These practices are known to help organizations increase employee performance. For example, Bhatti and Qureshi (2007) found employee participation to have a positive effect on employee productivity. Rewards also have a direct impact on employee performance (Qureshi et al., 2010). Training and development raise performance levels and brings success to organizations by developing the knowledge, skills, ability, competencies and good employee behavior (April, 2010). Singh and Mohanty (2012) also found a positive correlation between training and employee productivity. As employees develop, they become increasingly satisfied with and committed to their jobs (Hameed and Waheed, 2011). As a result, their performance improves, and the organization becomes a more efficient structure (Champathes, 2006). Thus:

*H1: HRM practices affect employee performance.*

HRM practices can help organizations raise the level of organizational citizenship behaviors (OCBs) among employees. Employees who participate in decision-making feel that their managers consider them to be important members of the organization. With a

positive outlook towards both management and the organization, the employee would be more willing to take on additional roles, thus increasing the likelihood of OCBs (Bateman and Organ, 1983; Miles et al., 2002; Smith et al., 1983). Organizations may also facilitate citizenship by rewarding OCBs (Babaei et al., 2012). A reward system that directly recognizes good citizenship makes it clear to employees that the organization truly values such behavior (Levering and Moskowitz, 2003; Meet Asda's Happy Family Pack, 2002).

A career planning system is necessary for employees to achieve their specific career goals. With this in mind, Greenhaus and Callahan (1994) developed some career development strategies. They believed that workers needed to go above and beyond the specified requirements of their tasks to realize their career goals. In other words, they had to perform some OCBs. Gong et al. (2010) also show that career planning is positively correlated to OCBs. Employees often view training as organizational support. Such views are positively related with a tendency to help co-workers (Shore and Wayne, 1993). As such employees who reflect positively on the benefits of training exhibit stronger feelings of citizenship to the organization that provided training. Empowered employees have the ability to invent and express OCBs (Morrison, 1996). Independence and the ability to influence outcomes within the scope of their roles encourage employees to go beyond their job requirements (Watt and Schaffer, 2003, Cushman, 2000). Thus:

*H2: HRM practices affect organizational citizenship behaviors.*

Employee participation leads to a sense of satisfaction regarding achievement, closure and work-related interpersonal contact (Sashkin and Burke, 1987). Thus, employee participation is positively correlated with job satisfaction (Bhatti and Qureshi, 2007). Two particular systems, compensation, and benefits and reward have been found to create job satisfaction (Boyt et al., 2001; Khojasteh, 1993; Miller et al., 2001). Rehman et al. (2010) also found job rewards to be a strong determinant of job satisfaction. It is said that the root of job dissatisfaction is an employee's lack of happiness in his/her career; conversely, the primary source of job satisfaction is career happiness, which comes from making a career plan and seeing it out (Henderson, 2000). Organizations that invest in career management are more likely to increase employee job satisfaction (Lee, 2000). Carden (2007) too found a positive relationship between career path and job satisfaction. Providing employee training facilitates the updating of skills, increases professionalism and boosts employee commitment and satisfaction to the organization (Bateman and Strasser, 1984; Bushardt and Fretwell, 1994; Cotton and Tuttle, 1986). Absar et al. (2010) further found training and development to have the greatest and positive influence on job satisfaction. However, some employees require autonomy and a sense of self-actualization to feel satisfied (Khan et al., 2012). Thus there is a relationship between employee empowerment and job satisfaction (Swarnalatha and Sureshkrishna, 2012). Thus:

*H3: HRM practices affect job satisfaction.*

Employees – through participation in decision-making or engagement – will often give back to the organization (Cascio et al., 1997). Employee engagement depends on staff feeling justly rewarded for their skills, knowledge, and contributions (Bhattacharya and Mukherjee, 2009) while the idea of engagement is further supported by Ram and Prabhakar (2011). When managers provide opportunities for training and a level of

support that clearly relates to career development, they help drive employee engagement (Mone and London, 2009). Shafer (2010) is another researcher who found a positive relationship between the professional development training program and employee engagement. Therefore:

*H4: HRM practices affect employee engagement.*

Employees who help to make important decisions feel motivated at work, because it fulfills their basic needs of clarity and social relations (Hussein, 2007). There are numerous ways to boost motivation. Al-Nsour (2011), showed that the participation of employees in strategic decision-making could lead to increased motivation. According to Ali and Ahmed (2009), a reward system helps to motivate employees. So does a career planning system. Employers or supervisors must provide guidance that encourages employees to set their goals; employees feel most motivated to meet the ones they set for themselves (Elrod, 2009), especially if these aims might lead to a promotion or some other kind of advancement. Employees, who perform well in training, feel that they have learned something that will enhance their profile, find themselves motivated at work (Lester, 1999). According to Gawali (2009), there is a positive relationship between employees involved in cross-training and motivation. By the same token, organizational changes that result in skill shortages, time pressures, uncertainties and demanding workloads leave employees feeling powerless and burned out. It is important to empower employees (Kaplan and Norton, 1992, 1996) because empowerment is one of the most efficient intervention programs to increase motivation (Yoon, 2001). Therefore:

*H5: HRM practices affect employee motivation.*

A reward system allows employees to demonstrate their functional flexibility; it provides them with the confidence to take initiative and quickly adapt at work because they know that the organization will recognize them for proposing creative solutions to new problems (Frenkel et al., 1999; Unsworth and Parker, 2003). But greater initiative and flexibility at work can result in an increased workload, which may produce stress and anxiety if employee efforts are not rewarded (Unsworth and Parker, 2003). Training and development are also beneficial in building skill flexibility in the workforce. Employees want to improve their talents to succeed in their careers; when combined with a sturdy educational foundation, proficiency in certain areas will give them the confidence to master and apply new skills (Wright and Snell, 1998). The positive relationship that training has with flexibility is further supported by Beltrán-Martín et al. (2008). A firm's effort to broaden workforce skills and competency grants employees the freedom to pursue alternative methods of carrying out their jobs, which subsequently fosters behavioral flexibility (Frese et al., 1996; Parker and Axtell, 2000). Therefore:

*H6: HRM practices affect HR flexibility.*

#### 4. Organizational Citizenship Behaviors (OCBs)

OCBs are the extra work-related behaviors of employees which go above and beyond the routine duties prescribed by their job descriptions or measured in formal evaluations. OCBs may also be defined as individual behavior that is discretionary, not directly or

explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization. These behaviors reflect an employee's genuine willingness to be involved in an organization (Chen et al., 1998; Shore et al., 1995). Appelbaum et al. (2005), analysis has shown a correlation between organizational citizenship and productivity. Employees should, therefore, exhibit OCBs to perform better at work (Podsakoff et al., 2009). Thus:

*H7: Organizational citizenship behaviors affect employee performance.*

#### 5. Job Satisfaction

Job satisfaction is a positive emotional feeling or state-of-mind regarding the nature of work. Satisfaction is a result of one's evaluation towards his job by comparing expectation with actuality. Job satisfaction is also a function of the range of particular satisfactions and dissatisfactions that he/she experiences concerning the various dimensions of work. Positive feelings come from the perception of the individual's job as fulfilling or allowing the fulfillment of their job values, provided these values are compatible with their needs (Dunnette & Locke, 1976). It is generally recognized in the organizational behavior field that job satisfaction is the most important and frequently studied attitude (Islam et al., 2012). There are three critical dimensions to job satisfaction (Locke, 1976): first, job satisfaction is an emotional response to a job situation; second, job satisfaction is usually determined by how well outcomes meet or exceed expectations; and third, job satisfaction represents several related attitudes (Mitchell and Larson, 1987). For organizations to be effective, they must ensure the satisfaction of their employees (Likert, 1961; McGregor, 1960). When employees are satisfied with their jobs, they perform well in the organization (Judge et al., 2001). In Halkos and Bousinakis (2010), findings showed increased satisfaction leads to increased productivity. Hence:

*H8: Job satisfaction affects employee performance.*

#### 6. Employee Engagement

Employee engagement is the harnessing of an organization members' into their work roles. In an engagement, people employ and express themselves physically, cognitively, and emotionally during role performances. Another definition is employees feel positive emotions toward their work, find their job to be personally meaningful, consider their workload to be manageable, involved enthusiastically at work, and have hope for the future of their work. To become fully engaged is to participate in and be enthusiastic about work (Falcone, 2006). There are two aspects of employee engagement: cognitive engagement and emotional engagement/physical engagement. Cognitive engagement is the extent to which a worker is aware of their mission at work and their role in the organization. Emotional engagement/physical engagement is the degree to which the worker empathizes with others at work and connects in a meaningful way with their co-workers (Kahn, 1990, 1992; Luthans and Peterson, 2002). Engaged employees who maintain positive attitudes have been known to perform better in work environments (Harter et al., 2002; Towers Perrin, 2007). Thus:

*H9: Employee engagement affects employee performance.*



#### 7. Employee Motivation

Employee motivation is one of the policies managers use to increase effective job management amongst employees in organizations. Employee motivation may be defined as identifying needs or desires that give purpose, direction, and the will to accomplish, in a person. Motivation, itself, is described by Hellriegel et al. (1992) as the force acting on or within a person that causes the person to behave in a specific, goal-directed manner. It stimulates people into action and realizes the desired task (Luthans, 1998). A motivated employee is a productive employee who contributes to the effectiveness of the organization (Matthew et al., 2009). When motivation is high, workers are more likely to enjoy working, and as a result, they spend more time and energy on their work tasks and performance improves (Deci and Ryan, 2000, 2002). According to Solomon et al. (2012), a motivational program is considered to be an essential ingredient for enhanced employee productivity. Thus:

H10: *Employee motivation affects employee performance.*

#### 8. HR Flexibility

HR flexibility is a dynamic capability of the firm in a sense that it is focused on adapting employee attributes. For instance knowledge, skills, and behaviors, for adapting to changing environmental conditions as well as the extent to which employees possess skills and behavioral repertoires that can provide a firm with options to pursue strategic alternatives. One of the main features of a flexible workforce is an employee's ability to accomplish a significant number of diverse tasks (Wright and Snell, 1998). Employee functional flexibility, which is a cornerstone of HR flexibility, refers to the extent to which employees can be transferred to different activities and tasks within the organization. It forms the basis for workers to be trained to acquire a range of skills, so that they can do other jobs as well as their own when necessary (Goudswaard and Nanteuil, 2000). Functional flexibility has been advocated as a mechanism to improve efficiency in the organization. It is also associated with superior employee performance (Rosenblatt and Inbal, 1999). Therefore:

H11: *HR flexibility affects employee performance.*

#### 9. Research Framework

This empirical study will concentrate on the relationship between HRM practices and employee performance. It is possible to develop a comprehensive framework, presented in Figure 1, consisting of HRM practices as the independent variable base of the literature review. The mediating variables include organizational citizenship behaviors, job satisfaction, employee engagement, employee motivation and HR flexibility. Employee performance is the dependent variable.

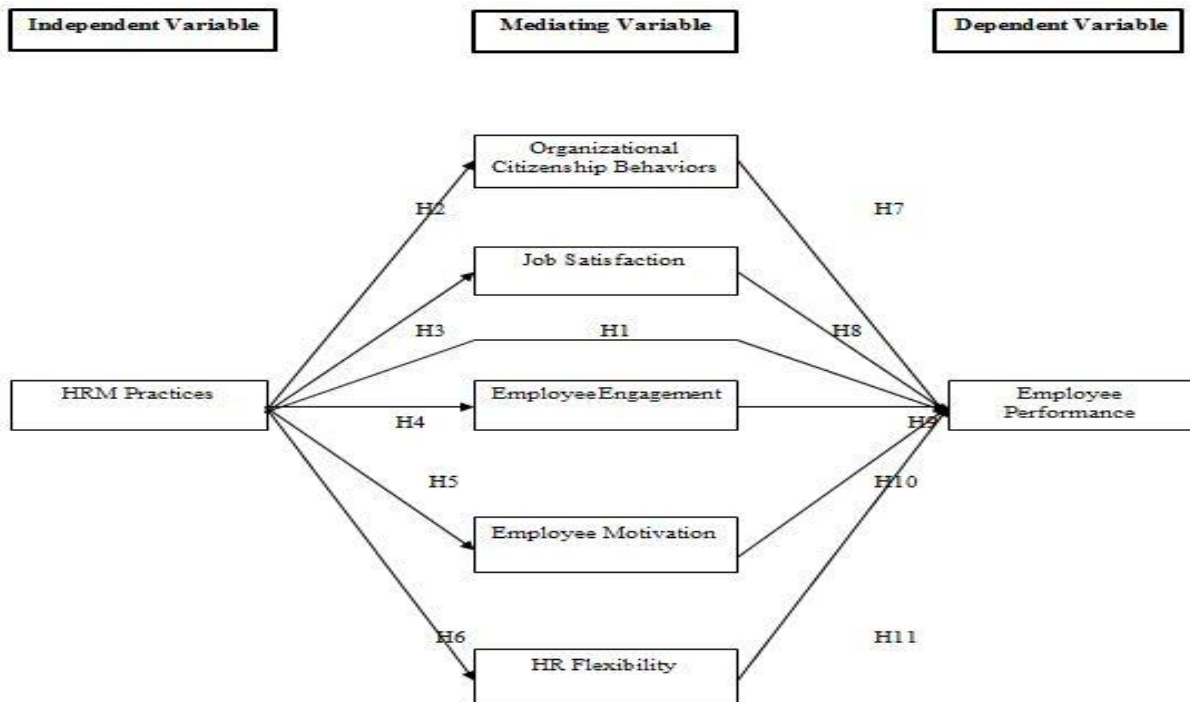


Figure 33 Conceptual Model

## Research Methodology

### 1. Scope of the Study

The study focuses on the effects of human resource management (HRM) practices on employee service quality as an employee performance in Thailand's chained-brand hotels that had been located in Bangkok, Thailand. The mediating variables include organizational citizenship behaviors, job satisfaction, employee engagement, employee motivation and HR flexibility.

### 2. Population and Group Sample

The population being studied are 238 Thailand's chained-brand hotels in Bangkok where they were members of hotel –chained Thailand. The samples used in this study are all managers in hotel –chained brand in Thailand that were operational in 2016. A total of 450 managers, which comprised of top management, HR leader and Line Hotel Operation manager that include Restaurant manager, Engineering manager, Executive Chef, were randomly selected from the 140 Thailand's chain-brands in Bangkok. For this study, the researcher used the non-probability sampling of purposive sampling, where there would be three types of managers, comprising of Top Management, HR Leader and Line Hotel Operation Manager, in each Hotel. They were chosen in this study because they set and implement policies, including human resource practices, in organizations.

### 3. Research Variables

HRM Practices, as the independent variable, have five factors which are 1) Employee Participation 2) Compensation and Benefits Management and Reward System 3) Career Planning System 4) Training and Development and 5) Employee Empowerment. There are five mediating observed variables, which are 1) Organizational Citizenship Behaviors 2) Job Satisfaction 3) Employee Engagement 4) Employee Motivation and 5) HR Flexibility. The dependent variable has one observed variable, which is 1) Employee service quality. This research used Path Analysis to explain the relationships between the Independent Variable, passing through the Mediating Variables, and the Dependent Variable.

#### 4. Research Instrument

A ten-part self-assessment questionnaire is used to collect quantitative data. Two advisors checked the questionnaire before sending out. Part one contains eight items, asking for information about the organization. These questions are part of the selection process to find out which organizations are relevant in this study. Part two contains six items, concerning personal information of the respondents. Part three has a total of twenty-eight questions, consisting of the five observed variables of HRM practices. These items were developed from Carden (2007), Chew (2004), Cushman (2000), Ferguson (2006), Huselid (1993), Kgomo (2010) and Martin (2011). Part Four to Part Eight involves the mediating variables with a total of thirty-seven items. These were adapted from Bhattacharya (2000), Carden (2007), Cushman (2000), Kgomo (2010), Rose (2012) and Springer (2010). Part Nine has a total of five items that are made up of one dependent variable. These were developed from Rose (2012) and Springer (2010). Lastly, Part Ten allows the respondents to provide any further comments about the questionnaire and whether they intend to use this study, once the data has been analyzed, to manage the human resource in their organizations.

From Part Three to Part Nine of the questionnaire, the respondents are asked to describe on a 5-point Likert scale with 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Moderately Agree, and 5 = Strongly Agree. To reduce the possibility of key information bias, a set of questions in the survey contain some revert questions for some of the variables, such as Job Satisfaction, to ensure that the respondents were confident about answering the questions (Cannon & Perreault, 1999). Reliability was assessed using Cronbach's alpha coefficient. If the value is greater than 0.70, it means that reliability is high. The questionnaire was first written in English and then translated into Thai. For linguistic consistency, it was then translated back into English by an experienced translator, and the necessary corrections were made in the Thai version. The Thai version was then distributed to the respondents.

#### 5. Data Collection

Two channels were used in distributing the questionnaire. First was a trip to meet the target sample at their workplace, and second electronically via email. In case of incompletes, researcher was directed contact to HR departments—the Departments that most often responded to questions—were contacted by telephone to allow them to coordinate with other manager of respondents for completely. To encourage participation, respondents were promised that they would receive a summary of the findings after the fieldwork was completed. Within 16 weeks, all of the questionnaires were collected and received. A total of 700 questionnaires were distributed, and 532 were returned (76% of response rate), of which 450 were adequately completed.

This research analyzed the data by using Statistical Package for the Social Science (SPSS) for Windows version21 and IBM SPSS AMOS version21. The steps for data analysis are as follows: (1) Examine the questionnaires that were returned from the respondents to check the answers and number them. (2) Enter the responses into the SPSS for Windows.

This research used Path Analysis to study the effects of HRM practices on employee service quality as an employee performance through the five mediating variables, (organizational citizenship behaviors, job satisfaction, employee engagement, employee motivation and HR flexibility). Path Analysis is a flexible, powerful and robust statistical method that is used to examine the relationships among the variables. These variables require a highly flexible and comprehensive statistical methodology thus Path Analysis is considered appropriate to test the conceptual model.

A two-step approach was taken to analyze the data (Anderson and Gerbing, 1988). First, the measurement model was evaluated using confirmatory factor analysis, followed by the estimation of theoretical (structural) models. Confirmatory factor analysis (CFA) was applied in the first part of data analysis to assess the convergent validity and discriminant validity of the multi-item scales measure of constructs. Research analysis results provided CFA measure results, the correlation between construct matrix and square roots of average variance extracted (AVE), as well as the model fit indices.

The evaluation of construct validity and reliability was assessed by confirmatory factor analysis using SPSS AMOS. All the items were then submitted to reliability analysis via Cronbach's alpha coefficient using SPSS 13.0 program. Cronbach's alpha for all constructs are above the recommended value of 0.70 (Nunnally, 1978).

#### 6. Analysis Results

Tables 1 and 2 provide the frequency and percentage of organizational characteristics and personal characteristics of respondents, respectively.

**Table 1: Frequency and Percentage of Organizational Characteristics**

Variable	Frequency	Percent
<b>Country of Hotel Origin</b>		
Asia Pacific	171	38.00
North America	156	34.67
Europe	112	24.89
Others ( e.g. Australia)	11	2.44
<b>Total</b>	<b>450</b>	<b>100.0</b>

**Table 2: Frequency and Percentage of Personal Characteristics**

Variable	Frequency	Percent
Male	179	39.78
Female	271	60.22
<b>Total</b>	<b>450</b>	<b>100.0</b>
<b>Age</b>		
21-30	35	7.78
31-40	152	33.78
41-50	217	48.22
51 and above	46	10.22
<b>Total</b>	<b>450</b>	<b>100.0</b>
<b>Current Position / Title</b>		
Top Management	48	10.67
HR Leader	98	21.78
Line Operation Hotel Manager	304	67.56
<b>Total</b>	<b>450</b>	<b>100.0</b>
<b>Education Level</b>		
Diploma or below	54	12.00
Bachelor's Degree or equivalent	147	32.67
Above Bachelor's Degree	249	55.33

Total	450	100.0
Work Experience		
0-10 years	67	14.89
11-20 years	231	51.33
21-30 years	125	27.78
31 years and above	27	6.00
Total	450	100.0

a. **Confirmatory Factor Analysis (CFA)**

This part shows the results of CFA Goodness of Fit statistics, where construct validity is used to check for consistency between the structural components through CFA. Table 3 shows one of the seven components of CFA, namely HRM Practices, Organizational Citizenship Behaviors, Job Satisfaction, Employee Engagement, Employee Motivation, HR Flexibility and Employee Performance.

**Table 3: Goodness of Fit Test for Confirmatory Factor Analysis Model in Employee Performance**

Goodness – of – Fit Statistics	Levels	Statistics
Chi – Square ( $\chi^2$ )		1.108
Probability Level (p)	> 0.05	0.293
$\chi^2 / df$	< 2.00	1.108/1= 1.108
RMSEA	< 0.05	0.019
RMR	< 0.05	0.004
GFI	≥ .90	0.999
Comparative Fit Index (CFI)	≥ .90	1.000

b. **Hypotheses Results**

Hypotheses are tested by finding the level of relationships between the variables. According to Table 4, correlation results are significant at the 0.01 level (2-tailed). Hypotheses results show the level of relationship between the variables value are not higher than +0.8, since that would mean both variables have the same meaning or use the same measurement.

**Table 4: Correlation Results**

	HRMP	OCB	JS	EE	EM	HRF	EP
HRMP	1						
OCB	0.530**	1					
JS	0.450**	0.505**	1				
EE	0.565**	0.646**	0.604**	1			

EM	0.341**	0.456**	0.303**	0.578**	1		
HRF	0.520**	0.229**	0.115*	0.243**	0.150**	1	
EP	0.380**	0.327**	0.334**	0.383**	0.335**	0.287**	1
N=411. Notes: ** Correlation is significant at the 0.01 level (2-tailed).							

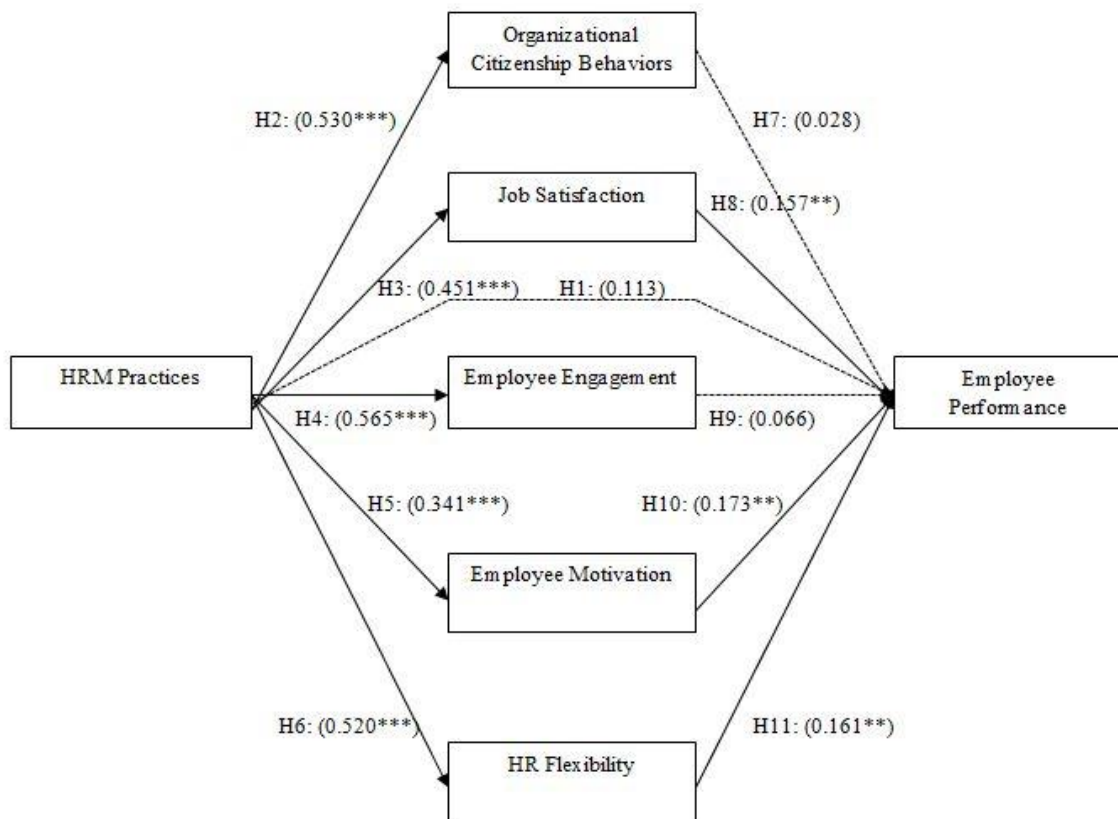
Table 5 shows the consistent statistical measure of Path Analysis model in relation to the research hypotheses and the empirical data on Human Resource Practices. The model fit presents statistical values that are within the stated level, as follows:  $\chi^2 = 2.631$  with degrees of freedom

(df) of 3, and  $\chi^2 / df = 0.877$ , which is  $< 2$ . This is in accordance with the stated level, and has  $p$ -value = 0.452, which should be  $> 0.05$ . Values for RMSEA, GFI and CFI are in line with the stated levels.

**Table 5: Goodness of Fit Test for Path Analysis Model Hypotheses Tests**

Goodness – of – Fit Statistics	Levels	Statistics
Chi – Square ( $\chi^2$ )		2.631
Probability Level (p)	$> 0.05$	0.452
$\chi^2 / df$	$< 2.00$	$2.631/3 = 0.877$
RMSEA	$< 0.05$	0.000
GFI	$\geq .90$	0.998
Comparative Fit Index (CFI)	$\geq .90$	1.000

Figure 2 presents the structural model, where the tests results should show not only direct relation between the variables, but also the indirect effect and total effect.



**Figure 34 Structural Model**

According to the path coefficient, presented below (Table 7), all of the variables in the hypotheses test results have the following relationships.

**Table 6: Hypotheses Test Results – Relationship Path Coefficients**

Dependent Variables	Independent Variables					
	V3HRMP	V4OCB	V5JS	V6EEG	V7EM	V8HRF
V4OCB	0.530***	-	-	-	-	-
V5JS	0.451***	-	-	-	-	-
V6EEG	0.565***	-	-	-	-	-
V7EM	0.341***	-	-	-	-	-
V8HRF	0.520***	-	-	-	-	-
V9EP	0.113	0.028	0.157**	0.066	0.173**	0.161**

\*\*\* p < .001, \*\* p < .01



**Table 7: Hypotheses Test Results**

Hypothesis	Path Coefficient	t value	Result
H1 : V3HRMP → V9EP	0.113	1.856	Not Supported
H2 : V3HRMP → V4OCB	0.530***	12.654	Supported
H3 : V3HRMP → V5JS	0.451***	10.243	Supported
H4 : V3HRMP → V6EEG	0.565***	13.857	Supported
H5 : V3HRMP → V7EM	0.341***	7.354	Supported
H6 : V3HRMP → V8HRF	0.520***	12.336	Supported
H7 : V4OCB → V9EP	0.028	0.466	Not Supported
H8 : V5JS → V9EP	0.157**	2.804	Supported
H9 : V6EEG → V9EP	0.066	0.929	Not Supported
H10 : V7EM → V9EP	0.173**	3.240	Supported
H11 : V8HRF → V9EP	0.161**	3.167	Supported

\*\* p < 0.01, t value > 2.576, \*\*\* p < 0.001, t value > 3.291

Furthermore, this study is able to show the indirect effect and the total effect, as stated in Table 8.

**Table 8: Direct Effect, Indirect Effect, and Total Effect of HRM Practices and Employee Performance**

Exogenous Variable	Endogenous Variable		
	V9EP		
	DE	IE	TE
V3HRMP	0.11	0.26	0.37
V4OCB	0.03	-	0.03
V5JS	0.16	-	0.13
V6EEG	0.07	-	0.06
V7EM	0.17	-	0.14
V8HRF	0.16	-	0.12

From Table 8, the direct effect, indirect effect, and total effect of HRM practices and employee service quality can be described as follows:

$$1) V9EP = 0.16^{**} V5JS + 0.17^{**} V7EM + 0.16^{**} V8HRF$$

Employee Performance is the result of the direct effects of Job Satisfaction, Employee Motivation and HR Flexibility, with path coefficients equaling 0.16, 0.17 and 0.16, respectively. These are all statistically significant.

- 2)  $V4OCB = 0.53^{***} V3HRMP$   
Organizational Citizenship Behaviors have a direct effect on Human Resource Management Practices with path coefficient equaling 0.53, which is statistically significant.
  - 3)  $V5JS = 0.45^{***} V3HRMP$   
Job Satisfaction has a direct effect on Human Resource Management Practices, with path coefficient equaling 0.45, which is statistically significant.
  - 4)  $V6EEG = 0.57^{***} V3HRMP$   
Employee Engagement has a direct effect on Human Resource Management Practices, with path coefficient equaling 0.57, which is statistically significant.
  - 5)  $V7EM = 0.34^{***} V3HRMP$   
Employee Motivation has a direct effect on Human Resource Management Practices, with path coefficient equaling 0.34, which is statistically significant.
  - 6)  $V8HRF = 0.52^{***} V3HRMP$   
HR Flexibility has a direct effect on Human Resource Management Practices, with path coefficient equaling 0.52, which is statistically significant.
- The model fit using causal Path Analysis model shows consistencies among HRM practices, employee performance, and theories used.

### Study Results And Discussion

Results provide new insight into the relationships between the variables. Of eleven hypotheses in this study, eight show positive relationships among the variables and three are unsupported. Included in the unsupported hypotheses, is H1, where there is no relationship between HRM practices and employee performance of employee service quality. The results are contrary to Qureshi et al. (2010), but in that study, data was collected from the cement industry in Pakistan and included low-level employees, and non-hospitality industry. In Bhatti and Qureshi (2007), other study, data was conducted in 34 diverse organizations from the oil and gas, banking and telecommunication sectors in Pakistan. Singh and Mohanty (2012), study was carried out in both the manufacturing and service sector industries in India, whereas this study was done solely in the manufacturing industry in Thailand. Nevertheless, there are also the mediating variables that can affect the relationship between HRM practices and employee performance. From the results, HRM practices are indirectly related to employee performance of service quality through the mediating variables, meaning a relationship still exists between HRM practices and employee service quality.

As for the relationships between HRM practices and the mediating variables, results suggest an overall positive correlation. For H2, HRM practices are positively correlated to OCBs ( $\beta=0.530^{***}$ ,  $\rho < 0.001$ ), thus supporting Babaei et al. (2012), Cushman (2000) and Gong et al. (2010). This means that HRM practices should be implemented to build a workforce that is willing to perform more than the standard duties. For H3, HRM practices have a positive relationship with job satisfaction ( $\beta=0.451^{***}$ ,  $\rho < 0.001$ ), thus confirming Absar et al. (2010), Bhatti and Qureshi (2007), Carden (2007), Rehman et al. (2010), and Swarnalatha and Sureshkrishna (2012). HRM practices are, therefore, shown to leave employees feeling increasingly satisfied with their jobs. For H4, there is a positive relationship between HRM practices and employee engagement ( $\beta=0.565^{***}$ ,  $\rho < 0.001$ ). Results are further supported by Bhattacharya and Mukherjee (2009), Ram and Prabhakar (2011), and Shafer (2010). By using HRM practices will create engaged employees. For H5, HRM practices have a positive correlation with employee motivation ( $\beta=0.341^{***}$ ,  $\rho < 0.001$ ). This is confirmed by Al-Nsour (2011), Ali and Ahmed (2009), Gawali (2009) and Yoon (2001), thereby showing how HRM practices can motivate employees to work hard and strive for success. For H6, there is a

positive relationship between HRM practices and HR flexibility ( $\beta=0.520^{***}$ ,  $\rho < 0.001$ ), further supporting Beltrán-Martín et al. (2008) and confirming the view that considered HR practices an appropriate mechanism with which to increase flexibility (Dyer and Shafer, 2002; Sparrow, 1998). Through HR practices, employees were found to be able to perform a variety of tasks effectively.

Results also show a strong positive relationship between the mediating variables and employee service quality. The only exceptions are H7 and H9. H7 indicates that there is no relationship between organizational citizenship behaviors and employee performance of service quality. Regarding H8, results show a strong relationship between job satisfaction and employee service quality ( $\beta=0.157^{**}$ ,  $\rho < 0.01$ ), which is further supported by Halkos and Bousinakis (2010). This suggests that when employees are satisfied with their jobs, they will work harder for the organizations. For H9, there is no relationship between employee engagement and employee performance of service quality. This is in contrast to previous studies like Harter et al. (2002), but that was conducted in just 36 companies outside Thailand. For H10, results indicate a positive relationship between employee motivation and employee performance ( $\beta=0.173^{**}$ ,  $\rho < 0.01$ ). This is confirmed by Solomon et al. (2012), meaning motivated employees will work harder for the organization. For H11, results confirm that HR flexibility has an effect on employee service quality ( $\beta=0.161^{**}$ ,  $\rho < 0.01$ ), thus confirming Rosenblatt and Inbal (1999). This shows that employees with functional flexibility are more productive in the organization.

### **Implications, Limitations and Recommendations**

This study to confirm a model relating HRM practices and employee service quality performance which can help both organizations and academics to understand that employee service quality cannot be determined by HRM practices alone. There are other factors, such as employee behaviors, that can also have an effect on employee performance. In this study, they are the mediating variables that help establish a relationship, albeit indirectly, between HRM practices and employee performance. The importance of HRM practices should, therefore, not be ruled out. Results have confirmed the conceptual model and important aspects of HRM practices in Thailand's chained-brand hotels that can be used in other business.

Many organizations including hotel industry have been trying to create new HRM management tools, which ignore the use of human resource management practices. However, this study can show that HRM practices are still acceptable to all firms and that they should realize the importance of these practices. By employing HRM practices and taking into account employee behaviors, managers can increase the likelihood that their employees will perform better at work and with the quality level expected. But there needs to be full worker participation in the organization, where information concerning policy issues are shared with employees. Employees should also be allowed to make suggestions concerning policies and procedures through a command structure that welcomes employee/employer interaction. Encouraging employees to express their views should be the goal of activities.

Managers in Thailand's chained-brand hotels should construct a system of compensation, benefits, and rewards in which employees are given positive recognition and rewards for good performance. Furthermore, there should be a competitive benchmark that considers the amount and quality of work that employees do. Within this system, the benefits should be equitable.

Chained-brand hotels organizations should institute a career planning system to help employees map out their visions for the future; it should be long-term and focused on individual development. Career planning in organizations must be both vertical and horizontal, allowing employees to not only grow within the scope of their jobs but also to

function and succeed in other roles. It is the duty of the organization to create the opportunity for employees to advance in their careers. Creating opportunities can be done through effective and timely training and development. Once training is complete, organizations should track employee progress both to ensure proper development and to monitor workforce satisfaction. In that sense, organizations must empower employees, giving them autonomy over their jobs.

HRM practices have an effect on these five types of behaviors as mediating variables which, in turn, have a positive impact on employee service quality performance. Out of the five mediating variables, the one that has the strongest effect on employee service quality performance is employee motivation. Managers should develop a program where employees are encouraged to make improvements at work that are acceptable by the organization, and to get ahead, thus allowing them to fulfill their ambitions. Academics should use this new model to create curricula consistent with empirical results by focusing on the HRM practices variables particularly three mediating variables, which are job satisfaction, employee motivation, and HR flexibility.

Although this study is successful in showing that HRM practices have an indirect effect on employee service quality performance, it does have limitations. First, the study was conducted of chained-brand hotels in Thailand and was limited to Bangkok. Thus, conclusions only represent a limited context. Those who intend to do further research on the topic should include other region in Thailand and other countries in South East Asia.

### Conclusion

Despite its limitations, this study has given a better understanding of the ways in which HRM practices and employee behaviors, as mediating variables, affect employee service quality as an important performance in chained-brand hotels. Employee service quality performance is a key determinant of a hotel and other hospitality performance, and this study provides in explaining the indirect relationships among these variables. However, these variables are not the only factors that can determine employee service performance in organizations. There are other factors involved besides the five main employee behaviors that have been discussed. Organizations also need to consider other aspects to determine the employee service quality as performance outcome of organizations, such as employee ability & competencies, organizational human resource development programs.

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## INTERNATIONAL HUMANITARIAN LAW AND CIVILIAN PROTECTION: THE CASE FOR INTERNALLY DISPLACED PERSONS

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### Abstract

Current norms for the protection of internally displaced persons is richly influenced by principles entrenched in international humanitarian law as applicable to civilians and non-combatants who are not actively involved in the prosecution of wars. These principles though not specifically directed at this category of persons per se is no doubt of paramount importance to them being victims of armed violence occurring within the borders of their own country. This paper keenly examines legal implications of international humanitarian law rule applicable to non-international armed conflicts to situations of internal displacement with the view to identifying the extent to which the rules and principles can be applied to fan protection for internally displaced persons beyond the parameters set out in the standard setting norms on internal displacement. This conceptual discourse is significant as it contributes to the need to engage in more insightful thoughts on alternate ways of strengthening protection and assistance of internally displaced persons.

**Keywords:** *Armed conflict; Civilians; Internally displaced persons; Humanitarian*

### Introduction

The complementary role of international humanitarian law in setting normative standards for the protection of internally displaced persons is indubitable as current norms on internal displacement are clear restatement of principles of humanitarian law, human rights law and refugee law by analogy (Guistiniani, 2011). This advancement is evidently captured in the Guiding Principles (GP, 2009) and later replicated in the Great Lakes Pact (ICGLR, 2006) and the African Union Convention for the Protection and Assistance of Internally Displaced Persons (Kampala Convention, 2009).

International humanitarian law (IHL) simply refers to rule and principles of international law applicable to war generally. They are also called “law of wars (LOW) or “law of armed conflicts (Solis: 2010). This rule governs armed conflict involving states, civil war groups or secessionists as well as those engaged in any form of state or non-state belligerency (Nagib, 2009). In traditional parlance they are collectively referred to “*jus in bello*” which literally connotes “set of rules of international law relating to the conditions under which a subject of international law is permitted to resort to armed force” (Bugnion, 2003) or law of armed conflicts” (Policastri & Stone) as opposed to “*jus ad bellum*” which on the other hand means “set of rules of international law applicable to the mutual relations of parties to an international armed conflict or the law and customs of war” (Bugnion, 2003; Stahn, 2007).

Broadly speaking, the application of law of armed conflicts or IHL is limited in two category of armed conflicts, namely international armed conflict and non-international armed conflict, with each having distinct rules. It is worthy of note that the extent to which the autonomy grounded in this distinction in terms of legal and practical implications is still shrouded in raging controversies especially having regard to the right of states to quell insurrection and rebellion, and the right of the people to self-determination as derived from the supranational prescriptions in the United Nations Charter (Arts. 1(2) & 55, 1945). Some commentators have described the distinction as arbitrary, unjustifiable and devoid of the humanitarian stance which this branch of international law represents (Warwick & Rowe, 1996).

The protection of internally displaced persons in this paper is examined from the general perspectives of protection of civilian populations in situation of armed conflicts that takes place within the territory of individual states as opposed to extra-territorial (Hickel, 2001). Bearing this in mind, this article critically assesses the role of international humanitarian law in the protection and assistance of internally displaced persons within the context of non-international armed conflicts with a view to identifying interpretative legal issues limiting their wholesale application to situation of internal displacement.

### **Sources And Progression Of International Humanitarian Law**

The sources of international law as set out in the Statute of the International Court of Justice (ICJ) is universally authoritative (Art. 38). It suffices also for international humanitarian law being a subset of the former. These are international treaties/conventions which are formal agreements between states or between states and international organizations or between intergovernmental organizations (Vienna Convention, 1969: Art. 2) ; customary international law which consists of unwritten rules created by the practices of States; general principles as recognized by civilized nations popularly referred to as peremptory norms or *jus cogens*; and judicial decisions of courts such as the International Court of Justice and International Criminal Court and the most highly qualified juristic writings as subsidiary means for the determination of rules of law.

It is apt to state that since 1864 when Dunant called for an international regulation of casualties of battlefields which culminated in the emergence of the first Geneva Convention (American Red Cross, 2011) comprising of only ten articles, international humanitarian law has been in gradual progression (St Petersburg Declaration, 1868).

Two legal current have contributed to further development of international humanitarian law, these are Hague Law which consists of the 1899 and 1907 Conventions and the Geneva Law comprising pre 1949 and 1949 Conventions now merged together by virtue of the two Additional Protocol to the Geneva Convention in 1977. Today as far as issue of humanitarian law treaties are concerned, reference is currently limited to the four Geneva Conventions and the two Additional Protocol on one hand and other Conventions dealing with specific subjects of international humanitarian law such as 1980 Convention on the Use of Conventional Weapons, Convention on Chemical Weapons 1993, Protocol relating to Blinding Laser Weapons 1995, 1996 Revision of the 1980 Convention, Convention on Anti-Personnel Mines (Ottawa Treaty 1997, 1998 Rome of the Statute of the International Criminal Court, Protocol II to the 1954 Convention for the Protection of Cultural Property 1999, 2000 Optional Protocol to the Convention on the Rights of the Child on the Involvement of Children in Armed Conflicts, Protocol on Explosive Remnants of War (Protocol V to the 1980 Convention) 2003, 2005 Protocol III to the 1949 Geneva Conventions, relating to the adoption of an additional distinctive emblem (the “Red Crystal”), and Convention on Cluster Munitions 2008 on the other hand (Bonvier & Langholtz, 2012)

As far this article is concerned, discussion would be limited to the Geneva Conventions (I-IV) of 1949 and the Additional Protocols (I&II) of 1977 because of their distinctiveness and universal acceptance (Wikipedia, 2016).

### **Scope Of Application Of International Humanitarian Law**

IHL rules are invoked only in situations of an ‘armed conflict.’ Armed conflict is not authoritatively defined in the Geneva Conventions and Additional Protocols despite several references made to the term in international humanitarian law. However, following the decision of International Criminal Tribunal for Former Yugoslavia (ICTY) in *Prosecutor v. Tadic*, in which the accused, a Bosnian Serb politician and former member of a paramilitary

armed forces supporting the attacks on Serb-run concentration camps in Prijedor was alleged of commission of crimes against humanity and grave breaches of the Geneva Conventions, the tribunal held in determining the application of the Geneva Conventions while rejecting the defense argument that there were no hostilities at the relevant time and place that: "...An armed conflict exists whenever there is a resort to armed force between States or protracted armed violence between governmental authorities and organized armed groups...International humanitarian law applies from the initiation of such conflicts..." (ICTY, 1996:70)

It is important to note that before a decision is made on which of the IHL rules that is applicable in any given instance, the nature of armed conflict must be first and foremost determined. Basically, flowing from the combined provisions of the four Geneva Conventions and Additional Protocol I and II, two kind of armed conflicts suffice for the application of international humanitarian law namely; international armed conflicts (IAC) and non-international armed conflicts (NIAC). In other words, rules of IHL apply differently depending on whether the armed conflict in question is international or non-international.

International armed conflicts (IAC) is defined in the common article 2 of the four Geneva Conventions as: "... All cases of declared war or of any other conflict which may arise between two or more of the High Contracting Parties, even if the state of war is not recognized by one of them. The Convention shall also apply to all cases of partial or total occupation of the territory of a High Contracting Party, even if the said occupation meets with no armed resistance."

It therefore follows that for an armed conflict to qualify as international armed conflict, 'parties to the conflict' must be a state within the meaning of the Geneva Conventions and the Additional Protocols, thus acknowledgment of the existence or non-existence of state of war between them is immaterial. State within the purview of the Geneva Conventions is a High Contracting Party who have signed and or ratified the said treaty provisions. It is however submitted that the existence of international armed conflicts should be decided on case by case basis (Jones & Powles, 2003).

In all armed conflicts bearing on above description, all the provisions of the four Geneva Conventions apply in addition to Additional Protocol I for states that have ratified it by virtue of article 1(3) thereof. It is glaring to add here that Additional Protocol I has expanded the definition of international armed conflict (IAC) to also include "armed conflicts in which people are fighting against colonial domination and alien domination and racist regimes" in accordance with article 1(4) of Additional Protocol II to bring them within the protection engendered by the spirit and purport of common article 2 of the Geneva Conventions. This Protocol abandons the concept of protected persons used in article 4 of the fourth Geneva Convention as it opted for an inclusive notion of civilians who are not combatants. It therefore follows that all the provisions of this Protocol aimed at protecting civilians are also applicable to IDPs especially under part IV of the Protocol, for instance under article 50 of Additional Protocol I.

On the other hand, non-international armed conflicts (NIAC) is described by common article 3 of the four Geneva Conventions as "... armed conflicts not of an international character occurring in the territory of one of the High Contracting Parties." Therefore its application is limited to armed conflicts which involves only armed forces of a state armed force of government opponent (belligerents) who are not combatants of another state's armed force occurring within the territory of High Contracting Parties (Solis, 2010). Article 1(2) of the Additional Protocol II clearly excludes internal disturbances such as riot, disorder and banditry from notion of non-international armed conflict and consequently same do not give rise to conflicts known to common article 3 of the Geneva Conventions.

The scope of application of common article 3 of the Geneva Conventions is strictly limited to a lower threshold of armed conflict. In other words, to determine whether a particular armed conflict is a non-international armed conflict or mere internal disturbance/violence two conditions relating to the nature of the conflict must be fully examined to wit: the intensity of the conflict and the organization of the parties to the conflict (ICTY, 1997:352). In other words, where the armed attacks are not 'sufficiently violent and protracted' and the non-state armed groups are not 'sufficiently organized' it is likely to be regarded as internal disturbance which constitute criminal acts punishable in domestic courts and in which case IHL rules of protection as envisaged in the Geneva Conventions and Additional Protocol II in respect of non-international armed conflict would be inapplicable.

It is important to note also that in non-international armed conflicts, common article 3 applies and perhaps Additional Protocol II apply and thus no other portion of the Geneva Conventions is applicable. Common article 3 of the Geneva Conventions is the sole article that deals with several kinds of internal armed conflicts in one single breadth namely- civil wars, insurrections and armed uprisings.

Common article 3 have attained customary international status as it guarantees humane treatment and applies to entire civilian population which also include IDPs (Pictet, 1952-9). It is therefore based on this reason *inter-alia* that it is often referred to as "Geneva Convention in miniature" (ICTR, 2001); Pictet, 1952-9). However to the extent that common article 3 establishes minimum yardstick of the rules of international humanitarian law applicable to internal and international and armed conflicts (ICJ, 1986), it is safe to submit that it applies across the range of armed conflict notwithstanding their characterization.

It is important to add that by reason of the changing nature in the methods of warfare, an internal armed conflict could turn out to an international armed conflict if armed troops intervene 'significantly and continuously' thereby making the provisions of Geneva Conventions regarding international armed conflict to apply to conflicts of non-international character (ICTY, 2006).

### **Protection Of Internally Displaced Persons In International Humanitarian Law**

Owing to the growing number of internal strife, generalized violence and gross human rights violations occurring within the borders of various states around the globe, multitude of people have been forced to leave their place of residence to elsewhere in search of safety and other livelihoods. This vulnerable persons are called internally displaced persons for reasons that their persecution has not taken them outside the territory of their own state. Internally displaced persons is authoritatively defined by the Guiding Principles on Internal Displacement 1998 following the appointment of the then Representative of the UN Secretary General (Francis Mading Deng) by the United Nations Commission on Human Rights. The Principles defines 'internally displaced persons' as "Persons who have been forced or obliged to flee or to leave their homes or places of habitual residence in particular as a result of, or in order to avoid the effects of armed conflict, situations of generalized violence violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognized State border" (GP, 1998: Para 2 & Kampala Convention, 2009:Art. 1k).

The above definition which is merely guiding and descriptive but not binding, incorporates two distinct legal criteria to wit; First, the involuntary nature of their flight and second, the fact that they have not crossed into the territory of another state. Though uprooted by similar causes akin to refugees, it is the internal/external dichotomy that is rightly used in distinguishing refugees from internally displaced persons who as a matter of law must be resident outside the shores of their own country at the material time when protection and assistance is sought (UN Refugee Convention, 1951: Art. 1 (2) A).

However, the extent of deprivations suffered by internally displaced persons is further heightened by the fact that in addition to absence of binding international legal protection, they are not like refugees who are under the direct responsibility of the United Nations High Commissioner for Refugees (UNHCR Statute, 1950, Para 8). Consequently, it becomes obligatory to fan for more concrete scheme of protection for this category of persons whose description failed to confer on them any special status in international law (Ladan, 2015).

Surprisingly internally displaced person (IDP) is not defined in international humanitarian law. However, civilians and non-combatants are clearly described therein as "...Persons taking no active part in the hostilities, including members of armed forces who have laid down their arms and those placed hors de combat by sickness, wounds, detention, or any other cause" (GC I-IV, 1949:Art.3)

The purpose of the definition of civilians in the foregoing provision is meant to generate an extensive meaning that would increase to the maximum extent, the breadth of humanitarian protection granted by the law on armed conflicts (Kolb & Hyde, 2008). Juxtaposing the position of IDPs especially in displacement caused by armed conflicts occurring within the territory of High Contracting Parties which are so described as "conflict of non-international character," for instance in Nigeria's North East region where government's armed forces are fighting the Boko Haram insurgency in order to suppress and if possible annihilate them (Akinbi, 2015), with the above statutory description, IDPs to the extent that they are not involved in hostilities would rightly qualify as civilians or non-combatants within the meaning of Common article 3 of the four Geneva conventions and article 4 of Additional Protocol II provided the determining criteria of level of intensity of attack and the organization of the non-state armed force (Boko Haram insurgents) suggests the existence of an internal armed conflict and not mere internal disturbances, such as violence, tensions and banditry (Cassese, 2004).

Aside from the foregoing, rules of international humanitarian law may also be applicable to situations of displacement caused by internal disturbances which are clearly outside its province where parties to the conflict agree to apply the same to conflicts beyond and above the formal prescription in accordance with articles 6, 6, 6 and 7 of the first, second, third and fourth of Geneva Conventions respectively.

### **Rules And Principles Of International Humanitarian Law Applicable To Situations Of Internal Displacement**

In the quest for sufficient if not adequate protection for victims of internal disturbances/violence below the threshold of armed conflicts under the Geneva Conventions and the Additional Protocol II and who are technically called 'internally displaced persons' as adumbrated above, states bears national responsibility for their protection and assistance for reasons that they are in the same pedestal with other citizens (Kampala Convention, 2009: Art. 5). This becomes more meaningful when existing norms for the protection for this vulnerable persons are domesticated into national laws and policies taking cue from the principles richly entrenched in international humanitarian law (Kampala Convention, 2009: Art. 7). It is gladdening to note that some of the principles encapsulated in international humanitarian law, which by way of analogy is applicable to internally displaced persons have acquired universal acceptance justifying their replications in the existing norms on internal displacement.

The prevention and prohibition of violations of these extant principles of international humanitarian law would indeed lead to gradual reduction of the depravities associated with situations of internal displacement as a result of violence that takes place within the borders of state in view of the fact that the triggering causes are potentially the same (ICRC, 2010),



notwithstanding the characterization of the conflict in question. Thus this section of the paper will in no particular order examine rules and principles as expressed in the Geneva Conventions and the Additional Protocols, and where necessary cross reference shall be made to both the Guiding Principles and the Africa Union IDP treaty to show extent of their restatements.

In another aspect, rules of international humanitarian law is of immense significance to the realization of protection needs of internally displaced persons insofar as the prevention and protection against unlawful and arbitrary displacements is concerned. Arbitrary displacement is a concept that is aptly employed in a number of norms relevant to internally displaced persons than in any other area of legal discourse, because of its potential as a catch-all-phrase for unlawful treatments which are considered not only to be disparaging but inhumane such as unlawful detention, forceful transfer and disappearance, killings-widespread or systematic, displacement by whatever cause etc. Even though individual branches of international law developed on separate paths, forced displacement in which the notion of arbitrariness resonates has become their common site of convergence (Fitzpatrick, 2000).

The protection of IDPs in non-international armed conflicts occurring within the territory of High Contracting Party against forced displacement in the form of deportation, mass transfers and evacuation is well provided for in article 49 of the fourth Geneva Convention. Civilians in similar circumstances are also protected against forceful displacement or object of attacks under articles 4(3) (e) and 17 (1) and (2) and 13 of Additional Protocol II respectively as replicated in article 7 (3) of the Kampala Convention.

International humanitarian law is greatly underpinned by the philosophical idea that notwithstanding the characterization of conflict, ultimate consideration shall be accorded to the need to protect civilians and non-combatants who are not involved in hostilities based on customary international law which is unequivocally influenced by the principles of humanity and obedience to public conscience derived from unwritten rules inherent in existing treaty law such as Geneva Conventions and Additional Protocols I and II. What is more, the preamble to Protocol I asserts to the effect that the Geneva Conventions of 1949 'are to be fully applied in all circumstances... without any adverse distinction based on the nature of origin of the armed conflict or on the cause s espouse by or attributed to the Parties to the conflict' (Green, 2000). In the erstwhile 1899 Hague Conventions II and 1907 Hague Convention IV, this minimum humanitarian guarantee is called the "Martens Clause."

The International Court of Justice (ICJ) in *Legality of Nuclear Weapons Case* (ICJ, 1996;226) which touches on the legality of threat and use of nuclear weapons reaffirmed the principles of civilian protection "as one of the cardinal principles contained in the texts constituting the fabrics of international law"(Hayashi, 2007).

It is therefore apt to note that based on the notion of civilian protection as evidenced from the provisions of Geneva Conventions, Additional Protocols I and II, Customary International Humanitarian Law rules, internally displaced persons as a result of armed conflict occurring within the territory of a High Contracting State qualify as civilian in this context necessitating their guaranteed right to safe return upon the cessation of hostilities in accordance with articles 49 and 147 of the fourth Geneva Convention, articles 51(7), 78(1) and 84(5) (a) of Additional Protocol, articles 4(3) (e) and 17 & of Additional Protocol II and Rules 129 and 132 of CIHL which are all of utmost relevance in this regard. The obvious problem with international humanitarian law's notion of guarantees against displacement is the fact that it focuses more on involuntary relocation rather than dealing in comprehensive term with situations of forced displacement during armed conflicts (Phoung, 2004).

The foregoing scheme of protection against arbitrary displacement is well restated in Principles 6(1) of the Guiding Principles to the effect that every human being enjoys an

inherent right to be protected against arbitrary displacement from his habitual place of residence. The principles extends the meaning of arbitrary displacement to also include engaging in large scale development projects among other acts listed under paragraph 2 thereof which endanger human lives during displacement. In similar vein, Kampala Convention also frowns at displacement predicated on arbitrary and unlawful grounds.

The Convention under the heading coined ‘prohibition and prevention of arbitrary displacement’ is in itself a significant innovation as article 4 thereof recognizes the right not to be arbitrarily displaced in a language that is more explicit and elaborative than in any other existing norms regarding internal displacement (Abebe, 2010; Alemayehu, 2010). For instance article 4 (4) (a – h) of this Convention have no equivalence in any other binding norms on internal displacement. In particular, the Convention provides against arbitrary displacement of people whose existence is dependent on land and declare that engaging in such prohibited acts of arbitrary displacement could amount to commission of international crimes ( Kampala Convention: 2009, Arts. 4 & 6). The Convention like the Guiding Principles provides that development projects could lead to arbitrary displacement under article 10 thereof.

It should be added that unlike Principle 9 (c) of the Guiding Principles, the Kampala Convention miss the mark in not providing for kind and purpose of projects envisaged under the Convention. The word “project” in the opinion of this researcher is too wide and thus amenable to multiple deceitful interpretations by those charged with such responsibilities. In the same vein, on question of necessity of the projects in the first place, the Convention similarly failed to employ the phrase ‘...compelling and overriding public interests’ used in the Guiding Principles to curb excesses of state actors and non-state actors. Under articles 2(4) and 3(1) of Great Lakes IDPs Protocol “member states are enjoined to prevent arbitrary displacement and to eliminate all root causes of displacement”.

Discrimination is one of the intense triggers of internal armed conflicts which could lead to massive displacement of people from one part of the country to the other when coupled with egregious violations of human rights. At the core of humanitarian law protection is the underpinning idea to treat all persons humanely and the right not to be discriminated against by whatever criteria. This entails the prevention and protection from forcible and involuntary displacement which is highly problematic in situations of internal displacement. In the course of precarious and complex situations, internally displaced persons have been thrown into, they are obligated not to be discriminated against because of their peculiar susceptibilities. The foregoing is richly underpinned also in the provisions of articles 3 and 27, articles 75 of Additional Protocol I, and articles 2(1) and 4(1) of Additional Protocol II, and Rules 1 and 7 of Customary International Humanitarian Law Rules (GP, 1998: Principle 4).

In addition to the foregoing, the general notion of civilian protection and assistance as provided for in the fourth Geneva Convention and Additional Protocols is more apt to IDPs as a result of internal armed conflicts ( Kampala Convention, 2009: Art. 7). In particular, IHL rules protects property and possession of civilians during hostilities against direct or indiscriminate attacks or pillage (GC IV, 1949: Art. 33) or from being used as a shield or destruction as a form as of reprisal attack or collective punishment (AP I, 1977: Arts. 51 &52). However, the protection envisaged here is in favor of those civilians who falls into the hands of another state and who are defined as ‘protected persons (GC IV, 1949:Art. 4 & Phoung, 2004:46). This is problematic because IDPs as a result of their plight lives within the borders of their own state and are not in the hands of the enemy state as it were and are not to be regarded as nationals of another state.

## Conclusion

The continuing rise in internal displacement due to armed conflicts and violence within the territory of states in most part of the world (IDMC/NRC- GRID: 2016) has made the significance of distinction between non-international armed conflicts and internal disturbances or tensions very doubtful as far as application of rules of international humanitarian law as evidenced in the Geneva Conventions and particularly in the Additional Protocol II insofar as it occurs within the territory of a high contracting party is concerned.

Granted that the exclusion of internal disturbances (riots, tensions and banditry) from the application of law of armed conflicts is anchored on the need to protect the integrity and sovereignty of states against interference in its domestic affairs, situation of internal displacement which is characterized as falling below the threshold of a recognizable armed conflict in international humanitarian law also constitutes threat to international and, regional peace and order. That the law of armed conflicts is state centric in view of its unhidden flair for upholding principles of sovereignty and equality of states deserve no further elaboration.

However, there are special procedures under the United Nations Charter dealing with the right of Security Council to intervene under Chapter VII as well as under the African Union's permissive or consensual right of intervention to deal with egregious violations of this nature which are admittedly domestic challenges (AU Constitutive Act, 2000: Art.4h) for reasons that such intervention or interference finds expression in the contemporary understanding that sovereignty also entails protection of subjects (Kuwali, 2010). The exercise of these collective measures in themselves could achieve two ends namely preventing widespread displacement in addition to safeguarding the sovereign integrity of states concerned.

It is no longer surprising to note that cases of disregard for common article 3 of the Geneva Conventions which governs non-international armed conflicts clearly outnumber instances of compliance as majority of states enmeshed in internal armed conflicts are not inclined to acknowledge the existence of common article 3 conflicts in their territory even though such recognition does not affect the legal status of the parties to the conflict as espoused in the final clause of Common Article 3 and also UK Ministry of Defense Manual They would gladly treat such internal violence as a form of rebellion to be dealt with in accordance with domestic penal sanctions. What is more annoying is the fact that High Contracting Parties are blindly vested the ultimate power to decide on when common article 3 conflict exists as well article 1(1) of Additional Protocol II. It is humbly submitted that the self-solicited function or better put, subjective determination of a vital decision of this nature on parties to the conflict is an over-bloated luxury that limits the relevance of IHL rules to internal disturbances or to put more simply violence that takes place within the territory of a High Contracting Party given the absence of mechanisms for international monitoring of states practices in this regard (Cassese, 2004: 33-4).

Strict adherence to the legal complications brought about article 1(1) of Additional Protocol II which introduced formalistic conditions such as intensity of the conflict, effective control of part of a national territory and an organized structure of the parties to the conflict (ICTR, 1998) would definitely renege on the purpose of the law in that it would heighten the threshold far beyond the parameters of internal armed conflict, not to mention of extending the same to internal disturbances which are clearly excluded. The negative delineation of non-international armed conflicts in Additional Protocol II without a corresponding definition of what amounts to internal disturbances and tensions leave much to be desired as its material scope of operation is bedeviled with lack of precision and in most cases the failure provides the cheapest line of defense for unwilling states against the application of international humanitarian law to conflict of low intensity due to attacks from non-state armed groups that

are not structurally organized even when it is glaring that such armed conflicts could present urgent needs for humanitarian intervention.

To this end, this paper concludes that all laws are created for the benefit of all human beings (ICTY, 1995: Para. 97) hence what is evil in international context should be dealt with the same blow at the domestic level. The nature of the parties to the conflict and character of conflict in question is of less practical significance. The interpretation of the threshold of international humanitarian law in the context of non-international armed conflict as applicable to civilian protection should be guided by the understanding of the purpose and object of international humanitarian law which is the provision of highest protection to victims of armed conflicts occurring within the territory of a High Contracting Party in particular (Vienna Convention, 1969: Art. 33) Where internal displacement is as a result of armed conflict, international humanitarian law based on its *raison de'être* (reasons for its adoption) in common article 3 ought to come in aid of victims so as to assuage their problems without unnecessary distinction.

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## AN EMPIRICAL STUDY OF THE DETERMINANTS OF THE DEMAND FOR LIFE INSURANCE IN SRI LANKA

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### Abstract

Life insurance plays an important role in managing personal risks of individuals and families and life insurance provides benefits to them when they need financial support at expected or unexpected happening of some events. However, households' demand for life insurance remains very low level in Sri Lanka. The aim of this research is to examine why Sri Lankan households with substantial income have low demand for life insurance plans. In this research, data was collected from a sample of 200 households selected through stratified random sampling technique and the collected data was analyzed using quantitative data analysis techniques. The research revealed that, 31 percent of the households have purchased and 49 percent of the respondents are willing to purchase life insurance products. Majority of the households have no good knowledge about life insurance products. Income of the households is one of the major factors affecting the demand for life insurance. Further, interest rates of the banks, bonus declared by the insurance companies and stability of the company and living costs of the households are the other factors affecting the demand for life insurance. However, households' perception is that, purchasing life insurance plans is a good solution for the economic problems faced in the future.

**Keywords:** *Personal risk, investment, life insurance, determinants for demand*

### Introduction

Life insurance is one of the most important financial instruments used to cover the risk of loss of income or earnings due to death of the life assured and an important saving and investment instrument for the future financial security. Therefore, estimation of life insurance need is essential in financial planning. The most important family needs include, education fund for children, emergency fund for unexpected contingencies, income during the dependency period, income during readjustment period, income to the surviving spouse, and income for the retirement (Rejda, 2008). Personal financial need approach attempts to determine the amount of life insurance that should be purchased based on analysis of needs of those who would suffer financial losses. Life insurance is one of the tools that may be used to meet the gap between the needs and available resources (Emmitt and Therese, 2003).

Life insurance is a legally binding contract between insured and the insurer. In exchange for payment of premium, the insurer agrees to pay specified death benefits to the beneficiary named in the policy if the death of the life assured occurred during the period of insurance (Trieschamann et al 2002). For many people, life insurance is most appropriate for dealing with the exposure of premature death of the life assured. However, many life insurance contracts also have benefits that may be payable due to circumstances other than death. Thus, a life insurance policy with a cash value can be used to save for other concerns, such as retirement, as well as to protect against the financial consequences of premature death.

Insurance Industry in Sri Lanka commenced with the advent of coffee and tea cultivation during the British colonial period. At the beginning, insurance was confined to marine cargo and fire insurance to cover tea and rubber factories. Life insurance was confined to foreigners and affluent people of the country (Wijenaike, 1998). However, the awareness of insurance was spread to the rural areas with the operating of branch offices by foreign insurers and with the entrance of local insurance companies to the market (Kanapathipillai, 1997). Foreign

companies continued their business operation in Sri Lanka even after the gaining its independence in 1948. By 1961, there were 122 foreign and local insurance companies in Sri Lanka and out of which 57 insurance companies transacted life insurance business (Kelagama et al, 1998). However, insurance fund generated by the foreign companies were remitted to their countries and they did not invest these funds in the country. Under these circumstances, the government made a policy decision to nationalize the insurance industry in Sri Lanka. Accordingly, Sri Lanka Insurance Corporation (SLCI) was established as the sole insurer to transact life insurance business in the country from 1<sup>st</sup> of January 1962 (Wickramasinghe, 1997).

Further, government opened the avenues for the private sector to enter into the insurance market from 1986. Accordingly, 3 insurance companies entered into the market in 1987 and subsequently many other private sector companies entered into the insurance market. Further, 80% of the foreign equity participation in insurance companies was permitted by the government in 2000 and the government permitted 100% foreign share holding in insurance companies from April 2002. At present there are 29 insurance companies operating in Sri Lanka and out of which 14 companies are transacting exclusively life insurance business while only the state insurer, Sri Lanka Insurance Corporation Limited is transacting both life insurance and general insurance business in the country.

### **Research Problem**

Although the life insurance is considered as one of the unique and most important financial instrument used in order to cover the risk of individuals, families and the society, life insurance products are not widely used by Sri Lankan households. While the insurance industry has fairly grown during the past few decades, the penetration rate of life insurance remains low at 0.46% of the GDP in 2014 with an average sum assured Rs. 4831. According to the Annual Report of Insurance Board of Sri Lanka (2014), the life insurance penetration as a percentage of total population has increased slowly from 10.7% to 12.6% during 2010 to 2014. The life insurance penetration as a percentage of total labour force has increased only by 2.3% during last 5 years. At present life insurance penetration as a percentage of total labor force in Sri Lanka is 29.6%. These statistical data indicate that, there is a large untapped life insurance market in Sri Lanka.

The penetration of life insurance premium as a percentage of GDP in some of the advanced countries; Switzerland 5.1%, United Kingdom 8%, Denmark 6.7%, Sweden 5%. In South Africa the penetration rate is 11.4%. It is in some of the Asian countries; Taiwan 15.6%, Hong Kong 12.7%, South Korea 7.2%, Japan 8.4%, Singapore 5.0%, Thailand 3.6%, Malaysia 3.1 and India 2.6%. The penetration of life insurance premium as a percentage of GDP in Sri Lanka is only 0.46% in 2014. Out of 88 countries Sri Lanka's rank is 77 in the penetration of total insurance premium as a percentage of GDP in 2014 (Sigma, 2014). Accordingly, it can be observed that the demand for life insurance in Sri Lanka is low compared with life insurance penetration as a percentage of DGP in many other countries in the world. Accordingly, the research problem in this study includes;

*Why household in Sri Lanka with sufficient income have low demand for purchasing life insurance policies as an alternative method of long term investment for their financial security in the future?*

### **Objectives of the Research**

The main objective of this research study is to examine why Sri Lankan households with sufficient income have low demand for purchasing life insurance policies. Accordingly, the specific objectives of this study include;



1. To examine the households' demand for purchasing life insurance policies.
2. To examine the most preference source of investment of the Sri Lankan households
3. To examine the factors considered by Sri Lanka households when they decide to purchase life insurance policies
4. Suggest some recommendation for the insurance companies to implement for increasing the selling of life insurance policies

### **Literature Review**

According to the Commission of Insurance Terminology of the American Risk and Insurance Association, "*Insurance is the pooling of fortuitous losses by transfer of such risks to insurers, who agree to indemnify insured for such losses, to provide other pecuniary benefits on their occurrence, or to render services connected with the risk*" (Rejda, 2008). This definition indicates that, an insurance arrangement typically includes the characteristics; pooling of losses, payment of fortuitous losses, risk transfer and indemnification. Insurance cannot eliminate or reduce the uncertainty of the individual as to whether the event will occur, nor does it alter the probability of occurrence, however insurance does reduce the probability of financial loss connected with the event (Emmitt & Therese, 2003). Accordingly, insurance is an economic device where by individuals transfer their risks of large financial losses to the insurers for a small cost that is the premium.

The risks which are directly affected for the individuals are the personal risks. They involve the possibility of loss of earnings or reduction of earned income, extra expenses, and the depletion of financial assets. There are four major personal risks; (1) Risk of premature death, (2) Risk of insufficient income during retirement (3) Risk of poor health and (4) Risk of unemployment (Rejda, 2008). However, Harrington and Niehaus (2003) classify personal risks into six categories such as earning risk, medical expense risk, liability risk, physical assets risk, financial assets risk, and longevity risk. Earning risk refers to the potential fluctuation in a family's earnings, which can occur as a result of a decline in the value of an income earner's productivity due to death, disability, ageing, or change in technology.

The main objective in managing personal risk is to avoid the deprivation of the individual and those dependents on him or her in the event of a loss that causes the termination of income. Achieving this objective generally the income that would be lost as a result of death, retirement, disability or unemployment. Insurance is a common approach to replacing such income (Emmitt & Therese, 2003).

Yaari (1965) was the first to develop a theoretical framework to explain the determinants for the demand for life insurance (Beck & Webb, 2002). He developed the 'life-cycle utility model' to explain the behavior of consumers in optimizing consumption and optimizing long term saving plans. According to Yaari's theoretical framework, the demand for life insurance is a function of wealth, expected income over an individual's life time, the level of interest rate, the cost of life insurance policies (administration cost of life insurers) and to assumed discount rate for current over the future (Kjoseski, 2012). Lewis (1989) has further developed the Yaari's theoretical model extending preferences of beneficiaries and dependents in to the life-cycle utility model. As shown by Lewis (1989), the demand for life insurance depends on the needs of spouse, dependents and beneficiaries. Accordingly, the dependency ratio, family size, age, education level, gender and the marital status etc affect for the demand for life insurance. Beck and Webb (2002) state that, there will be a positive correlation between the education and the demand for any type of life insurance products. Higher level of person's education may cause to understand the benefits of life insurance products and long term savings for managing the risk associated with the person himself. Outreville (1996) states that, individuals with higher level of education are more aware of risks and the significance of

managing the risks. Burnett & Palmer (1991) find that number of children is one of the positive significant variables for the demand for life insurance. However, Anderson & Nevin (1975) found that there is no significant relationship between family size and the demand for life insurance.

Life cycle hypothesis of Ando & Modigliani (1963) reveals that, income of the individuals varies with the life style and their savings including demand for life insurance differ according to the age level. However, Gandolfi & Miners (1996) find that there is no significant relationship between age and the demand for life insurance product. Gandolfi and Miners (1996) predicts that, demand for life insurance could vary among men and women based on difference in lifetime. Following the assumption that the demand for insurance is increasing with the probability of death and the fact that men live shorter than women, they will demand insurance. Marital status has also been found as an influencing factor for the demand for life insurance from both the individuals and households. Mantis & Farmer (1968) expected that, married men would spend more money on life insurance than single men. But the result of the analysis has indicated negative relationship between marriage and the demand for life insurance.

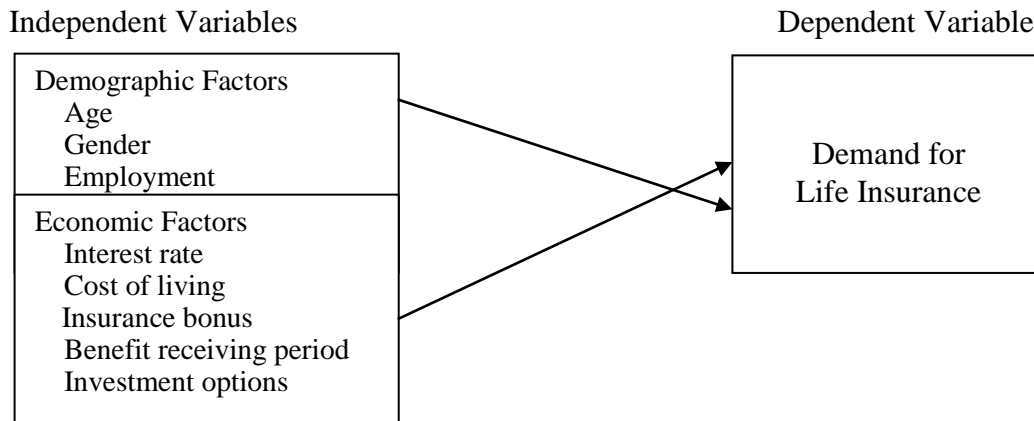
Redzun (2014) examines that, income is one of the most important determinants for the demand of life insurance consumption. The ability to pay life insurance premium mainly related to the level of income. Life insurance becomes more affordable when income grows. Beck and Webb (2002) state that, an individual's consumption and human capital typically increase along with income, creating a greater demand for life insurance. Hwang and Gao (2003) predict that, the premature death of a breadwinner with a high level of income may be likely to give rise to a greater loss of future income than that of a breadwinner on a lower level. Browne and Kim (1993) and Outreville, (1996) argue that inflation has a dampening effect on the amount of insurance purchased in a country, and erodes the value of life insurance, making it a less desirable good. However, Beenstock et al (1986) state that, rich people do not need insurance protection, and poor people have limited demand because they operate under budget constraints. Accordingly, they predict that, the middle class people have the greatest interest in life insurance products due to having a level of income from which these products become affordable.

Interest rate effects for the demand for life insurance in two different ways. The theory predicts that, a higher level of real interest rates increases life insurer's investment returns and in turn, they can offer improved profitability for potential purchasers of life insurance policies (Beck and Webb, 2002). However, Lenten and Rulli (2006) predict that, rise in interest rates might reduce the purchase of life insurance as higher returns on alternative financial assets may switch consumers from savings in life insurance to another type of investments. Outreville (1996) and Beck and Webb (2002) state that anticipated inflation has a negative impact of the demand for life insurance consumption.

Institutional framework, political and legal stability are most important determinants for vibrant and growing demand for life insurance. Kjosevski (2012) state that when the legal system and political system are stable, the higher will be the willingness of contracting parties to initiate life insurance business. Beck and Webb (2002) suggest that, if fraud is common in claims reporting, then the insurance mechanism will become prohibitively costly for a large part of the population. In Sri Lanka, even after gaining its independence many insurance companies sprang up to mobilized premium through life insurance and frequently disappeared due to lack of insurance legislation in the country to control the activities of insurance companies. This situation was lead to nationalize the insurance industry in Sri Lanka in 1961 (Wijenaike, 1998).

**Conceptual Framework**

In this research, the conceptual framework is developed based on the factors determining the demand for life insurance. In this case, mainly demographic factors such as age, gender, employment, education (knowledge), and level of income, are taken into consideration. Further, economic factors such as interest rate, cost of living, insurance bonus, benefit receiving period and alternative investment options are taken in to consideration in this research. However, social factors and institutional factors are not taken for the data collection and the analysis. Accordingly, conceptual framework of this study is shown in figure 1.



**Figure 1: Conceptual Framework**

**Development of Hypothesis**

In this study hollowing hypothesis were developed to test the relationship between variables.

- Hypothesis 1: There is a direct relationship between age and demand for life insurance plans
- Hypothesis 2: There is a direct relationship between the income level and the demand for life insurance products
- Hypothesis 3: There is a direct relationship between the bonus declared by the insurance companies and the demand for life insurance plans
- Hypothesis 4: The urge of the people to purchase life insurance plans decrease when living cost is high
- Hypothesis 5: There is a direct relationship between purchasing insurance policy and expectation to receive the insurance benefits while they live than after death

**Research Methodology**

The research approach adopted in this study was quantitative method which comes under positivism research philosophy. Bryman and Bell (2007) suggest that, positivism advocates the applications of the methods to the study of social reality. The problem of the research and the objectives of this study are directly related a socio economic phenomena, i.e empirical study on the determinants of the demand for life insurance. In this study, a sample of 200 households was selected from Gampaha District. According to the nature of the research problem and objectives, the researcher decided that the participants of this sample should be in the age between 30 -60 years with more than Rs. 10,000 monthly income. The reason for selecting this age group is that the researcher assumed that, adult people in this age group should have a proper plan for how to manage their personal financial risk in the future. According to the information of the Department of Census and Statistics in 2010, Gampaha District consists with 85.4% rural population and 14.6% urban population. Accordingly the sample was selected to represent 85.4% rural population and 14.6% urban population. Further

equal opportunities were given to both male and female to participate in this sample survey. Stratified random sampling technique was adopted to select the sample and the face-to-face interview using interviewer administered questionnaire was used to collect primary data. SPSS was used to analyze the data. Mean and standard deviation used to interpret the result of findings and correlation analysis was adopted to analyze the relationships between variables. Further, t test, chi-square test and Spearman's correlation test were applied to test the hypothesis.

**Data Analysis and Presentation**

The research problem of this study indicates that, vast majority of the working age population has not covered by life insurance in Sri Lanka. The life insurance penetration as a percentage of total labor force is very low and only a minority of the workforce has obtained life insurance policies. The aim of this section is to analyze the primary data collected from the households to achieve the research objectives. Primary data collected from the sample of 200 households from Gampaha District is analyzed using SPSS software application.

1. Preferred Source of Investment

In this research, data was collected to examine the households' perception to invest their present money to get benefit in the future. The respondents were asked to state their first preference, second preference and third preference etc; for each source of investment and the result is shown in the Table 1.

Table 1: Preferred source of investment

Preferred investment source	Preference Percentage (%)		
	1st preference	2nd preference	3rd preference
To invest in life insurance	4.0	19.5	31.0
To invest in fixed deposits in banks	66.0	20.0	8.5
To invest in companies' shares	3.0	7.5	13.5
To invest in Government Securities	3.5	12.5	17.0
To invest in lands and buildings	20.0	35.5	18.5
Other	3.0	5.5	4.0

Table 1 indicates that majority of the respondents (66%) most prefer to invest their additional funds in fixed deposits in banks and 20% of the respondents are willing to invest their extra money in lands and buildings. Respectively, 3% and 4% of the respondents are willing to invest in companies' shares and Government Securities. Only 4% of the sample most prefer to invest in life insurance. However, Table 1 indicates that, 50.5% of the sample has given second or third preference to invest their money in life insurance. These data indicate that, more than 50% of the income earners can be encouraged and promoted to purchase life insurance products.

2. Demand for Life Insurance Products

The results reveal that, 31 percent households of the sample have purchased life insurance policies. According to the Insurance Board of Sri Lanka (2014), penetration of life insurance as a per cent total labor force is 29.6 percent. Life insurance penetration of the sample indicates that it is consistent with national level of life insurance penetration as a percentage of labor force. Further, the result reveals that, 49 percent of the respondents are willing to purchase any type of life insurance policy.

3. Demographic Factors Affecting the Demand

a. Effect of age

The following hypothesis was developed and it was tested using Chi-square technique to statistically analyze the significance of the relationship between age and the demand for life insurance and the result is indicated in Table 2.

Hypothesis 1: There is a direct relationship between age and the demand for life insurance plans.

**Table 2: Relationship between age and demand for life insurance products**

	Value	Asymp. Sig. (2-sided)
Pearson Chi-Square	27.056 <sup>a</sup>	0.134
Likelihood Ratio	30.772	0.058
Linear-by-Linear Association	1.646	0.199
N of Valid Cases	200	

Because chi-square value is not significant at 5% error level, there is no association between age and the demand for life insurance. Therefore, we can reject the hypothesis 1. Accordingly, it can be concluded that demand for life insurance does not significantly vary with the age between 30 - 60 years.

b. Effect of the gender

Data was analyzed using Cross Tabulations of Descriptive Statistics to examine the effects of gender for the demand for life insurance products from the households and the results are indicate that, 46 percent of the female and 54 percent of the male were willing to purchase life insurance products. Accordingly, it is observed that, the demand for life insurance by male is slightly higher than the female. However, there is no significant difference between the male and female for the demand. Accordingly, it can be concluded that, there is no substantial effect of gender for the demand for life insurance.

c. Effect of employment status of the insured households

Primary data was analyzed using cross tabulation of descriptive statistics to examine the employment status of the households who have purchased life insurance policies. The result of cross tabulation indicates that, out of 200 households, 61 (31 percent) persons have purchased life insurance policies. Out of them, 23 percent of the respondents are public sector and 46 percent private sector employees. Further, 23 percent of them are self-employees and only 8 percent of them are business people. Accordingly, it is observed that, private sector employees are most preferred to purchase life insurance products.

d. Effect of insurance knowledge of the households.

Insurance knowledge of the customers about the product and the making awareness about the product by the marketers are important for promoting the customers to purchase the life insurance. The mean value 3.07 obtained for the statement “*I have a good knowledge about life insurance products*” based on 5 point Likert’s scale indicates that, most of the respondents are indifference regarding their knowledge about life insurance plans. It was revealed that 8 percent and 26.5 percent of the respondents respectively strongly agree and agree that they are having good knowledge about life insurance plans. However, the majority of the respondents are not having good knowledge in this regard.

e. Effect of the households’ Income

The mean value 4.41 and the std. deviation 0.643 obtained for the statement of “*If I purchase a life insurance plan, I concern about my income*” based on 5 point scale Likert’s scale indicate that, vast majority of the respondents is very much concern of their income when they purchase life insurance plans.

The result was revealed that 94.5% of the respondents’ perception is their income greatly affects for their demand for life insurance products. Further, following hypothesis was developed to examine the relationship between income of the households and demand for life insurance products.

Hypothesis 2: There is a direct relationship between the income level and the demand for life insurance products

Spearman’s Correlation technique was applied to examine the relationship between monthly income of the households and their demand for life insurance. The result of the correlation test is shown in Table 3.

**Table 3: Relationship between income and the demand for life insurance**

Correlations		If I purchase a life insurance plan, I concern about my income
like to purchase life insurance plans	Pearson Correlation	.136
	Sig. (2-tailed)	.054
	Covariance	.091
	N	200

Because of correlation is significant at the 5% error level, there is an association between income of the respondents and the demand for life insurance plans. Therefore, we cannot reject the hypothesis 2. Accordingly, it can be concluded that, there is a direct relationship between income of the households and the demand for life insurance. It is important to note that, there is no association between monthly income distribution of the households and the demand for life insurance plans. Accordingly, it can be concluded that, life insurance plans should be designed by the insurance companies to match with all the people who belong to different income categories.

4. Economic Factors Affecting the Demand for life insurance

a. Effect of the interest rates of banks

The mean value 3.99 and the std. deviation 0.865 of the responses obtained for the statement of “*If I purchase a life insurance plan, I concern about interest rates of the banks*” based on 5 point Likert’s scale indicate that, majority of the respondents concern about interest rates of banks when they purchase insurance retirement plans. As a percentage, 81 percent of the respondents strongly agreed or agreed with the statement that banks interest rates affect for their demand for life insurance.

b. Effect of the insurance bonus

To examine the relationship between insurance bonus and demand for life insurance plans, following hypothesis was tested applying the Spearman’s Correlation technique to examine the relationship between bonus declared by the insurer and the

demand for life insurance plans. The result of the correlation test is shown in Table 4.

Hypothesis 3: There is a direct relationship between the bonus declared by the insurer and the demand for life insurance plans

**Table 4: Relationship between declared insurance bonus and the demand**

Correlation		If I purchase a life insurance plan, I concern about the bonus declared by the insurers for such plan
Spearman's rho	I like to purchase a life insurance plan	Correlation Coefficient Sig. (2-tailed)
		.123 .083

Table 4 shows that correlation is significant at the 5% error level. Therefore we cannot reject the hypothesis 3. Accordingly it can be concluded that, there is an association between bonus declared by the insurers and the demand for life insurance.

c. Effect of the living expenses

To examine the relationship between living expenses and the demand for life insurance plans the following hypothesis was tested applying the Spearman's Correlation technique to examine the relationship between living cost and demand for life insurance plans. The result of the correlation test is shown in the Table 5.

Hypothesis 4: The urge of the people to purchase life insurance plans decrease when living cost is high

**Table 5: Relationship between living expenses and the demand for life insurance**

Correlation		My urge to purchase a insurance plan will decrease when living cost is high
	I like to purchase life insurance plan	Correlation Coefficient Sig. (2-tailed)
		-.129 .070

Table 5 shows that, correlation is significant at the 5% error level. Therefore, we cannot reject the hypothesis 4. As a percentage, 98.5 percent of the respondents agreed that, they concern about their living expenses when they purchase life insurance. Accordingly it can be concluded that there is an inverse relationship with the living cost and the demand for life insurance.

5. Benefit receiving period

Benefit receiving period is also one of the factors affecting the demand for life insurance. The mean value 4.04 and the std. deviation 0.974 for the responses to the statement of *"My expectation from insurance is to receive the benefit while on live than after death"* obtained based on the 5 point Likert's scale indicates that majority of the respondents' expectation is to receive the life insurance benefits while they live rather than after their death. Results revealed that, 80.5 percent of the respondents strongly agreed or agreed that, their expectation is to receive insurance benefits while on live than after their death.

To examine the expectation of the respondents to receive the insurance benefits while they live, the hypothesis 5 was tested using Chi-square technique and the result is shown in Table 6.

Hypothesis 5: There is a direct relationship between purchasing insurance policy and expectation to receive the insurance benefits while they live than after death

**Table 6: Purchasing insurance policy and expectation to receive the benefits**

	Value	Asymp. Sig. (2-sided)
Pearson Chi-Square	30.732 <sup>a</sup>	.015
Likelihood Ratio	33.974	.005
Linear-by-Linear Association	.855	.355

Because chi-square value is significant at 5% error level, there is an association between purchasing insurance policy and expectation to receive the insurance benefits while they live rather than after their death. Therefore, we cannot reject the hypothesis 6. Accordingly, it can be concluded that, people most prefer to receive the insurance benefit while they live than after death.

## **Summary, Recommendation and Conclusion**

### **1. Summary**

Life insurance is a legally binding contract between insured and the insurer. In exchange for payment of premium, the insurer agrees to pay specified death benefits to the beneficiary named in the policy if the death of the life assured occurred during the period of insurance. Many life insurance contracts also have benefits that may be payable due to circumstances other than death. Thus, a life insurance policy with a cash value can be used to save for other concerns, such as retirement, as well as to protect against the financial consequences of premature death.

Unforeseen longevity may cause equivalent problems if resources cannot provide an adequate income on retirement. Providing a life time annuity for survivors is one of the important features of life insurance. Therefore, life insurance is suitable for protection of the individuals and his or her dependents against undesirable financial consequences of premature death and superannuation (retirement) of the insured. Personal financial need approach attempts to determine the amount of life insurance that should be purchased based on analysis of needs of those who would suffer financial losses. Life insurance is one of the tools that may be used to meet the gap between the needs and available resources.

Though life insurance is considered as one of the unique and most important financial instrument used in order to cover the risk of individuals, families and the society, life insurance products in Sri Lanka are still not used widely. While the insurance industry has fairly grown during the past few decades, the penetration rate of life insurance remains low. The life insurance penetration as a percentage of total labor force has increased only from 2.3 percent during last 5 years.

The penetration of life insurance premium as a percentage of GDP in some of the advanced countries and, in some of the emerging countries remains substantially higher level. However, the penetration of long term (life) insurance premium as a percentage of GDP in Sri Lanka is remains only as 0.46% in 2014. Out of 95 countries Sri Lanka's rank is 89 in penetration of long term (life) insurance premium as a percentage of GDP in



2013 (Sigma 2014). Accordingly, it can be observed that the demand for life insurance in Sri Lanka is low compared with life insurance penetration as a percentage of GDP in other countries in the world. Accordingly, the research problem in this study includes; “why household in Sri Lanka with sufficient income have low demand for purchasing life insurance policies as an alternative method of long term investment for their financial security in the future”? Accordingly, it is very important to find the reasons for low demand for life insurance in Sri Lanka. This study will be more important for the insurers to identify the determinants of the demand for life insurance products in Sri Lanka and to identify the strategies which can be implemented by the insurers to promote purchasing life insurance products by Sri Lankan households.

The main objective of this research study is to examine why Sri Lanka households with sufficient income have low demand for purchasing life insurance policies. Accordingly, the specific objectives of this study include; examine the households’ demand for purchasing life insurance policies, examine the most preference source of investment of the Sri Lankan households, examine the factors considered by Sri Lankan households when they decide to purchase life insurance policies and suggest some recommendation for the insurance companies to implement for increasing the selling of life insurance policies.

One of the important objectives of this study was to examine the demand for life insurance plans. Accordingly, an attempt was made to identify the demand for life insurance. It was revealed that 49 percent of the respondents are willing to purchase life insurance and 51 percent did not like to purchase life insurance.

This research reveals private sector employees and self-employees most prefer to purchase insurance retirement plans, demand from the public sector employees for this product is very low. Gender differences do not affect the demand and age groups 30 -50 years are the most critical age group to purchase this product.

In this research it was revealed that, majority of the respondents are not having a good knowledge about life insurance plans and they have not been made aware of the agents in this regards. However, peoples’ perception is that, purchasing life insurance policies is a good solution for the economic problems faced in the future.

Another objective of this research was to examine the factors considered by the people when they purchase life insurance products. It was revealed that, income of the people, interest rates of the banks, bonus declared by the insurance companies and living costs of the people have a major influence on the demand for life insurance. Further, it was revealed that, stability of the insurer is also one of the other important factors considered by people when they decide to purchase the product. In this research it was found that, majority of the respondents prefer to purchase insurance products from public sector insurance companies. Accordingly, it can be concluded that, public sector insurance companies have more opportunities to promote this product.

## 2. Recommendations

Since there is a very good potential demand for life insurance plans, insurance companies should design their products to match with the customers’ requirements and promote the product. For this purpose, the following suggestions are recommended by the researcher to insurance companies.

- a. Make aware the general public through advertising using mass media and sales promotional campaigns with field force.
- b. Encourage both male and female potential customers as there is a demand for the retirement plans equally from male and female parties.

c. Training of agents and upgrading their knowledge, skills and competencies to understand the product features of life insurance plans, promote and encourage them to sell this product.

d. Rewarding the loyal customers for payment of premium for a longer period of time.

Following suggestions are recommended for the Government to promote life insurance plans as such promotions will be positively affecting to reduce the burden of the government for providing social security.

a. Make awareness programs by the government through Insurance Board of Sri Lanka, to enhance the knowledge of the general public regarding the importance of purchasing life insurance plans for the financial security in the future.

b. Provide tax relief by the government for the life insurance funds of insurance companies and tax relief to the people for payment of premium for the life insurance plans.

### 3. Research Limitations

In this study it was revealed that, most of the people do not aware about different types of life insurance plans and benefits of such plans. Therefore, the researcher had to make aware some of households before obtaining their views on life insurance plans. Accordingly less knowledge of the respondents about life insurance was one of the limitations in this study.

The budgetary constrain was another main limitation of this research. Though, surveys are useful and powerful in finding the answers for the research questions, due to budgetary constrain, researcher selected the samples of 200 households to collecting data. However, the sample was selected to represent rural, urban, industrial and coastal areas. Time constrain was another limitation of this study. Some times researcher had to spend about one hour to interview one household. Researcher had to collect data, analyze the data and write the project report within six months. Therefore, it was a huge challenge completes this task due to other official commitments.

### 4. Conclusion

In this research it was revealed that, majority of the respondents are not having a good knowledge about life insurance plans and they have not been made aware by the insurance agents. However, households' perception is that, purchasing life insurance plans is a good solution for the economic problems faced in the future.

Income of the households is one of the major factors affecting the demand for life insurance. However, the income distribution has no significant impact on the demand. Mainly income level of the households has greater effect on the demand. Interest rates of the banks, bonus declared by the insurance companies and living costs of the households are the other factors affecting the demand for life insurance. Stability of the insurer is also one of the other important factors considered by households when they decide to purchase the product. If life insurance plans are purchased, majority of the households most prefer to purchase it from public sector insurance companies.

At present, 31 percent of the households have purchased life insurance policies. However, more than 48.5 percent of the households are willing to purchase life insurance products. Accordingly, there are many potential buyers and untapped market in the field of insurance. Since majority of the households are not having good knowledge about life insurance plans, making more awareness programs by the insurers and the Insurance Board of Sri Lanka will positively effect to enhance the preference of households to purchase this products. Tax concessionary and other supportive actions by the government will also progressively affect the households' demand for life insurance.

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## CAPITAL STRUCTURE IMMUNIZE OR INFECT VALUE OF THE FIRM

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### Abstract

The study examines the capital structure that envisages firm immunizes or infects the firm value and tends to prefer risk minimized and higher return structure across the industries. Finance strategy is equated widely with crafting and maintaining a profitable fit between the finance need and the disbursement of firm investment. Capital structure and value of the firm are yet another debatable and famous issues in the field of finance. Therefore, continuous efforts of research can be seen with the main objective of determining optimal capital structure levels for firms to maximize the value. In addition, capital structure decisions play an important role pertaining to firm's stability, profitability and strength in carrying out its operations in the long run. In light of three successive factors, effectiveness and efficiency of capital structure related decisions are critical for managers to create value for the firm. This study examines the level of optimal capital structure to be maintained by a firm with a view to enhance the value of firm. Study highlights by observing that if external sources of finance are costly to firms than internally generated funds., there will typically be a benefit to investment which adds value to the extent that it helps ensure that a firm has sufficient internal funds available to take advantage of attractive investment opportunities. Study delineates how these financing strategies should depend on such factors as shocks or shift to investment and financing opportunities which leads to maximize the value of the firm.

**Keywords:** *Value of the firm, Optimal Capital Structure, Stability, profitability, strength*

### Introduction

Business unit stakes financing management very seriously, many of authors found that financing management is ranked as one of their most important activities. It helps to contributes prominent value to the economy, deprived of additional value to the economy. Given its real world prominence, one might guess that the topic of capital structure would command a great deal of attention from policy makers, and practitioners would therefore have a well-developed body of wisdom which to deal in setting financing strategy. Unfortunately, finance theory has had much less clear cut guidance to offer on the logically prior questions of financing strategy. What sorts of risk should be financing strategy? Should managers be optimizing financing strategy? What kind of instruments will best accomplish the financing objectives? Finding solution to these questions is difficult because, paradoxically, the same arbitrage logic that helps the refining company decide option relates deltas also implies that there may be no reason for it to engage in financing activity in the first place.

As an ultimate objective of the firm is shareholders wealth maximization, it is most important and necessary activity of the firm managers. In this process, firm effort to maintain maximum return and minimum risk by achieving the wealth maximizations. In the making decisions about the capital structure in the firm, it should consider wealth maximization as well as any other decisions. Any types of firm has own capital structure its entire capital provided his owners, this kind of firm called unlevered in the financial literature. On the other hand, firm entire capital capitalized by debt holders which is called levered firm.

Real business environment there is no pure levered or unlevered firm; it has capitalized proportionately by owners and debt holders.

In order to achieve firm ultimate objective, it is noted that there are number of potential rational to explain why firm might wish to use certain financing strategy. However, it seems fair to report that there is not yet unique, accepted framework which can be used to be guide for setting capital structure strategies. In this paper, researcher illustrates how financing strategy can be designed in a variety to setting towards the optimal capital structure. In order to achieve this study was built on one strand of the past work on financing that examine the implication of ownership, capital structure ant its determinants, product market and capital structure, non-debt tax shield and value of the firm. Extensively speaking, this study argues that if capital market imperfections make externally obtained funds more expensive than those generated internally, they can generate a rationale for financing strategy and it helps to achieve firm stability, profitability and strength.

The basic implication of this argument can be understood as follow. If the firm is unable to select proper financing strategy for capital structure there will be some variability in the cash flows generated by the resources in place. Simple accounting implies that this variability in firm internal cash flow may affect in either; (a) variability in income generated externally or (b) variability in expenses can be identify in generally in term of decreasing return. If the supply of external finance were perfectly elastic, the optimal expected solution of external finance would be to leave external financing plans not affected in the face of variations in internal cash flows, taking up the entire gap by changing of the amount of external finance raised. However this mechanism no longer works well if the marginal cost of funds goes up with the financing externally. On the other hand financing plane may be trade off with some increase in external financing, but some decrease in investment as well. However, available finance influences both investment and financing plan in a way that is costly to the firm. Strategic approach can reduce certain variability in financing; in can impact increasing the value of firm. The model that study develops following section is much in the valued in the above argument. However, it takes the argument several steps rather than direct that there is a role for financing strategy; study is able to show how a firm's optimal financing strategy implement depends on the nature of its investment and financing policies. Further, study illustrates how a well-designed financing strategy can enable a firm to optimally coordinate its investment and financing policies. Ultimate expected results of the financing policy are fulfilling the shareholders objectives.

Acceptable and extremely valid legend of the shareholder is gained maximum benefit to its interest, thus mangers of the firm is to achieve maximum value of the firm as an agent of the owners. Capital structure and value of the firm related decisions are extensive decisions of any kind of company. Thereby all business community should identify that impact of capital structure and value of the firm. Main activity in the managers to the firm is capital structure related decisions. It comprises fund raising and investment. Firm investment capital consists with two main devices which are debt and equity capital. According to Myers (1984), Bowman (1980), and Gupta, (1968) revealed that there is two folders of equity capital divide into retain and public offering.

It depends on firm's preference or capital requirement. The firm capital structure include long term debt, short term debt, common stock, preference stock and debenture etc. Above financial aspects are major of financing plan, which are invested by the various types of investments. An also that return explains to stakeholders about company preference. Therefore these are most important factors to study. Main problem for this study is how much investment both debt and stock should be obtainable? How can govern optimization capital structure by achieving maximum level of value of the firm? Above two researchable issues interest any researcher attention.

### **Ownership, Capital Structure And Its Determinants**

The growth of privatization, deregulation, international businesses, global competition and new information and production technology has changed the world of management accounting. These changes have special implications for transitional and newly industrialized or emerging economies. There are various theories and models regarding to the capital structure and firm value enlighten. Modigliani and Miller (1958) has provided basis for the modern thinking on capital structure and shows the impact of debt-equity ratio on firm value. This made two propositions under perfect capital market condition. As stated before, there has been extensive research and examines the determinants of capital structure and value of the firm both in developed and emerging economics (Modigliani and Miller, 1958; Nasirzade & Mostaghiman, 2010; Banerjee and Bowman, 1980; Bredly, Jarrell, and Kim, 1984; Gupta, 1968; Zhao Bei and Wijewardan 2012). There are various theories and models regarding to the capital structure and firm value enlighten.

This made two propositions under perfect capital market condition. A first proposition is related to the value of firm and capital structure introduced by Modigliani and Miller (1958) that shows value of firm is independent from its capital structure. In the second proposition mentions one thing regarded to cost of capital which is investment cost per capital. It mentions cost of equity plus or debt capital. Indirectly that implies the financial risk. According to Pandey (2004) states that the capital structure decision of a firm influences its shareholders return and risk. Because of it, the market value of its shares may be affected by the capital structure decision (Antoniou, Guney and. Paudyal (2002); Zhao Bei and Wijewardana (2012). The research are expected to do by using with assumption of that capital structure has significant influence on company Market Value Ratios mainly. Normally, Capital Structure consists with debt and equity. Due to debt and equity can influence the value of firm. The determination of capital structure of a company is difficult task. Therefore the selection of capital among the debt and equity can impact to value of the firm. Value of the firm consists with market value of debt capital and market value of equity capital. The return of capital structure can influence to value of the firms.

### **Product Market And Capital Structure**

Theories of Modigliani and Miller theory, trade off theory, pecking order theory and agency cost theory have been discussed one aspect of capital structure. These models based on the idea that the choice of debt in the first stage of the financing strategy as a commitment to successive output strategies in the second stage, in which product market competition revenue takes place, have traditionally been developed in an input output product level choice quantity competition setting. These models invent the seminal work of Brander and Lewis (1986), moreover as studies by Maksimovic (1988, 1998) and Glazer (1994). In the conceptual concept of Cournot competition model, debt pledges firms' shareholder to be a more cost leader market behavior and equilibrium debt levels are positive, even in the presence of agency costs of debt and in the absence of tax-related and other benefits of debt (Evgeny and Lyandres, 2006). Alternative conceptual model of oligopolistic competition is Bertrand-type product price competition and product capacity cost price competition. Further, show that the alter study cost price competition, company select debt in maximum point of equilibrium level if the uncertainty and risk is product demand related. However, if product costs are uncertain and risky, debt conveys a strategic disadvantage and is not select in equilibrium. On the other hand, the contrary result for the case of product capacity level cost price.

Similar to most pre commitment models the static model developed here has two stages. First, companies operate the market and select their financial structures. The latter are concise by the face values of debt maturing lastly. Each firm's owners set out their firm's debt level with

considering the ultimate objective of maximizing the value of the firm while charming the company's own and its competitors' consequent product output market strategies. Finally, the owners of each firm select company product output market strategy before examine the firm's cash flow. The comprehension of the insufficient, together with the product output market strategies select by the company and by its competitors, determines whether the firm is solvent. If the comprehension of the insufficient above value, the firm is solvent; it repays its debt and distributes the residual cash flow to its shareholders. If the realization of the shock is below the threshold value, the firm's cash flow equals zero, which leads to solvent. The analysis of strategic debt choices is developed in a duopolistic frame. However, varying the contact constraint that is prominently interest rate, which pronounces the amount to which company's selects move their competitor's market value, assists studying the relation between the amount of competitive contact among firms in product output markets and their optimal operating strategies and capital structure choices. All the findings of the model with respect to relations between the contact variables and company's optimal financial and operating leverage continue complete in a more than two company setting.

The model's setup allows examining the effects of the amount of competitive contact on company's financial and operating leverage decisions, as opposed to opinion on one of the probable determinants of the level of contact. The inclined will be settled by finding but perfect equilibrium still unsolved issues. The strategic effect of debt follows in the market from the fact that after the debt levels have been selected. However company's shareholders take only the cash flows stable and sufficient conditions considered if company selects their operating leverage strategies (Harris and Raviv 1991). Thus, debt serves as an assurance device to select a more aggressive operating leverage strategy in the final stage of the strategy.

### **Non Debt Tax Shield and Value of the Firm**

One of complicating issue for today financial managers is relationship between components of capital structure and mixture of loan and stock for financing. Regarding these issues that capital structure effects on investment projects with positive or negative current value by accept particular investment. In this circumstance capital structure models, tax relevancy and its effect is important therefore meaningful and weak relationship between non-debt tax shield and Debt ratio is vital. Although tax has effective role on capital structure decisions relation between business risk and debt ratio. Antoniou et al (2002), conclude their research determinants at company capital structure analysis manage effective factors on capital structure in developing countries. Tax shield effect on capital structure differ from develop and developing countries. On the other hand, Effective factors in ten developing countries capital structure has been analyzed by Booth et al (2001), they reveals that their capital structure effected by same variables in developed countries results show that more profitable companies have lower debt ratio. Hence, it is controversial issues exists between develop and developing countries. Jensen and Mackling (1976) conclude their study is to investigate the theoretical factors and reasons for selected model for capital structure from the perspective agency theory and stakeholders interest conflict of economic unit. Jensen and Mackling (1976) argue that it can create a balance between the benefits and costs of debt and achieved an optimal capital structure. In practically there is no optimal capital structure situation and it is proved at the conceptual model and theoretical aspect.

### **Methodology**

In here population considered 367 companies listed in Colombo Security Exchange (CSE) in 2011. The manufacturing sector has 32 listed manufacturing firms. Study was depended on

secondary data collected from audited financial statements. Period of data covers three years from 2012 to 2014 and study period confirmed unusual fluctuation for economy is not reported. In the aspect of quality of the data it is common agreement in the field of finance audited annual reports data is accepted. Research findings of Myers (2001) has reported measurements of capital structure variables hence, this study select well established measurement for this study. There are six variables use as dependent and independent, dependent variables are selected as Market value per share (MVPS) and Price earning (PE) ratio as firm market value measurement. As independent variables Total debt to total equity (TDTE), total debt to total assets (TDTA), Long term debt to assets (LTDA) and short term debt to total assets (SDTA) are capital structure measurement. Mainly three type of analysis have used to employ this study namely; descriptive, correlation and regression model. It is identify two dependent variable therefore two regression models introduce.

$$\text{Model 1 } MVPS = \alpha_{1,1} + \beta_{1,1}TDTE + \beta_{1,2}TDTA + \beta_{1,3}LTDA + \beta_{1,4}STDA + \lambda_1$$

$$\text{Model 2 } PE = \alpha_{2,1} + \beta_{2,1}TDTE + \beta_{2,2}TDTA + \beta_{2,3}LTDA + \beta_{2,4}STDA + \lambda_2$$

Where;

MVPS and PE are dependent variables; TDE, TDTA, LTDA and STDA are independent variables.  $\alpha$  intercept,  $\beta$  coefficient of variables,  $\lambda$  error term

### Results And Discussion

Table 1 provides descriptive statistics of the study variables. Study sample firms on report average values of MVPS and PE of 67.5219 and 56.0997 respectively as dependent variables in both models. This MVPS values are considerably higher when compared to other gain of the market but compare to standard deviation is high that imply reported degree of volatility and uncertainty of firm value is high. PE ration variation is more than the MVPS.

Table 1: Descriptive Statistics

Variables	Average	Std. Deviation
Market Value Per Share ( MVPS)	67.5219	66.0281
Price Earning (PE)	56.0997	331.8452
Total Debt to Total Equity (TDTE)	0.5163	0.5539
Total Debt to Total Assets (TDTA)	0.2380	0.2112
LTDA (Long Term Debt to Assets)l	0.1196	0.1424
STDA (Short term Debt to Assets)	0.1185	0.1797

Source: Researchers, 2015

However, the value of long-term debt to assets and short term debt to assets ratios represents a notable difference among the samples. These value exhibit manufacturing industry's company assets invested more equity than the debt. However, there is no significant difference between short terms debt to asset investment is less, that implication is practical essence of the field of finance. According to Booth et al. (2001) report a Asian reign long-term debt to assets and short term debt to assets ratios ranging from similar range. In contrast, in Rajan and Zingales (1995), the long-term debt to assets and short term debt to assets ratios of a sample of firms in G-7 countries are higher than Asian reign. The TDTE (51.63%) and TDTA (23.80%) total debt value is higher when compare to the total equity. Invested percentage capital of total asset on total debt is 23.80% which shows higher value. On the other hand, the worsening financial performance, there are three additional reasons for the observed low long-term debt



and short term ratios. First, the long-term debt ratio can be misleadingly low given that many companies use short-term debt on the rolling basis (Antoniou.Guney and.Paudyal , 2002; Xiao et al., 2004). Second, it could reflect that financing institute specially banks are vigilant in issuing long-term debt and short term debt in order to lower credit risk given that the moral hazard of borrowers is severe in Sri Lanka.

Table 2 reports the Pearson correlation coefficients between variables. Except for MVPS and PE, TDTE, and LTDA the correlation coefficients between independent variables are statistically significant. PE and all correlation coefficient are statistically not significant. TDTE and TDTE, LTDA, STDA the correlation coefficients are statistically significant and also coefficient values are high compare to the other values.

**Table 2: Correlation Matrix**

Variables	MVTB	PE	TDTE	TDTA	LTDA	STDA
MVTB	1					
PE	-0.044	1				
TDTE	-0.172	-0.075	1			
TDTA	<b>-0.227*</b>	-0.072	<b>0.758**</b>	1		
LTDA	-0.049	-0.090	<b>0.742**</b>	<b>0.542**</b>	1	
STDA	<b>-0.230*</b>	-0.014	<b>0.303**</b>	<b>0.746**</b>	-0.154	1

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

According to the table 3 of model 1 and 2 summary adjusted R square Values are 0.08 and 0.009 respectively. It is considerably low; therefore models are not best model. The table 3 of coefficients shows the impact independent variables on dependent variables. Estimation equation of both model are as follows.

$$\text{Model 1 } MVPS = 82.296 - 15.885.TDTE + 2248.977TDTA - 2234.794 LTDA - 2316.853STDA$$

$$\text{Model 2 } PE = 88.67 + 7.034TDTE + 110.070TDTA - 351.248 LTDA - 172.113STDA$$

According to above equation MVPS model 1 has negative impact of TDTE, LDTA and SDTA and positive impact on TDTA but statistically insignificant. Model 2 PE has negative impact of LTDA and STDA and TDTE and TDTA positive impact but both values are statistically insignificant.

**Table 3: Regression Model Results**

$$\text{Model 1 } MVPS = \alpha_{1,1} + \beta_{1,1}.TDTE + \beta_{1,2}TDTA + \beta_{1,3} LTDA + \beta_{1,4} STDA + \lambda_1$$

$$\text{Model 2 } PE = \alpha_{2,1} + \beta_{2,1}.TDTE + \beta_{2,2}TDTA + \beta_{2,3} LTDA + \beta_{2,4} STDA + \lambda_2$$

Variables	Model 1		Model 2	
	Coefficient	p-Value	Coefficient	p-Value
Constant	82.296	0.000	88.675	0.092
TDTE	-15.885	0.485	7.034	0.953
TDTA	2248.977	0.215	110.070	0.991
LTDA	-2234.794	0.217	-351.248	0.970

STDA	-2316.853	0.201	-172.113	0.985
R <sup>2</sup>		0.080		0.009

### Conclusion

This study presents two models that demonstrate a mix results among firms' leverage and the extent of competitive contact in their industries. This result is unable to generalization, type of limited gain models that show the conceptual difference between optimal capital structure choices in a duopoly and in a perfectly competitive industry. An important feature of the model is that most subsequent studies of the contact between firms' capital structure and value of the firm decisions. The model demonstrates that, regardless of the value of the firm positively affects their optimal leverage whenever debt carries a strategic advantage. The model's predictions are tested using 3 years of data, while employing two proxies for the extent of contact among firms. The empirical tests demonstrate that the extent of contact among proxies of capital structure and it is an important determinant value of the firm. Statistically and economically this results are not significant relations between the proxies for the degree of contact leverage and value of the firm. Overall, it is found that corporate financing in Sri Lanka PLCs has both some cohesions to, and differences from, that of the firms in traded in CSE. It also show that the various types of debt capita such as long term and short term debt examined in this study do not appear to have significant effects on capital structure choices in Sri Lanka. These results should be of interest to those that are interested in the emerging manufacturing sector. Further research is needed to examine whether the longitude data tested in this study is statistically significant. On the other hand, In the Sri Lankan context, state-owned banks and financing institutes may play vital role issuing debt instruments both short and long term since, the role of CSE with regard of debt instruments does not contribute as expected amount of debt. The capital structure instruments effects are deferent over the deferent situation and the business aspect and therefore study unable to predict the unique conclusion and solution for the issues of capital structure.

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## **BUILDING DYNAMIC CAPABILITIES IN TIME-BOUND NETWORKS**

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### **Abstract**

Researchers studying the alignment of business resources usually focus on business cases that inherently have a going-concern interaction built on long-term relationships at the firm level, dyadic level, or the broader network level. Resource alignment is usually flexible in terms of the timeline for identifying and aligning resources and resource engagement. This paper describes the theories and empirical studies of resource alignment ranging from resource-based views to more complex network views of social organizational interactions, and their implications to business performance activities. The main challenge comes from time-bound transactions built around the longevity of inter-organizational relations. Thus, the key strategic management problem is how resources and capabilities can be rapidly aligned and managed in a time-bound network to achieve sustainable competitive advantages (SCA) at the network level.

### **Introduction**

According to Van de Ven (1976) organizational theory considers the flow of resources among organizations as a process of creating relationships. These relationships may take the form of simple business transactions such as trading in specific goods, or may be structured into a more concrete alliance such as partnerships. In any case, the outcome of resource interaction is the fulfillment of predetermined business objectives. Such relationships would ideally be created with the notion of longevity. For example, in the case of a one-time trading transaction, the seller would set a target of customer satisfaction to ensure that the buyer will establish a longer-term relationship. At the other extreme, a joint venture alliance would start with the intention to support the prosperity of the relationship as long as it produces competitiveness and profitability. By studying the overlap between transaction cost and organizational theory, Gadde and Hakansson (2008) adopted the IMP approach to highlight the association between a firm's management of its business relationships and its use and control of resources. A firm forms dyadic links with certain members of the supply chain through the strategic decision to make or buy resources. This association then evolves through organizational relationships that may extend beyond the direct interaction to form a network.

Researchers in strategic management (e.g., Penrose, 1959; Barney, 1991), and marketing (e.g., Alderson, 1965), assumed that the heterogeneity of resources were a reason for differentiating firms in terms of their levels of success. Strategy researchers elaborated this assumption into the source of competitive advantage for one firm (e.g., Barney, 1991) or a network of integrated firms (e.g., Ritter et al., 2003). However, not all resources are locked into the firm boundaries; and in many cases the firm does not even readily possess access to resources. Therefore, controlling internal resources or aligning resources with external environments plays an important role in the competitiveness of a firm or even the industry to which the firm belongs, as demonstrated by Dyer's (1996) assessment of the auto industry. On a wider scale, the importance of resource differentiation and management plays a role in cross-country firm competitiveness (e.g., Yang et al., 2009).

Based on the assumption that a firm belongs to an economic exchange system of resources, the focus on a firm's relationship with its external actors has been explored since the middle of the 20th century. Several pioneering researchers have provided a solid foundation to the study of networks. Among them are the theory of firm growth by Penrose (1959) and the

economic perspectives of Alchian and Demsetz (1972) on specialization and cooperation, and the inter-organizational views of Van de Ven (1976). Porter's (1980) strategic management approach to the role of industries in a firm's creation of value also paved the way to understanding networks. These studies agree that resource interactions aim at sustainable advantages driven by strategies based on alliances, knowledge transfer, or other long-term associations.

Most of the theoretical work cited in this introduction addresses firm and network resource alignments that have long-term objectives of sustainability built into their modes of operation. This is suitable for such industries as manufacturing, hospitality, and consumer services. However, some business transactions possess very rigid conditions of execution, especially with respect to the periods of resource engagement. Example sectors that fit into this category are the construction and film industries. A primary feature of these industries is the time-bound nature of resource alignment. Interactions must take place swiftly, resources must be aligned rapidly, and activities or competencies that are integral to competitive advantage may be subcontracted to other members of the network. Therefore, limitations apply to the time allowed for aligning resources, followed by a definite period of engagement. This rigid environment creates complexities that compel each member of the network to focus on completing the project without regard to long-term sustainable competitive advantages that may be created by a more flexible interaction. Subsequently, members of a time-bound network are faced with short-term objectives that are governed by the life of the project.

A construction project is a capital intensive project based transaction (PBT) that involves sequential activities starting from the time of laying the tower foundations. A specialized firm demobilizes from the construction site as soon as its role is completed to allow another firm to start its activity. Other firms have overlapping tasks that also run in parallel. Duboi and Gadde (2002) view this transfer of roles as a source of complexity in the construction industry. This complexity is magnified by the need for a dynamic alignment of resources and capabilities. In their study of time-compression diseconomies, Pacheco-de-Almeida and Zemsky (2007) combine strategic management with microeconomic modeling to assess firm-level resource development. Beginning with the premise that it takes time to develop firm resources, they show that diminishing returns to effort result in a time-cost trade-off. This concept adds another challenge to PBT owners. The natural drive of project dynamics to align resources in relatively shorter period leads to financial burdens.

Practitioners in the construction industry have been criticized for leading the sector into operational inefficiency and sub-optimization at the macro level (Cox & Thompson, 1997; Gann, 1996). This is due to focusing on short-term business objectives. The main effect has been felt in the industry's delayed improvement in technical innovation. Duboi and Gadde (2002) agree with this opinion because the loosely coupled system at industry level causes innovation to suffer. However, they argue that this loose coupling provides the ground to support the tight coupling at the project level. Duboi and Gadde (2002) therefore conclude that the coupling dynamics at the project and industry levels are a convenient match for the inherent complexity in the construction sector. According to this perspective, the project level resembles short-term resource engagement, while the industry level corresponds to longer-term interaction that exceeds a single project.

## **Literature Review**

### **1. Competitive Advantage**

Several researchers from different disciplines have defined the concept of competitive advantage. Baumol et al. (1982) consider a firm's competition to be its existing and potential competition. The consideration of potential competition provides a definition by

default that extends beyond instantaneous competitive advantage to be bound by future market dynamics. Because of the potential for new sources of competition to arise in the future, the concept of sustainable competitive advantage was introduced to the literature. The field of strategic management is rich with research on sustainable competitive advantage (e.g., Rumelt 1984; Porter 1985; Barney 1991). A perspective based on strategic management principles may be attributed to the value chain model first described by Porter (1980). In this perspective, the competitive forces approach considers value creation as the objective of a business transaction. Since then, Porter's approach has identified the role of industry in determining a firm's success (e.g., Passemard & Kleiner, 2000).

Uncertainty and interdependence are among the factors that brand the construction sector as a complex industry. Gidado (1996) attributed this to the complexity of linking and orchestrating the workflow of resources. Such resources extend beyond the dyadic relationship to include an array of interdependences that work together to execute a specific project. With this in mind, this research explored previous literature on creating sustainable competitive advantage through resource management from two dimensions:

- Firm level perspective reviews resource-based literature that focuses on the dynamics of resource alignment at the level of a unit firm, with a distinction between internal and external resources.
- Network level perspective targets the notion of resource management in networks, with a special focus on external resource alignment.

Alchian and Demsetz (1972) presented an economic perspective. They suggested that productivity enhancement might be achieved through "cooperative specialization" that results in "demanding economic organizations which facilitate cooperation" (Alchian & Demsetz, 1972: 777). Economic organization refers to economic methods of measuring productivity. This early demonstration of the benefits of organized coupling of resources evolved through the perspectives of modern economies under inter-firm specializations of the value chain where firms develop limited business links that eventually form a complex network of interactions (Dyer, 1996). Firms can become competitive by developing an integrated production network that demonstrates a high degree of inter-firm specialization. Dyer reached this conclusion by evaluating performance differences between the Japanese and American auto industry supply networks, based on inter-firm specialization of assets such as site, physical and human capital.

## 2. Resource-Based View (RBV)

Wernerfelt (1984) introduced the RBV concept in his paper, which then diffused to become a seminal concept in business scholarship and practice. Barney (1991) adapted the model to construct a framework for a firm's sustainable competitive advantage. He argued that a firm resource might be a source of sustainable competitive advantage if it possesses four characteristics: valuable, rareness, imperfectly imitable, and lack of a substitute.

Supporters of strategic management criticize the RBV as having difficulty gauging the firm-specific factors that result in high performance and possibly create a competitive advantage (Dyer, 1996). RBV does not consider the time factor. While firm-based resources, especially those that are in some way tangible, are viewed as instantaneous in nature, capabilities are also among such resources. Capabilities could have associations with the time factor. While a resource may be acquired, a capability will require time to be developed. Although a seasoned manager can identify and exploit resources, the actual unique capability may be fully identified only after a certain period. Another aspect

attributed to the RBV perspective is its rigidity in applying it to dynamic environment of a project-based transaction.

### 3. Dynamic Capabilities Perspective\

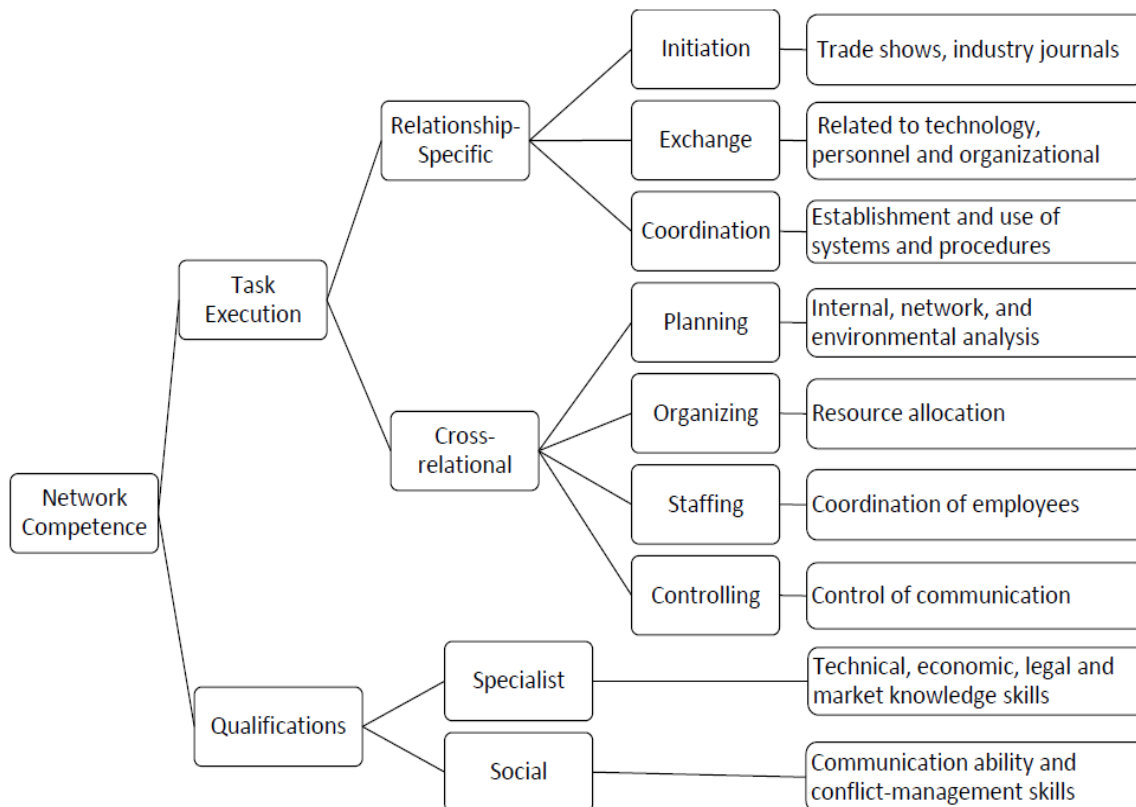
A further enhancement of the RBV is the dynamic capability perspective. The term dynamic capability was first defined by Teece et al. (1997: 516) as a “firm’s ability to integrate, build and reconfigure internal and external competencies to address rapidly changing environments”. The core focus in this definition is managerial and organizational processes, which Helfat (2007) described as means to open new strategic alternatives for a firm.

Eisenhardt and Martin (2000) elaborated on dynamic capabilities. They specified examples of processes characterized as dynamic capabilities including business alliances, resource allocation and knowledge transfer. Eisenhardt and Martin (2000) present the dynamic capabilities perspective as an enhancement of the resource-based view with a focus on long-term competitive advantage, especially in dynamic markets. They view organizational capabilities as common across firms; these capabilities may be labeled as “best practices” that evolve over time through learning. According to Eisenhardt and Martin (2000) the specific sets of organizational strategies that are addressed in the dynamic capabilities perspective include formation of alliances and decision-making strategies that reconfigure resources into value creation. They concluded that dynamic capabilities are not the source of sustainable competitive advantage; it is rather the timing and effective use of these capabilities to configure resources ahead of competition. A key dynamic capability identified by Helfat et al. (2007) is relational capability, which has the potential to provide competitive advantages that provide long-term success through external growth mechanisms, including alliance and acquisition capabilities.

### 4. Network Competence

Ritter et al. (2003: 745) defined “network competence” as “a company-specific ability to handle, use and exploit inter organizational relationships”, which provides competitive advantage. The scope of competence in this definition encompasses owned qualifications and knowledge as well as the skills required to manage the associated resources. The network competence model involves the elements described in Figure 1 as adapted from Ritter et al. (2003).

Ritter et al. (2003) presented network competence as a means to develop unique competitive advantages exemplified in enhanced innovativeness in technology-based firms. However, this ability to manage networks has become a resource that can lead to competitive advantages. Considering the unit of analysis to be the dyad or network of firms, they designed a framework for managing a network that led to inter-organizational competitive advantages. The four sources of potential competitiveness include the use of relation-specific assets, knowledge-sharing routines, complementary resources and capabilities, and effective governance mechanisms. Researchers describe these characteristics as alliance capabilities that can be a critical resource for a competitive strategic position (e.g., Anand & Khanna, 2000; Kale et al., 2000).



**Figure 1: Parameters of network competence**

### 5. Networks (Organizational Sociology)

The concept of networks dates back to Penrose's (1959) theory of firm growth. The picture of exchange of heterogeneous resources emerged as an interactive process that later developed into interactions of interdependencies between human and physical resources. Alchian and Demsetz (1972) later exemplified a network as the cooperation between firms and across markets through interactions among a lumberman, a lumber mill and a cabinetmaker. Van De Ven (1976) described the inter-organizational relationships among firms as a social action system that facilitates the achievement of goals that would be difficult to achieve had the firms acted independently.

The formation of inter-organizational relationships would be driven by the need to enhance internal or external resources. Van De Ven (1976) supports the idea that gauging the strength of inter-organizational relationship may be achieved by identifying the intensity and direction of resource flow between units. Intensity of resource flow also refers to the frequency of interaction. Van De Ven (1976) used this framework to study how inter-organizational relationships develop and eventually die. His assumptions and hypotheses propose that the strength of inter-organizational relationships is a function of resource dependence on external support, awareness of external resources and internal consensus on the objectives of the relationship. In this context, resource alignment becomes more complex as the number of interacting units increases.

This later evolved into the network perspective, which is also viewed from an organizational sociology perspective (e.g., Galaskiewicz & Zaheer, 1999). A sociological approach to inter-organizational networks is described in Gulati and Gargiulo's (1999)



study of organizational alliances. They explained that organizational alliances are formed to complement firm-specific resources and capabilities in the context of developing the social structure of the network. They elaborated on this concept by describing the formation of a network as an evolving social structure based on a longitudinally dynamic system that links resources. Their model portrayed the social structure as a “macro phenomenon” emerging from micro firm-level decisions seeking to gain access to resources.

The main connection between resource-based view (RBV) and industrial networks comes from the network resources referred to by Gulati (1999) as a similar understanding of the social capital view. Therefore, the RBV perspective may be a source for the creation of inimitable resources within the network. With this capability, a firm’s network allows a firm to gain access to key resources that are not possessed internally. Gulati et al. (2000) suggest that the network structure that a firm belongs to is a key resource that may be a crucial source of competitive advantage; accordingly, they label such structures ‘strategic networks’.

#### 6. Network Sustainability

Gulati (1999) has discussed network sustainability in the context of resource alignment through networks or alliances, suggesting that alliances and networks enhance the value-creation of firms by providing valuable resources. Zheng et al. (2013: 1208) have elaborated on Gulati’s study by defining network resources as “those resources that are owned by their alliance partners but which potentially can be accessed by the focal firm, as well as the valuable routines and arrangements embedded in the ties between the external parties.” This view by Zheng et al. (2013) presented network resources as a source of competitive advantage especially in relation to the innovation performance and technological capabilities of firms within a network.

Network resources have created competition among networks rather than just among firms. Firms participating in networks share resources and exchange relationships, thereby creating knowledge acquisition (Inkpen & Tsang 2005). Several researchers have studied the enhancement of a firm’s performance through shared network resources in fields such as biotechnology and telecommunication.

#### 7. Role of internationalization

The topic of internationalization is an important complement to this research study. This is why it is important to conduct this kind of studies in rapidly changing economies, such United Arab Emirates (UAE) and Qatar, which rely on the technical contribution of international firms, especially in the construction industry. Given that, the coordination among local and international firms is paramount to the formation of efficient business networks.

A general assessment of the literature on firm internationalization seems to highlight the importance of a firm’s resources in determining its ability to internationalize. The disciplines of business literature have produced extensive research on the modes and characteristics of internationalization of firms. Most of the research focuses on growth through internationalization from the firm’s perspective. Foundations of these research tracks may have been inspired by Penrose’s (1959) theory of firm growth. Hymer (1976) refers to a firm’s resources as a critical factor that should be used to penetrate foreign markets. Many researchers follow by focusing on a firm’s resources (e.g., Buckley & Casson, 1998) to describe the evolving and dynamic area of internationalization. The resource-based view and dynamic capabilities were also explicitly attributed to internationalization strategies (Peng, 2001).

Barney et al. (2001) highlighted that tacit knowledge developed by a firm through international experience is a competitive capability that is difficult to imitate. When studies on internationalization started focusing on international production into emerging economies or from emerging economies, the perspective of industrial network revealed its important role. Johanson and Mattson (1988) link the strength of an international network to the strength of a company's domestic relationships. Liu and Brookfield (2005) refer to "convoy migration" as a result of the internationalization of other members of a network.

Seggie and Griffith (2008) employ the resource-advantage (R-A) theory to support their argument that internationalization of service-based firms may be enhanced by aligning resources with the globalized domestic market. Standardization of the resource-matching process builds a competitive advantage for the international market. Although Seggie and Griffith (2008) highlight the important role of resource alignment on internationalization, their perspective is more focused on the usually less attended topic of increasing client diversity served domestically. The main proposition they advance is that the alignment of firm resources with the domestic segment's customer needs leads to enhanced performance at the domestic level and in the international market.

## **Discussion**

Based on the literature reviewed in this section, it is evident that scholars have presented two levels of sustainable competitive advantage. The first level is firm-based competitiveness that may be attributed either to tangible sets of resources or intangible capabilities that should possess value-adding characteristics that are unique, inimitable and non-substitutable. The second level is the macro network dimension that takes into account the nature of links among firms as well as the overall industry dynamics with significant attention to social capital fundamentals. While this outlook serves well as a general interpretation of the basic requirements for sustainable competitiveness in a typical business setup, it falls short of addressing the complexities associated with applications that fit within the category of time-bound networks. The reviewed literature has failed to describe the challenges that face individual firms as part of a temporary network where resources are aligned to cater to a certain project with limited long-term potential for continuous interactions. Subsequently, these challenges cascade across the supply chain and affect the competitiveness of the specific network, and the industry itself. Table 1 summarizes the main theories discussed in this section along with a schematic depiction of the expansion from a firm-level view to the network level.

Given the significance of network notions in this study, a sociological approach is the most attractive when addressing social networks. However, to address a broader perspective, including firm-based advantages and resource allocations, the industrial organizational approach was employed. In general, this research evaluated the characteristics of a project-based transaction through the discipline of strategic management, a field that explores the reasons for business success.

In order to conduct this research, the context of an internationally based construction industry can be useful because it provides a unique position to evaluate the features of sustainable competitive advantages in transactions that possess extreme cases pertaining to time, finance, and sequence of activities. While sustainable competitive advantage has been studied in the context of the construction industry, this research is expected to explore the crossroads between firm-level advantages as presented by the resource-based view (Barney, 1991; Wernerfelt, 1984) and the dynamic capabilities view (Eisenhardt & Martin, 2000; Helfat et al., 2007). The dynamic capabilities view serves as a key for alignment with external

resources and social networks that link firms in a single time-bound network. In principle, the resource-based view establishes the firm's advantages, while the relational dynamic capabilities will allow a firm to align its resources with the external environment to become part of the greater network.

**Table 1: Theories overview**

<b>D:</b> Assets, capabilities, organisational, processes, firm attributes, information, and knowledge  <b>R:</b> Daft (1983)	<b>T:</b> Resource Based View <b>D:</b> a resource may be a source of sustainable competitive advantage if it holds four characteristics <b>R:</b> Barney & Clark (2007)	<b>T:</b> Network Strategy <b>D:</b> Organisational sociology and social capital. <b>R:</b> Gulati et al. (2000), Scherer & Ross (1990)	<b>T:</b> Sustainable Competitive Advantage <b>D:</b> May be achieved if four characteristics are held at the firm level: value, rareness, imperfect immitability, and unsubstitutibility <b>R:</b> Barney (1991)
<b>D:</b> Physical capital, human capital, and organisational capital  <b>R:</b> Barney (1991)	<b>T:</b> Dynamic Capabilities View <b>D:</b> Firm's ability to integrate, build, and reconfigure internal and external competencies to address changing environments  <b>R:</b> Teece et al. (1997), Helfat et al. (2007)	<b>T:</b> Strategic Networks <b>D:</b> A firm's performance may be understood by examining the network the firm is part of. <b>R:</b> Gulati et al, (2000)	<b>D:</b> Sustainable competitiveness is attributed to resources and capabilities within the firm, the network, and the industry  <b>R:</b> Gulati et al. (2000)

**T:** Theory or research discipline    **D:** Description    **R:** References

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## INVESTIGATING THE ISSUES OF USING AGILE METHODS IN OFFSHORE SOFTWARE DEVELOPMENT IN SRI LANKA

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### Abstract

Offshore software development (OSD) is the process of developing software by globally distributed teams and it has become increasingly popular due to the many benefits it offers. Reduced costs, access to wide range of skilled people and reduction in application development time are the major attractions to OSD. Agile methods are popular software development methodologies that help companies deliver high quality products rapidly. In order to stay competitive in today's dynamic business environment many software companies are embracing Agile methods. Agile methods require frequent informal communication between all stakeholders of the project. OSD introduces time, cultural and geographical barriers to this requirement. Previous studies in other countries have identified some of the challenges to implementing Agile methods in an offshore environment. However, the impact of the challenges on the project success has not been studied by many. This study uses empirical and theoretical evidences in order to develop a model of challenges and their impact on project success. OSD as the fifth largest export earner of Sri Lanka has an important role in the economy. Thus results of this study will help researchers as well as the ICT industry to obtain an awareness and to alleviate the challenges of OSD.

**Key words:** *Offshore software development, Agile software development, project success, issues, Global software development*

### Introduction

Offshore software development (OSD) is the process of developing software by globally distributed teams. OSD also known as Global software Development (GSD) has become increasingly popular and thus the norm of developing software worldwide (Dingsøyr & Smite, 2014, Vogel & Connolly, 2005). The major benefits of OSD are lower cost, access to abundance of skilled people willing to work for a lower labor cost, improved quality and to reduce development time by developing the product for nearly 24 hours (Agerfalk et al, 2005; Dingsøyr & Smite, 2014; Vogel & Connolly, 2005). Thus many developing countries such as India, Sri Lanka, Philippines, and Bangladesh have become offshore outsourcing destinations. OSD has many barriers due to spatial distance, temporal distance and cultural differences (Jaanu, Paasivaara, & Lasseni, 2012; Agerfalk et al, 2005). Software development methods constantly evolve due to new technologies and demands of the users. Organizations need to continuously adapt new structures, strategies and policies to stay competitive in today's dynamic business environment. Thus, agile software development methods are becoming increasingly popular with the great flexibility they provide organizations to adapt to changing requirements and to market products rapidly. Agile methods were originated by a group of experienced professionals in 2001 based on their years of experience in the industry. According to the agile manifesto there is more value on, Individuals and interactions over processes and tools; Working software over comprehensive documentation; Customer collaboration over contract negotiation; Responding to change over following a plan. (Kent

Beck, Alistaire Cockburn, R Jeffries, & Highsmith, 2001). 'Agile' means being able to deliver quickly. Change quickly. Change often (Highsmith, 2002).

Agile methods are iterative and incremental methods. Agile development methods have been designed to solve the problem of delivering high quality software on time under constantly and rapidly changing requirements and business environment. Agile methods have a proven track record in the software and IT industries. Agile methods were originally developed for projects where all team members are in the same physical proximity where face to face communication is possible. With OSD, close proximity with all team members at all times is impossible. Several past research studies have identified challenges of implementing Agile methods at offshore settings. There are several research studies conducted on success and failure stories of implementing agile offshore. The researcher could not find any studies which have identified all the challenges and their impact on the project success. Further there are very few studies conducted in Sri Lanka on this area. It would be very beneficial for the industry as well as the researchers to obtain a holistic view of the challenges and their impact on the project success.

Thus, this research attempts to answer the following research question: What are the challenges of using Agile methods in offshore software development according to the peer reviewed articles in the literature?

The rest of this paper is organized as follows. Literature review section discusses the identified challenges and issues. In the next section, the theoretical model developed is presented.

## **Literature Review**

This section discusses the challenges in implementing agile methods in an offshore setting. Many of the previous studies are case studies. According to the literature there are 9 challenges namely communication, personal selection, work culture, different time zones, trust, tools and infrastructure, knowledge management, following agile methods and testing.

### **1. Communication**

Throughout the literature the importance of communication in Agile methods is highly emphasized (Alzoubi & Gill, 2014; Ambler S. W., 2014; Bjarnason, Wnuk, & Regn, 2011; Bose, 2008; Marambe & Jayasundara, 2014; Yaggahavita, 2011). As agile methods were originally designed for small co-located teams, they heavily rely face-to-face communication.

This is not possible in global teams where the members are geographically distributed and the communication between on-site and offshore teams is possible only through technology mediation. Another limiting factor may be the time difference due to different time zones that hinders synchronous communication even with the usage of telephones or video conferencing systems. The geographical and temporal distance prohibits informal communication (Bose, 2008; Marambe & Jayasundara, 2014; Dorairaj, Noble, & Malik, 2011). According to Fowler, Offshore development brings these two issues which conflict with the principles of agile development (Fowler, 2006). David Parnas states that poor communication among the team members and team members and the customer is the main reason for project failure (Agerfalk et al. 2006). Communication with geographically distributed team members often happen via asynchronous communication methods. Effective communication might be difficult to achieve with asynchronous methods. Email, chat, teleconferencing, video conferencing are the commonly used tools for communication (Bose, 2008). Video conferencing was used only at critical stages of the project as it was the most expensive. Many companies encouraged daily meetings as a successful strategy. Though there are well developed tools used for communication, it is

still a challenge to achieve 100% effective communication as in face to face communication (Korkala et al., 2007).

2. Personal selection

Personal selection in a team is identified as another challenge in GSE (Bose, 2008). Agile development requires cross functional teams with high communication skills (Misra et al., 2008). Members with a mind set for plan driven approach will not be suitable in this environment. Communication would be more effective between members with similar cultural backgrounds and similar mind set. Team members need to be autonomous rather than following the orders of the project manager. Hence selecting the right team members with the correct attitude is a challenge. (Conboy, Coyle, Wang, & Pikkarainen, 2011)

According to the literature different companies used different strategies in selecting the personnel for projects. Many successful scenarios emphasized the importance of having a good team lead who can coordinate the various activities. According to the literature some companies chose to have well experienced, creative people who have worked with each other before to be in the team. Some companies chose to have self-organizing teams who could manage their work responsibilities with minimum supervision (Bose, 2008).

3. Work Culture

As Fowler states another weak spot of offshore development come from culture and distance with the business. Because agile development works best with close communication and an open culture, people working offshore feel the pain much more than those using plan-driven approaches (Fowler, 2006, Bose, 2008). The characteristics of the people involved with the project and the culture plays an important role in the success of an agile project. It is said that offshore teams prefer plan driven development. Hence cross functional teams in an agile environment might not be effective at first. (Yaggahavita, 2011; Lalsing, Kishnah, & Sameerchand, 2012)

4. Different time zones

Having to work in different time zones is identified as another challenge in GSE (Bose, 2008; Conboy, Coyle, Wang, & Pikkarainen, 2011). A globally distributed team has to work in time zones that vary vastly. Agile methods rely on several face to face meetings even within a single iteration. Heavy documentation is not practiced as a way of communication. Thus distributed environment impose barriers for conducting regular meetings that are informed in short notice (Fowler, 2006).

5. Trust

Achieving trust between the team members is identified as another significant challenge in GSE. Since it is difficult to conduct regular meetings with the stake holders as in collocated team, it demotes trust between stakeholders (Bose, 2008; Paasivaara, Durasiewicz, & Lassenius, 2009). Team spirit where the whole team holds responsibility and works towards a common goal is essential in agile development. It is challenge in offshore environment where Sri Lankan and USA team might have a 'us vs them' attitude (Marambe & Jayasundara, 2014)

6. Knowledge Management

Documentation plays an important role in distributed agile more than in the co-located teams. Agile philosophy emphasis on 'just enough documentation'. But with the absence of proper documentation certain knowledge might not be conveyed efficient to all stakeholders (Dingsøyr & Smite, 2014; Bjarnason, Wnuk, & Regn, 2011; Lindvall, et al., 2002). Various tools such as wikis, code repositories are used for knowledge management. It is important that proper strategies and tools are used for efficient



knowledge management in order to effectively utilize tacit knowledge of experienced programmers (Bose, 2008).

7. Following the Agile Development Process

The agile practices are often modified in the distributed environment in order to meet the organizations requirements. Agile philosophy advocates a framework to software development. Details of practices to be used are not elaborated. For an example how to elicit requirements or what kind of documents to produce are not stated. Thus practices are adjusted according to the company's requirements. As Marambe et al. states following the proper techniques are challenged due to lack of knowledge, tight schedules, and distributed nature. These modified techniques might provide short term benefits while introducing unforeseen long term problems. It is identified that following the agile development process has the most significant impact on project success (Marambe & Jayasundara, 2014; Conboy, Coyle, Wang, & Pikkarainen, 2011; Yaggahavita, 2011)

8. Tools and Infrastructure

Usage of correct tools and infrastructure has a huge impact on the project success especially in OSD (Ambler S. W., 2014). Unavailability of the correct tools and infrastructure or improper handling of the tools will impede the project success. Branches of large companies will have all the facilities where as small and medium organizations might not be able to afford the cost (Shrivastava & Rathod, 2014; Alzoubi & Gill, 2014). Schwaber (2004) states the following "Prior to scaling any project, an appropriate infrastructure must be put in place. For instance, if a project will employ multiple collocated teams, a mechanism for frequently synchronizing their work must be devised and implemented." Smite, Moe and Agerfalk (2010) states the following "Although no single tool is strictly mandatory for a successful agile project, the right set of tools greatly facilitate realizing the various agile processes". Prior (2011) in her research observed that on a daily basis developers spend a considerable amount of time dealing with the tools and infrastructure to complete their daily tasks.

9. Testing

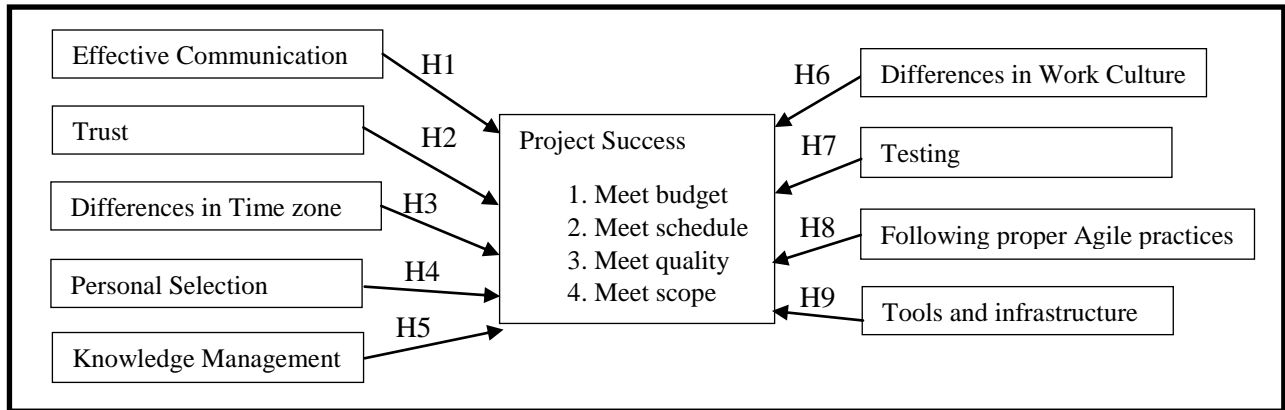
Agile philosophy emphasizes early and continuous testing of the product. Unit testing, integration testing, test driven development and test automation are some of the techniques used. Due to time constraints sometimes integration testing might not be possible for all features. This could result in decreased quality of the product. An industry expert opinion was to use test automation as a solution. Then the cost factor would be high. The distributed nature imposes challenges to continuous testing (Marambe & Jayasundara, 2014; Fowler, Using an Agile Software Process with Offshore Development, 2006). Bavani (2009) states that testing is a critical aspect when rolling out agile projects on a distributed scale.

**Theoretical Framework**

A successful project is should meet the scope, time, cost and quality constraints (Schwalbe, 2011). According to the literature 9 challenges that affect the project success was identified as depicted in Figure 1. Following hypothesis were developed accordingly.

- H1 – Effective communication has a positive impact on project success
- H2 – Trust between team members has a positive impact on project success
- H3 – Differences in time zone have a negative impact on project success
- H4 – Personnel selection has a positive impact on project success
- H5 – Knowledge management has a positive impact on project success
- H6 – Differences in work culture has a negative impact on project success

- H7 – Testing methods has a positive impact on project success  
 H8 – Following Proper agile practices has a positive impact on project success  
 H9 – Having Proper tools and infrastructure has a positive impact on project success



**Figure 1-Theoretical Framework**

### Future Research

In the future we will be testing the proposed theoretical model using quantitative methods. A random sample of software professionals who practice agile methods in an offshore setting in Sri Lanka will be selected. The population will consist of software professionals such as project managers, technical leaders, business analysts, software engineers and quality assurance engineers. It is planned to collect data using a questionnaire. The questionnaire would be personally given and data would be collected. The sampling method would be stratified random sampling and unit of analysis would be a software organization. Using quantitative methods it is planned to identify the most important factors that have an impact on the project success. OSD is currently the fifth large export earner for Sri Lanka. Many software companies are engaged in OSD using agile methods. Hence ICT industry as well as Sri Lanka as a country would greatly benefit from the findings of this study.

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**ENVIRONMENTAL MANAGEMENT IMPACT FROM ELECTRONIC WASTE:  
A STRUCTURAL EQUATION MODEL CONCEPTUAL PERSPECTIVE**

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**Abstract**

This study presents a structural equation model conceptual framework of variables that affect environmental management of discarded electronics, electrical products and appliances manufacturers in Thailand. Waste Electrical and Electronic Equipment or WEEE is different from general waste as there are many diverse and complex parts including heavy metals and hazardous substances such as lead, mercury, and cadmium. Improper handling and disposal can cause significant harm to the environment as well as pose a health hazard to humans. Solid waste management is a complex task which requires the use of advanced technology and specialized process controls. Most e-waste facilities are using aged equipment and techniques which must be upgraded to international standards. Added to this, most consumers do not realize the dangers of e-waste nor does Thailand have adequate and effective legislation and laws governing its disposal. Presently, Thailand relies on an Extended Producer Responsibility, which relies on manufacturers to improve product designs making them more environmentally friendly by reducing the use of hazardous substances that could adversely affect the environment throughout the life cycle of the product. Quantitative data is being obtained from a proposed sample of 240 Thai environmental managers from electronics, electrical products and appliance manufacturers. Qualitative research is being conducted with 10 executives by the use of purposive sampling. Analysis will be conducted using Partial Least Square (PLS-Graph) software to apply Structural Equation Modeling (SEM).

**Keywords:** *WEEE, e-waste, hazardous substances, environmentally friendly*

**Introduction**

E-waste is the toxic legacy of our digital age with electronic waste creating 20-50 million tons of e-waste each year around the globe. According to a 2014 report from the ITU (International Telecommunications Union), mobile-cellular subscriptions will reach almost 7 billion at the end of 2014, with 3.6 billion of these in the Asia-Pacific region. The increase is mostly due to growth in the developing world where mobile-cellular subscriptions will account for 78 per cent of the world's total (ITU, 2014), but at some point, most purchase a new phone and discard their old one as 'e-waste'.

E-waste is one of largest known sources of heavy metals and organic pollutants with hazardous or toxic materials like lead, mercury, cadmium, chromium, brominated and chlorinated compounds posing a threat to humans and the environment, if they are improperly disposed of (Deccan Chronicle, 2016). A report from United Nations University (UNU) found that the world produced 41.8 million metric tons of e-waste in 2014 - an amount that would fill 1.15 million 18-wheel trucks. Lined up, those trucks would stretch from New York to Tokyo and back (Baldé, Wang, Kuehr, & Huisman, 2015).

E-waste is a term used to cover all items of electrical and electronic equipment (WEEE) and its parts that have been discarded by its owner as waste without intent of re-use (Baldé et al, 2015). In Asia, the total e-waste generation was 16.0 million tons (Mt) in 2014. China, India,

Japan, Hong Kong, South Korea, Viet Nam, Bhutan, Cyprus and Turkey have national e-waste related laws (Baldé et al, 2015). In China, national e-waste legislation manages the collection and treatment of TVs, refrigerators, washing machines, air conditioners and computers (desktop and laptops). In 2013, China officially collected and treated around 1.3 Mt of these five types of e-waste, which was 28 per cent of the total e-waste generated for all categories (Wang, Kuehr, Ahlquist & Li, 2013).

In Table 1 we can see statistics for ASEAN (plus Timor-Leste) domestic e-waste generated for each country in 2014. ASEAN, the Association of Southeast Asian Nations, is a powerhouse in the production and use of consumer electronics and appliances as well.

**Table 1 Domestic E-Waste Generated per Country in 2014**

Name	kg/inh.	kt	National Regulation in force till 2013	population (1000)
Brunei Darussalam	18.1	7	no	411
Cambodia	1.0	16	no	15561
Indonesia	3.0	745	no	251490
Lao People's Democratic Republic	1.2	8	no	6557
Malaysia	7.6	232	no	30467
Myanmar	0.4	29	no	66257
Philippines	1.3	127	no	99434
Singapore	19.6	110	no	5595
Thailand	6.4	419	no	64945
Timor-Leste	4.1	5	no	1172
Viet Nam	1.3	116	yes	92571

In Vietnam alone, in the first six months of 2015, Vietnam produced 107.3 million mobile phones which was a massive 68.8 percent increase compared to the same period in 2014. The export value of cellphones and components in the six-month period topped US\$14.7 billion, up 27 percent from the first half of 2014 (Tuoi Tre News, 2015).. Additionally, there were 2.16 million televisions produced, all of which eventually ends of being disposed of somewhere.

Electronic waste isn't just waste, it contains some very toxic substances, such as mercury, lead, cadmium, arsenic, beryllium and brominated flame retardants. When the latter are burned at low temperatures they create additional toxins, such as halogenated dioxins and furans – some of the most toxic substances known to humankind. The toxic materials in electronics can cause cancer, reproductive disorders, endocrine disruption, and many other health problems if this waste stream is not properly managed (Wang, Cai, Jiang, Leuang, Wong, & Wong, 2005).

Yu, Gao, Wu, Zhang, Cheung, and Wong (2006) studied soil contamination from a e-waste recycling center in Southeast China using 'primitive technology' and analyzed the concentration, distribution, profile and possible source of polycyclic aromatic hydrocarbons (PAHs) in the soil. Researched discovered sixteen USEPA priority PAHs in 49 soil samples.

The dominant PAHs were naphthalene, phenanthrene and fluoranthene, which were mainly derived from incomplete combustion of E-waste (e.g. wire insulations and PVC materials), and partly from coal combustion and motorcycle exhausts.

Gullett, Linak, Touati, Wasson, & King (2007), researched air emissions and residual ash samples from experiments of open, uncontrolled combustion of electronic waste (e-waste), simulating practices associated with rudimentary e-waste recycling operations. Circuit boards and insulated wires were handled separately to simulate processes associated with metal recovery. Emissions of polychlorinated dibenzodioxins and dibenzofurans were analyzed as well. It was found that the value for the insulated wire is about 100 times higher than that for backyard barrel burning of domestic waste. The emission concentrations of polybrominated dibenzodioxins and dibenzofurans (PBDD/PBDFs) from the combustion of circuit boards were 100 times higher than for their polychlorinated counterparts. Particulate matter (PM) sampling of the fly ash emissions indicated PM emission factors of approximately 15 and 17 g/kg of the initial mass for the circuit boards and insulated wire, respectively. Fly ash samples from both types of e-waste contained considerable amounts of several metallic elements and halogens; lead concentrations were more than 200 times the United States regulatory limits for municipal waste combustors and 20 times those for secondary lead smelters. Leaching tests of the residual bottom ash showed that lead concentrations exceeded U.S. Environmental Protection Agency landfill limits, designating this ash as a hazardous waste.

Bi et al. (2007) analyzed electronic waste (e-waste) from across the world where in Guiyu, South China, the e-waste is dismantled and discarded. Concentrations of polybrominated diphenyl ethers (PBDEs), polychlorinated biphenyls (PCBs), and organochlorine pesticides (OCPs) were measured in serum from residents of the e-waste dismantling region, where 80% of families work in e-waste recycling, and compared to a matching cohort from a nearby region where the fishing industry dominates (Haojiang). The median BDE-209 concentration in Guiyu was 50-200 times higher than previously reported in occupationally exposed populations.

Zheng et al. (2008) also studied local children under the age of 8 years old in China's e-waste recycling region of Guiyu and stated that from the primitive electronic waste (e-waste) recycling process that the toxic heavy metals may keep on threatening to the health of local children. Children living in Guiyu had significantly higher BLLs (blood lead levels) and BCLs (blood cadmium levels) as compared with those living in Chendian. It was also stated that there was a significant increasing trend in BLLs with increasing age in Guiyu. The risk factors related to children's BLLs and BCLs mainly included father's engagement in the work related to e-waste, children's residence in Guiyu and the amount of time that children played outside near the road every day.

The management of waste electronic and electrical equipment (WEEE) is a major challenge in developing and transition countries (Mmereki, Li, & Li'ao, (2015). Obsolete electrical and electronic equipment (EEE) are a complex waste category containing both hazardous and valuable substances. In developing countries and regions, infrastructure, pre-processing, and end-processing facilities and innovative technologies for end-of-life management of e-waste are noticeably absent due to lack of investment and high costs of its management.

Although it has been established that e-waste is toxic and both dangerous and toxic to the environment and humans, e-waste also contains many valuable, recoverable materials such as aluminum, copper, gold, silver, plastics, and ferrous metals. In order to conserve natural resources and the energy needed to produce new electronic equipment from virgin resources,

electronic equipment can be refurbished, reused, and recycled instead of being landfilled (Kansas Department of Health and Environment, 2015).

In many places however e-waste recycling falls onto the backs of enterprises such as junk dealers who have no knowledge of the toxic nature of their 'junk' nor the technology necessary to extract the precious metals. Most of these firms are unregulated and unregistered as well further complicating the process of regulation and prevention of pollution caused by hazardous substances and heavy metals in the product waste.

In Indonesian as in most places across Asia, there is 2008 law on waste management but a regulation to elaborate on the law has still not been made. The law required that producers handle their own waste (like in Thailand) but in Indonesia that has been interpreted to mean only the packaging (Elyda, 2016). In Thailand there is no specific law or regulation regarding e-waste other than the Hazardous Substance Act B.E. 2535 (1992) and its amendment B.E. 2556 (2013) (Chareonsong, 2014) which covers chemical waste which must require a permit. Used electrical and electronic and appliance enterprises are currently exempted for the need of a permit or to register but importing conditions for used electrical and electronic equipment is required by DIW (Department of Industrial Works) (Chareonsong, 2014).

From Table 2 can be seen an estimation of Thailand's current and projected domestic e-waste generation. In 2016 it is expected that nearly 11 million phones will be discarded along with 2.8 million TVs and over 1.5 million refrigerators and washing machines, which at present times relies solely on a policy of a consumer product manufacture called 'Extended Producer Responsibility or EPR.

**Table 2 Estimation of Thai e-waste generation 2014-2021-(Ref: Chareonsong, 2014)**

Product type	Waste generation (1,000 units) in year								
	2014	2015	2016	2017	2018	2019	2020	2021	
TV	2,587	2,689	2,790	2,889	2,986	3,081	3,174	3,264	
Digital camera/VDO camcorder	875	983	1,059	1,065	1,055	1,106	1,192	1,289	
Media player	3,476	3,537	3,571	3,588	3,598	3,611	3,630	3,653	
Printer	1,520	1,532	1,542	1,546	1,547	1,545	1,543	1,540	
Mobile phone/Land line	9,750	10,337	10,907	11,456	11,983	12,486	12,966	13,419	
PC	2,210	2,421	2,630	2,834	3,032	3,222	3,402	3,572	
A/C	740	766	796	832	871	911	949	983	
Refrigerator	922	972	1,023	1,074	1,125	1,174	1,223	1,271	
Microwave	313	346	382	419	456	492	527	559	
Washing Machine	467	495	523	551	581	611	644	681	
Fan	1,916	1,996	2,079	2,164	2,251	2,340	2,431	2,524	

Lindhqvist (2000) first formulated the first definition of the extended producer responsibility (EPR) concept around 1990. Today, almost all OECD countries have formulated EPR policies and it is now possible to get a clearer understanding of the way the EPR principle can work under various conditions. In particular, the concept of EPR is as a policy principle to promote environmental improvements of products and product systems, and identifies possible approaches to key concerns in the implementation of EPR which builds on the preventive environmental strategies as promoted by, for instance, UNEP in the Cleaner Production Programme.



From the above, the researchers have developed the following 3 hypotheses for the study (Figure 1 below):

### Proposed Research Hypotheses

H1: *Environmental impact disposal management* has a direct influence on *e-waste disposal management*.

H2: *Environmental impact disposal management* has a direct influence on *product manufacturers*.

H3: *Product manufacturers* have a direct influence on the *e-waste disposal management*.

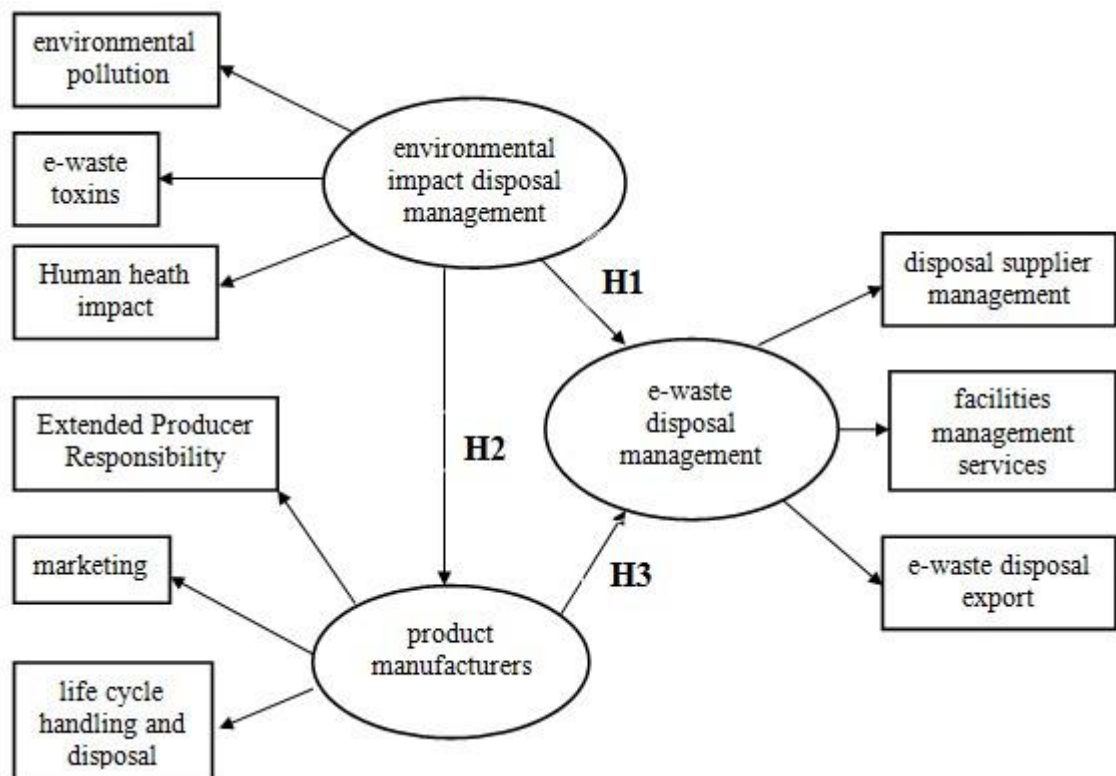


Figure 1: Proposed Conceptual Framework

### Methodology

This research aims to model the structure of the factors influencing the environmental management of discarded electronics, electrical products and appliances manufacturers in Thailand, so the researchers wish to determine the details and procedures from the methods below:

1. The approach used in the study

For this study the researchers used both quantitative and qualitative research from both primary and secondary data. The researchers thus determined the following steps for this study:

a. Secondary Data Research

Thus far, research has been comprised of published research, textbooks, internet materials, media reports, and data which has been cleaned, analyzed and collected to

develop a conceptual model for the variables that affect environmental management of discarded electronics, electrical products and appliances manufacturers.

**b. Quantitative Research Methods**

Quantitative research will be performed from the primary data by collecting a questionnaire from the target sample. The questionnaire to be used to collect data is structured and written in a realistic, easy-to-understand format which is deemed to be reliable and reasonable. Further reliability validation will be undertaken as follows:

- Questionnaire review will be conducted by academic scholars to validate the investigation questions and the use of rhetoric and the simplicity and comprehension of the questions.
- During the questionnaire trial stage, questions and responses will be monitored so better clarity can be achieved. Questions will be updated as needed.
- Perform data collection Statistical analysis

**c. Qualitative Research Methods**

Qualitative research will involve confirming the model of the quantitative research. It is a collection of interviews with electronics and appliance industry professionals as well as the manufacturers. Qualitative Research is to be undertaken through the use of in-depth interviews with those involved in innovation, including plant managers, production managers and engineering managers. To confirm the model of quantitative research, the sample size for this research will be 10 individuals.

**d. Population and sampling**

The population in this study is environmental managers of discarded electronics, electrical products and appliances manufacturers.

**e. Quantitative research**

Schumacker and Lomax (2010) stated that Structural Equation Modeling (SEM) uses a variety of models to show the relationships between observed variables with the same basic goal of providing a quantitative test of a theoretical model hypothesized by a researcher. Meldrum (2010) further stated that a sample size smaller than 100 should not be used in SEM as it is unreliable. This is consistent with other research on the 'Rule of 100' including Gorsuch (1983), Kline (1979), (MacCallum, Widaman, Zhang & Hong, 1999). No sample should be less than 100 even though the number of variables is less than 20 (Gorsuch, 1974; in Arrindell & van der Ende, 1985). Therefore, using a factor of 20 for each of the 12 variables from the research survey, it is anticipated that a total of 240 samples are adequate to assure a reliable sample size (Schumacker & Lomax, 2010).

**f. Self-administered questionnaire (SAQ)**

For this research, the measurement instrument or questionnaires utilized was prepared from the literature. A self-administered questionnaire (SAQ) is being used as it is exploratory in nature and serves as a starting point for other methodologies.

**g. Qualitative Research**

Berk (1984) stated that an evaluation of the congruence between items and objectives is the most important assessment during the content validation stage. If there is insufficient evidence that the items are measuring what they are intended to measure, the remaining item analyses are useless. An efficient measure for numerically assessing content experts' evaluations of items is the index of item-objective congruence (Rovinelli & Hambleton, 1977), in which ratings from content specialists are obtained in order to evaluate the match between test items and the table of specifications (Berk, 1984). For this study, 5 experts in their related fields were chosen with items having an IOC index higher than 0.5 being considered acceptable.

Additionally, the index of Item-Objective Congruence (IOC) developed by [Rovinelli and Hambleton \(1977\)](#) will be employed to carry out the screening of questions to a group of 10 initially in the pilot study. The research will then proceed to select items that have an IOC index higher than 0.5, which will be considered acceptable.

h. Research quality inspection tools

The research will be conducted to determine the quality and reliability of the instruments used in the research. Tools used to measure quality include content validity and reliability (Hale & Astolfi, 2014).

Questionnaires are constructed as a tool to measure concept definition and practice using a 5-Point Likert Scale (Likert, 1970). This research will conduct Confirmatory Factor Analysis (CFA) and subsequently reliability analysis to measure Cronbach's alphas (Cronbach, 1951) for this scale items to ensure internal consistency. Multi-item measures were developed based on Cronbach's alpha  $>0.68$ . This study will then calculate Cronbach's alphas for each construct. If the value is below 0.50, the research question will be cut off. This is considered highly reliable. The responses to the questions capturing focal constructs will use a five-point Likert scale (rating statements 1-5; 1 = strongly disagree and 5= strongly agree) (Likert, 1970).

There will also be an inspection by 5 experts including:

- Electrical and electronic manufacturers 3 members
- Industrial appliances and electronics academic expert 2 members

### Data Collection

1. Primary data

Primary data is a collection of factors that influence environmental management of discarded electronics, electrical products and appliances manufacturers in Thailand.

2. Secondary data

Secondary Data consists of studying the theories related to the research from various sources; including books, manuals, tutorials, articles, research papers, etc., to define the concepts and theories used in the study.

### Quantitative Data Analysis

Quantitative research is currently envisioned using the partial least squares (PLS) statistical method and hypotheses testing with PLS-Graph software (Chin, 2001), which analyses the display and model structure associated with the observed manifest variables with latent variables.

### Analysis of quantitative data

The analysis of quantitative data will be conducted using statistical analysis as follows:

1. An analysis will be conducted by descriptive statistics by characterizing the frequency, percentage, mean, and standard deviation.
2. An analysis will be conducted using structural equation modeling (SEM) to determine the relationship of the factors influencing environmental management of discarded electronics, electrical products and appliances manufacturers in Thailand.

### Analysis of qualitative data

To confirm the results of the quantitative analysis are credible and the findings reliable, the researchers will conduct interviews with those involved as environmental managers of discarded electronics, electrical products and appliances manufacturers in Thailand. Afterwards, the researchers will proceed to interpret qualitative information including classified information.

### Conclusion

A report from ABI Research predicts that the market for recovering and recycling used electronics will reach \$14.7 billion by 2015 (ABI Research, 2010). By 2017, the volume of discarded e-products worldwide is expected to be 33 per cent higher than in 2012 and weigh the equivalent of eight of the Great Pyramids of Egypt. The worldwide smartphone market grew 13.0% year over year in 2015 Q2, with 341.5 million shipments, according to data from the International Data Corporation (IDC, 2015).

No matter where you turn, the numbers are staggering and at some point, it all becomes e-waste. The solution needs to go beyond a policy of EPR which relies on manufacturer participation and cooperation. As was seen in Indonesia, this was watered down to be interrupted as packaging waste only (Elyda, 2016).

Manufacturers need to tackle the root cause of the problem and work on solutions that promote the safe recycling and destruction of their products. Additionally, products need to be designed that are more environmentally friendly without the use of dangerous chemicals and products.

In Thailand the May 19, 2015 draft resolution entitled '*Draft Waste Electrical and Electronics Equipment (WEEE) Management Act, B.E. ....*' was submitted. The Thai cabinet resolved to approve in principle the draft Waste Electrical and Electronics Equipment (WEEE) Management Act, B.E. .... as proposed by Ministry of Natural Resources and Environment. The draft act would then be submitted to the Office of the Council of State for consideration, and later to the coordinating committee of the National Legislative Assembly before proposing to the National Legislative Assembly. Ministry of Natural Resources and Environment would then proceed with the establishment of the waste equipment information center under the Department of Pollution Control (Royal Thai Government, 2015). As can be seen, there are many involved in the regulatory process of e-waste and related consumer product recycling and destruction.

This study therefore is being undertaken to see how these processes are currently working or not working and help with the understanding and dissemination of the information and data so as to help build a cleaner, healthier and sustainable consumer products industry.

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## BEING GREEN IN THE HOTEL INDUSTRY – AN EMPIRICAL STUDY FROM THAILAND

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### Abstract

Path analysis is used to evaluate the effects of green drivers, suppliers, service users, and employees' perception of Green Practices, in the Thai hotel industry. The analysis is based on 325 senior industry representatives who responded to a 2015 survey in Thailand. Results show significant positive effects of green drivers, hotel suppliers, service users, and perception of the environment on Green Practices. Additionally, results suggest that drivers, such as international environmental laws, environmental management standards, and competitors, have the effect of hotels adjusting to align with customers' needs and expectations. Furthermore, hotels need to implement processes for selecting suppliers who can provide green products and services to maximize their clients' satisfaction. Customers are increasingly aware of their environmental impact during hotel stays. Awareness of environmental concern by consumers is necessary for all levels within hotels. To strengthen Green Practices, this study suggests that drivers (such as the Thai Hotel Association), suppliers, hotels themselves, and customers continue current trends. A push along the path of Green Practices would help the Thai hotel industry achieve business sustainability. Findings from this study also provide useful information for hotel related firms and those in the hospitality industries on the impact of increase awareness of Green Practices.

**Keywords:** *Drivers, Hotel Suppliers, Service Users, Environmental Perception, Green Practices*

### Introduction

Pollution is occurring on a vast and unprecedented scale globally mainly because the number of industries is increasing (Zhu et al., 2008; Chandraker et al., 2013). Businesses motivated to grow revenue and concerns about increased environmental degradation, has triggered the need to integrate environmentally sound changes in supply chain management research and practice. Green and sustainable concepts and practices are increasingly becoming the norm and are issues of strategic importance. Green practices help to reduce environmental risk (Ying & Li-jun, 2012). The hotel industry worldwide is increasingly more concerned about environmental issues. Bohdanowicz&Martinac (2007) indicated that 75% of environmental pollution caused by the hotel industry was from over-consuming energy, water, and materials. Wastewater, fumes, and materials discharge during operations causes negative impacts on the environment. Thus, without proper design and planning, the environment would be negatively affected. To implement green practices, the hotel industry should follow practices align with environmental supply chain management guidelines. Numerous studies have tried to identify green practices in organizations. Competition in the Thai hotel industry is very high. To adjust service strategy and achieve customer satisfaction, good management is needed. Hotel management needs to change focus towards ecological issues and the impact of pollution (Robinot & Giannelloni, 2010). Existing hotel operating processes and services results in some problems, such as garbage, polluted water, and wasted energy. Apart from creating problems at tourist destinations, as well as for the surrounding communities, pollution and wastage are partly to blame for global warming. The

Thai hotel industry had 6,085 hotels operating in 2015 (Dept. of Business Development, 2015). A geographical breakdown is shown in Table 1.

**Table 1. Thai hotels in 2015 according to administrative regions. Unit: hotel**

Region	Bangkok	Central	East	North-East	North	South	West	Total
Amount	1,528	373	939	445	639	1,669	492	6,085
Percentage	26	6	16	7	11	27	8	100

Source: Department of Business Development, 2015

The main objective of this study is to identify the major factors that affect green practices in the hotel industry to develop guidelines for adjustment and self-development of hotel organizations.

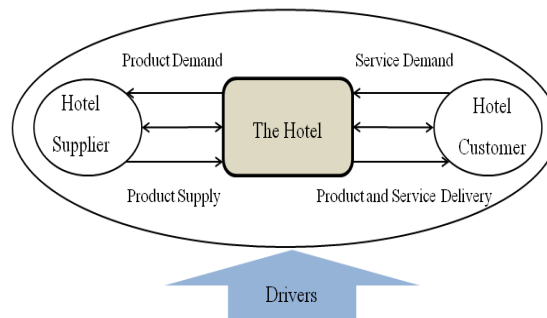
**Literature Review**

1. Green Practice in Hotel Industry in Thailand

Changes in global manufacturing, world climate, environmental and social issues, and concerns affecting client changes are becoming more important in managing any business. Green Supply Chain Management (GSCM) is an approach towards improving the performance of processes, products, and services, according to the requirements of environmental regulations (Hsu & Hu, 2008). Adoption of environmentally friendly GSCM practices includes addressing, internal environmental management, green purchasing, cooperation with customers, and incorporating eco-designs into corporate and operational strategies; aiding the firm’s environmental sustainability (Zhu et al., 2008).

Thailand’s hotel industry is an important part of the service sector driving Thailand’s long-term economic growth. Hotels need to adjust themselves to respond practically to various Green Environmental drivers, considering their other external and internal drivers. It is crucial to become environmentally friendly by creatively taking into consideration the green supply chain.

The green supply chain in the hotel industry is a process concerned with environmental protection related to hotel activities such as green design, green procurement, and suppliers. Management is concern with the environment experienced by service users or customers.



Source: Adapted from Kothari et al., 2005

**Figure 1. Green Supply Chain of Hotel Industry**

The Green Supply Chain (GSC) in the hotel industry (Fig. 1) shows movement from upstream to downstream. Drivers such as Environmental Law, Environmental regulations, and Competitors affect the GSC in the hotel industry. Relationships among activities and processes have a potential impact on the environment starting from the coordination with hotel suppliers and ending with serving customer demands. The link shows the significance of product suppliers who supplies environmentally friendly goods and services. Currently,



Thailand’s hotel industries are adjusting themselves to improve their products and services for a service that are green supply friendly (Kothari et al., 2005).

2. The relationship between Drivers, Hotel Suppliers, Hotel Customers, Environmental Perception, and Green Practices in the hotel industry

Environmental management is considered by business and social sectors as an important part of corporate social responsibility and is being given more attention (Lamond, 2008). Hotel management, also, has to take environmental concerns into account in running the business while balancing business profitability, society, and other sustainable business advantages. The increase in enforcement of environmental law, together with the pressure from stakeholders to be more aware of Green practices, are considerable (DiPietro et al., 2013; Jones et al., 2014). Creativity in the hotel industry is needed to bring awareness of environment-related issues such as energy management, water consumption, and waste management to save costs and maintain a competitive advantage (Bowe, 2005; Chen et al., 2005).

These factors (Drivers, Hotel Suppliers, and Hotel Customers) are affected by the hotels’ business implementation of green practices. In this study, the researchers, therefore, focused on the relationship among all stakeholders in the hotel supply chain by reviewing relevant literature and field research. Some relevant literature is given in Table 2.

**Table 2. The study of relevant variables**

Considering issues	Items	Researchers	Definitions of terminology
Hotel Drivers	5		
- Adherence to environmental policies (IND)		Awasthi <i>et al.</i> (2010)	Domestic environmental laws and regulations, governmental environmental policies, and international environmental law regulation etc. Institutional pressure promotes organization to adopt the green supply chain practices. (Cui &Jiang, 2012; Zailani <i>et al.</i> , 2012; Wong <i>et al.</i> , 2009; Wong <i>et al.</i> , 2012)
- Compliance to Government regulations (REG)		Handfield <i>et al.</i> (2002)	
- Competitors (COM)		Large & Thomsen (2011)	
Hotel Suppliers	3		
- Supplier’s green image (ALN)		Large & Thomsen (2011)	Suppliers Pressure and willingness is that driver of GSCM that states that suppliers can help to provide valuable ideas used in the implementation of environmental projects, but they generally do not act as a direct force. (Bhool&Narwal, 2013)
- Green supplier assessment (DEV)		Noci (1997); Wen & Chi (2010)	
- Greening the supplier (AWA)		Chiou <i>et al.</i> (2011)	
Hotel Customers	2		
- Consumer satisfaction (SUG)		Lee &Heo (2009), Luo& Bhattacharya (2006)	Customer awareness, pressure, and support are the

Considering issues	Items	Researchers	Definitions of terminology
- Return intentions (IMP)		Berezanet <i>al.</i> (2003)	drivers of Green Supply Chain Management, which states that the understanding and knowledge that a buyer should have of his rights as a customer. (Bhool&Narwal, 2013)
Environmental Perception - Knowledge (KHL) - Awareness (AWN)	4	Mowen& Minor (1998) Thongbai <i>et al.</i> (1995)	Perception is a process occurring unconsciously and unintentionally due to one's experience and social accumulation. One could not pay attention to everything happening around oneself but would select to perceive only part of them. Each person pays attention to and perceives things around him/her differently. Suppliers, customers, and hotel organization, therefore, perceive the importance of the environment differently.
Green Practices - Internal Environmental management (ENV)  - Green Purchasing (PUR)  - The cooperation of service users towards environmental requests (USE)  - Friendly Environmental design (DES) - Reverse logistics (LOG)	24	Noci (1997), Zhang <i>et al.</i> (2003), Humphreys <i>et al.</i> (2006), Chiou <i>et al.</i> (2008), Li & Zhao <i>et al.</i> (2009), Yan (2009), Lee <i>et al.</i> (2009), Tuzkaya <i>et al.</i> (2009), Chen <i>et al.</i> (2010), Shen <i>et al.</i> (2013) and Rituraj <i>et al.</i> (2013) Lu <i>et al.</i> (2007), Hsu & Hu (2009), Chen <i>et al.</i> (2010), Shang <i>et al.</i> (2010), Tseng (2011), Shen <i>et al.</i> (2013) and Rituraj <i>et al.</i> (2013) Rituraj <i>et al.</i> (2013)  Hong-Jun & Bin (2010) and Chen <i>et al.</i> (2010) Buyukozkan&Cifci (2011,2012b)	The enterprise uses green design, green innovation, green manufacturing, green purchasing, and green service practices to increase sustainable performance.(Chien& Shih, 2007; Zhu <i>et al.</i> , 2008; Shang <i>et al.</i> , 2010)

### 3. Theory

In this study, three critical and relevant theories have been reviewed; they are Institutional Theory, Stakeholder Theory, and Ecological Modernization. These theories have been synthesized to be used in the research as follows:

a. Stakeholder Theory

The theory suggests there are various groups of stakeholders involved in a hotel’s operations including government as a regulator, hotel organizations, employees, service users, shareholders, suppliers, competitors, other public/private organizations, and communities. The stakeholder theory is usually used as an explanatory theory for the adoption of various green practices. Stakeholder influences on green purchasing, are supply chain environmental life cycle analysis of reverse logistics are two prime examples of the Theory’s use (Sarkis, Zhu, and Lai, 2011).

b. Institutional Theory

This theory focuses on explaining the imitative behavior of organizations for their survival and societal acceptance (Meyer & Rowan, 1977; Tolbert & Zucker, 1983; Zucker, 1987). The institutional theory could explain the phenomenon of organizations applying for international standardized management techniques and certification such as ISO 14001, ISO 18000, ISO 9000, or TQM social acceptance.

Institutional theory has become a major research direction to explain environmentally related practices. Normative isomorphic drivers cause enterprises to conform or to be perceived as having legitimate organizational activities. Social normative pressures can explain environmental management practices among enterprises. Mimetic is an isomorphic driver which occur when companies imitate the actions of successful competitors in the industry, in an attempt to replicate the path of their success.

c. Ecological Modernization Theory (EMT)

EMT has its underpinnings in sociological theories and has been further developed by policy and organizational theories. EMT is geared towards industrial development for environmental protection through innovation and technological development and has been widely adopted in the manufacturing sector. EMT-based green supply chain management (GSCM) studies explain how an environmental policy can promote the adoption of GSCM and demonstrate that GSCM can improve both economic and environmental performances. Due to its ‘win-win’ nature, governments urge companies to undertake environmental practices voluntarily. However, it is still a question of how EMT and GSCM can give rise to a ‘win-win’ situation, which is a key to urge suppliers and customers of the companies to have environmentally friendly awareness.

4. Hypotheses

The researchers have set out the hypotheses of the research in Table 4.

**Table 4. Hypotheses of the research**

Hypotheses	Relationship link	Content	Selected key literature
H <sub>1</sub>	Direct Positive to Hotel Suppliers and Green Practice	Suppliers have positive link with Green Practice.	Simpson <i>et al.</i> (2007); Nawrocka <i>et al.</i> (2009)
H <sub>2</sub>	Direct Positive to Hotel Customers and Green Practice	Hotel Service Users have positive link with Green Practice.	Simpson <i>et al.</i> (2007); Eltayeb&Zailani (2011)

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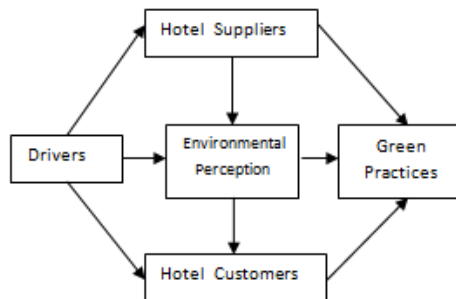
H <sub>3</sub>	Direct Positive to Environmental perception and Green Practice	Environmental Perception has positive link with Green Practice	Simpson <i>et al.</i> (2007)
H <sub>4</sub>	Indirect Positive between Drivers, Environmental perception and Green Practice	Drivers contribute more to Environmental Perception of hotel business in creating reliability and trust in Service Users who have environmental awareness.	Eltayeb&Zailani (2011);Diabat&Govindan(2011)
H <sub>5</sub>	Indirect Positive between Drivers, Suppliers and Green Practice	Drivers contribute to the adjustment of Suppliers to be more aware of the environment and design when producing products and materials according to the Green Design provided by the hotel and the conditions designated in the agreement made with the hotel.	Large & Thomsen(2011)
H <sub>6</sub>	Indirect Positive between Drivers, Customers and Green Practice	Environmental law, environmental, conservation trends, and ISO 14001 help Service Users to realize and be aware more of environmental effects which, then, contributes to the hotel adjustment to respond to Service Users' need.	Zhu <i>et al.</i> (2011), Ninlawan <i>et al.</i> (2011), Diabat&Govindan (2011), Holt&Ghobadian (2009)
H <sub>7</sub>	Indirect Positive between Drivers, Suppliers, Customers, Environmental perception and Green Practices	The adjustment of Drivers such as environmental rules and regulations raised environmental awareness more among Service Users as well as suppliers. This contributes to the adjustment of the hotel practices as service providers responds to the demands of Service Users.	Diabat&Govindan (2011), Zhu <i>et al.</i> (2010), Holt&Ghobadian (2009)

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**Proposed Model**

A Green Supply Chain Performance model of the Hotel Industry in Thailand presented by Pratyameteetham and Atthirawong (2014) has been applied in the conceptual framework of this

research. The model shows that Drivers, Suppliers, and Customers have a direct relationship with Green Practices of hotel organizations. This research focuses on hotels performance in implementing Green Practices using several instigating factors. The conceptual framework is shown in Figure 2.



Source: Adapted from Pratyameteetham and Atthirawong, 2014

**Figure 2. Relationship between Drivers, Hotel Suppliers, Hotel Customers, Environmental Perception on Green Practice in the hotel industry to an organization performance**

**Research Methodology**

1. Research Instrument

A seven-point Likert scale questionnaire was used in this study, where 1 represented strongly disagree, and 7 strongly agree. The survey consisted of 38 questions; 5 questions concerning Drivers, 3 questions concerning Suppliers, 2 questions concerning Service Users, 4 questions concerning Environmental Perception, and 24 questions about Green Practices.

2. Instrument Design Process

The questionnaire design process was initiated by a pilot interview with five hotel executives to confirm the variables, and then, questions were generated. The drafted questionnaire was validated and analyzed by five experts. Thirty questionnaires were distributed to a non-sample group to find out the questionnaire’s reliability using Cronbach’s alpha coefficient. After analyzing, the resultant coefficient was 0.976, representing a high-level of reliability thus usable (Kline, 2011).

3. Sample Population and Data Collection

For this study, the population consisted of hotel managers from 6,085 hotels across the country (Department of Business Development, Ministry of Commerce, 2014). The total sample size determined by the concept of Anderson & Gerbing (1984) was 380 persons from the selected hotels ranging from one-star to five-star hotels.

All 380 questionnaires were distributed to the sample group by mail, email, and hand. 325 questionnaires were returned (though none from one or two stars hotels) giving an effective response rate of 85.53 percent (Babbie, 2002).

4. Statistical Method

An analysis was done using descriptive statistics, inferential statistics, and Path analysis. The representative criteria used are provided in Table 5.

Table 5. Relevant Statistics

Statistical Value	Criteria
<i>p</i> -value	< 2.00
$\chi^2/df$	< 2.00

Statistical Value	Criteria
CFI	> 0.9
GFI	> 0.9
AGFI	> 0.9
RMSEA	< 0.05

Source: Hair *et al.* (2006)

**Test Results**

1. Sample Group Analysis

The general information of the sample group of 325 hotels in Thailand was analyzed and is classified as shown in Table 6.

**Table 6. Descriptive Statistics (n=325)**

Gender	Female: (167:51.4%); Male: (158:48.6%)
Age	Below30: 11.1%; 30-39 : 33.8%; 40-49 : 31.1%; 50 and above: 24%
Educational Level	Lower than Bachelor’s degree: 11.7%; Bachelor’s degree: 67.4%; Master degree or higher: 20.9%
Position	Top executive: 53.8%; Middle level managers: 46.2%
Working experience in the current position	Less than3 years: 23.4%; 3-5 years: 25.2%; 6-10 years: 18.8%;more than10 years: 32.6%
Organization size	Less than60 rooms: 22.5%; 60-149 rooms: 30.8%; 150 rooms or more: 46.8%
Type of Organization	Managed by owners: 72.6%; managed by local chain: 9.2%; managed by international chain: 18.2%
Number of Employees	Less than51employees: 25.2%; 51-99 employees: 19.7%; 100 employees or more: 55.1%
Hotel type	3 - stars: 32.9 %;4 - stars: 50.2 %; 5 - stars: 16.9%

None of the one or two star hotels responded to the questionnaire. Having 55 more data points (14.5 percent of questionnaires) may alter the data especially where the difference is less than 10 percent.

2. Path Analysis

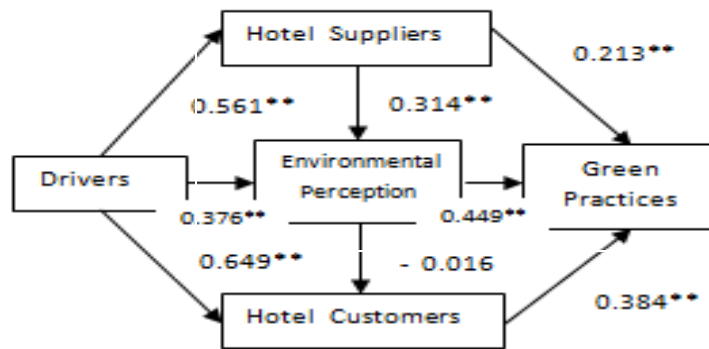
From the Path Analysis, statistics used to test the model is Chi-squared( $\chi^2$ ) which is equal to 0.915, degree of freedom (*df*) is equal to 1, *p*-value is equal to 0.339,  $\chi^2/df$  is equal to 0.915. When the efficiency index is taken into consideration, the Comparative Fit Index (CFI) is equal to 1,000, the Goodness of Fit Index (GFI) is equal to 0.999, the Adjusted Goodness of Fit Index (AGFI) is equal to 0.983, the Root Mean Square Residual (RMR) is equal to 0.007, and the Root Mean Square Error of Approximation (RMSEA) is equal to 0.000. Therefore, it can be concluded that the model conforms to the empirical data as follows:

**Table 7. Comparing the Research Results to Statistical Criteria**

Statistical Value	Criteria	Research Results
<i>p</i> -value	>0.05	0.339
$\chi^2/df$	< 2.00	0.915
CFI	> 0.9	1.000

GFI	> 0.9	0.999
AGFI	> 0.9	0.983
RMSEA	< 0.05	0.000

The coherence between the model and the empirical data is presented in Figure 3. The conclusion of the value of direct effect, indirect effect, and total effect of the model is presented in Table 8.



**Table 8. Direct Effect, Indirect Effect, and Total Effect of the Model**

Cause Variable	Effect Variable											
	Hotel Suppliers			Hotel Customers			Environmental perception			Green Practice		
	TE	DE	I E	TE	DE	I E	TE	DE	IE	TE	DE	IE
Driver	0.561**	0.561**	-	0.649**	0.649**	-	0.534**	0.369**	0.166**	0.609**	-	0.609**
Hotel Suppliers	-	-	-	-	-	-	0.314**	0.314**	-	0.354**	0.213**	0.141**
Hotel Customers	-	-	-	-	-	-	-0.016	-0.016	-	0.376**	0.384**	-0.007
Environmental perception	-	-	-	-	-	-	-	-	-	0.449**	0.449**	-
$R^2$	0.315			0.421			0.353			0.520		

$\chi^2 = 0.915$ ,  $df = 1$ ,  $\chi^2/df = 0.915$ ,  $p$ -value = 0.339, CFI = 1.000, GFI = 0.999, AGFI = 0.983, RMR= 0.007, RMSEA = 0.000

Remark: DE = Direct Effect, IE = Indirect Effect, TE = Total Effect

\* Refers to statistical significance at the level of .05 ( $1.960 \leq t$ -value < 2.576),

\*\* Refers to statistical significance at the level of .01 ( $t$ -value  $\geq 2.576$ )

From Table 8, the results of the analysis are as follows:

- Hotel Suppliers have a direct effect on Green Practices with the path coefficient of 0.213 which has statistical significance at the level of .01; supporting H<sub>1</sub>.
- Hotel Customers have a direct effect on Green Practices with the path coefficient of 0.384, which has statistical significance at the level of .01; supporting H<sub>2</sub>.
- Environmental Perception has a direct effect on Green Practices with the path coefficient of 0.449, which has statistical significance at the level of .01; supporting H<sub>3</sub>.

- d. Drivers have an indirect effect on Green Practices through Environmental perception with the path coefficient of 0.166, which has statistical significance at the level of .01; supporting H<sub>4</sub>.
- e. Drivers have an indirect effect on Green Practices through Suppliers with the path coefficient of 0.141, which has statistical significance at the level of .01; supporting H<sub>5</sub>.
- f. Drivers have an indirect effect on Green Practices through Hotel Customers with the path coefficient of -0.007, which has no statistical significance; not supporting H<sub>6</sub>.
- g. Drivers have an indirect effect on Green Practices through Hotel Suppliers, Hotel Customers, and Environmental perception with the path coefficient of 0.609, which has statistical significance at the level of .01; supporting H<sub>7</sub>.

All combined variables in the model explains Hotel Suppliers, Environmental perception, Hotel Customers, and Green Practices at the percentage of 31.5, 42.1, 35.5, and 52.0, respectively.

**Table 9. Results**

Relation	TE	DE	IE	Hypothesis Decision	Relation
H <sub>1</sub>	Hotel Suppliers → Green Practice	0.213*	0.141*	0.354**	Supported
H <sub>2</sub>	Hotel Customers → Green Practice	0.384*	-0.007	0.376**	Supported
H <sub>3</sub>	Environmental perception → Green Practice	0.449*	-	0.449**	Supported
H <sub>4</sub>	Drivers → Environmental perception → Green Practice	0.369*	0.166*	0.534**	Supported
H <sub>5</sub>	Drivers → Hotel Suppliers → Green Practice	0.213*	0.141*	0.354**	Supported
H <sub>6</sub>	Drivers → Hotel Customers → Green Practice	0.384*	-0.007	0.376**	Not Supported
H <sub>7</sub>	Drivers → Hotel Suppliers → Environmental perception → Hotel Customers → Green Practice	-	0.609*	0.609**	Supported

\*\* Refers to statistical significance at the level of 0.01

**Conclusions And Discussion**

The study found that Hotel Suppliers (H1) are critical in providing environmentally friendly products or services. As a result hotel organization are developing an appropriate Hotel Suppliers selection process to find qualified suppliers who can provide green products and services. This finding is consistent with the research result of Bhool&Narwal (2013) suggesting that Suppliers contribute in creating value by offering environmentally friendly products and services. Hotel Service Users or Customers (H2), such as governmental agencies, have significant roles by continuously providing the knowledge and understanding and promoting environmental awareness among hotels. Results align with research result of Bhool&Narwal (2013) who found that environmental awareness of customers is a significant driver for service organizations to understand and develop their services.

Environmental Perception (H3) suggests that the hotel management and personnel shall have knowledge and understanding concerning the steps towards becoming considered a Green Hotel. With a concrete commitment, good motivation, and proper working atmosphere, management can



create a workplace that will have a direct effect on Green Practices. Results conform to the research results of Luo, Qu & Marnburg (2013), who found that justice perceptions, justice-related satisfaction, employee commitment, and turnover intention are several positive or negative factors influencing employee social loafing behavior.

Hypotheses (H4, H5) play the most significant role in raising awareness of hotel organization regarding the environmental importance focusing on reducing pollution. Thus consistent with the research results of Cui & Jiang (2012), who found that drivers have significant effects on the change of organizational practices and that they take into account its stakeholders as well.

Customer demands (H6) have an effect on the behavior of Service Users who expect Green Services from the hotel. There may be some limitations preventing the hotel from improving and developing its service to meet customers' needs. For instance, limitation in the budget for purchasing green products or materials to meet service users' expectations eventually affects the service users' satisfaction. Drivers (H7), environmental law, environmental management standards, etc. have an effect on the practical green path. Suppliers, as well as competitors in the same industry, contribute to Green Practices by adjusting or developing practices to comply with the hotel customers' needs and expectations. This is consistent with the research results of Cui & Jiang (2012), who found that environmental law, regulations, and the policy of the government on the environment lead to adjustments of the business sector towards being a Green Practice organization.

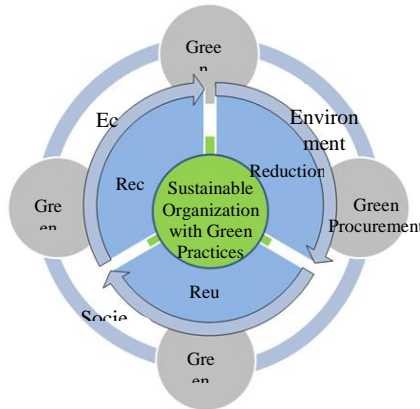
All of the factors mentioned above are in line with Institutional Theory as all of the factors are drivers affecting the operation of the organization. As a result, the hotel organization needs to adjust itself to survive and be competitive. Aligned with Stakeholder theory, all categories of stakeholders such as suppliers, customers, and hotel organizations jointly contribute to the reduction of negative environmental impact and increasing positive effects. For the organization's sustainability, three balancing dimensions of development, economic, social, and environmental development, need to be carried out in parallel with ecological modernization.

### **Recommendations**

As mentioned above, Drivers, Suppliers, and Customers have an effect on the Green Practices of the hotel industry. Considering the Environmental Perception of Suppliers and Service Users the hotel industry can get a better idea of better environmentally friendly practices and develop guidelines to suit. Hotels and their stakeholders can apply the 3Rs (Reuse, Recycle, and Reduce) to reduce the negative environmental impact that may arise from hotel operations as well as to create organization sustainability as shown in Figure 4. To make Green Practice more tangible, each of the stakeholders should carry out the specific roles presented in Table 10.

**Table 10. Stakeholders' Roles to make Green Practices more tangible**

No.	Stakeholders	Green Practice Implication
1	Suppliers	Being aware and paying attention to producing products and services minimizing environmental effects.
2	Hotel organization	Organizing training, providing knowledge, and promoting understanding among the management and personnel in every division concerning Green Practices such as Green Procurement, Waste Management, Energy Saving, and Green Design.
3	Service Users or Customers	Having environmental awareness when using service to reduce environmental effects or reusing products such as using water economically, reusing towel, turning off the lights when they are not needed as well as giving suggestions concerning service quality of the hotel for correction and improvement.
4	Relevant Government Agencies	<ul style="list-style-type: none"> <li>- Publicizing knowledge of the “Green Hotel” to raise awareness of environmental preservation in the form of leaflets or websites (such as the website of Department of Tourism, Ministry of Tourism and Sports).</li> <li>- Organizing training on environmental management in the hotel such as Green Procurement, Green Design, Energy Saving, and Energy Conservation in Buildings, etc.</li> <li>- Organizing the “Green Hotel Award of Thailand” contest as a campaign for raising environmental awareness of hotel operators to continuously develop their organizations in parallel with paying attention to the environment.</li> <li>- Inspecting hotels to make sure their operations comply with the Hotel Act B.E. 2535 (1992) to reduce environmental impact.</li> </ul>
5	Thai Hotel Association	<ul style="list-style-type: none"> <li>- Organizing meetings of hotel chain members and collectively setting environmental policies and implementing them continuously.</li> <li>- Organizing activities to persuade non-member hotels to become members to have coherent environmental practices in developing the hotel industry in Thailand.</li> </ul>



**Figure 4. The Proposed Model of a Sustainable Organization with Green Practices**

The Model shown in Figure 4 presents the primary objectives of practices for hotels to create environmental balance and operate sustainably. The main idea of the model comprises 3Rs, which would be carried out in every single process of the organization including designing, procurement, service, and logistics to create economic, environmental, and social balance.

### Acknowledgement

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## AN ANALYSIS OF LEGISLATION AND LAWS AFFECTING THE DISPOSAL OF THAILAND'S E-WASTE

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### Abstract

E-waste is the legacy of digital consumerism with some estimates placing global WEEE (Waste Electrical and Electronic Equipment) at over 20 million tons per year. Growing at a rate of 13 percent per year, this waste includes highly toxic components which are very harmful to the environment and individuals which must be disposed of in a safe and proper manner. Unfortunately, legislation and laws governing this massive problem are limited or non-existent in many countries with Thailand presently relying on an inadequate policy of 'Extended Producer Responsibility' in which manufacturers are tasked to collect and dispose of their respective industry's waste. Stronger legislation in the form of Thailand's WEEE Management Act unfortunately is tied up in a bureaucratic process with many levels of approval necessary before it can be enacted. This research therefore is focused on legislation and laws concerning the management and disposal of discarded consumer products such as electronic, electrical and household appliances products, and the principles related to Thailand's 'Extended Producer Responsibility'. Quantitative data is being obtained from a proposed sample of 240 Thai environmental waste managers from electronics, electrical and appliance products manufacturers. Qualitative research is being conducted with 10 executives by the use of purposive sampling. Analysis will be conducted using Partial Least Square (PLS-Graph) software to apply Structural Equation Modeling (SEM).

**Keywords:** *EPR, Extended Producer Responsibility, WEEE, recycling*

### Introduction

In a special report by the Bangkok Post, the headlines boldly heralded 'Thailand Government Reviews Electronic Waste Management Bill' on December 16, 2014 (Wipatayotin, 2014). In the following year on May 19th, a draft resolution entitled '*Draft Waste Electrical and Electronics Equipment (WEEE) Management Act, B.E. ....*' was submitted to the Thai cabinet. By the end of the day the government had resolved to approve in principle the draft Waste Electrical and Electronics Equipment (WEEE) Management Act, B.E. .... as proposed by the Ministry of Natural Resources and Environment. The draft act would then be submitted to the Office of the Council of State for consideration, and later to the coordinating committee of the National Legislative Assembly before proposing to the National Legislative Assembly. Ministry of Natural Resources and Environment would then proceed with the establishment of the waste equipment information center under the Department of Pollution Control (Royal Thai Government, 2015). As can be seen, there are many involved in the regulatory process of e-waste and related consumer product recycling and destruction in Thailand.

Thailand's Department of Pollution Control (DPC) has drafted a new law to address electronic waste dumping in public landfills and recycling of hazardous waste throughout the Kingdom which includes "provision for a hazardous waste tax, recycling, and a compulsory take-back scheme where manufacturers have to take back old products when consumers turn up to buy new ones" (Thailand Lawyer Blog, 2014). The WEEE draft law would make dumping electronic or electrical equipment in a public space illegal.



The DPC has also reported that in 2013 Thailand created 368,314 tons of waste from electric and electronic equipment, up from 359,070 tons in 2012. This is consistent with e-waste growth projections which state that by 2017, the volume of discarded e-products worldwide is expected to be 33 percent higher than in 2012 and weigh the equivalent of eight Great Pyramids of Egypt. In an IISD (International Institute for Sustainable Development) conference in 2015 in the Maldives, it was stated that 41.8 million metric tons of e-waste were generated in the world in 2014, 38% of this e-waste was produced in Asia (IISD, 2015). The worldwide smartphone market is also growing 13.0% year over year and in quarter two of 2015, there were 341.5 million shipments of smartphones globally (IDC, 2015). Another report from ABI Research predicts that the market for recovering and recycling used electronics will reach \$14.7 billion by 2015 (ABI Research, 2010).

As we can see the problem is massive and is not going away and international bodies, conferences and individual countries and communities are trying to tackle the global problem. An example can be found in the United Nations Environmental Programme (UNEP) through its International Environmental Technology Centre (IETC) which is focusing on WEEE/E-waste management under its waste management program.

Other experts such as Australia's Sunil Herat (IISD, 2015) highlights the business opportunities for recovering valuable materials from e-waste, and recommended a four-step approach for environmentally sound management of e-waste, including to: strengthen collection systems; understand the current financial, policy, and institutional set-up; examine policy measures implemented similar to EPR (extended producer responsibility); and incorporate expertise from an EPR panel on the technological, policy and financing aspects of e-waste management.

The Ministry of Natural Resources and Environment in Thailand, has also introduced an emerging WEEE legal framework based on the EPR principles and a national integrated WEEE management strategy in Thailand at the international Malé, Maldives IISD conference in 2015 (IISD, 2015).

Extended Producer Responsibility (EPR) is increasingly recognized worldwide as an efficient waste management policy to help improve recycling and reduce landfilling of products and materials. The basic feature of EPR is that producers assume responsibility for managing the waste generated by their products put on the market (OECD, 2014). In 2001 OECD defined EPR as "*an environmental policy approach in which a producer's responsibility for a product is extended to the post-consumer stage of a product's life cycle*".

Going back as far as 1990, one can find the origination of Thailand's present EPR strategies as articulated by Lindhqvist (2000) who first formulated the first definition of the extended producer responsibility (EPR) concept. Today, almost all OECD countries have formulated EPR policies and it is now possible to get a clearer understanding of the way the EPR principle can work under various conditions. In particular, the concept of EPR is as a policy principle to promote environmental improvements of products and product systems, and identifies possible approaches to key concerns in the implementation of EPR which builds on the preventive environmental strategies.

The current landscape of EPR in Asia varies significantly across countries and between OECD and non-OECD members. Industrialized OECD economies like Japan and the Republic of Korea have already well-established EPR schemes and regulations in place on the key waste streams, supported by a solid monitoring and enforcement framework. Some rapidly emerging economies, such as the People's Republic of China (PRC), India and Indonesia have started to develop EPR programs even though these are generally not yet fully implemented and functioning. Malaysia and Thailand are also embarking the path towards

EPR for e-waste, although these initiatives generally rely on voluntary participation of producers (OECD, 2014).

In Indonesian as in most places across Asia, there is a 2008 law on waste management but a regulation to elaborate on the law has still not been made. The law required that producers handle their own waste (like in Thailand) but in Indonesia that has been interpreted to mean only the packaging (Elyda, 2016).

Therefore, as we have seen from the above short discussion, the need for further research and understanding of the variables surrounding the issues, policies, legislation and laws needs to be undertaken in this global problem. The researchers are thus proposing the following three research hypotheses as stated below and modeled in Figure 1:

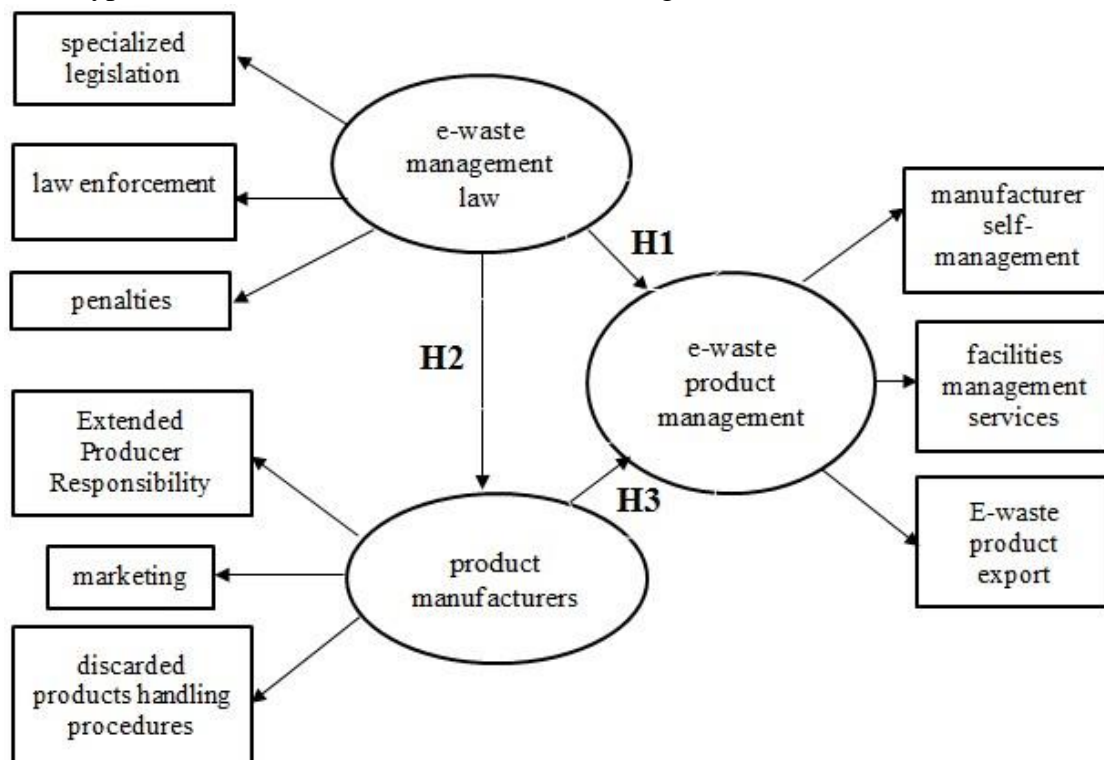


Figure 1: Conceptual Framework

### Proposed Research Hypotheses

H1: Waste management law of discarded electronic, electrical and appliance products has a direct effect on waste product management.

H2: Waste management law of discarded electronic, electrical and appliance products has a direct effect product manufacturers.

H3: Product manufacturers of discarded electronic, electrical and appliance products has a direct effect waste product management.

### Methodology

This research aims to model the structure of the factors influencing Thailand's legislation and law affecting waste disposal of e-waste from electronics, electrical and consumer appliance products manufacturers in Thailand. Therefore, researchers have determined the following detailed steps of how to carry out the research

#### 1. The approach used in the study

For this study the researchers used both quantitative and qualitative research from both primary and secondary data. The researchers thus determined the following steps for this study:

a. Study of Secondary Data

The researchers are reviewing the literature related to e-waste legislation and law and the manufacturers' perspectives and policies concerning it. Thus far, research has been comprised of published research, textbooks, internet materials, media reports, and data which have been synthesized to develop a conceptual model for the variables that affect environmental management legislation, law and policies of discarded electronics, electrical, and consumer appliance manufacturers.

b. Quantitative Research Methods

Quantitative research will be performed using the primary data by collecting a questionnaire from the target sample. The questionnaire to be used to collect data is structured and written in a realistic, easy-to-understand format which is deemed to be reliable and reasonable. Further measurement and reliability validation will be undertaken as follows:

- Questionnaire review will be conducted by academic scholars to validate the investigation questions and the use of rhetoric and the simplicity and comprehension of the questions.
- During the questionnaire trial stage, questions and responses will be monitored so better clarity can be achieved. Questions will be updated as needed.
- Perform data collection and statistical analysis

c. Qualitative Research Methods

Qualitative research will involve confirming the model of the quantitative research. It is a collection of interviews with electronics, electrical and appliance industry professionals involved with the manufacture ring of these products.

d. Population and sample

The research population consists of manufacturers of electrical, electronic and consumer products in Thailand.

e. The sample size

Schumacker and Lomax (2010) stated that Structural Equation Modeling (SEM) uses a variety of models to show the relationships between observed variables with the same basic goal of providing a quantitative test of a theoretical model hypothesized by a researcher with Meldrum (2010) further stating that a sample size smaller than 100 should not be used in SEM as it is unreliable. Therefore, using a factor of 20 for each of the 12 variables from the research survey, it is anticipated that a total of 240 samples are adequate to assure a reliable sample size (Schumacker & Lomax, 2010).

To confirm the model of quantitative research, 10 in-depth interviews with those involved in environmental waste disposal management for manufacturers of electrical, electronic and consumer products in Thailand will be undertaken to confirm the model of quantitative research.

f. Tools used in the research

For this research, the measurement instrument or questionnaires utilized was prepared from the literature. A self-administered questionnaire (SAQ) is being used as it is exploratory in nature and serves as a starting point for other methodologies.

g. Quality inspection tools used in the research

Researchers will continue to monitor the quality of the instruments used in the research to be used as a measurement of quality. The entire content validity and reliability is divided into two stages.

- The questionnaire will be created by the research team, and be peer-reviewed and tested by use of the content validity of item objective congruence index (IOC) by five experts in their respective fields. The IOC for each item is the summation of scores given by the experts divided by the number of experts. This ensures the quality of the questionnaire with any IOC score less than 0.05 being eliminated.
- Checked by five experts in their fields including:

Electrical, electronic, and appliance manufacturers	3 members
Industrial appliances and electronics academic experts	2 members

### **Data Collection**

Primary data is a collection of factors that influence environmental waste management legislation, law and policies of discarded electronics, electrical, and consumer appliance manufacturers in Thailand.

Secondary Data consists of studying the theories related to the research from various sources; including books, manuals, tutorials, articles, research papers, etc., to define the concepts and theories used in the study

#### **1. Data analysis and statistics used**

Quantitative data analysis research will be conducted using statistical analysis as follows:

- a. Descriptive statistics including frequency, percentages, means, and standard deviations will be used to demonstrate the profiles as well as rating scores and response rate.
- b. An analysis will be conducted using structural equation modeling (SEM) to determine the relationship of the factors influencing environmental waste management legislation, law and policies of discarded electronics, electrical, and consumer appliance manufacturers in Thailand.

#### **Qualitative data analysis**

To confirm the results of the quantitative analysis are credible and the findings reliable, the researchers will conduct interviews with those involved in environmental waste management legislation, law and policies of discarded electronics, electrical, and consumer appliance manufacturers in Thailand. Afterwards, the researchers will proceed to interpret qualitative information including classified information. The idea that qualitative data is mainly ‘unstructured’ is useful, if this is taken not as a definition but rather as an imperative for analysis. Although unstructured data may not be classified, it can be classified and indeed one of the main aims of qualitative analysis is often to do just that (Dey, 1993).

### **Conclusion**

Thailand is in urgent need of a new law to enter the new age of waste management as the amount of electronic waste entering landfills and being dumped on public land threatens public health and the environment. The world is entering a new age of waste management, which requires cooperation from everyone and if waste separation goes ahead successfully, the amount of waste can be cut by half.

Experts concur on the role of the informal e-waste recycling sector; the need for data-driven policy and resources; and the possible costing impact of EPR. It has also been noted the importance of formalizing and incorporating the informal sector into WEEE management systems to create “win-win” situations. The need for occupational safety and health training also must be accessed. It is a known fact that proper and safe e-waste management and

disposal is not an inexpensive proposition so therefore constraints must be overcome for investing in WEEE recovery and recycling facilities. In order to set up a market-based waste management system, data inventory and enabling regulations are needed while being sensitive to the cost of EPR being passed through to end-consumers. Under the concept of “product stewardship,” cost increases are inevitable and all stakeholders involved in the electronics market have to become responsible.

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## DRIVERS OF ENTREPRENEURIAL FIRMS IN HOSTILE EMERGING MARKETS: A SURVIVAL MODEL

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### Abstract

**Purpose:** The purpose of the study was to understand the critical success factors for survival of entrepreneurial firms in hostile markets. Market crises and hostilities challenge the sustainable business ventures and growth of entrepreneurial firms in emerging markets. Success of entrepreneurial firms is important to any nation as the entrepreneurial firms contribute significantly to the stability and well-being of the economy. The purpose of this thesis is to enlighten entrepreneurs what factors that are essential to gain business success in constantly turbulent and hostile emerging economy markets.

**Methodology:** The research methodology included the empirical research. We collected about 200 data from the respondents, especially entrepreneurs. We requested them to elaborate and rate the entrepreneurial challenges being faced by them during their operations in a particular country. The country in this context is Sri Lanka. This research, conducted in three parts (autobiographic study, case research and questionnaire based survey) using empirical data from entrepreneurs and entrepreneurial firms operating in Sri Lanka provided interesting findings.

**Findings:** The analyses suggested that in a constantly turbulent and hostile emerging market context, five factors, namely, credibility, creativity, competence, commitment, and connections/relationships (networking) significantly influence entrepreneurial firms' survival and growth in a turbulent economy or market. A model showing the influence of these factors has been proposed too. VMOG MODEL AND PPTCR MODEL would be helpful in developing sustainable enterprises.

**Implications:** This research also addressed a knowledge gap in the literature by investigating the contribution of factors that are critical and essential for entrepreneurial firms to survive and grow in constantly turbulent and hostile emerging economy markets. The findings offer entrepreneurs in emerging markets important insights into growth strategies for surviving and thriving in often-hostile market conditions. In addition, suggestions for further research to address the possible gaps in the findings of this research have been proposed.

**Keywords:** *entrepreneurial challenges, key success factors, critical success factors, emerging markets, entrepreneurship*

### Introduction

Hostile market conditions make managing business organizations extremely challenging. Especially entrepreneurial start-up firms find it hard to survive in such markets because they lack resilience when facing a crisis and other hostile conditions threatening their survival. An entrepreneur is tested for extraordinary capabilities in driving forward the firm in hostile markets.

In the hostile markets where threats from crises, turbulences, and competition are manifested, sustainable business ventures of entrepreneurial firms has become a great challenge. Many new entrepreneurial firms fail to withstand the pressure generated from these uncontrollable market forces and, finally, may be forced to shut down before long. Enterprise failures cause damage to the economy and loss of credibility of new firms as well as to the entire entrepreneurial community of the country. This unhealthy environment fosters lack of trust in

the entrepreneur's ability to succeed and thus prospective investors become reluctant to invest in new firms, discouraging young entrepreneurs, as they would find it difficult to secure funds and other resources for their new firms.

Companies worldwide have realized the importance of being present and to be operating transnational. That is why many firms tend to expand globally through Mergers & Acquisitions. Furthermore a takeover could be categorized as either friendly or hostile, whereas the latter one is characterized as an acquisition of control of a target company without a contract or a mutual understanding with the management of the target firm (Savela, 1999). Furthermore, if a bid is placed for the shares of the target company without informing its board, the term hostile takeover is also applied (Damodaran, 1997) A target company which faces a hostile bid from an acquiring firm does not stand helpless. The management of the targeted firm may implement certain defense measures, such as various corporate defense strategies, which aims to make the hostile bid less profitable for the acquiring firm as well as protecting the shareholders and the management of the targeted firm. Commonly known is that there are several reactive measurements that can be implemented in the case of a hostile takeover, but one important aspect that we will also look further in to are the proactive measures that can be implemented prior to a hostile bid. The commitment to defend against future takeover attacks is important both because of preventive defenses take time to construct and because they signal that the board and the executives are united in the pursuit of the goal of the companies' independence.

Many researchers confirmed that doing business in hostile markets is not an easy task due to its higher degree of uncertainty and the crisis-rich nature (Herman, 1963; Starbuck and Hedberg, 1977; Turner, 1976; Webb, 1994; as cited in Mishra, 1996). Despite the highly unfavorable conditions for business enterprises as evident from published research, it is encouraging to see some enterprises with similar resources thrive in hostile markets while others go out of business. It is therefore worthwhile to explore the factors behind the survival and growth of new entrepreneurial firms in the face of constant market turbulences and hostilities that affects the whole nation's industries.

## **Literature Review**

### **1. Characteristics of Emerging Economy Markets**

During difficult times due to hostile market conditions, firms have to face often complex rapid and unexpected changes (Doherty and Delener, 2001; Edgar and Nisbet, 1996; Black and Farias, 2000; Conner, 1998). Lawton (2011), drawing from multiple definitions of natural scientists, described a hostile environment as an environment with unstable external conditions that expose firms to high risks for investments, and making less resources available to operate while demanding more effort to run the business. Researches cite the characteristics of hostility being shortage of resources, rapid inflation, wide swings in the business cycle, changing social values and a multitude of other dynamic forces that radically alter the industry's operating environment (Ward and Lewandowska, 2005). Accordingly, hostile environments "are characterized by precarious industry settings, intense competition, a harsh, overwhelming business climate, and a relative lack of exploitable opportunities" (Casillas, Moreno and Barbero, 2011 as cited in Covin and Selvin, 1989). Intimidating offensive characteristics that negatively affect performance is seen to be present in hostile environments (Shin and Kleiner, 2001 as cited in Denenberg, 1999). Therefore, a hostile market can be characterized as a market with adverse, antagonistic, high risk and rapidly changing conditions that negatively affect business performance.

Recent studies conducted on market crisis situations, its behavior and how firms respond

to turbulent situations have revealed that market hostilities create uncertainties and furthermore push firms towards crisis situations (Ansoff, 2008; Hatiramani, 2008; Harrington et al, 2005). Some scholars have attempted to describe the behavior of market turbulence in which the firms are functioning. Among them, the description of turbulence by Ansoff (2008) is worth an extra attention. There are five distinct levels of turbulences or crises where firms are operating have been described by Ansoff (2008). Repetitive Environment - a placid environment where nothing ever changes even in the free market conditions is the first level of turbulence he identifies. Expanding/Slow Incremental Environment where demand usually exceeds supply and customers' needs are basic and undifferentiated are the second level. Then, the Changing/fast Incremental Environment where customers' needs are differentiated by different buying power and preferences is the third level. Discontinuous (Predictable) environment is the fourth turbulent environment described. This environment exists in emerging markets with influx of foreign competitors, technology substitutions, rapid changes of customer needs, and governmental and social changes. The fifth environment described is the Surprising (Unpredictable) Environment where technology leadership plays a key success factor. In this environment, customers are receptive to new technological advancements and are willing to pay for such high technology products. In the first three environments identified, the future can be extrapolated from the past and there are only a few surprises may happen. Firm's existing strengths and successful strategies in the past are likely to remain relevant in winning business. However, in the fourth and fifth level turbulent environments, extrapolation of the past in to the future will be dangerous, as serious frequent market changes tend to happen. In such environments, historical strengths can become weaknesses and the past successful strategies will become obsolete and ineffective (Ansoff, 2008).

Analyzing the hostile and turbulence market behavior critically, James and Wooten (2008) describe five phases that depict organizational crisis situations. They are (i) Signal Detection – where the leadership is getting warning signals that something is wrong, (ii) Preparation/Prevention – where the leadership starts preparing to prevent crisis situation, (iii) Containment / Damage Control – where the leaders execute strategy to control and contain damage, (iv) Business Recovery – where leaders put long term and short term efforts to get back to usual business and (v) Learning – where leaders go through a process of acquiring, interpreting, acting on and disseminating new information throughout the firm. Understanding these phases is very much important in order to develop leadership skills to manage crisis situations successfully (James and Wooten, 2008).

A few interesting definitions for 'crisis' and detailed descriptions of 'crisis behavior' too were proposed by Mishra (1996), Marcus and Goodman (1991) and James and Wooten (2008). The state of crisis has been defined as "a major threat to system survival with a little time to respond involving an ill-structured situation where resources are inadequate to cope with the situation (Mishra, 1996). Looking at a different dimension of crisis situations, James and Wooten (2008) defined business crisis as "any emotionally charged situation that, once it becomes public, invites negative stakeholder reaction and thereby has the potential to threaten the financial well-being, reputation or survival of the firm or some portion thereof". However, few are of the opinion that although a crisis raises questions of survival for a firm, it can lead to either positive or negative organizational outcomes (Marcus, and Goodman, 1991).

Elaborating further on the definition of crisis, two primary types of crisis situations have been identified by James and Wooten (2008): sudden and smoldering. While sudden



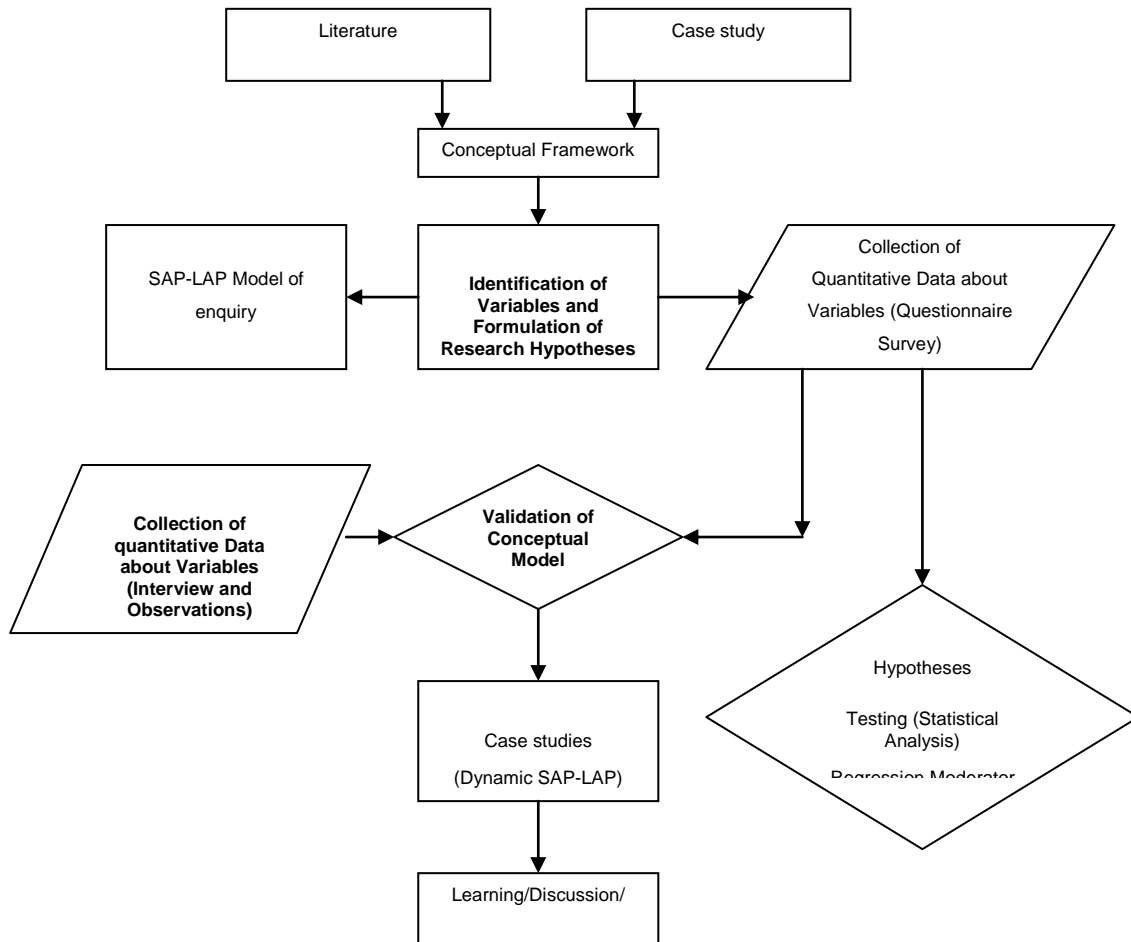
crisis are unexpected incidents in which the firms have no control of, smoldering crisis take place due to the problems of firm's leadership. Though there is no 'one way' to curb or manage crisis situations, James and Wooten (2008) reiterated the importance of understanding what differentiate a crisis situation from an unfortunate or unfortunate business challenge. Another similar argument suggested that, during turbulence, change occurs in two dimensions: complexity and turbulence. When complexity increases, turbulence increases (Black and Farias, 2000).

Crisis has been also described in the light of market related instability such as shorter production cycles, product multiplicity and shorter planning horizons. The literature further stated that the crises could be manifested in a commercial confusion caused by global terrorism, localized conflicts, rising oil prices, and the deep rooted uncertainty in the world (Harrington et al, 2005). This definition is highly applicable to a country like Sri Lanka where the national development was hampered for over two and a half decades due to prolonged ethnic conflicts and political turmoil existed in the country.

Literature available suggested that crisis created by market hostilities does not only affect the organizational wellbeing but also to the overall economic stability and development of the country (Hatiramani, 2008). Discussing the long term effects of market turbulence on country's economy in general, researchers stressed that there could be a long-term effect on firm's growth, income and employment sustainability. Trade deficits would be widen and the Government's budgetary management would lead to a higher inflation, and increase in the interest rates while depreciating exchange rates in a turbulent situation (Hatiramani, 2008, as cited in Abeyratne, 2008).

## 2. Case methodology

The study was undertaken through case study method (Yin, 1994). Through this method the authors have tried to develop theories based on case study analysis (Eisenhardt, 1999). The study uses SAP-LAP method (Sushil, 2000) and PPTCR model (Bhardwaj, 2016) for developing the theories and proving the drivers of survival factors in hostile markets especially for entrepreneurs. is divided into three phases: (i) the pilot study to identify the organizational antecedents of sustainable business ventures, (ii) questionnaire study to establish relationships among organizational antecedents for sustainable business ventures (iii) case studies to verify and enrich the sustainable business ventures model. The framework of research methodology is given in Figure 1. The framework shows the structural variables and internal environmental variables which help motivate the sustainable concept within the company. The framework also shows the relationship between drivers of sustainable business ventures in hostile markets which are the given characteristics undertaken in the study. The Figure 1 mentioned below describes the methodology in detail. It shows the various steps taken to do the research and also shows the how the conceptual framework was developed.



**Figure 1: Framework of Research Methodology**

This qualitative research primarily examined the critical factors that helped Epic to survive in a constantly turbulent and hostile market environment that prevailed in Sri Lanka during the decade of 2000. Epic Lanka (Pvt.) Ltd. is one of the most successful companies in Sri Lanka’s ICT industry, and has expanded its operations in to neighboring countries. Epic Lanka has recorded continuous business growth and has successfully managed business diversification despite the hostile market conditions during the period 2000 - 2009. In the background study, special attention has been placed on two specific crises in 2000 - 2003 and 2007 – 2009, where the country experienced heightened hostilities due to local and international market turbulences. Epic Lanka recorded a significant growth during the decade amidst many market hostilities. The findings from the Epic Lanka case (the critical factors for surviving hostilities) were then compared with eleven other cases of entrepreneurial firms that also were successful and have achieved growth during the same period. Comparative cross-case analysis helped identify a set of critical factors that were essential for entrepreneurial case firms to survive in the constantly turbulent and hostile market environment.

The founders of these case firms were interviewed to explore how their organizations have either avoided or withstood crisis situations caused by hostile market conditions in Sri Lanka during the period under review. The strategies adopted by these entrepreneurs and the underlying critical factors that helped them in surviving in the hostile market conditions were also investigated. All the 12 companies considered in the sample, including Epic Lanka, have registered steady growth in their revenue and bottom-line profitability amidst hostile market conditions prevail in the country. The respondents were chosen by invitation for empirical data gathering after assessing the credentials of their organizations based on published and market information. The career-stories of these entrepreneurs have been explored through interviews in order to understand what factors have helped them to survive in the hostile markets. The exploratory case research technique used in the interviews yielded in personal, sensitive and confidential information of their entrepreneurial ventures. The genuineness of information ensured through cross-reference of the secondary data relevant to each respondent has improved the quality and reliability of the outcome of comparison and validation.

### 3. Case study of Sri Lanka

Sri Lanka, being a small developing economy with weak economic fundamentals and markets, has been frequently exposed to turbulence caused by both, domestic and external shocks. Socio-economic indicators reveal that Sri Lanka is generally a hostile market for doing business. The situation aggravated during the decade of 2000 mainly due to the intense civil war and the two global economic crises during the period. Many barriers for entrepreneurial investments and business growth exist in Sri Lanka. Compared to the conditions in a stable economy, Sri Lanka's risk profile is more complex and intense due to its uniqueness of the political and economic environment. This suggests that entrepreneurial start-ups are more vulnerable as they have to operate in a much more uncertain business environment and have to overcome challenges that are much greater than those of more stable and advanced economies.

In Sri Lanka, small and medium enterprises (SMEs), of which majority is entrepreneurial firms, contribute more than seventy percent to the GDP (Central Bank of Sri Lanka, 2013). This indicates the significance of the small and medium firms' contribution towards the domestic economy. It is noteworthy that over seventy five percent of the new established enterprises in Sri Lanka fail to gain momentum of growth and, therefore, ceases to exist after few years of operations. While the failures of this sort have been researched by many scholars (Stinchcombe, 1965; Singh et. al, 1986; Audretsch, 1991; Bruderl et. al., 1992; Holtz-Eakin et. al, 1994; Gimeno, et. al, 1997), it is noticed that lack of resilience in withstanding the challenge caused by market turbulence significantly contributes to business failures in Sri Lanka. Entrepreneurs' incapability to operate under hostile market conditions and to withstand external shocks apparently drives many out of business.

### **Sap-Lap Method Of Case Study Analysis**

**Situation:** In Sri Lanka, new entrepreneurial firms are exposed to undue risks and threats due to the prevailing hostile market conditions. Entrepreneurs face greater challenges in sustaining their business in such a hostile market filled with many impediments external market forces and uncertainties. Furthermore, hostile markets demand entrepreneurs to adopt unique strategies in their organizations to thwart the impact of hostilities specific to Sri Lanka's economic and market conditions. One of the most commonly debated reasons for the prevailing lower success rate of entrepreneurial start-ups is its inability to survive diverse crises created by the external forces in the unstable, volatile, and hostile market conditions,

which create additional challenges to already existing constraints that every entrepreneurial start-up firm faces. Due to lack of confidence in sustainability and survival of the new firms, skilled professionals express reluctance to join young and new enterprises unless such firms are funded by or are affiliated to larger and well-established corporations. As this tends to restrict hiring the 'best-fit' human resources to young enterprises, they are left in more difficult situations to gain competitive advantage over established large organizations. Until the new enterprise establishes a strong image in the industry, young entrepreneurs face the risk of high employee turnover.

Negative image and low credibility of start-up firms also prevail among the finance institutions such as banks and finance companies due to the frequent failures of start-up enterprises. Due to uncertain sustainability of start-up enterprises in Sri Lanka, financial institutions, in order to avert risks, impose tighter conditions on loans, which include higher interest rates and provision of collaterals up to over 200 percent of the loan. Borrowing from banks has become extremely difficult and application procedures have become very rigid for young entrepreneurs because of the negative image created by frequent business failures.

**Actors:** It is evident that Sri Lankan entrepreneurs operate in markets characterized by frequent economic and political crises. In this macro environment, understanding the most critical factors that help new entrepreneurial firms to survive is of great importance to entrepreneurs as well as to policy makers. However, the entrepreneurship literature indicates a lack of studies in this regard. This necessitates further research on critical resources and practices that contribute towards the success of entrepreneurs starting new business enterprise in emerging markets. Thus, exploring and understanding the most critical factors that influences entrepreneurial firms' performance and survival will not only benefit entrepreneurs to drive their firms to success amidst hostile market conditions, but also will address a research knowledge gap with regards to influence in the context of different market environments.

Survival and growth of entrepreneurial firms will provide many other benefits too. While establishing a stable local economy, market expansion beyond local boundaries that brings in foreign exchange by way of exports and preventing foreign exchange repatriation through import substitution by manufacturing imported goods locally are key benefits entrepreneurial firms offer. In addition, technology transfer and knowledge assimilation by developing relationships with international industry leaders, engaging in research and development for continuous improvement, innovations, uplifting social and living standards, employment generation, rural economy development and inclusion by bridging rural and urban economies, etc. are also important benefits that could be reaped from sustainable entrepreneurial firms. Therefore, the findings of this research will directly benefit to individual firms for its survival and growth, and to the Governments for developing a stronger national economy, while they will indirectly contribute in improving international relations, knowledge assimilation and transfer, social welfare, etc.

### **Process of Entrepreneurial Survival In Hostile Markets**

Though most of the evidence exist suggests that hostile and turbulent market situations lead to uncertainties for businesses survival (Mishra, 1996) some researchers have described 'crisis' as an 'opportunity' too for innovative entrepreneurs, as crisis situations tend to create pockets of new opportunities for them to grab (Marcus, et al, 1991; James and Wooten, 2008,). A few others too have expressed similar ideas. One research paper quotes that "A crisis is an opportunity riding on a dangerous wind" - the phrase derived from Chinese word for crisis "we iji" which has two ideograms "danger and opportunity". According to the authors, there are two certainties in this chaotic world the businesses are operating in; the rapid change triggers crisis and crisis brings uncertainty and more change. Also, crises can provide

managers opportunities too to learn and change for good amidst threatening repercussions for organizational survival (Mishra, 1996, et. al).

### **Learnings**

The country's GDP growth slowed down to an average of 3.5 percent during the decade of 2000 (Bureau of South and Central Asian Affairs, 2011). Industries suffered due to the credit crunch created in the country as a result of tough policies imposed by the Central Bank. The prime lending rates and bank interest rates reached all-time high figures of 25 to 28 percent, which were rated the highest in the region. Borrowing became almost impossible for industries. The net export of goods and services reported at minus 13.7 percent aggravating the burden on foreign exchange reserves. The trade balance (exports-imports) was recorded at US\$ 6 billion. Bad debts in the country during the period accumulated to a staggering amount exceeding Rs. 170 billion, which is almost 5.3 percent of the national average GDP of the decade (Central Bank of Sri Lanka, 2011). Indicating signs of industrial instability, the proportion of non-performing loans was as high as 50 percent of the total loans granted by the banking industry (Daily Mirror, 12 May, 2012). The period prior to 2009 was seen highly hostile for business in Sri Lanka.

On May 19, 2009 the Government of Sri Lanka eradicated terrorism in the country with the end of the long drawn out war. Soon after the victory celebrations, the President of Sri Lanka announced that the country would embark on a new era of economic development. In the years since 2009, the Sri Lankan economy became somewhat stable. Foreign reserves came back to a comfortable footing with an all-time high figure of US\$ 8.5 billion, sufficient to support six months of imports and easing the pressure on the current account and the balance of payments (Ceylon Today, 2014). GDP growth increased to seven percent in the post-war period and is estimated to exceed 8 percent in 2015 and beyond. Poverty rates have fallen from 22.7 percent in 2002 to 6.5 percent expected in 2012. As Sri Lanka's economy became strong enough to borrow from international capital markets on its own rather than seeking external assistance from IMF, the new Government started borrowing at commercial rates, which pushing the country into unhealthy debt burdens as the government launched many infrastructure development projects. Critics alleged growing corruption in the guise of development. This situation created political and administrative instability within the country depriving the opportunity of becoming a strong regional economic hub.

### **Actions**

The contribution of entrepreneurs to the economic development is of profound importance to any nation as entrepreneurship fuels the development of the economy by exploitative of opportunities of production and commerce, especially with the onset of globalization. In development economics theory, it is argued that countries that endow effective entrepreneurs in abundance have attained development while effective entrepreneurship is essential for underdeveloped nations to attain development (Desai, 2009; Powel, 2007; Strom, 2011). The economic importance of an entrepreneur can be explained through the fact that the entrepreneur produces goods and services that are essential for life, engages in invention and innovation, creates factor income, contributes to industrialization, generates surplus in the economy, pays taxes to the government and engages in capital market. Thus one could argue that the economic development of a nation is both directly and indirectly attributable to entrepreneurship. Through organizing the factors of production and engaging in innovations that are essential for the society, entrepreneurs play a vital role contributing directly to the enhancement of the gross domestic product (GDP).

### **Performance**

Creating and maintaining a loyal customer base is another strategy for survival during turbulent times as suggested by some of researchers (Ruiz et al, 2008; Mishra, 1996; Abimbola, 2001; Yao, 1997). Companies that recognize the strategic relevance for maintaining a solid base of loyal customers in order to survive grow and financially perform in these competitive markets (Ruiz et al, 2008). Delivering higher customer value has become a key strategy in achieving customer loyalty (Ruiz et al, 2008).

Contrary to the arguments based on consolidation as a strategy, Edgar and Nisbet (1996) states that traditional methods of management techniques such as strategic planning and scenario planning have little impact in coping with the speed, volume and unpredictability of today's hostile markets. Therefore finding new ways of coping with such rapid changes and complexities are essential for firms to survive. In concluding their research, Edgar and Nisbet (1996) present very interesting tactics for firms to be successful in turbulent markets; (i) placing emphasis on new market development, and prepare to aggressively disrupt the market, (ii) leading in adopting market strategy – changing faster than the market does, (iii) aggressive, quick and flexible product management and (iv) aggressive pricing in order to win specific strategic customers (Mason and Staude, 2007 as cited in Edgar & Nisbet, 1996).

### **Conclusion**

**Lack of Vision.** Lack of vision too was found to be another critical factor for the failures. None of the failed ventures were started with a solid and clear vision. The author had no clear 'dream' of what he wanted to achieve or where he wanted to be in a few years of time. It was revealed that the author has not spent much time in envisaging on, visioning and planning the business. Though he was highly ambitious on the venture, he did not have a clear vision on how to achieve the goals. Every action or decision he took was reactive rather than proactive in most cases. Instead of having long term goals and objectives based on a strong vision, he only had short term objectives looking only a few months ahead with no guidance from a strong vision.

**Lack of Passion, Commitment and Focus.** Lack of passion, commitment and focus on the core business was appeared to be another factor for failure in most of the failed ventures. The author commenced all his failed entrepreneurial ventures not because he had passion for the core business or domain, but merely for the reason that he would need to commence an entrepreneurial venture to fulfill eager to become an entrepreneur. He has chosen the business domain (or the industry) merely because of influence from outsiders but not for the passion he had on the business/industry, thus the author had minimum commitment and focus on the core-business initiated. Further, it was found that in all the failed attempts, he has not capitalized on the strengths and core-competencies he possessed therefore the companies he founded have failed to gain competitive advantage in the market. As they could not face the competition and market forces successfully, the entrepreneurial ventures could not survive in the hostile market environment. Therefore, using PPTCR model (People, process, technology, culture and resources model) entrepreneurs world over can develop and sustain competitive advantage. Also using VMOG Model (Vision, mission, objective and goals model) entrepreneurs can develop strategic directions for the outcomes and sustainability of the enterprises.

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## STRATEGIC MANAGEMENT OF SMART CITIES IN THE UAE: PERCEPTIONS OF PRIVATE SECTOR EXECUTIVES

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### Abstract

Recent years have witnessed a rising tide of interest in smart cities all over the world. A smart city can be described as an urban area developed to create a sustainable development in all aspects. As smart technologies have emerged with astonishing speed, UAE has taken a strategic decision to transform itself into a smart nation in order to make use of these technologies in all walks of life and compete effectively on the international stage. It would be interesting to examine and analyses how this transformation happens in the UAE through strategic management. Indeed, private sector has a critical role in this transformation process. This study argues that the transformation of the UAE into a smart nation would depend, to a large extent, on the effectiveness of strategic management in both public and private sectors.

**Keywords:** *smart cities, urban sustainability, strategic management, private sector executives, ICT.*

### Introduction

A smart city is described as an urban area where sustainable development in the cultural, social and economic arenas of life is managed to produce excellent performance in a number of specific sectors. These sectors include transport and communications, environment, quality of life, economy, and governance in general. This situation is only achievable through social, financial and human resources, as well as good infrastructure for communications (Jung, 2013).

The world's population will have grown from its 2012 level of 7 billion to over 9 billion in the year 2050. Almost three-quarters of the population is likely to live in urban areas. As more and more people continue to come to cities and the population numbers of cities keep increasing, different types and sizes of cities around the world keep springing up. Cities and towns continue to grow and so do the social and economic aspects of the lives of people. Surely, ICT is one of the factors that have been seen to successfully steer normal cities into smart ones.

Buoyant infrastructure and ICT development are essential in the management of projects meant for the improvement and successful socioeconomic development of cities. The challenges facing cities include increasing population, environmental complications, financial constraints and other challenges. ICT infrastructure is essential for ensuring these challenges do not hinder the development of these cities.

### Problem Statement

In the recent past, smart technologies have continued to emerge at an alarming rate. These technologies have great implications for socio-economic development. In other words, if these technologies are not integrated into the entire process of socio-economic change, it would not be possible for cities in the UAE to achieve the avowed objectives of international competitiveness and sustainable development. Therefore, UAE has made a decision to strategically to transform itself into a smart nation so as to be able to use and utilize the



technologies that have continued to develop. The technologies that have already been invented, those that are being developed in real time, and those that will develop in future are being considered by decision makers in the UAE.

Against the backdrop of the UAE's quest to transform itself into a smart nation, this study poses the following research questions.

*Research Questions*

To what extent does a strategic decision of the Government to transform the UAE into a smart nation have an impact on the strategies of private sector organizations?

This overarching empirical question leads to the following sub-questions.

*Research Sub-questions*

1. What are the key strategic challenges facing decision makers in the private sector?
2. What are the socio-economic consequences of smart cities?
3. What policies and strategies are going to sustain smart cities?

These research questions pave the way for empirically testable hypotheses as follows.

*Hypotheses*

H1: The private sector exhibits weaker levels of smart city dimensions in the UAE.

H2: Smart cities are invaluable for socio-economic transformation.

H3: The private sector strategies are enablers of smart cities project in the UAE.

In the light of the research questions and the hypotheses posed above, the main objectives of this research study are as follows.

*Objectives*

- To demonstrate ( through an empirical research exercise) how strategic management is an essential tool in the transformation of any city into a smart city;
- To capture the perceptions of private sector executives about strategic management of the smart cities project in the UAE, and
- To analyze implications of perceptions of private sector executives for managerial decisions.

*Significance of Study*

The importance of this study is that it can help identify how strategic management can be used to improve the socioeconomic factors of different cities and countries, and even turn the developed cities into smart cities as well. The study will have very appealing implications and lessons on strategic management for improvement of other cities around the world.

The smart city developed using strategic management will provide its citizens with an improved quality of life. It would also encourage business activities and create a well-planned environment for suitable living (Shaban, 2015).

This study anchored in the theoretical framework of strategic management is likely to have implications for policy and literature. It seeks to bridge the gaps in existing literature pertaining to strategic management of smart cities. In a case where the all-inclusive framework of strategic management is non-existent, or has not yet been established, it might be quite challenging for the city to achieve its goals.

## **Literature Review**

Recent years have witnessed a proliferation of studies focusing on smart cities. The main objective of this section is to review literature relating to smart cities to gain conceptual, theoretical and empirical insights, and to identify gaps that this study seeks to fill.

In extant literature, Sanchez L. et al (2011) highlights a new paradigm for smart cities where strategic management of rapid urbanization is vital. Cities are required to increase the efficiency of the infrastructure and other services. Hence, there is a need for taking a step in the direction of change for integrating the management and operations of the infrastructure.

The quality of life experienced by the residents is influenced by the level of smartness of different services. A greater level of this smartness is achieved by smart technology. A smart city transformation is a continuous step to promote advancement. For instance, Dubai has embarked on E-government and developed into an operational smart government. This is a solid base from which a smart Dubai could be achieved. The Dubai government portal was launched and further e-commerce procedures and e-transactions in the city were made possible. In less than a year, innovative possibilities were achieved including the e4all, e-job, e-library, Dubai. (Al-Hader et al., 2009). The UAE's development boom is due to the high ambitions and diverse opportunities.

Washburn, D. et.al (2009) state that smart cities bring up new services and practices which greatly affect policy, coexisting with the urban facilities. A smart city's contribution in the entire urban planning ought to be recognized. As reflected in UAE's development, both urban and regional planning testify to the government's strong support for smart technologies. This study further presents the coexistence of urban space and smart city for mutual benefits.

The smart city concept expounded by Rodzi, (2009) focuses on the smart city infrastructure and reveals that developing a city's infrastructure is an important step in the context of a smart city. The study suggests that the implementation of the system of Enterprise Resource Planning is a basis of creating a smart concept in the city.

Gil-Castineira (2011) observes that the development of the government websites has been a significant enabler of the smart city by establishing customer websites. Anthopoulos, L. et al. (2012) studies the smart value created in the public sector.

Lee (2013) discusses how Dubai has moved closer to being a smart city and states the strategic moves Dubai is making to become a smart city. Harrison, (2011) provides a guide to smart cities' development and explains that providing the relevant solutions to private sector's e-service problems is a strategic step in the development of a smart city. This is because business processes define the ability to provide quality services to customers. The processes influence service delivery, performance and the available administrative support. It is important to outline a framework that improves the existing business processes, thus supporting and developing the e-services. The process model includes some pre-conditions, guidelines, directives and templates. Harrison (2011) emphasizes that it is necessary for the ICT architectures to act as a reference guide for the smart cities. Citizens are required to receive proper e-services that are delivered by an automated business process of an organization and are supported by the information technologies. The UAE has created customer contact centers by promoting businesses that are customer-driven.

Perera, (2014) studies the telecommunication technologies in the UAE. The study argues that Dubai has become a smart city due to the advanced internet access. The Dubai District Design has liaised with du, the official WIFI provider, to offer WIFI services in the d3 region. The existence of the WIFI at d3 is one of the vital steps Dubai has taken that has enabled full access of the internet thus paving a way for a smart city. Citizens are able to access essential government services and information. The robust infrastructure is the basis for development

in every industry (Perera, 2014). Lombardi, (2011) describes Dubai as an innovative smart city that has created specialized skills in various areas of smart city including security, energy, water, environment and communication.

It is thus clear that literature contains a wide range of studies focusing on smart cities and their implications. Certainly, the smart city projects in the UAE appear to be in line with best practice. However, the literature has hardly addressed strategic management dimensions in interaction with private sector decision making processes. This study seeks to fill this gap in the existing literature.

### **Research Methodology**

The study was done in the UAE as policy makers here have been making unflinching efforts to transform it into a smart nation. It was anchored in the strategic management framework (Townsend, 2013).

#### **1. Questionnaire Development**

Following a review of studies relating to questionnaire constructs (Shimp and Sharma, 1987) and in the light of the research questions posed in this study, a questionnaire was developed to capture the perceptions of private sector executives. The questionnaire had 27 items in both sections of the questionnaire. The target population of this study included all private sector executives placed in Dubai, Abu Dhabi, Ajman and Sharjah. Because of difficulties in obtaining probabilistic samples, a convenience sampling technique was used. College students were engaged to collect data. The efforts resulted in obtaining 207 usable responses.

#### **2. Cronbach's Alpha for Reliability**

SPSS was used to test the internal consistency of the items in the questionnaire. Cronbach's alpha is a measure of internal consistency. It shows how closely related a set of items are as a group. It is considered to be a measure of scale reliability. The literature suggests that the acceptable values of alpha range from 0.70 to 0.95. The Cronbach's alpha was 0.821 for first section of the variables while it was 0.815 for the second section of the questionnaire.

Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.823 for the first section of the study and it was 0.736 for the second section of the variables. Similarly, Bartlett's Test of Sphericity, another indication of strength of the relationship among the variables was found highly significant at 0.000 for both the sections.

### **Results**

The demographic information presented in Table 1 indicates that 70.5 percent of the respondents were male and the remaining 29.5 percent of the respondents were female. The expatriates who responded to the questionnaires were 79.7 percent of the respondents. The maximum responses (55.1%) came from Dubai. The descriptive statistics relating to section 1 is presented in Table 2. The correlations pertaining to section 1 are presented in Table 3.

For the purpose of analyzing data, Principal Component Analysis was applied. Retaining only those variables which had Eigen value more than 1 a total of seven factors emerged from the analysis. These factors put together explained 71.8 percent of total variance (Table 4). After removing the factor loading with less than 0.50, data are presented in Table 5 with the communalities. Tables 6 through 9 present data pertaining to the challenges facing private sector executives in the context of strategic management of smart cities in the UAE.

**Table 1: Background information about the respondents**

	Percentage
Gender	
Male	70.5
Female	29.5
Nationality	
Emirati	20.3
Expatriates	79.7
Location of the Organization	
Abu Dhabi	27.1
Dubai	55.1
Sharjah	12.6
Ajman	5.3
Total number of respondents	207

**Table 2: Relevance and Importance**

		Mean	S.D.
	Strategic Planning		
a1	The Smart Cities Project has influenced the vision and mission of my organization	2.71	1.196
a2	The Smart Cities Project has been embedded into the strategic plan of my organization	2.80	1.198
a3	Top management supports smart organization	3.84	1.042
a4	My organization has a shared vision of smart organization	2.71	1.196
a5	Our organization has a central co-ordinator for smart projects	2.68	1.213
a6	Our organization has specific smart goals and objectives	2.76	1.261
	Smart MIS		
a7	Our organization has participated in research relating to smart organizations	3.38	1.263
a8	We collect data on a regular basis	3.48	1.350
a9	We share data on smart systems with our employees	3.22	1.218
a10	We periodically circulate documents relating to smart city projects	2.58	1.235
a11	We regularly disseminate results stemming from smart projects	2.64	1.181
	Smart Performance Indicators		
a12	Our organization has designed smart performance indicators	3.21	1.231
a13	Our organization rewards employees with smart skills	3.35	1.205
a14	Our organization promotes personnel with smart skills to managerial positions	3.92	.997
a15	Smart KPIs exist at all levels of the organization	3.31	1.247
	Competitiveness		
a16	Our organization has enhanced its competitiveness within the UAE due to emphasis on smart processes	4.09	.917
a17	Our organization has enhanced its international competitiveness due to emphasis on smart processes	3.82	.983
a18	Our organization has enhanced its connectivity due to emphasis on	3.93	.973

	smart processes		
a19	Our organization has carved smart brand equity.	3.27	1.129
	Smart Human Capital Development		
a20	We spend considerable budget on smart human capital training and development	3.45	1.104
a21	Our workforce is committed to implementing smart projects	3.72	1.091
a22	Emiratization has got a boost due to smart project	3.67	1.042
a23	We send our employees to smart cities overseas to learn smart best practice	2.90	1.315
	Sustainability		
a24	We design long-term plans	4.05	.787
a25	Smart organizations are invaluable for long-term sustainable development of our country	4.03	.803
a26	We have succession planning in our organization	3.87	.900
a27	We look after vulnerable employees while implementing smart plans	3.44	1.168

Table 3: Correlation Matrix

	a1	a2	a3	a4	a5	a6	a7	a8	a9	a10	a11	a12	a13	a14	a15	a16	a17	a18	a19	a20	a21	a22	a23	a24	a25	a26	a27	
a1	1																											
a2	.691**	1																										
a3	.220**	.289**	1																									
a4	.599**	.637**	.255**	1																								
a5	.518**	.564**	.240**	.582**	1																							
a6	.556**	.531**	.182**	.679**	.579**	1																						
a7	-.062	.081	.172*	.094	.102	.114	1																					
a8	-.075	.158*	.059	.018	.060	.078	.496**	1																				
a9	.038	.058	.017	.108	.074	.057	.419**	.607**	1																			
a10	-.115	.041	.031	.079	.089	.098	.101	.173*	.145*	1																		
a11	-.063	.014	.052	.046	.070	.122	.144*	.147*	.164*	.643**	1																	
a12	.38	.41	-.43	.41	.64	.11	.06	.18	-	-	1																	

1 2	1**	1**	.01 2	7**	5**	5**	5	8	3**	.16 6*	.17 6*																
a 1 3	.38 4**	.42 0**	-. 00 1	.43 8**	.41 6**	.62 1**	.05 9	.09 5	.18 4**	-. 18 5**	-. 20 4**	.91 6**	1														
a 1 4	.15 6*	.20 6**	-. 13 8*	.16 8*	.20 0**	.23 3**	.26 2**	.14 3*	.19 8**	-. 10 5	-. 13 9*	.45 6**	.48 3**	1													
a 1 5	.37 9**	.39 3**	-. 02 5	.42 2**	.41 9**	.56 3**	.04 3	.00 6	.13 4	-. 12 1	-. 09 9	.86 0**	.85 4**	.36 3**	1												
a 1 6	-. 00 7	.00 8	-. 09 1	-. 00 7	.00 0	-. 04 0	.29 7**	.21 5**	.15 5*	-. 07 3	-. 10 4	.13 8*	.13 3	.37 9**	.17 5*	1											
a 1 7	-. 02 9	-. 05 2	-. 12 3	-. 08 3	-. 09 0	-. 06 7	.27 9**	.14 4*	.08 7	-. 08 3	-. 11 1	.09 2	.05 1	.21 3**	.10 2	.63 3**	1										
a 1 8	.01 6	-. 06 6	-. 08 7	-. 02 1	-. 03 5	-. 06 5	.27 0**	.19 1**	.09 9	-. 10 0	-. 16 5*	.10 5	.13 6	.34 5**	.14 1*	.72 0**	.62 6**	1									
a 1 9	.13 6*	.06 2	-. 12 1	.14 0*	.02 7	.17 4*	.11 0	.20 2**	.14 7*	-. 07 7	-. 07 0	.34 1**	.35 5**	.25 6**	.34 8**	.38 4**	.33 3**	.48 1**	1								
a 2 0	.08 8	-. 05 2	.01 6	.00 4	-. 04 8	.03 8	-. 03 1	-. 06 5	-. 08 2	-. 00 8	.00 5	.04 4	.06 5	.06 1	.04 5	.01 7	.18 8**	.14 1*	.21 1**	1							
a 2 1	.00 5	.01 6	-. 10 7	-. 01 7	-. 00 8	-. 01 2	.21 3**	.09 1	.04 6	-. 03 5	.01 7	.09 0	.08 2	.16 3*	.04 9	.23 4**	.26 5**	.22 0**	.17 0*	.53 0**	1						
a 2 2	-. 07	-. 07	-. 14	-. 10	-. 09	-. 03	.22 0**	.07 2	.05 8	-. 02	-. 02	.08 4	.05 4	.17 6*	.06 0	.33 7**	.40 1**	.32 3**	.20 7**	.54 7**	.82 5**	1					

2	7	7	7*	8	1	4				0	1																	
a 2 3	.14 0*	.12 6	-. 19 9**	.19 2**	.18 2**	.27 0**	.18 9**	.01 5	.14 4*	-. 07 0	-. 03 8	.32 7**	.31 0**	.28 7**	.32 6**	.26 5**	.16 7*	.17 7*	.25 0**	.17 7*	.45 2**	.46 6**	1					
a 2 4	-. 04 2	-. 05 7	-. 09 7	-. 04 7	-. 01 9	-. 05 2	.30 9**	.19 7**	.06 5	-. 11 9	-. 10 7	.16 0*	.16 1*	.38 2**	.14 8*	.41 8**	.20 6**	.32 1**	.22 1**	.02 5	.41 1**	.38 7**	.32 8**	1				
a 2 5	-. 13 1	-. 10 9	-. 05 2	-. 09 6	-. 04 9	-. 09 8	.31 3**	.23 1**	.07 2	-. 12 8	-. 11 0	.15 0*	.12 8	.37 3**	.08 7	.47 0**	.22 3**	.37 6**	.24 2**	-. 02 3	.39 3**	.37 3**	.27 0**	.78 1**	1			
a 2 6	-. 11 5	-. 06 0	-. 07 3	-. 03 9	-. 00 6	-. 01 8	.34 1**	.26 6**	.13 6	-. 13 9*	-. 12 9	.23 0**	.15 7*	.35 2**	.13 9*	.43 2**	.27 0**	.34 5**	.21 9**	-. 05 0	.41 0**	.35 5**	.28 5**	.64 6**	.74 5**	1		
a 2 7	.12 7	.13 8*	-. 11 3	.13 4	.20 7**	.18 4**	.28 7**	.08 2	.14 9*	-. 11 7	-. 10 2	.46 9**	.46 0**	.50 1**	.43 2**	.31 1**	.06 7	.19 3**	.24 9**	-. 05 4	.25 6**	.18 4**	.43 0**	.44 1**	.46 5**	.47 8**	1	

\*. Correlation is significant at the 0.05 level (2-tailed).  
 \*\*. Correlation is significant at the 0.01 level (2-tailed).



**Table 4: Total Variance Explained**

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
Factor 1	3.649	13.514	13.514
Factor 2	3.568	13.213	26.728
Factor 3	3.309	12.257	38.985
Factor 4	2.652	9.823	48.808
Factor 5	2.488	9.215	58.023
Factor 6	2.058	7.624	65.647
Factor 7	1.667	6.176	71.822

**Table 5: Principal component factor analysis (varimax rotation), factor loadings and communalities for motivational variables**

	1	2	3	4	5	6	7	Communality
a1		.767						.654
a2		.810						.705
a3		.610						.533
a4		.787						.698
a5		.725						.604
a6	.525	.645						.717
a7						.674		.593
a8						.848		.762
a9						.859		.766
a10							.889	.814
a11							.890	.820
a12	.847							.858
a13	.847							.861
a14								.502
a15	.831							.804
a16				.783				.782
a17				.807				.713
a18				.860				.809
a19				.569				.509
a20					.805			.728
a21					.845			.849
a22					.839			.843
a23					.505			.532
a24			.823					.745
a25			.873					.830
a26			.807					.733
a27	.513		.593					.628

**Table 6: Challenges facing private sector executives**

		Mean	S.D.
b1	Modern ICT architecture	4.24	.748
b2	Smart governance	4.05	.732
b3	ICTs-driven processes	4.05	.796
b4	International connectivity	3.89	.994
b5	Existence of national policy tracks relating to smart cities	3.73	1.081
b6	Leadership commitment for smart organizations	3.72	1.019
b7	Smart inter-functional coordination	4.20	.873
b8	Decentralization of smart city planning	3.92	.977
b9	Smart education and skills	4.15	.927
b10	Risk management system	4.20	.835
b11	Globalization of business in smart cities	4.14	.893
b12	Smart transportation system (public and private)	4.17	.944
b13	Cleaner city	4.10	.935
b14	Greener city	4.14	.934
b15	Multi-cultural environment	4.34	.849
b16	Cleaner energy	4.12	.890
b17	Smart healthcare system	3.94	.989
b18	A culture of innovation	3.79	.921
b19	A culture of transparency	3.96	.855
b20	Strategic focus on international competitiveness	3.86	.865
b21	Smart security system	3.83	.902
b22	Environmental protection	3.91	.868
b23	Bridging rural-urban divide in terms of development	3.91	.931
b24	Protection of senior citizens	3.97	.872
b25	Protection of cultural values	3.49	1.070
b26	Efficiency in resource utilization	3.78	.868
b27	Sustainable economic growth	3.77	.866

**Table 7: Correlations**

	b1	b2	b3	b4	b5	b6	b7	b8	b9	b10	b11	b12	b13	b14	b15	b16	b17	b18	b19	b20	b21	b22	b23	b24	b25	b26	b27
b1	1																										
b2	.420**	1																									
b3	.215**	.395**	1																								
b4	.027	.114	.234**	1																							
b5	.098	.214**	.186**	.032	1																						
b6	.113	.092	.120	.028	.640**	1																					
b7	.017	-.085	-.029	.142*	-.061	.117	1																				
b8	-.127	-.042	-.045	.226**	.113	.188**	.473**	1																			
b9	-.102	-.105	-.136	.229**	-.074	-.082	.316**	.356**	1																		
b10	-.132	-.042	.049	.131	-.041	-.076	.191**	.126	.398**	1																	
b11	-.099	-.041	-.010	.164*	-.073	-.070	.377**	.240**	.362**	.445**	1																
b12	-.155*	.001	-.019	-.027	-.168*	-.171*	.141*	-.001	.135	.312**	.461**	1															
b13	-.088	.120	.176*	.079	-.132	-.124	.143*	.019	.039	.242**	.269**	.509**	1														
b14	-.098	.180**	.146*	.048	.063	.002	.054	.129	.047	.230**	.291**	.318**	.245**	1													
b15	-.090	-.092	.145*	.078	.017	.022	.183**	.137*	.148*	.257**	.310**	.355**	.429**	.329**	1												
b16	-.136	-.032	.121	.096	-.003	.041	.227**	.211**	.161*	.301**	.328**	.299**	.179**	.283**	.352**	1											
b17	.163*	.159*	.164*	.176*	.085	.109	.075	.146*	.079	.038	.185**	.078	.101	.004	.035	.239**	1										
b18	.102	.182**	.221**	.108	.181**	.190**	.149*	.149*	.061	-.089	.100	.043	.097	.025	.063	.161*	.712**	1									
b19	.031	.221**	.189**	.109	.124	.125	.187**	.025	.113	.155*	.179**	.094	.011	.196**	.128	.153*	.307**	.401**	1								
b20	.020	.249**	.236**	.152*	.231**	.078	.049	.074	.050	.119	.156*	.082	.016	.241**	.050	.216**	.399**	.348**	.464**	1							
b21	-.061	.176*	.216**	.179**	.061	.021	.136*	.100	.061	.170*	.282**	.201**	.216**	.312**	.186**	.231**	.293**	.335**	.336**	.386**	1						
b22	-.034	.023	.120	.118	-.021	-.040	.184**	.037	.048	.120	.267**	.286**	.190**	.178*	.207**	.290**	.243**	.279**	.295**	.345**	.506**	1					
b23	.072	-.007	.118	.174*	-.009	.031	-.027	-.029	.139*	.217**	.189**	.139*	.132	.165*	.308**	.258**	.216**	.216**	.312**	.226**	.334**	.477**	1				
b24	.079	.132	.170*	.220**	.067	.099	.098	.128	.163*	.250**	.174*	.125	.034	.173*	.166*	.318**	.223**	.245**	.395**	.277**	.214**	.329**	.451**	1			
b25	.066	.066	.163*	.136	.200**	.203**	.228**	.227**	.065	.061	.082	-.032	.083	.059	.021	.077	.275**	.304**	.177*	.319**	.200**	.263**	.297**	.252**	1		
b26	.050	.179**	.185**	.001	.253**	.282**	.025	-.031	-.042	.189**	.032	-.007	.062	.087	.029	.171*	.144*	.179**	.229**	.226**	.187**	.089	.049	.221**	.247**	1	
b27	.053	.034	.074	.085	.157*	.126	-.043	-.004	.032	.057	.027	-.058	-.081	-.061	-.006	.085	.217**	.225**	.190**	.218**	.080	.205**	.174*	.131	.195**	.425**	1

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Table 8: Total Variance Explained**

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
Factor 1	2.672	9.897	9.897
Factor 2	2.351	8.708	18.605
Factor 3	2.216	8.208	26.813
Factor 4	2.090	7.740	34.553
Factor 5	2.069	7.664	42.217
Factor 6	1.934	7.164	49.381
Factor 7	1.835	6.797	56.178
Factor 8	1.561	5.780	61.958

**Table 9: Principal component factor analysis (varimax rotation), factor loadings and communalities for motivational variables**

	1	2	3	4	5	6	7	8	Communality
b1	-.144	-.049	-.210	.155	.062	-.004	.697	.054	.583
b2	.006	-.077	.335	.051	-.155	.061	.766	.042	.737
b3	.179	-.101	.160	.064	.157	.192	.641	.010	.545
b4	-.078	.439	.053	.015	.337	-.019	.357	-.099	.452
b5	-.099	-.041	.173	.003	-.032	.793	.130	.144	.709
b6	-.063	.044	-.024	.091	.021	.844	.053	.124	.745
b7	.210	.663	-.043	.251	-.037	.126	-.067	-.095	.580
b8	.033	.701	.033	.164	-.029	.328	-.113	-.199	.682
b9	.003	.745	.043	-.068	.111	-.185	-.082	.122	.630
b10	.349	.458	.183	-.315	.148	-.153	.004	.396	.665
b11	.469	.512	.240	.048	.039	-.158	-.077	.107	.586
b12	.732	.068	.173	.029	-.030	-.248	-.092	.050	.645
b13	.798	.000	-.065	.127	-.012	-.107	.176	-.030	.701
b14	.441	.049	.573	-.244	.035	.142	.054	-.127	.625
b15	.687	.105	-.036	-.069	.315	.158	-.028	-.066	.618
b16	.433	.231	.213	.056	.255	.091	-.127	.144	.400
b17	.046	.124	.209	.768	.084	-.034	.153	.152	.706
b18	.040	.058	.236	.804	.094	.115	.118	.089	.752
b19	-.037	.111	.597	.222	.237	.025	.104	.195	.525
b20	-.044	.042	.697	.282	.149	.085	.099	.158	.633
b21	.253	.024	.581	.274	.250	.012	.028	-.057	.545
b22	.262	-.041	.329	.330	.541	-.078	-.121	.003	.601
b23	.158	-.026	.125	.094	.842	-.039	.017	.057	.765
b24	.024	.200	.263	.007	.618	.047	.158	.188	.554
b25	.003	.164	.031	.390	.349	.309	.055	.121	.415
b26	.106	-.048	.151	.058	-.011	.296	.114	.753	.707
b27	-.094	-.039	.001	.237	.184	.070	-.032	.719	.623

**Discussion**

The hypotheses were validated through the responses, thus suggesting that the government sector is ahead of the private sector in implementing the smart city projects in the UAE. The private sector executives generally appreciated the importance of using strategic

management framework to translate vision, mission, goals and objectives of the smart city project into reality.

There is virtual unanimity in existing literature about the benefits stemming from smart cities. The visionary leadership of UAE realized that the time was ripe for transforming the country into a smart nation to enable it to become more efficient and competitive on the world stage. It is well-known that UAE is an open country. It must be innovative to stay ahead of competitors. Its smart city project is a pioneering project in the Arab World.

The unveiling of smart city project in the UAE has certainly opened up avenues for research. For instance, it would be useful to attempt a coherent definition including all the elements of a smart city. It would be interesting to explore various dimensions of smart city.

The responses to the structured questionnaire and qualitative interviews conclusively suggest that an all-encompassing strategic management framework is quite valuable for successfully implementing the smart city project across public and private sector organizations in the UAE.

This study found support of a cross-section of respondents for the smart city project in the UAE. This is a healthy sign for sustaining the project. Often discussed but rarely empirically substantiated is the strategic management framework for the smart city project in the UAE. Our review of literature suggests that this is the first study on a smart city project anchored in the strategic management framework. The message of this study is loud and clear. Smart cities project in the UAE must include all sectors and sections of society. And, there must be neat integration of ICTs into all aspects of social and economic life in the country to enhance connectivity and convenience.

A review of literature points out that the term, smart city is used to highlight a city's ability to respond as quickly as possible to the needs of the people. The needs of the people include quality of life and welfare. Of course, the core ecosystem of a world-class cities such as Abu Dhabi and Dubai includes transport, government services, education, public safety and healthcare. They must become smart.

The conclusions of this study have managerial implications. Most interestingly, government policy makers and corporate executives can of course co-ordinate their efforts and strategies for the common cause of implementing the smart cities project in the UAE. It is certainly a win-win project for both the sectors.

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## AN EXAMINATION ON THE SUCCESS OF BILINGUAL SCIENCE TEACHING BY REFERRING TO ITS CONTEXT AT JUNIOR SECONDARY LEVEL IN SRI LANKA

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### Abstract

Bilingual Education Policy was introduced in Sri Lanka in 2002 with selected subjects including science. There are serious concerns as to whether intended benefits are being achieved specially in terms of students' performance. This study attempts to examine reasons of introducing bilingual education in science subject and to examine the impact of this change on the teaching learning process, manipulative skills, thinking skills and attitudes.

Data is collected through a survey from five leading schools in the category of 1AB in Colombo. Accordingly, 150 students, 36 teachers of grades 7 and 8 in Bilingual classes and principals of are selected and interviewed. In addition, direct observations are also made on teaching learning process. Qualitative methods and descriptive statistics are used to analyse data.

Study finds that the bilingual program is not successful and major reasons include the use of poor policy framework, nonexistence of proper plans for pre-service or in-service teacher training programs in parallel to introduction of bilingual education, lack of teacher confidence, carrying out of poor and less number of practical sessions. English language competencies of students are also found to be poor. Further, the study reveals that the available training centers and resources are not effectively used thus stressing the need for taking initiatives to streamline training programs. All in all the findings urge policy makers and stakeholders of education system to revisit the bilingual education program in order bring the intended benefits and to enhance the quality of education in Sri Lanka.

**KeyWords:** *Bilingual Education, Teaching Learning Process, Science, Quality of Education, Education Policy*

### Introduction

English medium education was introduced to Sri Lanka during the British Rule but it was changed when famous Kannagara Reforms that were implemented in 1945. Subsequent changes in political environment of the country in 1956 accelerated in implementing Sinhala as the medium of instruction in parallel to the change of the official language policy.

Throughout the history of public schooling, general profile of education is being argued. Among them the popular idea is that the education system should produce employable citizens. However, many critics argue that education should create someone who is equipped with adequate knowledge, competencies and skills and disciplined with principles and ethics that harmonize with social values. Therefore, the objective should be much more than simply molding students into future workers or citizens. Including pioneers such as Maria Montessori and Rudolf Steiner, among others, all insisted that education should be understood as the art of cultivating the moral, emotional, physical, psychological and spiritual dimensions of developing a child. Science is a very live and practical based environmental related subject which can help achieving above skills to some extent as the core of science follows the basic rationale and nature.

On the other hand, English helps students to improve their communication skills effectively as that is now being widely used. As a result of prolonged discussions and suggestions; Bilingual Education Policy was introduced in Sri Lanka in 2002 with selected subjects to be taught in the English medium. However, the situation was more challenging when science subject was introduced mainly due to complexity of the content of the subject and inadequacy of training. Performance level in science subject is poor even in Sinhala medium and teaching science by existing Sinhala Medium teacher with less training further brought the performance level down. On the other hand students too started facing problems after starting learning science in English medium and this situation should not be ignored without having a proper examination. Therefore, the study raises the following questions with a view to explore the real courses for this from a policy making perspective.

- What were the real reasons for changing the medium of instruction to English?
- What is the impact of the change in the medium of instruction science subject on learning – teaching process and performance
- Whether teaching in English medium improves manipulative skills, thinking skills and attitude

Primary data was collected from 150 students in grade 7 and 8 English medium classes from five leading 1AB schools in Colombo. 1AB School is a one which offers advanced level subjects in all three streams namely Science, Commerce and Arts. Further, 30 teachers who teach science in English medium, 6 class teachers of English medium classes, and five principals of the selected schools were interviewed thus expanding the sample to represent wider perspective. In addition, direct observations were made at all the selected schools.

Both qualitative approach and quantitative techniques were used to assess performance and achievements of English medium students. For data collection purposes at the interviews, structured questionnaire was used. Qualitative methods and descriptive statistics were used to analyse data. Accordingly, the study describes the socio-historical background of English medium education in Sri Lanka, rationale of the study, research methodology, and bilingual education programme in Sri Lanka, teaching-learning process of science at present today, definitions of terms and delimitations of the study.

There are nearly two hundred and fifty thousand candidates of Government Schools face the G.C.E (Ordinary Level) examination, while 10,000 candidates sit the English medium science question paper (according to the Evaluation Report issued by the Sri Lanka examination Department (2009 and 2011), science is a compulsory subject for all students in the curriculum. Therefore from grade 6 – 11 all the students learn science in the class room learning – teaching process in schools. Text book designers and curriculum designers dealing with English medium education should be governed by the theories relating to content based instructions and the objectives of English medium Science education as stated in the National Education Commission (1997).

### **Literature Review**

Theoretical bases formed for science – learning – teaching process for students who are compelled to change their medium were referred along with related researches and further analyzed by referring to Sri Lankan context.

Colonial education policy with a particular reference to the British Education policy in its former colonies exposes one to the attitude of the colonial master to their subjects in the field of education. This is particularly significant because such a discussion traces the circumstances that led to the establishment of English as medium of instruction in education against the local languages (even where such languages could be used in education) in the former British Colonies. Accordingly, the findings from literature was used to investigate, briefly, the factors that hinder the reintroduction and thereby the development of local



languages in education in countries that were subjected to British rule. After this an overview of the causes that led to the temporary relegation of English during the middle of the past century and its subsequent revival afterwards are explored. This is followed by a quick look back on the advent of English in Sri Lanka and its place in science education at present. A presentation of this nature helps to understand the causes that made people, especially, in the countries formerly ruled by Britain, consider English as the superior and the most used language. For certain studies beyond a certain stage in education, it also helps one to critically examine elements that impede more use of local languages in education. It also creates a platform for one to get a good grasp of the percentage of people in a given context that can have access to education in English versus local languages. Furthermore, a presentation of this nature enables one to examine significant questions related to debates on “development” especially in the Sri Lankan context after the instruction of local languages to teach science subjects in the secondary education circle. In order to get a better understanding of the different concept regarding this topic, literature review was grouped into following areas.

- Kannagara Report
- A brief historical overview of Science Education in Sri Lanka
- Nature of Science Education
- The importance of Science Education
- Education Reforms in 2007
- Bilingual Education programme in Sri Lanka
- Second Language Acquisition

### **Objectives Of The Study**

Study tries to achieve following two objectives.

1. To examine the performance level of students in science at secondary level education
2. To examine the bilingual education has been able to improve thinking skills manipulative skills and attitudes of student as planned

### **Research Methodology**

The researcher has already paid direct attention to the methods used in science teaching – learning process in the English medium at junior Secondary Education. Furthermore, it examines the emphasis paid to develop thinking and manipulative skills of students in their learning – teaching process in the class room. Introducing science subject in the medium of English is very needy action and wise decision the government has taken in relation to make an active global citizen. Private sector complains the government sector that school leavers are not trainable, and not employable. Moreover, they are unable to communicate with the modern world as lack of competency of English language. They do not have ability to manage four language skills of English and usage of modern technology. Implementation of English medium science to the curriculum helps to solve the above mentioned issues to some extent. Although, English Medium education promotes competency of using English language of students, it is questionable whether manipulative skills and thinking skills in science are promoted or not. The researcher has already researched the above mentioned issues that should be addressed immediately for the betterment of science English medium learning – teaching process in schools, in relation to produce an active global citizen. Qualitative approach and quantitative techniques were used to assess performances and achievements of English medium students. Primary data was gathered through direct observations of learning teaching process, interviews with teachers and students of English medium Science, principals and questionnaires to students of English medium and Teachers

of English medium Science. For the analysis of data qualitative methods and simple statistical methods were used where necessary. Sample of the study consists of 5 – 1AB Colombo schools which conduct Bilingual Education process in Colombo because it has the highest educational performance and also the most sophisticated facilities for learning and teaching process. Accordingly, following constitutes are given as the components of the sample.

- Schools in the Colombo Zone
- Sample schools is limited to 5
- 5 – 1AB Schools.
- Sample number of English medium science teachers is 30
- Sample number of English medium students is 150
- Interview with 2 principals.
- Interview (structured) with 6 English medium science teachers
- Interview with 5 English medium class teachers
- Structured interview with 15 English medium students.

### **Data Analysis And Discussion**

Obtained data at the study were analyzed by using different methods to realize the objectives of the study. This analysis was meant to understand the impact on manipulative skills, thinking skills and attitudes towards science English medium learning - teaching process. Class room observations helped to study the impact of the English medium instructions in the science learning and teaching process. Furthermore, it helped to investigate how the teachers used different methodologies and how teachers used student centered, competency based activity oriented science – learning – teaching process. Findings of interviews and lesson observations were discussed in detail in chapter 4 and significant cross check for the questionnaires were reported accordingly. It was found that there were no proper planned pre-service or in-service English medium science teacher training programs scheduled by the government to conduct the program effectively. The lack of teacher confidence in teaching science in the medium of English and very less practical sessions used in learning - teaching process of science are the major problems identified. Furthermore, lack of English Language skills and lack of manipulative skills in English medium students are other main drawbacks. There are printing mistakes, unclear subject matters in English medium science text books. The text books have to be enriched with colorful illustrations and clear printings. Other major issues recognized are there is no specific framework of bilingual policy and lack of monitoring mechanism in English medium science education at junior secondary level in Sri Lanka. English medium science education in Sri Lanka should be equipped with an on-going and fast evaluation program to have a better future.

The course components of teacher training programs of science teacher trainees at Collage of Education, teacher training center and other relevant training institutions should address all aspects of the science learning – teaching process. Teachers of English medium science, teaching at junior secondary level should be equipped with language competencies and professional skills that are necessary for students, being an active global citizen. In teacher – training programs, special attention should go to attitudinal change of English medium science teachers to promote to grab the maximum use of science laboratories in their learning – teaching process. Furthermore, promoting teachers to use more individual activities with group work is very important in their training programs. Although, the selected schools are well equipped, negative issues related to English medium learning teaching process can be seen.

## Conclusion

English medium science education in Sri Lanka should be equipped with an on-going and post evaluation program to have a better future.

The course components of teacher training programs of science teachers trainees at College of Education, teacher training centers, and other relevant training institutions should address all aspects of science learning – teaching process. Teachers of English medium science teaching at Junior Secondary level should be equipped with language competencies and professional skills that are necessary to be an active global citizen. Lack of teacher confidence is one of the major problems identified

In teacher – training programs, special attention should go to attitudinal change of English medium science teachers to promote them to have the maximum use of science laboratories in their learning – teaching process. Furthermore, promoting teacher to use more individual activities with the group work is very important in their training programs.

Text book designers and curriculum designers dealing with English medium education have been governed by theories relating to content based instructions and the objectives of English Medium science Education as stated in the National Education Commission (1997). Learning instructions can be both in L1 or L2. The language of instructions is also an important aspect in providing clear instructions; (According to the response from students for students' questionnaire)

As mentioned in the literature, the beginning level of English medium students do not have the English language (L2) proficiency in understanding the explanations in English. Therefore, it is advisable to use native English language for strategy instructions.

Another major issue recognized is there was no specific framework of bilingual policy stakeholders. They were not aware of the policy. Lack of monitoring mechanism is another significant finding obtained at the interviews with teachers and principals. In any pioneering exercise, monitoring mechanism is inevitable. If the English medium students are proficient enough to understand the explanations, teachers should use L2 only. In most of the schools in Sri Lanka the teachers and students can use mother language in an excellent manner. Therefore, using a combination of both native and target language (English) is very fruitful. It will help English medium students to perform the expected standards. It was proved in this research, researcher provided instructions in both languages.

The above factors should be taken into consideration in order to make the English medium programme at junior secondary level successful in future in Sri Lanka.

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## EXCESS CASH HOLDINGS AS AN INDICATOR OF AGENCY PROBLEMS

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### Abstract

The research objective is to examine the implication of excess cash holdings on firm value based on agency theory. This research uses a sample of Indonesian non-financial public firms for the period 2000-2011 whose cash holdings exceed normal cash holdings. By applying panel regression techniques to estimate cash holdings with 1828 observations, 672 of them set cash holdings exceed cash holdings normal, there are some findings. First, excess cash holdings has a negative effect on firm value. Second, the negative effects of excess cash holdings on firm value is stronger for financially unconstrained firms classified by multiple criteria (paying dividends, high cash flow, low MTB and low debt). Third to fifth, the negative effects of excess cash holdings on firm value is stronger for more concentrated ownership, for more dispersed ownership and for more financial distress. Overall, these empirical findings show that excess cash holdings can be a significant indicator of agency problem.

**Keywords:** *excess cash holdings, agency problem, agency theory.*

### Introduction

Theoretically, the management must allocate cash holdings on a level which could maximize the wealth of the shareholders, that is refer to the cash holdings allocation strategy which balances the costs and marginal benefits of cash holdings (Opler, et al., 1999). The development of the ratio cash holdings of the non financial public companies in Indonesia during the years 2000-2011 fluctuate at a range of

9,8%-13,1%. The important issue is whether those cash holdings are excessive or not.

New chapter research on cash holdings are reflected in the real difference on focus of the cash holding research. According to the old viewpoint, cash holdings do not have a strategic benefit for the company value. Cash holdings are considered only part of the working capital. Cash holdings according to the new viewpoint have a strategic value and are important to the company. The decision of how much cash level should be held could affect the value of the company (Powell and Baker, 2010).

Allocating cash holdings exceeding the normal amount of cash holdings like a double-edged sword. On one side, the excess cash holdings allows flexibility to avoid cost of underinvestment. Companies whose flexible financing, when facing a negative shock could avoid financial difficulties and could provide funds for investing purposes when the opportunity to invest arises. Cash holdings are viewed as a form of cash accumulation to anticipate the opportunity to invest in the future so that the cash holdings are valued higher or positively. Research results of Mikkelsen and Partch (2003) and Simutin (2012) and research findings of Faulkender and Wang (2006) proves consistently with the hypothesis of financial flexibility. Livdan, et al. (2009) tested the effects of financial constraints to the risk. Their research results indicate that excess cash holdings contain information of effort to reduce financial constraint risks, therefore investors respond more positively. On the other side, excess cash holdings are cash which are not tied to operation and investment, are the biggest candidates to be allocated inefficiently, to be squandered and misused (Fresard and Salva, 2010) because the excess cash holdings are the resources of the company which are easy to misuse which are not align with the interests of the shareholders, so the excess cash holdings have a lot of opportunity to be invested by the controlling shareholders for

projects which decrease the company value to get personal benefits (Jensen, 1986, Stulz, 1990). This argument is in line with Simutin (2010) and Khieu and Phyles (2012) opinion which state that the agency problem is strongly exist in the excess cash holdings.

The potential that the controlling shareholders would exploit the resources of the company by ignoring the interests of the other stakeholders, then the company would be valued lower by the investor. Supporting research that the marginal value of cash holdings are decreasing in line with the increase of cash holdings are Faulkender and Wang (2006), Lee and Powell (2011), Chen, et al (2012). Consistent with the results are the research of Pinkowitz and Williamson (2004) which indicate that the cash of 1 unit of currency significantly contribute to the return of less than 1 unit of currency. The investor argument has the expectation that excess cash could drive the company controlling shareholders to invest to unprofitable projects. The decreasing of market values indicate a problem in agency. The potential that controlling shareholders (insiders) exploiting the company resources, then the company would be valued lower by the investor.

The research goal is testing empirically the implications of excess cash holdings to the value of a company by using a framework of agency theory. This research also adds the variable of financially unconstrained, moderating variable of most concentrated ownership, moderating variable of very dispersed ownership, and moderating variable of most financing difficulties to strengthen the negative effects of cash holdings to the value of the company. The goal is to test the theory of agency as the most appropriate theory to explain the implications of excess cash holdings to the value of the company. This research also uses different methodology to investigate the effect of excess cash holdings to the value of a company. Earlier methodologies commonly use the methodology of Fama and French (1998). This research apply the modern specification model based on the creation of value which originate from the base model which is used by Ramezani, et al (2002) and Bacidore, et al (1997).

### **Literature Review and Hypothesis Development**

The concept of the theory of agency (Jensen and Meckling, 1976, state that the issue of agency could arise due to the occurrence of information asymmetry and the conflict of interests due to inequality of goals. Excess cash holdings are the cash holdings which are so high that they exceed the amount of normal cash holdings. Excess cash holdings are the backup cash allocated over the amount needed for the company to operate daily and to invest (Attig, et al. 2011).

A company should allocate cash holdings to a company at a normal amount, although in reality companies tend to decide to accumulate cash holdings in excess rather than pay off the excess cash holdings to the shareholders, resulting in an excess.

Cash holdings are a kind of liquid asset most favored and the cheapest to convert into another asset which is beneficial individually and is more easily disposed compared to other kinds of assets. From earlier research results, shows that the existence of excess cash holdings indicate an agency problem. Faulkender and Wang (2006) investigated on nonfinancial companies in the United States during the years

1971-2001 and found that the marginal cash value decreased along with the increase of cash holdings. Chen, et al (2012) investigated 8016 companies in the United States and found that the addition of cash on an already large amount of cash will cause an agency problem. Pinkowitz and Williamson (2004) stated that the presence of agency problem while the shareholder view that the insiders will use the funds inefficiently and the debtors

will enjoy profit from the company liquidation, the shareholder lowers the cash holdings value. According to results of research, the first hypothesis argued in this research is:

**H1:** excess cash holdings negatively effects the value of a company.

Furthermore, when the market is imperfect, then not all companies are able to realize all the investment opportunities because the external costs become disproportionately expensive compared to the internal financial source (Myers and Majluf, 1984). For companies which have financial constrained but have an attractive growth opportunities, the consequence is that the company will invest at suboptimal, thus hindering the growth, performance and value of the company. The benefit of having backup cash to reduce the risk of underinvestment will decrease even more if the company isn't hindered by funding. For companies which are not hindered by funding, cash backup is irrelevant and even causes a higher agency cost because tied to the potential of insiders to squander excess cash holdings even more. Earlier research which support this statement is Faulkender and Wang (2006). According to the companies which do not have financial impediments have a lesser marginal cash value compared to companies with financial impediments. Denis and Sibilkov (2010); Chen, et al (2012) also support the hypothesis.

Therefore, conceptually or logically it can be said that the potential to misuse excess cash holdings for personal benefits will be greater for companies with no financial impediments, which in turn will decrease the value of a company even more than for a company which no financial impediment. The second hypothesis submitted to this research:

**H2:** the negative effect of excess cash holdings to the value of a company will be stronger in financially unconstrained companies.

This research places emphasis in viewpoint by focusing on the availability of empirical evidence the existence of agency issues caused by excess cash holdings. Entrenchment argument explains that agency conflict type 2 has a higher chance of happening to companies whose shareholding of their main shareholders is very large. This shareholder could use their rights to re-distribute the wealth from others to themselves. Earlier research found that the reduction in performance and company value in companies which have a high shares of insiders (Mitton, 2002; Lemons and Lins, 2003; Suranta and Madiastuty, 2003; Gunarsih, 2003).

Companies in many countries, including Indonesia, have a concentrated ownership structure with the existence of insiders who have a very strong position of control and has the ability to control the company manager (La Porta, et al, 1999). The controlling shareholders have the ability to expropriate minority shareholders, even creditors (Shleifer and Vishny, 1986, Stulz, 1988, and Burkart et al, 1997). Faisal (2013) empirical testing finds the effects of expropriation by insiders on ownership concentration level above 70%. Investors with the expectations that insiders will take their assets, so that they will anticipate this by lowering the value of the company. Therefore, the hypothesis put forth on this research is:

**H3:** the negative effects of excess cash holdings to the value of the company will be stronger when the ownership of the company is very concentrated.

Conflict of agency also arises from the separation from ownership and control which happens in companies with dispersed ownership, which are companies owned widely by smaller investors (Jensen and Meckling, 1976, Morck et al, 1988). Jani, et al (2004) identified the dispersed ownership using ownership of shares by one shareholder or total block holders less than 30%. These shareholders have low or even none incentive to supervise management because the fee to monitor is so expensive. If one of these shareholders supervise and the performance of the company increases, then the benefits will be reaped by all the shareholders. This expensive monitoring fee ensures that every shareholder will enjoy the free ride in the hopes that another shareholder will do the

monitoring. However the resulting is that there are little or none of the shareholders willing to monitor.

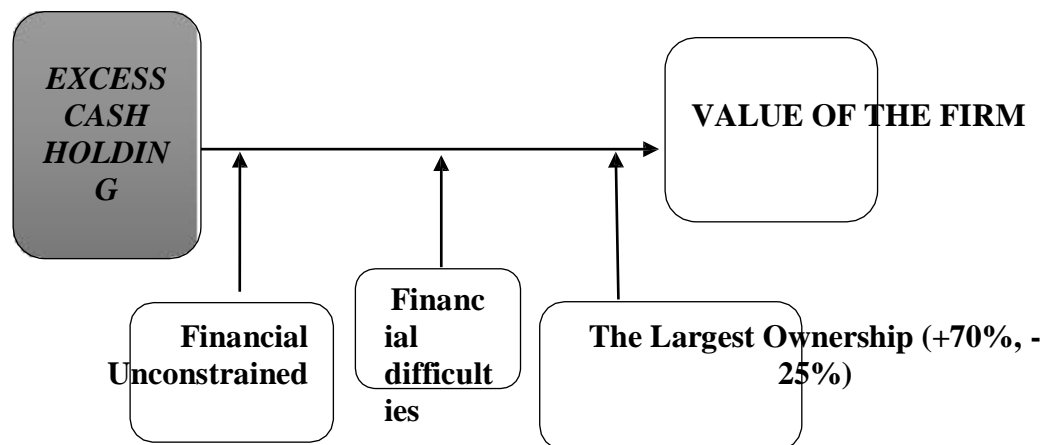
This lack of management supervision by the shareholders cause the incentive by the manager to pursue their own interests by using the costs from the shareholders. An example of this management activity which disadvantages and harms the public company is when the manager determines their high salary with luxurious facility. Managers may invest non beneficially but they can increase their power. Managers may accumulate cash holdings for their own benefits (Jensen, 1986) because cash accumulation can reduce the risk of companies which eventually may save the position of the manager in the company. As result of this free riders problem, the interests of the shareholders are not fulfilled. Therefore, the proposed hypothesis is:

**H4:** the negative effects of excess cash holdings toward the value of the company is stronger when the ownership of the company is widely dispersed.

Jensen and Meckling (1976) proposed a conflict of agency between the shareholders and the debt holders when the company has debts. On one side the shareholders want excess cash holdings to be invested to high-return investment programs which are risky, however the shareholders believe that when a company has high financial difficulties then shareholders will not receive the benefits of excess cash holdings, the ones who receive the benefit are the debt holders. Therefore, this is the measurement for shareholders in valuing excess cash holdings. As long as the excess cash holdings provide benefit the shareholders, whether shared to the shareholders or held by the company, the value will rise. On the contrary, if the excess cash holdings do not provide benefit, its value will go down (Pinkowitz and Williamson, 2004). The proposed hypothesis in the research is:

**H5:** the negative effects of excess cash holdings toward the value of the company is stronger when the company is highly financially difficulties.

The following is a framework of conceptual research:





**Figure 1: Research Framework: The Negative Effects of Excess Cash Holdings on Value of The Firm**

**Methods**

**1. Methods To Estimate The Normal Cash Holdings**

Excess cash holdings are determined by the residual value of estimated cash holdings. This research will estimate on cash holdings by using a sample of emitens that have data panel structure. Emitens was selected through the method of purposive sampling.

**Table 1 Sample Research to Estimate Cash Holdings**

<u>Year</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>Obs.</u>
Initial sample	176	263	283	291	305	314	327	351	371	383	406	431	3901
Criteria	54	62	71	76	80	85	88	96	101	105	108	113	1039
<b>Year</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>Obs.</b>
1													
Criteria	0												
2		0	0	0	0	0	0	0	0	0	23	48	71
Criteria													
3 and 4	49	108	97	84	70	70	75	78	88	90	79	75	963
Availab le sample													
	73	93	115	131	155	159	164	177	182	188	196	195	1828

Criteria 1: nonfinancial public companies in Indonesia classified under the classification system of Global Industry Classification (GICS). Criteria 2: nonfinancial public company had Initial Public Offering in 2009. Criteria 3: nonfinancial company has all the related data during the years 2000-2011. Criteria 4: the data are not outlier.

This research will estimate on cash holdings by using three approach on a regressive, estimation model.

**A. Static panel data regressive model.** Implicitly the estimate of cash holdings of static model assumes there is no need adjustment to the new cash holdings target. The model of static estimation of cash holdings are:

$$CASHHOLDINGS_{i,t} = \alpha_0 + \alpha_1 X_{i,t} + \alpha_2 X_{i,t-1} + \dots + \alpha_n X_{i,t-n} + u_{i,t} \quad (1)$$

**B. Dynamic panel data regression model.** Dynamic-model cash holdings admit that there is adjustment process to normal cash holdings, thus resulting in a lag. Autoregressive dynamic regressive statistic model to estimate cash holdings is the following.

$$CASHHOLDINGS_{i,t} = \alpha_0 + \alpha_1 CASHHOLDINGS_{i,t-1} + \alpha_2 X_{i,t} + \alpha_3 X_{i,t-1} + \dots + \alpha_n X_{i,t-n} + u_{i,t} \quad (2)$$

**C. Regressive model with the method estimated GLS through the procedure iterative Cochrane Orcut.** Autocorrelation is indicated by interdependency of disruption from one regressive model following a structure AR (1). This method is

basically an estimator GLS and is known by the term feasible/estimated GLS. The regressive statistic model of EGLS to estimate cash holdings is:

$$\overline{\text{CASHHOLDINGS}}_{i,t} = \alpha_i + \sum_{i=1}^n X_{i,t} + u_{i,t} \quad (3)$$

Explanation:

$$\overline{\text{CASHHOLDINGS}}_{i,t} = \text{CASHHOLDINGS}_{i,t} - \rho \text{CASHHOLDINGS}_{i,t-1}$$

$$\overline{X}_{i,t} = X_{i,t} - \rho X_{i,t-1}$$

$$\overline{u}_{i,t} = u_{i,t} - \rho u_{i,t-1}$$

Symbol  $\alpha_i$  and  $\alpha_t$  is *firm-specific effects* and *period-effects*. X is a vector containing independent variables, that is investment opportunity (GROWTH), company size (SIZE\_RIIL), financial difficulties (DDISTRESS), cash flow volatility (RV) or (VCF), cash flow (CFLOW), investment (CAPEX), convertibility (CONVERT), leverage (LEV), dividend (DDIV\_DPS), cash conversion cycle (CCC), debt maturity (MATURITY), assets tangibility (TANGIBLE).

**Table 2 Summary of the estimation of cash holdings**

Estimator	Dynamic panel data regression model									Regressive model with the estimated GLS								
	Panel			Cross-section			Panel Least			Panel Least Square			Cross-section			Panel Least Square		
	Coeff.	t-Stat		Coeff	t-Stat		Coeff	t-Stat		Coeff	t-Stat		Coeff.	t-Stat		Coeff.	t-Stat	
C	0.06	6.86	***	0.03	0.95		0.07	3.99	***	0.09	2.62	***	0.09	1.65	*	0.10	2.46	**
GROWTH	-	-	***	-	-	**	-	-	***	0.00	1.36		0.00	1.92	*	0.00	1.31	
SIZE_RIIL	0.00	3.13	***	0.01	4.21	***	0.00	2.68	***	0.00	4.29	***	0.00	1.93	*	0.00	4.29	***
DDISTRESS	-	-	***	-	-	***	-	-	***	-	-		-	-		-	-	
RV	1.29	10.45	***	2.23	12.46	***	1.30	11.32	***	2.29	22.83	***	2.45	23.07	***	2.28	22.78	***
CFV	-	-	***	-	-	***	-	-	***	-	-	*	-	-		-	-	*
CFLOW	0.02	4.31	***	0.01	7.59	***	0.01	3.97	***	0.03	2.52	**	0.03	3.13	***	0.03	2.58	***
CAPEX	-	-	***	-	-	***	-	-	**	-	-		-	-		0.00	0.02	
CONVERT	-	-	***	-	-	***	-	-	***	-	-	***	-	-	***	-	-	***
LEV	-	-	***	-	-	**	-	-	***	-	-	***	-	-	***	-	-	***
DDIV_DPS	0.01	8.59	***	0.00	4.39	***	0.01	8.23	***	0.00	4.25	***	0.00	4.67	***	0.00	3.96	***
CCC	0.00	0.67		0.00	-		0.00	0.31		0.00	-		0.00	0.21		0.00	-	
DEBTMAT	0.02	8.33	***	0.00	2.49	**	0.02	8.43	***	0.01	3.61	***	0.00	1.15		0.01	3.80	***
TANGIBLE	-	-	***	-	-	***	-	-	***	-	-	***	-	-	***	-	-	***
CASHHOLDING(-	0.48	16.42	***	0.24	6.35	***	0.47	0.03	***									
AR(1)										0.77	40.62	***	0.44	8.00	***	0.76	39.24	***
Adjusted R-squared	0.78			0.87			0.78			0.86			0.88			0.86		
Durbin-Watson stat	1.52			1.72			1.52			2.10			2.08			2.10		
Sum squared resid	4.62			2.40			4.56			2.45			1.76			2.43		
Industry Dummy	No			No			Yes			No			No			Yes		
N	174			174			174			151			151			151		

The cash holdings estimators are selected based on a criteria of BLUE regression model assumption and the criteria of goodness of fit, which are the value of Adjusted  $R^2$ , and the value of SSR (Sum squared Residual). The higher the value of Adjusted  $R^2$ , then the better the model. The less the value of SSR, the better the model.

According to those criterion, then the excess cash holdings are calculated based on two of the best specification estimation cash holdings normal model, which are the static estimation cash holdings model with the Cochrane Orcutt iterative correction procedure (Estimated GLS/Feasible GLS) with the cross-section fixed effect modeling and the dynamic estimation cash holdings model using the cross-section fixed effect specifications.

**Methods to Test Research Hypothesis**

1. **The research sample** is selected from the research sample which in certain years experienced positive excess cash holdings and have a complete data. Excess cash holdings are determined by the value of residual estimation of cash holdings which come from the chosen specification model. Number of selected samples are 672 observations, with the detailed 185 observations from consumer discretionary sector, 143 observations from Materials sector, 110 observations from consumer staples sector, 104 observations from industrial sector. The rest are dispersed out in the remaining 5 sectors.
2. **Research Variables** in term of definition, formula and identification to test the research hypothesis is provided in the table below.

**Table 3 Variable Definitions to Test Research Hypothesis**

Variable	Definitions and Formulas	Variable Identification
<i>ABNRETURN<sub>i,t</sub></i>	Abnormal return is a proxy of value of the firm, which excess return from normal return. Normal return is expected return of investor. Formula: $\alpha_{i,t} = R_{i,t} - E(R_{i,t})$ $\alpha_{i,t}$ is abnormal return $R_{i,t}$ is individual return $E(R_{i,t})$ expected return, using market return. Formula:	Dependent Variable
<i>XCASH HOLDINGS<sub>i,t</sub></i>	Excess Cash Holdings is cash holdings which deviate from normal cash holdings, calculated from residual value of cash holdings with positive sign. Formula: $XCASHHOLDING_{i,t} = CASHHOLDING_{i,t}$	Independent Variables
DDIV_DPS	is dummy variable, set to one, if the firm paid dividends., and zero otherwise	Moderating Variables to

Variable	Definitions and Formulas	Variable Identification
DMULTIPLE (Dividend, Cash flow, Market to Book and Debt)	is dummy variable, set one if the company paid dividends, had high cash flow, high MTBA and low debt, and zero, otherwise.	Test of Agency Problems
DOWN1	is dummy variable, set one if the largest shareholder has share >70% and zero otherwise	
DOWN2	is dummy variable, set one if the largest shareholder has share <25% and zero otherwise.	
DISTRESS	is dummy variable, which measured by TIER ratio. Formula $TIER = \frac{EBIT_{i,t}}{Biaya\ Bungai_{i,t}}$ . Dummy variable set one, if $TIER < 0$ , and	
EVA <sub>i,t</sub>	<i>Economic Value Added</i> is financial performance measure based on shareholders value creation. Formula: $EVA_{i,t} = NOPAT_{i,t} - WACC_{i,t} \times CAPITAL_{i,t}$ NOPAT = Net Operating Profit After Tax CAPITAL = Book Value of Equity WACC = <i>Weighted Average Cost of Capital</i> , from Database	Controlling Variables
RISK <sub>i,t</sub>	is deviation of asset pricing as a proxy of unsystematic risk normalized by asset total t	
SIZE <sub>i,t</sub>	is company size Formula: $\ln(\text{Market Value}_{i,t})$	

3. **Research Statistics Model** of this research is  $Y_{i,t} = \alpha_0 + \beta_1 X_{i,t} + \varepsilon_i$ . Coefficient  $\beta$  is estimated by using regression analysis with Moderated Regression Analysis approach, as seen on Table 4.

**Table 4 Statistics Test Model and Sign Prediction**

Hypothesis	Sign Prediction	Regression Equation
H1	$\beta_1$ negative	$ABNRETURN_{t,i} = \alpha_1 + \beta_1 XCASHHHOLDINGS_{i,t} + \sum \beta_2 CONTROLS_{it} + \varepsilon$
H2	$\beta_3$ negative	$ABNRETURN_{t,i} = \alpha_1 + \beta_1 XCASHHHOLDINGS_{t,1} + \beta_2 DDIV_{i,t} + \beta_3 XCASHHHOLDINGS_{i,t} * DDIV_{i,t} + \sum \beta_4 CONTROLS_{i,t} + \varepsilon$
	$\beta_3$ negative	$ABNRETURN_{t,i} = \alpha_1 + \beta_1 XCASHHHOLDINGS_{t,i} + \beta_2 DMULTIPLE_{i,t} + \sum \beta_3 CONTROLS_{i,t} + \varepsilon$

Hypothesis	Sign Prediction	Regression Equation
		$\beta_3XCASHHHOLDINGS_{i,t} * DMULTIPLE_{i,t} + \Sigma\beta_4CONTROLS_{it}$
H3	$\beta_3$ negative	$ABNRETURN_{t,i} = \alpha_1 + \beta_1XCASHHHOLDINGS_{i,t} + \beta_2DOWN1_{i,t}$ +
		$\beta_3_{i,t} * DOWN1_{t} + \Sigma\beta_4CONTROLS_{it} + \epsilon_{it}$
H4	$\beta_3$ negative	$ABNRETURN_{t,i} = \alpha_1 + \beta_1XCASHHHOLDINGS_{i,t} + \beta_2DOWN2_{i,t}$ +
		$\beta_3XCASHHHOLDINGS_{i,t} * DOWN2_{i,t} + \Sigma\beta_iCONTROLS_{it} + \epsilon_{it}$
H5	$\beta_3$ negative	$ABNRETURN_{t,i} = \alpha_1 + \beta_1XCASHHHOLDINGS_{i,t} + \beta_2DISTRESS_{i,t} +$

**Result and Discussion**

Research hypothesis are tested using two models. Model 1 calculates excess cash holdings using the residual value result of estimated model static regression cash holdings, whereupon model 2 calculates excess cash holdings using the residual value of estimated model dynamic regression cash holdings. The summary of the estimation show in Table 5.

Table 5 Summary of Estimated Result

Hyp	Model	$\beta$	Direction	Coeff.	t-Stat		Decision
H1	1	$\beta_1$	negative	-0,767	-2,730	***	H1 Support and robust
	2	$\beta_1$	negative	-0,579	-2,588	***	
H2	1	$\beta_3$	negative	-1,674	-2,732	***	H2 Support but not robust
	2	$\beta_3$	negative	0,130	0,126		
H2	1	$\beta_3$	negative	-1,671	-1,817	*	H2 Support and robust
	2	$\beta_3$	negative	-1,053	-1,383		
H3	1	$\beta_3$	negative	-4,433	-4,012	***	H3 Support and robust
	2	$\beta_3$	negative	-2,321	-1,769	*	
H4	1	$\beta_3$	negative	-2,537	-2,492	**	H4 Support and robust
	2	$\beta_3$	negative	-2,385	-2,644	***	

- 1. Result of the effect of excess cash holdings toward the company value.** Hypothesis 1 estimates that excess cash holdings negatively affects a company’s value. Result of testing show that the variable regression coefficient of excess cash holdings signify negative and significant. The re-estimation results show the sign of negative and significant coefficient. Therefore, hypothesis 1 which states that excess cash holdings affects a company’s value negatively is supported and robust. This empirical finding shows that excess cash holdings are a significant pointer to supporting the agency free cash flow hypothesis. The finding of this research supports the agency cost of free cash flow theory, in line with the findings of

Pinkowitz and Williamson (2004), Faulkender and Wang (2006), Lee and Powell (2011), Chen, et al. (2012).

- 2. Result of the effects of financially unconstrained in strengthening the negative effects of excess cash holdings toward the value of a company.** Hypothesis 2 states that the unconstrained financial effects strengthen the negative effects of excess cash holdings toward the value of a company. The estimation results show that the interaction coefficient signed negative and significant when the financial unconstrained is classified using a dividend paying criteria. When using a multiple criteria, interaction coefficient is signed as negative and significant. The re-estimation result uses a subsample analysis supporting the hypothesis that the negative effects of excess cash holdings toward the company value is stronger in the subsample of a company which is financial unconstrained using a multiple criteria.

If the data in this research is supported, then the implication of excess cash holdings according to the agency free cash flow hypothesis. The research finds that the effect of unconstrained funding affects return negatively, is consistent to the findings of Pinkowitz and Williamson (2004), Denis and Sibilkov (2010) and Tong (2011), which state that unconstrained funding causes cash holdings to hold less value compared to the value of cash holdings when financially constrained. The decline of the value of cash holdings more negatively is the response to the rise of agency cost of free cash flow.

- 3. Result of the effect of ownership is very concentrated in strengthening the negative effects of excess cash holdings toward the value of a company.** Hypothesis 3 estimates that the effect of ownership is very concentrated in strengthening the negative effects of excess cash holdings toward the value of a company.

The result of testing shows that the negative effects of excess cash holdings toward the value of a company is stronger when the variable of the main shareholder is over 70%. The same re-estimation shown on model 2 show the same and significant sign of coefficient. Therefore, the hypothesis is supported. The highly concentrated ownership has an effect in strengthening the negative effects of excess cash holdings because in the proportion of shareholding over 70% the act of expropriating is more dominantly acted (Jani, et al. 2004; Faisal, 2013). The expectations in the occurrence of agency problems is reflected in the cutting of company value by outside investors. This test result supports the findings of Liu (2011) and Attig, et al (2011), Kusnadi (2011).

- 4. Result the effect of highly dispersed ownership in strengthening the negative effects of excess cash holdings on firm value.** Hypothesis 4 estimates that highly dispersed ownership strengthens the negative effects of excess cash holdings toward the value of a company. The testing result shows the coefficient of interaction show negative sign and significant. Re-estimation to the model 2 also supports the result. Therefore the problem of agency between the shareholders and the supported manager.

The research result is in line with the findings of Kalcheva and Lins (2007), Lee and Lee (2009), and Faisal (2013). In the structure of highly dispersed ownership, allows the entrenchment by company management because of the free-rider problem. Faisal (2013) also finds that the company value decreases when the concentration level of ownership is lower than 30% because of the free rider problem.

**5. Result of the effects of financial difficulties in moderating the effects of excess cash holdings toward the value of a company.** Financial difficulties is a problem or a hardship caused by the inability of a company to fulfill its obligation. When a company has financial difficulties, then the chosen investments are those with very low risk, causing the shareholders to not have a choice in placing investments in other projects with higher return, causing an agency conflict. The result of estimation and re-estimation shows that the coefficient interaction shows negative sign and significant. Therefore hypothesis 5 is supported in that a company with very serious financial difficulties have an agency problem caused by excess cash holdings. This research result is consistent with the findings of Pinkowitz and Williamson (2004) which state that for outside investors, cash holdings are valued less when the company has financial difficulties, and as such are responded negatively by outside investors because investors prefer investments which produce higher return.

#### **6. Robustness Checks**

This research tests the robustness model toward the company not experiencing excess cash holdings (UNXCASHHOLDINGS). This testing is done to strengthen the argument that the agency of free cash flow hypothesis happens at a company experiencing excess cash holdings. If the research model is robust, then the company no longer experiencing excess cash holdings will have a better performance compared to those experiencing excess cash holdings. Robustness checks use two measurements of non-excess cash holdings which originate from the residual value of the estimate on the regression of the same cash holdings to test the hypothesis and re-estimate the hypothesis. The result of testing the research model on models 1 and 2 using the main variable of non-excess cash holdings show a coefficient of positive-signed UNXCASHHOLDINGS variables ( $\beta_1=+1,438$ ) and ( $\beta_1=+0,770$ ) and significant with the rate of significance as 1%. This result supports the argument of research model. The re-estimation results show that the problem of agency identified using excess cash holdings is supported and robust.

### **Conclusions, Implications and Recommendations**

#### **1. Conclusions**

The first finding proves that excess cash holdings affect the value of a company negatively. This empirical finding shows that excess cash holdings are a significant clue in supporting the agency hypothesis.

The second finding shows that the effect of the unconstrained strengthens the negative effects of excess cash holdings toward a company's value. Thus empirical finding supports the hypothesis of the agency free cash flow. This research argues that the accumulation of excess cash holdings is motivated by agency reasons, so that the outside investors will respond negatively.

The third finding, the highly concentrated ownership structure is supported by the research data can strengthen negative effects of excess cash holdings toward the company's value. This is consistent with the expropriation hypothesis or the entrenchment hypothesis which state that the act of expropriating excess cash holdings is more dominant when the company ownership is highly concentrated.

The fourth finding, consistent with the managerial entrenchment hypothesis which state that the act of expropriating excess cash holdings by management is more dominantly done when there is the



free rider problem amongst the shareholders as a result of dispersed ownership, resulting in the shareholders not supervising management.

The fifth finding, the agency problem between the insider and the debt holders when the company has severe financial difficulties, so that the safest investment is the most low-risk investment. The difference in risk-taking increases the agency problem between the insiders and the debt holders, which would elicit negative responses from outside investors. Therefore, the hypothesis is supported and robust.

## **2. Implications**

The theoretic implication of this research is able to explain the agency theory using excess cash holdings. To date earlier research uses the proxy of free cash flow or internal cash flow. The other implication of this research is to give additional empirical evidence that the specification of the value model uses a method based on the value creation can competently valuing the effect of excess cash holdings.

The policy implication resulted from this research is giving input to the financial institution to control the cost of external financing, so the companies do not have to face the high cost of cash holdings.

The practical implications of this research that can be given to companies is that the companies allocate strategically the excess cash holdings so as to create a value to the company, for example by returning excess cash holdings to the shareholders in the form of dividend. The practical implications toward investors is that when valuing a company, it is important to consider the resource aspect of the company which is easily misused, the ownership structure of the company and the level of financial difficulty.

The other practical implication is that this research has succeeded in building an estimation model in normal cash holdings which can be used by companies to investigate performance of their level of cash holdings.

## **3. Recommendations**

Related to the limitations of this research, the next research may adds a model which able to measure the marginal value of excess cash holdings. Second, if the managerial decision to invest in short-term in the form of standalone marketable securities, then the determiner will be different from the determiner of cash holdings. This is a limitation in the research because it is assumed that short-term investments are a substitution for cash. Third, researchers give suggestions to test a series of these hypotheses to a sample/subsample group which has a much larger amount of members and balance. The method is to add the period of research to more than 12 years, or to do a research on the sample across ASEAN countries, or JASICA-based sectors so that the observational limitations which are the sample and subsample members can be avoided and the validity of research can be improved.

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## RETURN STOCKS AFFECTED BY STOCK TRADING SUSPENSION IN INDONESIA STOCK EXCHANGE

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### Abstract

Suspension is a temporary suspended of shares trading in the Securities Exchange. The termination can be caused due to the request of the Issuer itself or the stock decision in order to provide protection for investors or it may be due to the imposition of sanctions by the Stock Exchange to an Issuer. Information about the suspension is the category of Bad News, in general, will lead to the decline in return stock to the companies that affected by the suspension. Therefore, this study is an event study that refers to an allegedly occurrence h that will affect the decision making of investors whether to buy or not the shares. The results of the study showed the suspension of the company causes fluctuations in the return stock suspension and inflicted the negative abnormal return.

**Keywords:** *Event Study, Suspension, Abnormal return.*

### Introduction

The Indonesian capital market is a part of the Asia *emerging market* that more increase the capitalization in each year. Along with the development of technology information, more increase the number of market players in Indonesia Stock Exchange so that there is a need for information disclosure for investors to improve the credibility and market efficiency.

The Indonesian capital market will be more efficient when the faster new information available on the market is reflected in the securities price of the capital markets. The information here consists of historical data information, the published data and private data of the company.

Temporary Suspension of stock trading (*suspend*) by Indonesia Stock Exchange (IDX) is one of the information published by the BEI managers for all issuers in the market. Based on the rule, number III-G Kep-00086/BEI/10-2011 about the revocation of the suspension and the Exchange Membership approval by Indonesia Stock Exchange. The suspension is one of the rights owned by the stock exchange to stop suspend stock trading according to the specified time of securities trading. Against trade activities members of a Securities Exchange as the penalty for violations by the Issuer or a member of the securities exchange, or due to demand from the Issuer exchange member, Bapepam-LK or because of the consideration the exchange. Suspend sanctions provided for Issuers is a category of bad news that can affect the value of stock trading for Issuers so that there is a need clarification or improvement effort for errors that have been done.

The following is a list of Issuers companies that affected suspend sanctions in 2014:

**Table 1.1. The list of the Companies (Issuer) affected by the Trading Suspension in 2014**

No	The Company Code	The Company Name	No	The Company Code	The Company Name
1	AKSI	Majapahit Securities Tbk	21	HOTL	Saraswati Griya Lestari

2	ALTO	Tri Banyan Tirta Tbk	22	IKAI	Intikeramik Alamasri Industri Tbk
3	APOL	Arpeni Pratama Ocean Line Tbk	23	ITMG	Indo Tambangraya Megah Tbk
4	ARII	Atlas Resources Tbk	24	KARW	ICTSI JASA PRIMA
5	ASBI	Asuransi Bintang Tbk	25	KREN	Kresna Graha Sekurindo Tbk
6	ASIA	Asia Natural Resources	26	LAPD	Leyand International
7	BAJA	Saranacentral Bajatama	27	LINK	PT Link Net Tbk.
8	BALI	PT Bali Towerindo Sentra Tb.	28	MAGP	Multi Agro Gemilang Plantation Tbk
9	BSWD	Bank of India Indonesia Tbk	29	MBSS	Mitrabahtera Segara Sejati Tbk
10	BTEL	Bakrie Telecom Tbk	30	MFMI	Multifiling Mitra Indonesia Tbk
11	BULL	Buana Listya Tama Tbk	31	MREI	Maskapai Reasuransi Indonesia Tbk
12	BUMI	Bumi Resources Tbk	32	MYOR	Mayora Indah Tbk
13	BWPT	Eagle High Plantations Tbk	33	PKPK	Perdana Karya Perkasa Tbk
14	CITA	Cita Mineral Investindo	34	RIMO	PT Rimo International Lestari
15	CPRO	Central Proteina Prima	35	SAFE	Steady Safe Tbk
16	DKFT	Central Omega Resources Tbk	36	SIAP	Sekawan Intipratama Tbk
17	DSFI	Dharma Samudera Fishing Ind. Tbk	37	SIPD	Sierad Produce Tbk
18	FORU	Fortune Indonesia Tbk	38	TMAS	Pelayaran Tempuran Emas Tbk
19	GPRA	Perdana Gapura Prima	39	TRAM	Trada Maritime Tbk
20	GTBO	Garda Tujuh Buana Tbk	40	UNSP	Bakrie Sumatera Plantations Tbk

Source: IDX 2014

Normally, all market players did not want the loss at the time of the investment. All forms of information are considered in the decision. This also applies to the transaction related to the capital market activity. It better before investing, investors see information in newspaper and news from the internet to be able to predict the future information that will come due to choosing the secure investment required the careful analysis and accurately supported data.

Overreaction Market hypothesis states that investors systematically perform actions that excessive force against an event by specifying the price too high (low) as a reaction to the information in the value of good/bad, so for a while, the stock price will be shifting from the fundamental value (Fama, 1991).

The Capital Market is the compartment for investors to invest with the hope it will gain the profitability of the capital that has been issued. The desire of investors to invest in the capital market is affected by the information obtained by the investor which is used as the guidelines to determine the policy that will be taken. Good information will react positively to emerging markets while conversely wrong information will react negatively in emerging markets.

### **Basic Concept of Efficient Market**

The first concept of the efficient market has been stated and popularized by Fama (1970). In this context what is meant by the market is the capital market and the money market. A market can say efficient when no one, both individual investors and institutional investors will be able to obtain the abnormal return, after adjusted for risk, using existing trade strategy. This means that the stock prices reflect all available information.

According to Fama (1970) form of the efficient market can be grouped into three, known as the efficient market hypothesis. The three forms of efficient markets are (1) had the weak eyes form of the efficient market hypothesis, (2) semi-strong form of the efficient market hypothesis, and (3) strong form of the efficient market hypothesis. Each of the forms of the efficient market is closely related with as far as where the absorption of information occurred in the market.

The expression of the other mentioned that in an efficient market asset prices or securities quickly and fully reflect the available information about the securities or asset. In studying the concept of the efficient market, our attention will be directed to the extent to which and how quickly the information can affect the market which is reflected in the changes in the price of securities. In this case Haugen, (2001) divided into three information groups, namely (1) information in good past stock prices, (2) all public information, and (3) all available information including inside or private information. Each of the groups of the information reflects the extent of the efficiency of a market. Jones (1998) stated that the price is now share (securities) reflect the two types of information, namely the information that is already known and information that still needs suspicion. The information is already known covers two kinds, namely the past information (e.g. profitability years or the last quarter) and current information as well as Genesis or events that have been announced but still will occur (e.g. the plan of separation share). For example, the information still needs suspicion if many investors believe that interest rates will soon come down, prices will reflect this belief before the actual decline occurs.

Ariani (2010) in the research entitled "The reaction of the Indonesian Capital Market investors to the announcement of bailout Dubai World". The purpose of this research is to know the volatility in the shares of the LQ45 and to test the efficiency of the semi-strong form stock market represented by the shares of the LQ45 recorded in IDX due to the announcement of the bailout Dubai World. The Efficient Capital Market is prices that formed to adjust with the existence information received by investors is the ideal market. In this research, the problem examined how the volatility stocks LQ45 before, during and after the event of the bailout announcement Dubai World and whether there is a significant difference between the average abnormal return before and after the events of the bailout announcement Dubai World which is one of the efficient market indicators. In this research, the method used is the event study method and event date or information that was done by observation is the date of the announcement of the bailout Dubai World which is called as the date event date. The Data used is price index share data and the LQ45

share covering the period August 2009 to January 2010. The results of this research showed that the existence of the bailout announcement Dubai World does not provide a significant impact against the shares return in the LQ45, or there is no abnormal return (excess return), and there is no difference between the volatility stocks LQ45 significantly. From 45 shares including abnormal in the highest return only reach 0,009726 achieved on day 4 after the event date. The positive abnormal return value for 21 days observation totals only 8 days, while the negative value abnormal return amounted to 13 days. Thus this shows that the capital stock market in Indonesia is the half a powerful, efficient capital market because of the bailout announcement information Dubai World are not reflected in the price and return share the LQ45.

Wiyanto (2002) in the research entitled "Weak Form Market Efficiency test on cigarette industry stocks in the Jakarta Stock Exchange covering period 1999-2001 (Divination Box-Jenkins Methods and Runs Test)". This research is a test of weak form market efficiency in the cigarette industry stocks in the Jakarta Stock Exchange period 1999-2001. The results of the analysis identify that cigarette industry stock markets in the BEJ categorized in the market are not efficient in the form of weak. This condition can be used by investors to obtain the abnormal return because the price in the past can be used to predict the price in the future.

## **Research Methodology**

Research Methodology is the steps of research that will be done in writing a scientific paper. The stages of the research determined first in advance so that the research more focused and provided a clear picture about what steps that must be done.

### **1. Research Period and Place**

#### **A. Research Period**

The period observation research was done on these companies before and after the date of suspension cast down by IDX in 2014. Research data used as the Composite Stock Price Index (IHSG) (closing price) and IHSS per issuer 15 days before and after the period of suspension is obtained through the Indonesia Stock Exchange, with the assumption, there is no corporate action.

#### **B. Research Place**

The research was done on all affected suspension shares with the Composite Stock Price Index (IHSG) and sectoral stock price index (IHSS) in Indonesia Stock Exchange.

### **2. Types of Data**

The type of data that is used in this research is secondary data; it is the field research results data obtained by collect data on the company shares that affected suspension on IDX in 2014. According to how collect the data that is needed in this research is in the form of the data time series.

### **3. Data Collection Method**

#### **A. Literature Research**

This literature research was done by collecting and reading from various literature, good financial journals and reference in the form of books and newspapers, magazines or the internet and learn the theories related to this research.

#### **B. Field Research**

Field research was done by visiting the Capital Market Reference Center in Indonesia Stock Exchange. The methods used in this field of research is the documentation method; it performs data collection and recording of data that is required in this writing.

**4. Population and Sample Research**

**A. Population Research**

The population in this research is all the shares that listing and suspension in Indonesia Stock Exchange in 2014.

**B. Research Samples**

The determination of the sample research based on the method purposive sampling with the criteria among others:

TABLE IV. The companies which listing in Indonesia Stock Exchange.

TABLE V. All Companies affected by the suspension in 2014 but revocation sanctions in 2014.

TABLE VI. The suspension companies that are trading actively in 2014 on the outside of the period of suspension.

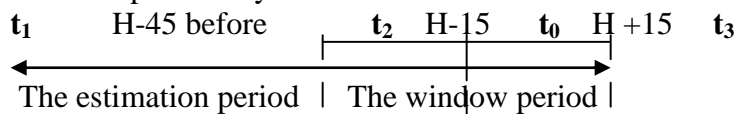
Based on the criteria specified and there are only 5 samples companies that worthy meet the criteria include:

No	Code	Issuer Name
1	BUMI	Bumi Resources Tbk
2	BWPT	Eagle High Plantations Tbk
3	ITMG	Indo Tambangraya Megah Tbk
4	KREN	Kresna Graha Sekurindo Tbk
5	PKPK	Perdana Karya Perkasa Tbk

Source: IDX 2014

**5. Time Range Selection Patterns with Events Study**

The amount of time that used in this research is 75 day, 45 days before the information of the suspension by the Indonesia Stock Exchange. The amount of time the estimation period for 45 days, window period during the 15 day before, when suspension and 15 days after taking the sanctions suspension by IDX in 2014.



Picture 6 . The Event Study Pattern

Source: Jogiyanto (2009:559)



## 6. Operational Variables Definition

1. Shares return is the rate of return from an investment share. Return on this research is an Issuer return shares.
2. Beta share is returned volatility measurement securities to market return. Beta on this research obtained with how regression ( $R_i - R_f$ ) as dependent variables and ( $R_m - R_f$ ) as independent variables during the period of the estimation before the suspension.
3. Expected Return is the rate of return or expected profit by investors, in this research which was the expected return of an Issuer shares. Expected return is calculated by using the estimation model of the Capital Asset Pricing Model (CAPM).
4. Abnormal Return share is the difference that obtained between the realization return and expectation return. Abnormal return that calculated in this research is abnormal return before the suspension and abnormal return after the revocation suspension.
5. The event of contains information in this research is the suspension information which is one of the events and needs to be examined the content information and conducted an event study to know whether an abnormal return or not and how quickly the market will react when an abnormal return.

## 7. Analysis Tools

Data analysis method used as follows:

### A. Normality Assumption Test

The assumption normality test is to know whether the data is normally spread. The assumption normality test can be seen by *Augmented Dickey Fueller (ADF)* test.

### B. Formation CAPM Model and Search for Abnormal Return

#### 1. Calculating Stock Return

Calculating the stock return every day during the period of estimation that calculated by using this formula:

$$R_i = \frac{P_t - (P_{t-1})}{P_{t-1}} + D_t$$

Where :

$R_i$  : Return on day t

$P_t$  : Share price ( *closing price* ) on the day of t (in rupiah)

$P_{t-1}$  : Share price ( *closing price* ) on the day of t-1 (in rupiah)

$D_t$  : Dividend Share at t period

#### 2. Calculating Daily Market Return

Calculating the daily market return is calculated with the following equation, with market dividend assumption is not counted or considered as zero.

$$R_m = \frac{IHSG_t - IHSG_{t-1}}{IHSG_{t-1}} + D_t$$

Description:

$R_m$  = Market Return

$IHSG_t$  = The securities market price index in the period to-t

$IHSG_{t-1}$  = The price of securities markets in the period to the previous t

$D_t$  = Market Dividend t period

**3. Regressing ( $R_i - R_f$ ) and ( $R_m - R_f$ ) to Form CAPM Model**

$$(R_i - R_f) = \beta (R_M - R_f)$$

Description :

$E(R_i)$  = Expected Return

$R_F$  = Risk-free return assets use SBI

$R_M$  = Market Return

$B$  = Securities Beta to-i

**4. Calculating Abnormal Return to the Window Period**

The calculation of Abnormal Return using the formula :

$$AR_{i,t} = R_{i,t} - E(R_{i,t})$$

Description :

$AR_{i,t}$  = Securities Abnormal Return to-i

$R_{i,t}$  = The return happens to securities to-i in the period of the event to-t

$E(R_{i,t})$  = Securities Expected Return to-i in the event period to-t

**5. Calculate the Standardization Abnormal Return**

$$ARS_{i,t} : \frac{AR_{i,t}}{KSE_i}$$

Description :

$ARS_{i,t}$  : Standardization Abnormal Return of Securities to-i on the day to-t in the window period

$AR_{i,t}$  : Securities Abnormal Return to-i on the day to-t in the window period

$KSE_i$  : Estimates Standard Error for securities to-i

**6. Calculate Cumulative Abnormal Return**

$$CAR_t = \sum AR_{t-1} + AR_t$$

Description :

$CAR_t$  : Cumulatif Abnormal Return securities to-t in the window period

$\sum AR_{t-1}$  : Total number of Abnormal Return securities before t in the window period

$AR_t$  : The securities Abnormal return to-t

**C. Average 2 Varies Test**

1. In this study using the average 2 varies test with the paired sample t-test by comparing return between before and after the suspension in IDX.

$$T_{\text{count}} = \frac{X1 - X2}{\sqrt{\left( \frac{(n_1 - 1)(SD^2_1) + (n_2 - 1)(SD^2_2)}{n_1 + n_2 - 2} \right) \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

Where:

- X1 = The average abnormal return before Suspension
- X2 = The average abnormal return after Suspension
- SD21 = Standard deviation before Suspension
- SD22 = Standard deviation of Suspension
- N = Number of samples

2. Determine the region of acceptance and rejection of the zero hypothesis (Ho)  
 Ho accepted or Ha rejected if: t count < t table  
 Ho rejected or Ha accepted if: t count > t table
3. Compare t count with t table can conclude based on the statistic test that has done. The author uses the level of trust in 95% or  $\alpha = 5\%$ .

**8. Hypothesis Testing**

There are 10 samples of the issuer stocks in this research; the research object is the assumption of the company stocks, and there is historical price data.

The hypothesis testing that used in this research are:

**A. Normality Test**

- H<sub>0</sub>: the data normally distributed
- H<sub>a</sub>: the data are not normally distributed
- With the level of confidence 95%, then when
- Probability < 0.05: Reject H<sub>0</sub>
- Probability > 0.05: Do not reject H<sub>0</sub>

**B. The Average Two Different tests t test**

H<sub>0</sub>: There is no a significant difference between the average abnormal return on Manufacture stocks between before and after the Suspension.

H<sub>a</sub>: There is a significant difference between the average abnormal return on Manufacture stocks between before and after the Suspension.

If H<sub>0</sub> was rejected and H<sub>a</sub> accepted means, there is a significant difference between the average abnormal return as a result of Manufacture stocks between before and after the suspension.

## Result and Discussion

### 1. Results

#### A. Stationary Data Test Result

Before analysis the abnormal return stocks test of the companies that are affected by the suspension, the first thing has to do is testing the stationary data. The stationery data test used to test the data behaviour that will be used. Stationary data has the tendency of the data variation is not great and approaching the average value, instead of the data is not stationary have larger variation data with the average value (Insukindro, 1991).

The regression using data not stationary in general has a value R-square which is relatively high, but having the statistic value of the low Durbin Watson. That will affect the regression happens to be spurious or irregular so that the coefficient regression assessor will not efficient, and the regression forecasts will be missed then the result is not valid (Insukindro, 1991).

The research variables used in this research are: The *Return* IHSG value, The Daily SBI Rate, And the return of each company with the code company among others: BUMI, BWPT, ITMG, KREN, PKPK.

The stationery data test using the unit root tests by using the model of the Augmented Dickey Fuller (ADF) using the statistic EVIEWS 8.1 program.

The result of stationery data test summarized in the Table IV.1 among others:

**The table IV.1. Test results Stationary**

Variable	ADF (Prob.Value)	
	t	Prob.
RIHSG	-6.281056	0.000
SBI	-7.128417	0.000
Return BUMI	-9.594286	0.000
Return BWPT	-7.929213	0.000
Return ITMG	-3.593008	0.000
Return KREN	-5.578658	0.000
Return PKPK	-7.767663	0.000
Test Critical Value		
1%	-3.519050	
5%	-2.900137	
10%	-2.587409	

Source: Processed Data

Based on the table IV.1, seen that all variables data that used stationary on the initial level and significant at the alpha level 1%. It shows that the variable data used does not have the unit roots.

#### B. The formation of Expected Return (E(R))

The formation of the expected return model in this research using CAPM model with fluently time data during 52 days before the suspension. The steps which applied in the formation of each company expected among others:

1. Determine the return of each company using historical data of each company stock price changes in the estimation period 52 days research.
2. Determine the value of the free risk-return using the daily standard value of interest rate in the Certificates Bank Indonesia during estimation period.
3. Determine the return of the market that uses the data changes of Composite Stock Price Index (IHSG) during the estimation of the research period.
4. The formation of CAPM model by forming an equation regression:

$$R-R_f = (R_m-R_f) \cdot \beta + a$$

From the equation model be obtained Beta ( $\beta$ ) value produced can be used as the former model of CAPM in order to get the Expected Return ( $E(R)$ ) value with equation:

$$E(R) = R_f + (R_m-R_f) \cdot \beta$$

The formation results of each equation regression using EViews 8.1 can be seen on the attachments 1.1 with expected return model of each company as follows:

$$E(R) = R_f + \beta (R_m-R_f)$$

$$E(R_{BUMI,t}) = R_f + 0.007742 (R_m - R_f)$$

$$E(R_{BWPT,t}) = R_f + 0.118507801625 (R_m - R_f)$$

$$E(R_{ITMG,t}) = R_f + 0.0788356271004 (R_m - R_f)$$

$$E(R_{KREN,t}) = R_f + 0.000621 (R_m - R_f)$$

$$E(R_{PKPK,t}) = R_f + 0.011955 (R_m - R_f)$$

### C. The Calculation Results of the Abnormal Return and Abnormal Cumulative Return

The calculation results of the abnormal return of each company uses the difference between the realization return with the expected return model ( $R-E(R)$ ) can be seen in the table IV.2.

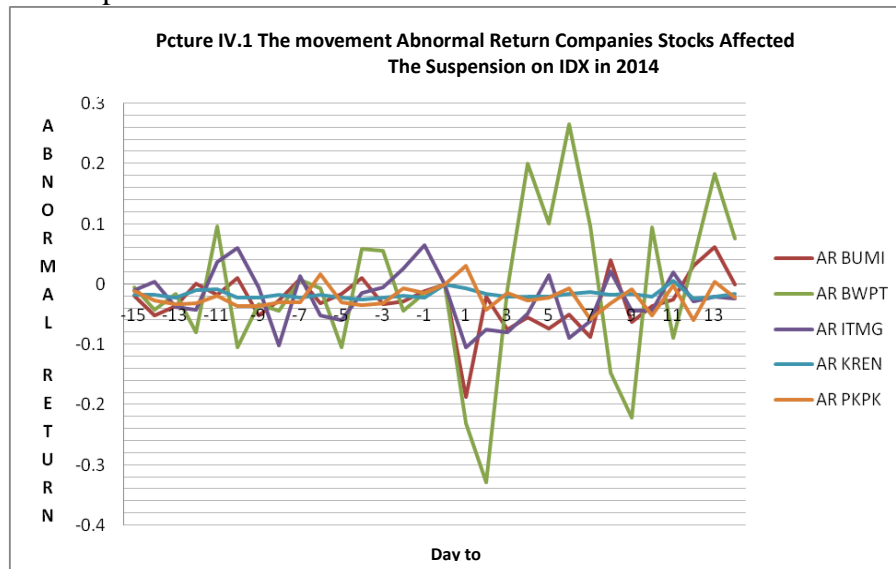
**The table IV.2 Abnormal Return the Companies Affected by the Suspension in 2014**

The day to	AR BUMI	AR BWPT	AR ITMG	AR KREN	AR PKPK
-15	-0.00717	-0.08851	-0.17203	-0.01809	-0.01472
-14	-0.01948	-0.00548	-0.01037	-0.01764	-0.01058
-13	-0.05266	-0.04209	0.003401	-0.01686	-0.0269
-12	-0.03673	-0.01531	-0.03854	-0.0222	-0.03311
-11	0.001252	-0.08053	-0.04304	-0.00934	-0.032
-10	-0.01753	0.096458	0.036166	-0.0078	-0.01832
-9	0.00976	-0.10557	0.06026	-0.02197	-0.03632
-8	-0.05143	-0.03262	-0.00482	-0.02195	-0.03636
-7	-0.02766	-0.04452	-0.10187	-0.01716	-0.03031
-6	0.008381	0.008089	0.013008	-0.02218	-0.02903
-5	-0.03209	-0.00672	-0.05253	-0.01763	0.01754
-4	-0.01648	-0.10493	-0.05974	-0.02195	-0.0296
-3	0.010389	0.058568	-0.01486	-0.02513	-0.03448
-2	-0.0327	0.054887	-0.00488	-0.02192	-0.03144

-1	-0.02939	-0.04346	0.025585	-0.01913	-0.00563
0	-0.01107	-0.01474	0.06458	-0.02232	-0.01473
1	0	0	0	0	0
2	-0.18745	-0.23025	-0.10477	-0.0066	0.031009
3	-0.02037	-0.3291	-0.07591	-0.01558	-0.04258
4	-0.0757	-0.00776	-0.08038	-0.02039	-0.01338
5	-0.0547	0.200331	-0.04909	-0.02092	-0.02583
6	-0.07438	0.101356	0.015113	-0.02117	-0.02141
7	-0.05058	0.265889	-0.0892	-0.01616	-0.00697
8	-0.08711	0.096542	-0.06101	-0.01354	-0.05752
9	0.039919	-0.1471	0.021619	-0.01686	-0.03112
10	-0.06232	-0.22171	-0.04481	-0.01641	-0.00796
11	-0.03701	0.093852	-0.04411	-0.02125	-0.05088
12	-0.02564	-0.08914	0.018749	0.005765	-0.00156
13	0.031228	0.041946	-0.02848	-0.02296	-0.05925
14	0.061592	0.183173	-0.02041	-0.02081	0.004281
15	-0.00032	0.07532	-0.02328	-0.01654	-0.02235

Source: processed data

The calculation results of the abnormal return company can also be seen in the picture IV.1, which shows the movement of abnormal return stocks which fluctuate before and after the suspension on the companies.



Source: processed data

In the picture, IV.1 showed that BWPT share has the movement of abnormal fluctuation return stock greater after the civil suspension revocation compared with the other stocks. This shows the influence of suspension information more has the real impact on investors in BWPT shares that do the transaction stock trading. Based on the calculation results of abnormal return stock of each company can be determined the cumulative value of abnormal return stocks enumerates the value

of abnormal return from 15 days before the suspension and 15 days after suspension revocation as shown in Table IV.3.

The table IV.3. The results of the calculation Cumulative Abnormal Return the companies affected by Suspension on IDX in 2015.

The Period	CAR BUMI	CAR BWPT	CAR ITMG	CAR KREN	CAR PKPK
Before suspension	-0.30461	-0.36648	-0.29966	-0.30328	-0.366
After taking the suspension	-0.6128	-0.08794	-0.68989	-0.26469	-0.32611

Source: The Data processed

The table IV.3 shows that there are two types of emitting companies which have the cumulative impairment of abnormal return stocks after a suspension, specifically the shares of BUMI (Bumi Resources Tbk) and ITMG (Indo Tambang Raya Megah Tbk). While the others three types stocks experiencing the cumulative value abnormal return stock which increased, specifically the shares of BWPT (Eagle High Plantations Tbk), KREN (Kresna Graha Securindo Tbk), and PKPK (Prime Paper Mighty).

The calculation of abnormal return the entire company shares affected by the suspension can also be calculated using the approach the average abnormal return (AAR) and the cumulative average abnormal return (CAAR) all companies affected by the suspension which can be seen in the table IV.4.

**Table IV.4 The results of the calculation the *Average Abnormal Return (AAR)* and *Cumulative Average Abnormal Return (CAAR)* The Companies which Affected by Suspension on IDX in 2014.**

The day to	AAR	CAAR
-15	-0.06355	-0.06355
-14	-0.13511	-0.19866
-13	-0.14589	-0.34455
-12	-0.16366	-0.50821
-11	0.088974	-0.41923
-10	-0.09384	-0.51307
-9	-0.14718	-0.66025
-8	-0.22152	-0.88177
-7	-0.02173	-0.90351
-6	-0.09143	-0.99494
-5	-0.2327	-1.22764
-4	-0.00551	-1.23315
-3	-0.03605	-1.2692
-2	-0.07203	-1.34123
-1	0.00172	<b>-1.33951</b>
0	0	0
1	-0.49806	-0.49806
2	-0.48354	-0.9816
3	-0.19761	-1.17921
4	0.049791	-1.12942
5	-0.00049	-1.12991
6	0.102979	-1.02693
7	-0.12264	-1.14957
8	-0.13354	-1.28311
9	-0.35321	-1.63632
10	-0.0594	-1.69572
11	-0.09183	-1.78755
12	-0.03752	-1.82506
13	0.207826	-1.61724
14	0.01283	-1.60441
15	-0.25098	<b>-1.85539</b>

Source: Processed Data

The table IV.4 shows that there are fluctuations in the value of the average abnormal return in overall stocks before and after the suspension. The cumulative value of the average abnormal return share before and after the suspension event is negative and the more declining showed, in general, the investors have a negative sentiment against the shares of affected suspension companies.



**D. Test results vary two average of t Test**

Two different tests the average t-test is used to see the difference in the average from the results of abnormal return before and after the suspension event of company shares that affected suspension companies. The results of the vary two the average abnormal return stocks affected by the suspension test can be seen in the Table IV.5.

**Table IV.5 Test Results Vary Two the average Abnormal Return Shares affected by Suspension in BEI Year 2014**

Test for Equality of Means Between Series

Sample: 1 15

Included observations: 15

Method	df	Value	Probability
t-test	28	0.600183	0.5532
Satterthwaite-Welch t-test*	19.01101	0.600183	0.5555
Anova F-test	(1, 28)	0.360219	0.5532
Welch F-test*	(1, 19.011)	0.360219	0.5555

\*Test allows for unequal cell variances

1. Test results vary 2 average shows the results of t-tests that are not significant with probability 0,5532 greater than significant rank 10% indicates that there is no distinction of significant abnormal return before and after the suspension.
2. This shows the initial hypothesis (Ho) which indicates there is no difference in the average abnormal return before and after the suspension event received, while the final hypothesis indicates there is a difference of the average abnormal return before and after the suspension event rejected.

**2. Discussion**

The overall research results using the expectations model of the *Capital Asset Pricing System* (CAPM) with the average two different test methods *sample t-test* showed that the value of the probability t-count greater than the probability t-table with the greater significance than 0,10. This result received the initial hypothesis that says there is no difference between the average abnormal return share before and after the suspension event that happened in the company. There is no difference between the average abnormal return shares occurred shows in the information that has been absorbed by the market so the investors do the anticipation on stock price changes.

The results of this research also support the previous research which stated that the capital market in Indonesia Stock Exchange efficient, which means that the price has capital markets reflects the information content that occurs in markets.

## Conclusion and Suggestions

### 1. Conclusion

Based on the results and the discussion of the research done so it can be taken some conclusions among others:

1. Test stationery test results with the ADF test indicates that the overall variable used is stationary with the level of the smaller significance from 0,01, which means the research of data used does not have the roots of the unit which may cause lead to the lancing regression (spurious regression).
2. The results of the abnormal's cumulative return share value before and after the negative value suspension showed negative sentiment market against the suspension information on the companies affected by the suspension.
3. Test results from 2 *vary the average sample t-test from the Average Abnormal Return (AAR)* shows that there is no difference significant AAR between before and after the suspension event indicates that the information has been absorbed by the market and investors have been anticipating the changes of return shares in BEI. The situation supports the previous research which stated that the Indonesian capital market is located on the efficient condition.

### 2. Suggestions

1. When the perpetrators of the investment take a decision to invest in the capital market preferably first seek clarity regarding the information that is going on related to the type of shares that will be invested in.
2. The suspension event is the event that occurs as a result of an error by the company causing negative sentiment in the market. The company should avoid the suspension by following the rules that have been set by the managers of the capital market.

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## PERFORMANCE MEASUREMENT INFORMATION, JOB ROTATION, ROLE STRESS AND PERFORMANCE

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### Abstract

Budgets in the public sector, especially in local government become the starting point for local governments to implement public service. Many strategic decisions relating to the budget that must be taken by public manager for future service improvements.

This study raised the issue that the quality of public manager strategic decisions requires performance measurement information and role stress in local government. Therefore, the performance of public managers associated with budgeting is evaluated in this study.

The study was conducted by using experimental methods to obtain evidence of a causal relationship between performance measurement information, job rotation, role stress, and performance of public managers. This study used a Multivariate Analysis of Variance and path analysis as data analysis.

The results showed that role ambiguity on public manager who received non-financial and financial performance information is lower than public manager who received non-financial performance information only. Public manager performance was significantly higher at the time when experiencing low role ambiguity. These results support the role theory and contingency theory. However, no evidence was obtained that public managers who received non-financial and financial performance measurement information experiencing role conflict is lower than the official who received the non-financial performance measurement information or financial information alone. Similarly, about the job rotation, this study did not obtain evidence that role ambiguity and role conflict were lower in the job rotation with high frequency.

The results also indicate that role ambiguity is fully mediating the effects of performance measurement information on the performance of local government public managers. However, no evidence was obtained that role conflict mediates the influence of performance measurement information on the performance of public managers. Other results showed that role ambiguity and role conflict did not mediate the association with the job rotation and performance.

**Keyword:** *financial and non-financial performance information, job rotation, performance measurement, role stress.*

### Introduction

Questions about the performance of local governments after the reformation are still becoming a hot issue to be discussed. Coste and Tudor (2013) suggested that the performance of services in the public sector is a topic of increasing attention today. The performance of an organization is inseparable from the performance of their leaders, who in the so-called is government public manager. Government public manager plays a very important in driving the performance of government (Moynihan and Pandey, 2010; Melkers and Willoughby, 2005; Cavalluzzo and Ittner, 2004). Stoner (1986) defines performance as the quantity and quality of work completed by an individual, group, or organization. Agency performance is a function of the performance of

programs and activities in it, while the performance of the program/activity is achieved through individual performance in it (LGSP, 2008). In essence, the unit only implements programs and activities that have been decided by public manager in the team budget. Therefore, decisions of official team budget are crucial in creating the performance of local government in the future.

Some previous researchers in the public sector explain that performance measurement is used to improve the quality of decision making (Parker, 1996; Willoughby and Melkers, 2000; Pattison, 2002; Wang, 2002). Acting as an authorized person in the decision-making should desperately need performance measurement information in order to properly carry out its role. The government can use performance measures to improve organizational performance through planning, budgeting, management and better communication (Kreklow, 2005). Conceptually, all system organizations achieve its goals through the allocation of resources generated through the process of managerial decision making (Bodnar and Hopwood, 2010).

However, some studies indicate that the use of performance measurement is still little information in the public sector (Swindell and Kelly, 2000; De Lancer Julnes and Holzer, 2001; Andrews, 2004). De Lancer Julnes and Holzer (2001) suggested that performance measures are not used for decision-making, budget allocation, or monitoring programs. Another study showed that nearly 75% of organizations that collect performance data in the United States do not use it in decision making (Swindell and Kelly, 2000). Most governments can result in performance through performance measurement information, but few governments use performance information (Andrews, 2004). Though the government has devoted tremendous effort in creating performance data in the hope that this performance information will be used to improve performance (Moynihan and Pandey, 2010). Moynihan and Pandey (2010) showed that the antecedent factors that influence the use of performance information by the manager of the local government are public service motivation, the role of the leader, the availability of information, organizational culture and administrative flexibility.

Hall (2008) provided evidence that a comprehensive performance measurement system has positive influence on managerial performance to be mediated by role clarity and psychological empowerment. Research using contingency theory to explain that the performance measurement system, that is part of the management control system needs to be generalized by considering the role of situational factors and psychological empowerment clarity that can be applied effectively. Burney and Widener (2007) showed that strategic performance measurement system (SPMS) positively affects the performance of managers through its relationship with job-relevant information and role ambiguity. The research uses goal setting theory and organizational theory as a basis for research. Goal setting theory predicts that by having a specific purpose in a formalized strategic performance measurement system, the workers become clear about what to do.

The fundamental function of the internal control system is to influence human behavior (Carmichael, 1970). The form of the system of internal control in this study includes the provision of performance measurement information and job rotation. An employee who is too old to work on a part can lead to moral hazard, so job rotation is needed. When an employee is in anticipation of the rotation, the report will be more accurate (Hertzberg et al., 2009).

Chong et al. (2011) provide evidence that the job rotation positively influences the performance of public sector organizations. Phenomenon occurring in local government is that there is a high frequency of rotation so that it becomes a question whether high-frequency job rotation is associated with poor performance. Job rotation done with the correct mechanism will have positive influence on performance (Park, 2010; Giachetti, 2010). However, when the job rotation was short-term, then this can cause problems (Noe et al., 2008).

This research was conducted in the public sector, especially local government, for two reasons. First, the previous studies have not explored conceptual model which shows the antecedent factors of public manager performance in local government. This study proposes Role Theory and Contingency Theory as a relevant perspective to explain the influence of contextual factors on the performance of public manager. Contextual factors refer to changes in the work environment variables, namely: the job rotation, and information technology variables, namely: performance measurement information. Woods (2009) used a contingency theory which the results show that appropriate control depends on the contextual variables of information and communication technology as well as the size of the organization. Woods (2009) tested the contingency theory in the public sector because it argues that the contextual variables in different business sectors are associated with the public sector.

Kahn et al (1964) suggested that role ambiguity and role conflict can be predicted by personal factors, interpersonal, and organizational. Performance measurement information and the job rotation are organizational factors. Rogers and Molnar (1976) explained that as a form of intra-organizational factor is accountability. Performance measurement information is a form of accountability. Parasuraman and Alutto (1981) incorporated contextual variables shift work as antecedents of stress factors in the model study. Displacement refers to the context of changes in the work environment due to different locations within the organization. Testing on the job rotation as antecedent variables in this study uses the arguments developed by Alutto Parasuraman (1981) and Rogers and Molnar (1976).

Second, research on behavioral accounting and managerial accounting has not been done in the public sector. The empirical evidence obtained from studies conducted earlier still showed mixed results. Chong et al (2011) showed the positive effect of job rotation on the performance of public sector organizations. However, Hill (2009) provides evidence that the change of manager is often a negative influence on the performance of individuals and organizations. This suggests that although the job rotation can provide the knowledge, skills and experience on the individual, when carried too fast (high), it will have negative effect on individual behavior.

Research on the performance measures is also not conclusive. In business sector, research from Patelli (2007), Hall (2008) and Lau (2011) showed conflicting results. Patelli research results (2007) are consistent with the Dynamic Role Theory which suggests that diversity measurement of conflicting roles has a negative influence on individual performance. Hall (2008) using contingency theory provided evidence that a comprehensive performance measurement system has positive influence on managerial performance to be mediated by role ambiguity and psychological empowerment. Lau (2011) showed that the non-financial measures influence managerial performance through role ambiguity.

## **Literature Review and Hypothesis Development**

### **1. Effect of Performance Measurement Information on Role Ambiguity and Role Conflict**

Application performance measurement is widely used for management decision making in government who uses a lot of information (Melkers and Willoughby, 2005). Performance information in the public sector is used for management and decision planning, resource allocation decisions, and the incentive scheme (Andrews, 2004). Public managers in local government have some tasks, among others are making decisions and taking budget allocation policies related to the use and implementation of the budget in the area of authority and responsibility.

Performance measurement information provides feedback to the public managers that are expected to improve the quality of decision making. One of the public manager's roles is to make decisions

programs/activities right in the budget. Role ambiguity arises because of lack of information or because there is no information at all or the information is not submitted or is confusing. Factors related to the ambiguity of the role include coordinating the flow of work, a breach in the chain of command, job description, and the adequacy of the flow of communication (Bamber et al, 1989).

Burney and Widener (2007) showed that strategic performance measurement system that contains financial measures and non-financial is closely related to the reduction in role ambiguity. Hall (2008) also showed that a comprehensive performance measurement system (the financial and non-financial) is significantly associated with role clarity both clarity of purpose and process. Kloot (1999) suggested that the single financial performance measures only limited aspects of the performance of an organization. Therefore, non-financial measures are also necessary. Role theory suggests that more complete information received by executive role so that the role executor will understand more the role that should be implemented well. Therefore, the hypotheses in this study are:

**H1a:** Public managers who receive financial and non-financial performance measurement information will have less role ambiguity than the public managers who received the non-financial performance measurement information only.

**H1b:** Public managers who receive financial and non-financial performance measurement information will have less role ambiguity than the public managers who received financial performance measurement information only.

The result of Burney and Swanson (2010) research showed that non-financial performance measures are related to job satisfaction manager. Lau (2011) further sought to assess the influence of the financial and non-financial measures alone on role clarity. Research results showed that the non-financial measures affect manager performance significantly through role clarity (ambiguity). The results of the study Lau (2011) also indicated that the effect of a non-financial measure is stronger than financial measures.

**H1c:** Public managers who receive financial performance measurement information will experience higher role ambiguity than the public managers who received the non-financial performance measurement information.

Simon (2000) suggested that the performance measurement system can communicate organizational priorities and performance information for each individual that can help to increase understanding of their job. Patelli (2007) showed that the diversity of measurement experienced subordinates role conflict. This is consistent with the role dynamic theory. When individuals are given a variety of motivational pressure at the same time, then it can lead to role conflict.

Performance measurement information is a portrait of the organization or unit performance, and it should be used by managers in communicating to management at the top level so that managers can understand the above conditions of the unit underneath. It can alert management to organizational goals thereby decreasing conflict manager role for below. Achievement of government organization objectives uses non-financial performance measures.

Extensive use of performance indicators can create a situation in which an agent can learn aspects of their work that is important for the principal (Thiel and Leeuw, 2002). Financial measures on local government emphasize on the efficiency of an activity, while the non-financial measures emphasize on effectiveness. By the time being given the financial and non-financial measures to a role, it means that a role given is a complex set of roles so that there is a role conflict.

**H1d:** Public managers who receive financial and non-financial performance measurement information will experience higher role conflict than the public managers who received the information of non-financial performance measures alone.

**H1e:** Public managers who receive financial and non-financial performance measurement information will experience higher role conflict than the public managers who received financial performance measurement information only.

Several recent studies indicate that non-financial performance measures are closely associated with better managerial performance (Burney and Swanson, 2010; Lau, 2011). The non-financial measures emphasize more on the future and long-term goals, while financial measures considered are outdated, too general, lacking focus, historical and incomplete (Lau and Sholihin, 2005). Therefore, the information of non-financial performance measures is expected to be able to direct the behavior of public managers better.

Person-role conflict occurs when the individual perceives a discrepancy between the needs of the individual needs of his role in running a position (Nelson and Quick, 2003). Information of non-financial performance measurement emphasizes more on achieving long-term goals, which is expected to meet the needs of public managers to take a decision in the budget.

**H1f:** Public managers who receive financial performance measurement information will experience higher role conflict than the public managers who received the non-financial performance measurement information.

## **2. Effect of Performance Measurement Information on Performance**

Kren (1992) showed a positive relationship between work-related information and managerial performance. Performance measurement information in local government contains of input, output and outcome of a program/activity in the budget that can be classified by financial and non-financial information. Financial and non-financial information is a form of information that is relevant to the job because it describes the results of past work performance achievement that can be used as a reference for making decisions. Burney and Widener (1997) and Kren (1992) suggested that job-relevant information is information used for decision-making.

Performance measurement information contains performance indicators. In the preparation phase of the government budget, it can use performance indicators to show the expected performance level, and at the stage of execution/evaluation of the budget, it can be used to assure the efficiency and effectiveness of a program (Wang, 2000). Role theory assumes that a person will hold the behavioral expectations for himself and others' expectations of him. Performance measurement information is a form of a formal set of expectations. The more complete information obtained, the better a public manager carrying out his role. Single performance measures are not sufficient, because public sector organizations have a variety of stakeholders with different goals and often involve in conflicting (Propper and Wilson, 2003). Criticized financial measures only create short-term perspective as part of the management and the tendency to reject the crucial processes that must be run to ensure the long-term health of the organization (Kaplan and Norton, 1992).

Performance measurement system contains of a variety of measures (at least two measures) that convey information, communicate and clarify strategies (Burney and Widener, 2007). The purpose of this performance measurement system is to motivate managers to act consistent with the organization's strategy (Kaplan and Norton, 1996). Kaplan and Norton introduced the



multidimensional perspectives of performance measures that are expected to address the weaknesses that exist in a single performance measure. Comprehensive performance measurement information is better in improving performance compared to single performance measurement information (Feltham and Xie, 1994; Propper and Wilson, 2003; Ullrich and Tuttle, 2004).

**H2a:** Performance of public managers who received non-financial and financial performance measurement information is higher than performance of public managers who received only non-financial or financial performance measurement information.

Curristine (2005) explains that the majority of governments of countries that are members of the Organization for Economic Co-operation and Development (OECD) tried to move the emphasis of budget and management from input to the focus on results that are measured in terms of output and/or outcome. This suggests that the current attention on the local government performance measures has shifted to non-financial performance measures. Campbell research (2008) showed that the promotion and demotion are sensitive to non-financial performance measures of quality of service.

Several recent studies show that non-financial information is more powerful in influencing job-outcomes rather than financial information (Burney and Swanson, 2010; Lau, 2011). Burney and Swanson (2010) provide evidence that non-financial performance measures are related to job satisfaction manager. Individual job satisfaction has a strong correlation with the performance of the individual (Petty et al., 1984). Marginson et al (2014) also found that the interactive use of measures of non-financial performance is very important to produce the positive psychological experiences and indirectly improve performance.

**H2b:** Performance of public managers who received information of non-financial performance measures is higher than the public managers who received financial information only.

### **3. Effect of Job Rotation on Role Ambiguity and Role Conflict**

Kahn et al. (1964) suggested that the role stress predictors are personal factors, interpersonal, and organizational. Job rotation is part of the organizational factors, namely changes in the work environment and the application of the principle of control. In the role theory, it is proposed that different groups demand needs of different roles on the individual (Robbins and Judge, 2011). This means that in the event of job rotation, the role played by a manager will be different too. The results of the study from Morris (1956) showed that individuals who rotated agree that rotation gives them a better understanding of internal and external forces are varied.

Job rotation occurs when an organization deliberately moves employees from one job to another to reduce boredom by giving them varied assignments (Giachetti, 2010). Displacement refers to the context of the work environment changes due to a different location within the organization (Parasuraman and Alutto, 1981). In a company that has a turnover rate (turn-over), it needs lower occurring job rotation as one way to increase the work productivity of employees (Park, 2011).

Cooper et al. (2010) explains that the horizontal rotation of the focal person is sensitive to the role requiring the coordination of a role set. Knowledge of another job gives personal growth, increases self-confidence, and gets people fit and job-oriented. Parasuraman and Alutto (1981) incorporate contextual variables of job transfer (shift work) as antecedents of stress factors in the model study. Job rotation gives knowledge and more experience for individuals in various areas or functions within an organization. Through job rotation program, some knowledge and experience gained

from the previous department has been moved to a new department (Chong et al, 2011). The literature of executive development indicates that the rotation related to career development, improves the experience and learning because it runs a variety of different roles (Champion et al., 1994). Job rotation can clarify the role that can reduce role ambiguity.

**H3a:** Public managers who have job rotation with high frequency will have less role ambiguity than public managers who have job rotation with low frequency.

Role conflict can occur in three forms, namely person-role conflict, conflict and intra role conflict (Gibson et al., 2003; Nelson and Quick, 2003). Essentially, role conflict occurs when an individual has a condition in congruency or incompatibility with regard to the needs of the individual in their role (Rizzo et al, 1970). Job rotation means redesigning or enriching jobs to develop a number of skills that is varied, task identity, task significance, autonomy and feedback, and allows to improve both motivation and job performance and to reduce the level of stress (Cooper et al., 2010) .

Kaymaz (2010) suggested that work with many people at different periods of time, develops a relationship with humans and support internal and external communication between departments. Rotation gives space for open communication with other people who have the characteristics of different behaviors. Individuals who experience job rotation are perceived to have the ability of adaptability and flexibility (Champion et al, 1994) so it can decrease the role conflict.

**H3b:** Public managers who have job rotation with high frequency will experience lower role conflict than public managers that experienced job rotation with low frequency.

#### **4. Effect of Job Rotation on Performance**

Many companies do the job rotation among them with the aim to prepare lower-level workers for promotion and to reduce the moral hazard problem (Park, 2010). With a job rotation, an individual is expected to gain additional knowledge and experience from other areas so they are able to enhance its capabilities. Job rotation contributes more effectively at all levels of managerial decisions with the knowledge and experience gained from diverse assignments in several departments (Kaymaz, 2010). Research results support the theory that the job rotation practices have a positive effect on motivation. Inheritance boring (monotone), increased knowledge, skills and competencies, as well as the development of social relationships in the practice of rotational position have a positive effect on motivation. Brownell and McInnes (1986) showed that the positive effect of motivation on performance.

Sison (2000) explains that the most common development of planning supervisors and executives is job training and job rotation. This policy is to sharpen the executive managerial skills to produce better work performance and enable managers to overcome obsolescence. Training through the job rotation environment will help managers develop more effective utilization and employee relations. Job rotation can be done quickly or slowly depends on the characteristics of the organizational environment. In companies that experience rapid technological change such as in Japan, it is more suitable to apply a faster job rotation to improve employee productivity. At companies that require in-depth expertise in a field such as in America, more effective use of job rotation is slow. As with the existing characteristics of the public sector organizations, public sector organizations, especially local governments, they do not aim for profit and slow adoption of the technology (Zhonghua and Ye, 2012).

Contingency theory explains that there is no management control system design which is universally applicable to all types of organizations. The effectiveness of an organization depends on the control design of the contextual/situational factors. Contextual variables are often found in previous studies such as the external environment (uncertainty, ambiguity and rapid technological development), technology, organizational structure, organizational size, strategy and organizational culture. A good fit means improved performance, while the poor fit implies a decrease in performance (Chenhall, 2003).

**H4:** Performance of public managers who have job rotation with a high frequency is higher than performance of public managers who have job rotation with a low frequency.

### **5. Effect of Role Ambiguity and Role Conflict on Performance**

Role stress is often constructed with role ambiguity and role conflict. Role ambiguity relates to the perception of information gap needed to carry out his role with the uncertainty of expectations of different role set members (Saether, 2011). Role ambiguity is found negatively related to performance (Hamner and Tosi, 1976 in Belkaoui, 1989; Saether, 2011). Role clarity has a positive effect on the achievement of the organization's business plan and the achievement of objectives relating to the provision of services to the community (Greatbanks and Tapp, 2007).

Fisher (2001) provides evidence that the role ambiguity was significantly negative associated with auditor job performance and job satisfaction. High role conflict and role ambiguity give effect to a decrease in job satisfaction resulting in a decrease in performance, which further increases the tendency to leave the organization (Senatra, 1980). Similarly, Fried et al. (1998) provide evidence that the increased role ambiguity and role conflict simultaneously linked to the level of the lower job performance. Role ambiguity caused improper behavior on the job so it affects negatively on performance (Tubre and Colins, 2000). This is consistent with the role theory.

Bamber et al. (1989) found that role conflict arising will increase anxiety in the line of duty. Feelings of anxiety in the work can degrade the performance of the individual. Therefore, it is necessary to create an environment that can reduce role conflict. Abernethy and Stoelwinder (1995) provide strong support that creating an environment that decreases the role conflict affects positively significantly on job satisfaction and performance of individual subunits as a whole. High role conflict leads to a decrease in performance (Senatra, 1980; Fried et al., 1998).

**H5a:** Role ambiguity experienced by public managers negatively affects the performance of public managers.

**H5b:** Role conflict experienced by public managers negatively affects the performance of public managers.

### **6. Role Ambiguity and Role Conflict as Intervening Variable between Performance Measurement Information and Job Rotation to Job Performance**

Role theory states that when the expected behaviors of individuals are inconsistent, then the individual will lead to stress, dissatisfaction, and poor performance (Rizzo et al., 1970). Therefore, stress is not expected in the work. Katz and Kahn (1964) and Rizzo et al (1970) suggested that the antecedents of the role stress factors are personal factors, interpersonal, and organizational. Rogers and Molnar (1976) divided it into two organizational variables, namely: intra-organizational and inter-organizational. One of intra-organizational variable is accountability, while inter-

organizational variable is resource exchange. Performance measurement information is a form of accountability in local government that contains information of the program/activity achievement program/activity that is expected to clarify how much effort must be made to achieve the goal.

The results of the study from Hall (2008) showed that the role clarity fully mediates the relationship of comprehensive performance measurement systems and managerial performance. Burney and Widener (2007) also found that strategic performance measurement system is significantly associated with the role clarity/ambiguity, and role clarity is an important intervening variable between strategic performance measurement systems and performance manager.

**H6a:** performance measurement information affects performance through the reduction of role ambiguity.

Patelli research results (2007) indicate that the diversity measurement causes role conflict experienced by subordinates, which then negatively affects the performance of the individual. This is consistent with the role dynamic theory. The dynamics of the role given to individuals through performance measures of financial and non-financial roles can lead to conflict because they allow the occurrence of difficulties in fulfilling both. An activity in local government performance will be measured by the level of efficiency (financial measures) and effectiveness (non-financial measures). In fact, it would be difficult to optimize both in one fiscal year due to the size of the non-financial long-term oriented.

**H6b:** performance measurement information affects performance through increased role conflict.

Rizzo et al (1970) describe that the position of role ambiguity and role conflict has been explained as an intervening variable that mediates the effect of diverse organizational practices of individual or organization outcome. Exchange of leadership is one of the inter-organizational variables (Rogers and Molnar, 1976). Job rotation is a form of exchange of resources in order to improve the ability of adaptability and flexibility of a person (Champion, et al, 1994).

Adaptability and flexibility of these capabilities could be expected to decrease the role conflict they experienced. Role conflict occurs when a manager is not able to meet the expectations of the job due to incompatible demands (Rizzo et al, 1970; Kren, 1992, Fogarty, 1996). Many previous studies agree that the job rotation is positively related to performance (Champion, et al, 1994; Mourdoukoutas and Roy, 1994; Ortega, 2001; Eriksson and Ortega, 2006; Bei, 2009; Kaymaz 2010, and Chong et al, 2011).

**H6c:** job rotation affects the public manager performance through a reduction in role ambiguity.

**H6d:** job rotation affects the public manager performance through a reduction in role conflict.

### **Research Methods**

Data collecting in this study uses laboratory experiments, carried out in two areas: Yogyakarta and Lampung (Way Kanan regency) in Indonesia. Treatments to the subject of two independent variables were investigated, namely performance measurement information and job rotation. Control is done on the inherent variables in the subjects, such as: age, gender, level of education, by using way of random assignment that then it is tested with the chi-square test.

2x3 between variable factorial designs used in this experiment to test whether the performance of public managers (dependent variable) is affected by two (2) independent variables, performance

measurement information and job rotation through a variable intervening: role ambiguity and role conflict. Performance measurement information was manipulated by three (3) levels, namely: non-financial information, financial information, and financial and non-financial information. The job rotation was manipulated with two (2) levels, namely: low frequency and high frequency. Testing of hypotheses 1 and 3 used Manova, while hypotheses 2 and 4 used Anova. Hypothesis 5 used multiple regression, while hypothesis 6 used path analysis.

**Table 1. Experimental Design**

		Performance Measurement Information		
		Non-Financial	Financial	Financial & Non-financial
Job Rotation	Low Frequency	1	2	3
	High Frequency	4	5	6

**Results and Discussion**

In experimental studies, randomization is an important thing to do. Tests using the Chi-Square Tests (df = 5, n = 96) showed that there was no significant difference between the experimental conditions for gender (Pearson  $\chi^2 = 2.986$ ,  $p > 0.702$ ), for the experiments place (Pearson  $\chi^2 = 1.415$ ,  $p > 0.923$ ), age (Pearson  $\chi^2 = 154.447$ ,  $p > 0.07$ ), duration of work (Pearson  $\chi^2 = 94.843$ ,  $p > 0.485$ ), and long-serving (Pearson  $\chi^2 = 48.708$ ,  $p > 0.525$ ). Testing for normality using the Kolmogorov-Smirnov test showed that the variables age ( $p > 0.074$ ) and duration of working were (0,138) normally distributed.

Manipulation check was done to convince researchers that the participants have understood and felt the action correctly given. The results of the manipulation check for the variable performance measurement information to the subject in Yogyakarta showed 91% passes, while 92% of Lampung subjects answering correctly.

The results of the manipulation check for the variable rotation of the first questions to the subject position in Yogyakarta and Lampung showed the same figure which is 94% of the subjects answering correctly. The second question to the Yogyakarta region showed 100% of the subjects answering correctly, while for Lampung showed 99% of the subjects answering correctly.

Testing of hypotheses 1 and 3 used Manova, so it is necessary to firstly conduct assumption tests that must be fulfilled, such as: normality test, Homogeneity test of variance and covariance. Normality test is done by Kolmogorov Smirnov resulting that data were normally distributed. Levene's test showed that the variance was homogeneous. Similarly, homogeneity test of covariance showed that there was no difference between cells covariates.

**Table2. The mean of Role Ambiguity, Role Conflict and Performance  
Panel A. Independent Variable I**

Performance Measurement Information	Mean Ambiguity	Role	Mean Conflict	Role	Mean Performance	N
Non-Financial	4,50		5,03		2,997	30
Financial	3,97		4,73		3,030	30
Financial and Non-Financial	3,42		4,28		3,039	36

Panel B. **Independent Variable II**

<b>Job Rotation</b>	Mean Ambiguity	Role Conflict	Mean Performance	N
Low Frequency	3,86	4,90	2,935	49
High Frequency	4,00	4,40	3,115	47

Testing of H1a, H1b, and H1c is done based on the results of Multiple Comparisons Turkey HSD by using the results in Table 3. The result indicates that the lower role ambiguity occurs in the public managers who received financial and non-financial information than the public managers who received the non-financial performance measurement information, which means that H1a is supported. Mean difference between the two was 1.08 ( $p = 0.036$ ,  $p < 0.05$ ).

**Table3. Mean Differences of Role Ambiguity with Turkey**

	<b>PMI (I)</b>	<b>PMI (J)</b>	<b>Mean Differences (I-J)</b>	<b>Sig.</b>	<b>Conclusion</b>
<b>Tukey</b>	F & NF	NF	-1,08 <sup>**</sup>	0,036	H1a supported
	F & NF	F	-0,55	0,284	H1b not supported
	F	NF	-0,53	0,316	H1c not supported

PMI= Performance Measurement Information, NF=Non-financial, F=Financial, F & NF=Financialdan Non-Financial

\*\*\*) significantat  $p < 0,05$

Table 3 also shows that the H1b and H1c are not supported. These results are not in line with Lau (2011) showing that the non-financial measures influence managerial performance through role ambiguity.

Supporting H1a means giving support to role stress theory, at which time a person get a complete and clear information relating to the execution of the tasks that must be delineated and a clearer direction of what to do. Financial information and non-financial together was the message delivered to the individual organization, which may be pressure for the individual. With supporting H1a, it means that role stress theory is also applied to public sector organizations, especially local government.

The mean of role ambiguity in job rotation with a low frequency is 3.90, whereas the mean of role ambiguity in job the rotation with high frequency is greater, which is 4.02. Although there is a mean difference of 0.12 in role ambiguity on the second level of treatment, these results were not statistically different (H3a was not supported). Tests were conducted with Manova produce F count 0,084 with  $p = 0.772$  ( $p > 0.05$ ), which means that there is no difference in the role ambiguity with low-frequency job rotation and high frequency. Not supporting H3a because the job rotation does not provide additional knowledge and skills related to the job he had to do, so it does not affect the role ambiguity. These results do not support the role stress theory. The results of this study suggest that environmental changes faced by public managers either fast or slow, it does not affect the clarity of work implementation.

Testing for H3b was performed by generating Manova F count 1,815 with  $p = 0.181$  ( $p > 0.05$ ), which means that there is no difference in the role conflict with the low-frequency job rotation and high frequency, which means H3b is not supported.

**Table 4. Mean Differences of Role Conflict with Turkey**

	PMI (I)	PMI (J)	Mean Differences (I-J)	Sig.	Conclusion
<b>Tukey</b>	F & NF	NF	-0,77*	0,096	H1d not supported
	F & NF	F	-0,47	0,308	H1e not supported
	F	NF	-0,30	0,532	H1f not supported

\*) significantat  $p < 0,10$

Test results of H1d, H1e, H1f show that there is no difference in the role conflict in giving three levels of performance measurement information: non-financial, financial, as well as financial and non-financial. Thus, H1d, H1e, H1f are not supported.

In role theory, someone who will be fully informed a job is expected to perform the job better. The results of the ANOVA test resulted F counting of 0.008 with  $p = 0.992$  ( $p > 0.05$ ). This means that there is no difference in performance from giving the third level of performance measurement information (H2a and H2b are not supported). De Lancer Julnes and Holzer (2001) have suggested that the decision-making process at the stage of adoption and implementation of the information use in the government's performance is influenced by rational and political factors and organizational culture. When political factor is dominant, the public manager then is not rational so that performance measurement information is not considered in the decision process.

The results of this study are consistent with Lau and Sholihin (2005) providing evidence that the use of non-financial performance measures alone or financial measures partially only do not affect the behavior of managers. Kasdin (2010) revealed that the failure of performance measures to motivate public managers in the government is because the performance measures used are numerous and complicated so that it becomes difficult to use. Another factor is the lack of incentive when the program is completed successfully (Kasdin, 2010). These results provide direction for future research to consider the incentive variable as a variable that affects the use of performance measurement information to improve performance.

Testing H4 shows that there is a difference of 0.18, but this result is not statistically significant with a calculated F of 0.328;  $p = 0.568$  ( $p > 0.05$ ). It means that H4 stating that performance of public managers experiencing high-frequency job rotation is higher than the ones having job rotation with low frequency is not supported. These results do not lend support to the contingency theory and is not in line with previous studies that have been done in the business sector, which indicated that the job rotation practices have a positive effect on employee job outcomes (Kaymaz, 2010). This study suggests that performance measurement information and job rotation are not contextual factors that affect performance in local government.

Testing of H5a stated that role ambiguity experienced public managers negatively affects the performance of public managers. The results showed the coefficient of -0.276;  $p = 0.01$  ( $p < 0.05$ ). It means that H5a is supported. These results are consistent with studies from Yitzhak et al. (1998), Fogarty et al. (2000), Caillier (2010), and Singh and Dubey (2011), and Caillier (2010) conducting

study in government. Table 5 below shows that H5b is not supported. This result is consistent with the results of the research Burney and Widener (2007).

**Table 5. Results of Regression Testing**

Dependent Variable	Independent Variable	Coefficient	t-value	p-value	Conclusion
Performance	Role Ambiguity	-0,276	-2,627	0,010	H5a supported
	Role Conflict	0,146	1,394	0,167	H5b not supported

The results of path analysis showed that the effect of performance measurement information is not directly on the performance of the work, through role ambiguity. Coefficients resulted from the influence of performance measurement information test towards the role ambiguity -0.217;  $p < 0.05$ . Similarly, the coefficients generated from the test of role ambiguity effect on the performance is -0.276;  $p < 0.05$ . Coefficients having negative mark in the model indicate that more complete measurement of performance information (financial and non-financial) causes lower role ambiguity. Furthermore, a low role ambiguity can improve job performance. However, the direct effect of performance measurement information on job performance coefficient is -0.022;  $p > 0.05$ , which is not significant. These results indicate that H6a is supported.

This study supports the contingency theory that the ambiguity of the role as one of the situational factors needs to be considered when choosing the type of performance measurement information that can improve performance. These results also provide support to the role stress theory. By the time a person is given adequate information relating to the task he had to do, so it can reduce role ambiguity that eventually can improve job performance. Table 6 also shows that role conflict does not become intervening between performance measurement information to the performance of the work. This result means that H6b is not supported.

The results of path analysis showed that no evidence obtained that the job rotation affects job performance, either directly or indirectly through role ambiguity and role conflict. These results indicate that H6c and H6d are not supported. It means that the job rotation performed in the local government does not have an impact on the psychological aspects of the work and performance of local government public managers.

**Table 6. The Results of Path Analysis**

Dependent Variable	Independent Variable	Path Coefficient	t-value	p-value	Conclusion
Ambiguity	PMI	-0,217	-2,145	0,035	$P < 0,05$
Performance	PMI	-0,022	-0,212	0,833	$p > 0,05$
Performance	Ambiguity	-0,276	-2,627	0,010	$P < 0,05$
H6a supported					
Conflict	PMI	-0,172	-1,702	0,092	$p > 0,05$
Performance	PMI	-0,022	-0,212	0,833	$p > 0,05$
Performance	Conflict	0,146	1,394	0,167	$p > 0,05$
H6b not supported					
Ambiguity	Job Rotation	0,030	0,292	0,771	$p > 0,05$
Performance	Job Rotation	0,088	0,864	0,390	$p > 0,05$
Performance	Ambiguity	-0,276	-2,627	0,010	$P < 0,05$
H6c not supported					



Conflict	Job Rotation	-0,137	-1,352	0,180	p>0,05
Performance	Job Rotation	0,088	0,864	0,390	p>0,05
Performance	Conflict	0,146	1,394	0,167	p>0,05
H6d not supported					

The results showed that many hypotheses are not supported. Especially for the testing related to the job rotation, literature that can explain it has not been found. Therefore, in-depth interviews are conducted with local government public managers, with the hope of getting answers why this hypothesis is not supported. Interviews were conducted by one of the public managers who had experienced high and low rotation.

Interviewee selected with characteristics of experiencing job rotation with low and high frequency, so that the answer given is not a perception but it is something that is felt. Having attempted to trace the names of officers who rotated through the Regional Employment Agency of Lampung province, the data were not given for confidentiality reasons. Then, another way is used to observe the news in the local newspaper relating to the job rotation for two years. Observations indicate that the public managers who had experienced rapid and slow rotation are only three people, but only one person who is willing to be interviewed by investigators.

A series of questions posed essentially seek for answers on why and how the rotation does not affect the performance of official position. The answers given are as follows:

1. Job rotation does not affect the performance of public managers because basically the pattern of employment in the local government system has been formed, meaning that the work or tasks each employee is already well. Therefore, the change of leadership that can occur at any time does not affect the work to be completed. The work becomes duties (duties and functions) of each employee that must be completed on time. Leaders, in this case, only serve as controller only. Therefore, job rotation experienced public managers also has no effect on role ambiguity and role conflict that are perceived as work to be done by a team working beneath it.

2. After the job rotation, the first thing done is to try to learn the official duties and previous findings related. Especially, at this time, each unit of work has been required to establish an internal government watchdog unit in charge of guarding the implementation of programs and activities in accordance with the plan. The presence of this unit helps public managers to be able to perform the job better.

### Conclusion

This study wanted to test the ability of Role Theory and Contingency Theory in explaining the phenomena occurring in public sector organizations, especially local government. Role theory is used in research to explain the relationship of accounting performance measures of financial and non-financial business sector behavior (Lau, 2011; Patelli, 2007), as well as the application of the controlling principles (Burkert et al, 2011), but no studies that tested this theory in the public sector. Paradigm change (into the New Public Management) occurring in government in Indonesia since 2000 is seen to be able to bridge these hypotheses testing.

Specifically, the role theory is divided into three types, namely: the role stress theory, role expansion theory, and the role dynamics theory. In the role dynamics theory, performance measure is a motivational pressure transmitted to individuals in order to influence their role (Patelli, 2007). One result of this study indicates that the use of financial performance measurement information and non-financial more can improve the performance of local public managers through decreasing of role ambiguity, compared to the provision of non-financial information or financial information

alone. These results support the role dynamics theory, which means that it also give theoretical contribution.

In the business sector, research on performance measures has not been conclusive. Researches from Patelli (2007), Hall (2008) and Lau (2011) showed conflicting results. Patelli research results (2007) are consistent with the Role Dynamic Theory which suggests that the diversity of measurement creates role conflict that eventually gives a negative influence on individual performance. Multidimensional performance measures give pressure simultaneously that are sent to a subordinate role, so it creates role conflict. However, Patelli (2007) showed that diversity does not affect the measurement of role ambiguity, contrary to the results of research Hall (2008). Lau (2011) compared the non-financial and financial measures resulting that non-financial measure has a stronger negative effect on role ambiguity than financial measures. The non-financial measures give clarity of role in achieving organizational goals. The difference in study results may be due to differences in methodology and research context. Performance measure used by Patelli (2007) is a measure of organizational performance in the context of establishing incentive plan, while Lau (2011) used individual performance measures to evaluate the performance of the individual. This dissertation contributes subsequent theoretical context of decision-making by public manager relating to the budget.

Contingency theory is used to investigate the effect of contextual variables in the public sector. Contextual variables in the business sector may differ from those in the public sector (Woods, 2009). Contextual factors refer to changes in the work environment variables, namely: the job rotation, and information technology variables, namely: performance measurement information. Performance measurement information and job rotation are parts of the management control system. Testing on the effectiveness of performance measurement information and job rotation practices can contribute to the regulator. The issues raised in this study have not been investigated in public sector organizations.

The findings in this study indicate that the performance measurement information to improve performance through the reduction of role ambiguity. These results may encourage the use of performance measurement information, which is not optimally used in local government. This study implies that role ambiguity may be one factor in contextual variables in local government. Results of other studies indicate that rotation does not affect the performance of public managers either directly or indirectly through role ambiguity and role conflict. These results imply the need to explore other theories that could explain the phenomenon. Franco and Bourne (2003) suggested that the system is applied to the public sector becomes ineffective because of the environment in the public sector and the politics of government agenda that ultimately distort the system.

### **Limitations and Recommendations for Future Research**

This study has limitations, primarily on two things, namely: the use of paper and pencil in the implementation of the experiment, and not allowing job rotation to be done as real experience. First, the implementation of experiments using paper and pencil is chosen because of technical constraints faced by experimental subjects when using the computer. When testing is carried out, most of experimental subjects who are government employees, are not familiar in using computers, so many errors occur on it implementation. It is quite disturbing in the process of implementation of the experiment. However, the use of paper and pencil in this study also raises weakness that is related to the work of most subjects that cannot be processed because the variables measured data is not answered.

Second, laboratory experiments were conducted to have a weakness because it is difficult to create the same situation with regard to the actual rotational position in the field. For example: a new working environment (leadership and subordinates relationship) and the complexity of the actual work to be performed. This can cause the subject's responses less profound.

Future studies are advised to do a different test on the performance of public manager based on job duration duties, between public manager whose main duty and function from previous position is are still related to the duty and function of new job and public manager whose main duty and function from previous position are not related to the duty and function of new position. The results of these tests will be used to enrich and clarify the phenomena that exist in local government.

Specifically, further research is recommended to include variables related to the experience of new position about the kind of the duties. In additional testing done, the variable experience affects performance of public managers significantly. This can methodologically be the basis of these variables that deserve to be tested in future studies. As theoretically, the experience can be one of the personal factors that will certainly psychologically attached to the individual and will have an impact on its performance in the future.

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## THE ROLE OF TANGIBLE AND INTANGIBLE RESOURCES ON STRATEGIC GROUP CHANGE IN INDONESIAN BANKING INDUSTRY

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### Abstract

The research assesses the role of tangible and intangible resources whether as a promoter or a blocker of strategic group change. Samples of the research are 126 Indonesian banking firms, which survived from 1999 to 2007, consists of government owned banks, forex and non forex3 private national banks, regional development banks, mixed banks, and foreign banks. K-means cluster analysis is utilized to identify strategic group formation and analysis of strategic group change followed on the clusters identified. Then, the panel data hierarchical logistic regression analysis is done in order to detect the influence of tangible and intangible resources on strategic group change.

Resource based strategic grouping analysis successfully formulated the strategy typology of banking firms in allocating their financial resources: conservatives, opportunistic, speculative, and progressive. The analysis of strategic change has identified the stable strategic time periods (STTPs) and non-STTPs, identified occurrence, extinction, or survival of strategic group, and recognize the strategic group membership composition change as the strategic group change took place.

Regression analysis results indicate that technological capacity, reputation, CEO successions, bank density, and firm age promote the strategic group change, while results suggest that past performance, human capital, and structural complexity block or inhibit the strategic group change. The physical resources, financial resources, and firm size fail to show their roles either as promoter or blocker of strategic group change.

**Key words:** *Strategic Group Change, Tangible, and Intangible Resources*

### Introduction

#### 1. Background

Strategic change has held an important position in the field of strategic management, as a phenomenon to represent on how an organization achieves the co-alignment with its business environment. Organizational fit or alignment with the environment is vital since the changing in competitive, technological, and sociological environment have frequently been threaten the effectiveness and sustainability of company (Farjoun, 2002; Kraatz and Zajac, 2001; Zajac et al., 2000; Ginsberg, 1988; Ginsberg and Venkatraman, 1985; Van de Ven and Drazin, 1985; Venkatraman, 1989; Venkatraman and Camillus, 1984; Rajagopalan and Spreitzers, 1996; Reger and Huff, 1993).

The objective of accomplishing organizational alignment with its environment is to maximize the company performance, so that the survivability and sustainability of business can be maintained (Thomas et al., 1985; Petigrew, 1987b; Smith and Grimm, 1987; Zajac et al., 2000; Zajac and Shortell, 1989; Zajac and Kraatz, 1993; Rajagopalan and Spreitzers, 1996; Kraatz and Zajac, 2001; Ginsberg 1988). The result of alignment process will show either there is similarity or dissimilarity



of performance among organizations. From this evidence, researchers can conclude that similarity and dissimilarity of strategies and implementation exist among companies (Rumelt, 1974; Rumelt et al., 1991; Mehra, 1996).

The strategic group change as a form of organizational alignment is performed through managing tangible and intangible asset, which is by doing so a company can create its competitive advantage (Aaker, 1989). In one hand, some organizations are very dependent to their environment in acquiring the necessary resources (Aldrich, 1979; Pfeffer and Salancik, 1978). In another hand, some organizations are capable to manage their dependence by using the enactment strategy (Thompson, 1967; Hofer and Schendel, 1978). However, because the environment of business has relatively strong influence, therefore, whenever a fundamental change takes place, organizations within the certain environment should change their strategies as well (Thompson, 1967).

In strategic group change study, researchers have difficulties to come up with a consensus on the drivers of strategic change and degree of manageability (Vicente-Lorente and Zuniga-Vicente, 2006). Consequently, the studies in strategic change in the last two decades have resulted in various perspectives, with inconclusive or idiosyncratic findings of researches (Rajagopalan and Spreitzers, 1996). The most dominant approach in strategic change study recently is an environmental resources approach (Dess and Beard, 1984; Campbell, 1969; Aldrich and Pfeffer, 1976; Aldrich and Reiss, 1976; Pfeffer and Salancik, 1978). The main cause of divergence in research findings is differences theoretical perspectives that contribute most of confusion in conceptualization or in defining the strategic change. The condition has triggered to deepen the understanding on strategic change from the the role of tangible and intangible resources perspective in strategic group change.

## **2. Research Issues**

The conceptual issue of the study is to what extent the role of tangible and intangible resource that can act either as promoter of change, or as inhibitor of change. The methodological issue of the study relates research method that used by earlier studies, which most of them utilize cross section data or some of them used single period case study, as shown in study by Chandler (1962, 1977), Mintzberg (1978), Pettigrew (1987a), Johnson (1987, 1992). Due to main theoretical characteristic of strategic change theory as dynamic, path dependent, or link to temporal aspect of study, then if study uses case study should be several period of case (Pettigrew, 1990). With its dynamic characteristics, strategic change theory needs to be tested by longitudinal method (Greve and Goldeng, 2004). Another methodological issue is level of analysis of earlier studies which used level of industry, business, and organization.

## **3. Research Questions, Motivation, and Research Context**

The formulation of research question: First, whether tangible resource functions as promoter or blocker of strategic group change? Second, whether intangible resource functions as promoter or blocker of strategic group change? In line with the addressed questions, the research main motivation is to test the model of the role of tangible and intangible resources in the strategic group change, with the context or setting of Indonesian banking industry or firms.

## **Theoretical Review and Hypothesis**

### **1. Conceptualization of Strategy**

Mintzberg has proposed five definitions of strategy as plan, ploy, pattern, position, and perspective (Mintzberg, 1987; Mintzberg et al., 1995; Mintzberg et al., 1998). First, strategy as a plan is defined as the set of intended actions or as a guideline to face the various situations. A plan

normally formulated before the actions are taken or implemented and explicitly formed in a formal document (Mintzberg, 1987). Second, the strategy as a ploy or maneuver, is an intended steps for defeating competitors or opponents (Minztberg, 1987). This view of strategy focuses more toward dynamic aspects of competition. Third, strategy as a pattern is shown by existing strategic behavior or as a realized strategy, which may content emergent change in policy and deliberated initial plan. Fourth, strategy as a position means that the placement of an organization in favorable position, in spite of competitive or uncompetitive condition. In this case the organization situated in special position or has a niche in its business environment (Minztberg, 1987). According to this thought, strategy is viewed as a mean to develop competitive advantage, by focusing certain business unit, industrial structure, and internal competence (Nyamori et al., 2001). Lastly, fifth, strategy as a perspective is understood as a commitment of a strategist to act and responds the environment in certain way.

## 2. Conceptualization of Strategic Change

The research of strategic change to date is marked by the inconclusive finding. One of the causes of idiosyncrasy is confusion of definitions on strategic change. Table 1 indicates various perspectives and definitions of strategic change.

**Table 1. The Variety of Perspectives and Definitions of Strategic Change**

No	Perpective	Definition	Researchers
1	Change cube	Strategic change is the change that relate to organizational direction. Change occur start from conceptual level (i.e. vision and culture) to concrete level (i.e. program and people)	Mintzberg and Westley (1992)
2	Revolutionary change/configurational school/ quantum change/ transformational/ turn around/ frame breaking or discontinuous change	Strategic change is the change that takes place in fundamental and comprehensive manner, involving various organizational elements that path-break the organization pattern, in order to respond external environmental and internal organizational pressures.	Mintzberg et al. (1989) Miller and Friesen (1980a, b, 1982, 1984) Tushman et al. (1986) Karim and Mitchel (2000)
3	Evolutionary/Incrementalism / strategic learning/Strategic drift <sup>25</sup>	Strategic change is the change that takes place gradually or incrementally, by dispatching the linkage with the earlier strategies. The change is resulted from a learning process of earlier strategies weaknesses or fail.	Quinn (1980) Nelson and Winter (1982) Carroll and Hannan (1989) Hannan and Freeman (1989) Arnold and Fristrup (1982) Gould and Eldridge (1977) Van de Ven and Poole (1995) Senge (1990a, b)

<sup>25</sup> Perspektif *evolutionary change* tumpang tindih atau *overlap* dengan perspektif *content, context, and process of change*, juga dengan perspektif lensa pembelajaran.

4	Content, context, and process of change	Strategic change that depends on the not only organizational context and process, but also content of strategy.	Pettigrew (1987a)
5	Rational lens, learning lens, and cognitive lens	<b>Rational perspective:</b> Strategic change is defined as unitary concept measured by using discrete change in business or corporate strategy <b>Learning/cognitive perspective:</b> Strategic change is viewed as an iterative process; manager influences the changes through relatively small steps that designed in order to investigate environment and organization.	Rajagopalan and Spreitzers (1996)
6	Adaptive vs. inertia/ change vs. resistance force/core capability vs. core rigidity <sup>26</sup>	<b>Adaptive/Core Capability:</b> Change in strategy whenever fundamental transformation exists within the business highly inert to change due to two main competences: organizational reliability and accountability. Strategy is viewed as fixed since the initial period and will remain stable environment. <b>Inertia/Resistance:</b>	Strebel (1994) Hamel and Prahalad (1994) Teece and Pisano (1994) Teece et al. (1990, 1997) Hannan and Freeman (1977) Leonard-Barton (1992)
7	<i>Strategic group change</i>	Strategic change takes place when a firm moves from one strategic group strategies which affect performance.	Hunt (1972) Caves and Porter (1977, 1978) Porter (1979) Hatten and Hatten (1987) McGee and Thomas (1986). Smith et al. (1997) Vicente-Lorente and Zuniga- Vicente (2006) Fiegenbaum et al. (1990, 2001)
8	<i>Resource-based View (RBV)</i> <sup>27</sup>	Organizational strategic change is driven by or inhibited by the existing resources, either tangible or intangible resources.	Penrose (1959) Wernerfelt (1984) Barney (1991)

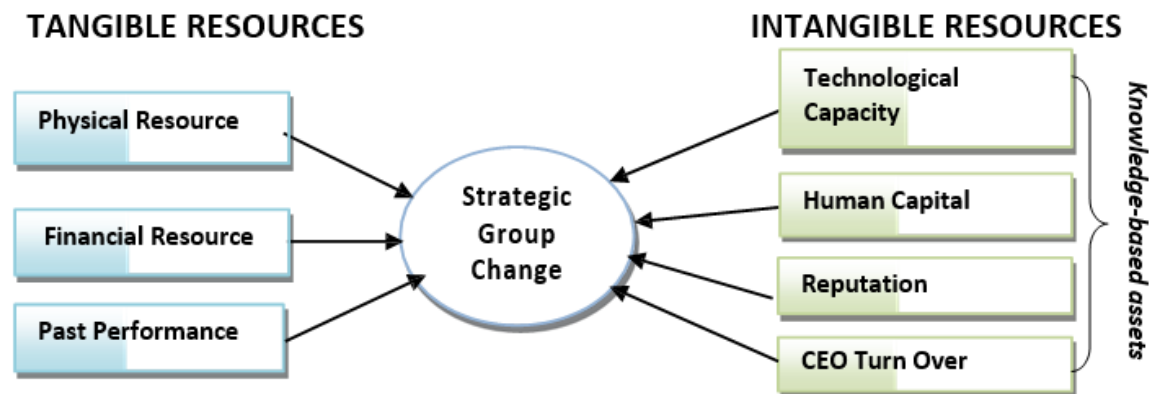
### 3. Research Model and Hypotheses

The strategic change can be as a form of business reconfiguration that forces to change its business resources, either tangible or intangible asset (Karim and Mitchel, 2000; Sanchez et al., 1996; Galan-

<sup>26</sup> Perspektif adaptive vs inertia tidak berdiri sendiri tapi menjadi bagian dari perspektif evolutionary, content, context, and process of change, serta strategic group change.

<sup>27</sup> The Resource Based Perspective intersect with perspective of evolutionary, content, context, and process of change, as well as strategic group change. Overlapping among perspective can be seen from explanation each of perspective

Zazo and Zuniga-Vicente, 2003; Wernerfelt, 1984; Chatterjee and Wernerfelt, 1995; Winter, 2000, 2003; Helfat et al. 2007; Barney and Clark, 2007). Competitive pressures require organization to change its resources mix in order to create or exploit new opportunities (Penrose, 1959; Porter, 1979). Based on its utilization, a resource that possessed by an organization can promote the development of products and services mix. Therefore, resources can be meant as bundles of potential products and services. The possession of certain resources can become source of firm uniqueness (Penrose, 1959). The model of research will assess two type resources, tangible and intangible, as determinants of strategic group change, which is shown in Figure 1.



**Figure 1: Research Model**

Each of resources, if it is proven by model testing has positive influence on the strategic group change, and then it can be conclude that type of resource functions as driver of strategic group change. However, when it is proven has negative influence on the strategic change, then it can be concluded that type of resource functions as inhibitor of strategic change. Prior to the testing of resource role, whether it is as a driver or as an inhibitor of strategic group change, the determination of stable strategic time periods (SSTPs) must be done. From the SSTPs testing, number of membership of each strategic group in each period can be known. Then, judgment of whether membership change take place as an indicator of strategic group change can be known as well. Each strategic group represents a typology of strategy; therefore the identification of strategic typologies is done after SSTPs are known.

In order to assess the influence of resources role on the strategic change, following hypotheses are formulated:

- H1: Physical resource positively influences on strategic group change.
- H2: Financial resource positively influences on strategic group change.
- H3: Past performance positively influences on strategic group change.
- H4: Technological capacity positively influences on strategic group change.
- H5: Human capital positively influences on strategic group change.
- H6: Reputation positively influences on strategic group change.
- H7: CEO turnover positively influences on strategic group change.

## Research Method

### 1. Research Design, Setting, Sample, Level and Unit of Analysis

Design of research is longitudinal analysis that is combining the cross section and time series data in the form of panel data. The utilization of research design is based on the consideration that hypotheses of strategic change have dynamic theory characteristics. Setting or context of research is Indonesian banking industry. Samples are selected from the population of banking firms, in category of state owned banks, foreign exchange national private banks, non foreign exchange national private banks, regional banks, mixed banks, and foreign banks. Periods of data range from 1999 to 2007, with 126 banks are selected out of 129 banks. In this research, strategic changes are assumed to take place in the level of organization with banking firm as unit of analysis.

## 2. Variables Operationalization

### A. Dependent Variable

Dependent variable or criterion variable of the research is strategic group change is also can be called as strategic mobility. Operationalization of strategic change variables draws on three stages procedure (Galan-Zazo and Zuniga- Vicente, 2003; Fiegenbaum et al., 1990). First, strategic variables or strategic dimensions that represent strategies used by banking firms are selected. These dimensions are used to form strategic group in cluster analysis. Second, identification of strategic group resulted from cluster analysis. Third, determination of strategic group change is done by looking at the membership movement among groups to form SSTPs and non SSTPs. This three stages procedure in operationalization is based on earlier studies (Fuente-Sabate et al., 2007; Vicente-Lorente and Zuniga-Vicente, 2006; Fiegenbaum et al., 1990; Fiegenbaum et al., 2001; Fiegenbaum and Thomas, 1990; Dierickx and Cool, 1989).

Strategic dimensions reflect differences in banking products and services for each market segment, and represent bank lending strategy as resources allocation done by banking firms in achieving certain goal for the sake of performance (Barney and Clark, 2007; David, 2009; Thompson et al., 2010). Fund lending done by banks is categorized in intermediation and disintermediation activity (Eisenbeis, 1985; Smith and Walter, 2003; Walter, 2002). Each lending type represents a strategy in creating return from each market segment. The segments are 1) Central bank segment or Bank Indonesia Certificate; 2) Interbank loan or call money segment; 3) Investment segment; and 4) Intermediation segment.

After forming strategic group and identifying SSTPs, the subsequent step is determining the strategies typology in banking firms based on each formed strategic group. The changing of typologies also presented from year to year. Strategy typologies are created by naming each cluster of bank as strategic group using following guideline shown in Table 2.

### B. Independent Variables

#### a. Tangible Resources

- i. **Physical Resource** or PR is the variable to measure the productive capacity of banking firm. This proxy is measured by natural log (Ln) of bank fixed asset.
- ii. **Financial Resource** or FR represents financial ability of banking firm. This proxy is measured by natural log (Ln) of bank debt ratio that calculated by to Ln total debt divided by equity capital of bank.
- iii. **Past Performance** or **ROEt-1** is a variable that represents learning by experience perspective from a prior performance achievement. This proxy is measured by using one year lag ROE of bank firm.

**Table 2. Guideline for Strategic Group Labeling**

		Fund Lending Segment			
		SBI Segment	Inter Bank Segment	Investment Segment	Intermediation Segment
Fund Lending Intensity	Very High (VH)	Conservative Superior	Very Opportunistic	Very Speculative	Progressive Superior
	High (H)	Conservative	Opportunistic	Speculative	Progressive
	Moderate (M)	Relatively Conservative	Relatively Opportunistic	Relatively Speculative	Relatively Progressive
	Low (L)	Conservative Inferior	Less Opportunistic	Less Speculative	Progressive Inferior
	Very Low (VL)	X	Non Opportunistic	Non Speculative	X

**b. Intangible Resource**

- i. **Technological Capacity** or TC is innovative capability of banking firm as a potential source of competitive advantage. This proxy is measured by squared root of number ATM of each bank. The placement of ATM is viewed not as physical asset placement but rather as technological capability in reaching customer or market coverage.
- ii. **Human Capital** or HC is productive capacity of human resource in contributing firm revenue of banking firm. This proxy is measured by dividing earning before tax (EBT) by total employee.
- iii. **Reputation** or RP is a variable to measure customer’s loyalty as a reflection of bank credibility from the main stakeholders or customers point of view. This proxy is measured by dividing time deposit by total deposit.
- iv. **CEO Turnover** or Succession is a variable to measure the role of CEO as initiator strategic change in bank firms. This proxy is measured by coding it 1 when CEO replacement takes place and 0 when there is no change in CEO personnel.

**C. Control Variables**

- a. **Banking Density** or BD is environmental factor that used to detect the rivalry along the study periods, indicated by how dense the strategic group is. This proxy is measured by dividing number of bank in each cluster by total bank, thus total number of density will be similar to number of cluster in every year of observation.
- b. **Firm Age** or FA is a measure of establishment or maturity of a firm in relation to its experience. The age of firm is measured by the total year since its founding.
- c. **Firm Size** or FS is an indicator of resource possession by a firm, also represents a political insulation and degree of bureaucratization. This proxy is measured by to Ln the total asset of banking firm.
- d. **Structural Complexity** or SC is a variable that indicate degree of banking firm organizational complexity. This proxy is measured by Ln of number of branch offices in each banking firm.

**3. Testing Model and Analysis Technique**

General equation of hierarchical logistic regression that used in the analysis is:

$$SGC_{it} = \alpha + \beta_1 PR_{it} + \beta_2 FR_{it} + \beta_3 PP_{it} + \beta_4 TC_{it} + \beta_5 HC_{it} + \beta_6 RP_{it} + \beta_7 CEO_{it} + \varepsilon_{it}$$

( $\beta > 0$ ) ( $\beta > 0$ ) ( $\beta > 0$ ) ( $\beta > 0$ ) ( $\beta > 0$ ) ( $\beta > 0$ ) ( $\beta > 0$ )

Where:

*SGC* Is strategic group change of bank *i* in period *t* (value 1 when the firm moves or changes in group membership, and value 0 when the firm does not move or change in group membership).  $\alpha$

Is an intercept  $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6,$  and  $\beta_7$  are slope  $\varepsilon$  Is error term

*PR<sub>it</sub>* Is physical resource of bank *i* in period *t* (*Ln* of total fixed asset) *FR<sub>it</sub>* Is financial resource of

bank *i* in period *t* (total debt/total equity) *PP<sub>it</sub>* Is past performance of bank *i* in period *t* (ROEt-1)

*TC<sub>it</sub>* Is technological capacity of bank *i* in period *t* ( $\sqrt{\#}$  of ATM)

*HC<sub>it</sub>* Is human capital of bank *i* in period *t* (EBIT/total employee)

*RP<sub>it</sub>* Is reputation of bank *i* in period *t* (time deposit /total deposit)

*CEO<sub>it</sub>* Is CEO turnover of bank *i* in period *t* (value 1 when CEO change, value 0 when CEO not change)

Control variable that are not included in main model to test hypothesis

are:

*BD<sub>it</sub>* Is bank density of bank *i* in period *t* (number of bank in a cluster/total bank)

*FA<sub>it</sub>* Is firm age of bank *i* in period *t* (period *t* subtracted by year of founding)

*FS<sub>it</sub>* Is firm size of bank *i* in period *t* (*Ln* total assets)

*SC<sub>it</sub>* Is structural complexity of bank *i* in period *t* (*Ln* number of branch)

Then the whole equation that includes all control variables will be:

$$SGC_{it} = \alpha + \beta_1 PR_{it} + \beta_2 FR_{it} + \beta_3 PP_{it} + \beta_4 TC_{it} + \beta_5 HC_{it} + \beta_6 RP_{it} + \beta_7 CEO_{it} + \beta_8 BD_{it} + \beta_9 FA_{it} + \beta_{10} FS_{it} + \beta_{11} SC_{it} + \varepsilon_{it}$$

## **Result and Discussion**

### **1. Data and Sample**

The research uses data on profile and financial reports of Indonesian banking firms. Data are acquired from the Indonesia Banking Directory published by Bank Indonesia. Data period of research is ranging from 1999 to 2007. Data type consists of financial and non financial data. Financial data extracted from financial reports, while non financial data extracted from banking firm profile.

The research uses banking firm samples that operate from 1999 to 2007. According to dynamic development of Indonesian banking industry, in the year of 2007, total banking firms which operate their business are 129 banks; out of this number 126 banks are eligibly selected as samples of the research. Basis of selection is mainly bank existence in its operations from 1999 to 2007. Samples are consist of 4 or 3% state-owned banks, 33 or 26% foreign exchange private national banks, 36 or 29% non foreign exchange private national banks, 26 or 21% regional banks, 17 or 13% mixed banks, and 10 or 8% foreign banks.

### **2. Strategic Group Analysis and Strategy Typology**

#### **A. Cluster Analysis: Determination of Strategic Group**

Strategic group is determined by using cluster analysis with K-Means cluster analysis procedure. The result of analysis shows that in 1999 there are 5 strategic groups existed with mean value of F 99.79, in 2000 there are 3 strategic groups existed with mean value of F 127.11, in 2001 there are 6 strategic groups existed with mean value of F 87.09, in 2002 there are 4 strategic groups existed with mean value of F 72.38, in 2003 there are 4 strategic groups existed with mean value of F 72.38, in 2003 there are 4 strategic groups existed with mean value of F 79,82, in 2004 there are 6 strategic groups existed with mean value of F 61,22, in 2005 to 2007 there are 5 strategic groups existed with mean value of F 70,25, 64,69 and 78,68.

#### **B. Strategic Mobility**

Strategic mobility is shown by appearances of new strategic group and disappearances of existing strategic group, net change in term of number of strategic group, and number of sustained strategic group. By scrutinizing the mobility of strategic group, stable strategic time periods (SSTPs) can be identified as well. From the determination of strategic change in Indonesia banking industry, two SSTPs are identified: First SSTP in 2002-2003 indicated by 4 clusters each year; and second SSTP in 2005-2007 indicated by 5 clusters each year.

#### **C. Strategic Group Membership Change**

Subsequent stage after determination of strategic group and number of strategic group in each year is to see the strategic group change from year to year. The strategic group change is main issue of the research and as dependent variable. In this research, strategic group change is defined as strategic change in banking firm as a result of bank's group membership from year to year. In 1999, the biggest strategic group in term of member number is cluster 3 with 38 banks, while the strategic group with the least member is cluster 5 with only 1 bank. In 2000, strategic group with highest number of member is cluster 2 with 78 banks, while strategic group with least member is cluster 1 with 10 banks. In 2001, strategic group with highest number of member is cluster 5 with



44 banks, while the strategic group with least member is cluster 6 with only 2 banks. The dynamic of membership change also took place from 2002 to 2007.

#### **D. Strategy Typology Based on Strategic Group**

Strategic group formation based on strategic dimensions can lead to the identification of strategic dominant in every group. The dominant strategy that implemented by banking firms within a group characterizes certain typology which can be classified as generic strategies in banking firms. From the cluster analysis of Indonesian banking industry, there are four main strategy categories: 1) conservative strategy; 2) progressive strategy; 3) opportunistic strategy; and 4) speculative strategy. In the process of strategy implementation each category interacts and combines with three other strategies with intensity that differ one to another.

The determination of strategic group change as the dependent variable is done by assessing whether a banking firm change its membership of strategic group or not. Value of 1 is assigned to the firm that changed its membership and

0 to the non change. The whole value (change or not change) of all firms will be used as consequences of strategic group change which will be analyzed which resources determine that changes.

#### **E. Strategic Group Change based on The Strategy Typology**

Strategic group change that took place between 1999 and 2007 can be seen from clusters that change each year. In 1999, 5 clusters are identified with most them (56%) are fallen into speculative category. In 2000, 3 clusters are identified with most of them (62%) are included in progressive category. In 2001,

6 clusters are identified with 35% are progressive, 33% are opportunistic, and

29% are conservative. In 2002, 4 clusters are identified with 44% are progressive and 35% are conservative. In 2003, 4 clusters are identified with most of them (63%) are progressive. In 2004, 6 clusters are identified with most of the (66%) are progressive. In 2005, 5 cluster are identified with 55% are conservative and 40% are progressive. In 2006, 5 clusters are identified with 57% are conservative and 40% are progressive. In 2007, 5 clusters are identified with 55% are conservative and 43% are progressive.

Strategy choices were changing overtime which are indicated by strategic group change. From the analysis one can see: (1) in 1999 is speculative period due to uncertainty of the macro economy of Indonesia that caused by economic crises, (2) period between 2000-2004 most banks tend to be progressive as the banks enter the recovery period, (3) period between 2005- 2007 most banks tend to be conservative in responding the central banks regulations (establishment of LPS (Indonesian Deposit Insurance Corporation), Single Presence Policy, and CAR).

### **3. Hypotheses Results Testing**

Figure 2 shows those hypotheses testing results which include all variables, significance value, and regression coefficients. Regression analysis results showed that technological capacity, reputation, CEO successions, bank density, and firm age promote the strategic group change. Results suggest that past performance, human capital, and structural complexity block or inhibit the strategic group change. The physical resources, financial resources, and firm size fail to show their roles either as promoter or blocker of strategic group change.

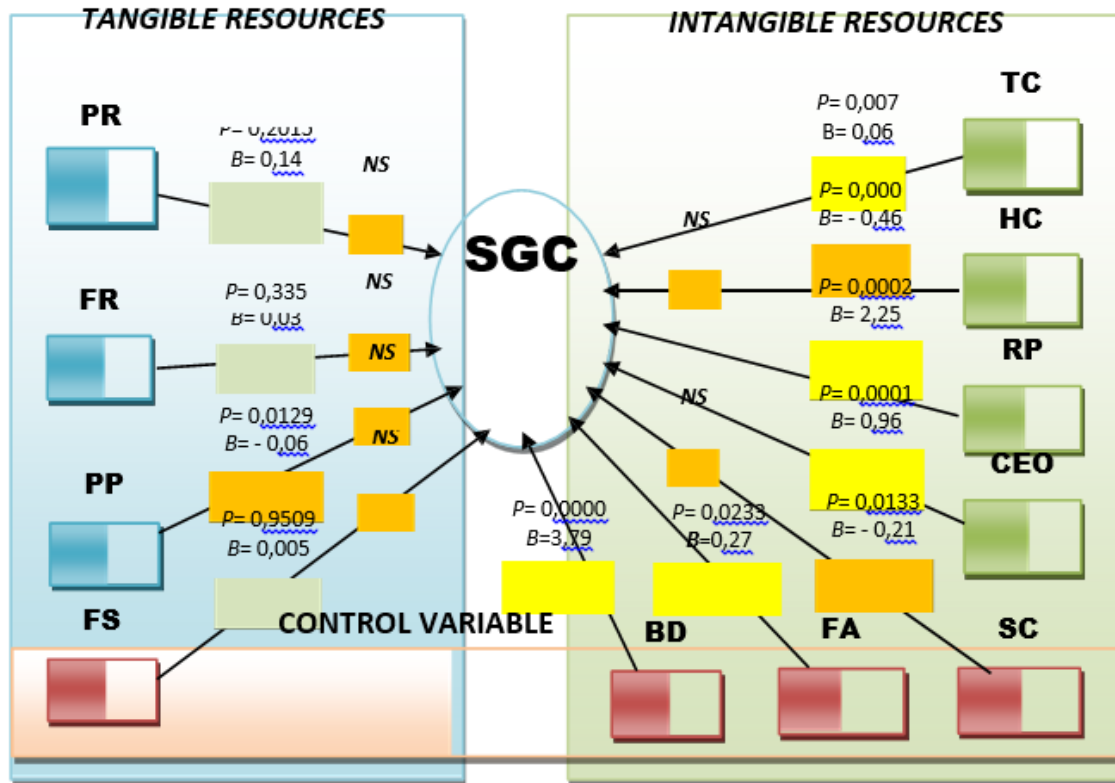


Figure 2. Significances and coefficients of Resources Variables influence on Strategic Group Change

#### 4. Discussions

##### A. Strategic Group Formation and Changes

Resource based strategic grouping analysis, with strategic dimensions of bank fund allocation segments, successfully formulated the strategy typologies of banking firms: conservative, opportunistic, speculative, and progressive. These typologies are comparable to Miles and Snow (1978) Porter (1980, 1985), McNamara et al. (2003), Reger and Huff (1993), and DeSarbo and Grewal (2008), Ebbes et al. (2010). typologies. The analysis of strategic change has identified the stable strategic time periods (STTPs) and non-STTPs, detected occurrence, disappearance, or survival of strategic group, and detect the strategic group membership composition change as the strategic group change took place.

The SSTPs indicate that within this periods, there is similarity of strategic behavior among firms (Fiegenbaum et al., 1987), and when it turns to instability or to non-STTPs, then when it involves most of the firms within industry strategic path-breaking or revolutionary change or quantum change or turn around or discontinuous change take place (Mintzberg and Westley, 1992; Mintzberg et al., 1989; Miller and Friesen, 1980a, b, 1982, 1984; Tushman et al., 1986; Karim and Mitchel, 2000). However, when change from STTPs to non-STTPs involve few firms and in gradual manner then revolutionary change happen (Van De Ven and Poole, 1995), this concept also known as incrementalism (Quinn, 1980), strategic learning (Hannan and Freeman, 1989; Carroll and Hannan (1989), and strategic drift (Johnson, 1987, 1992).

The analysis implies that the strategic grouping very much depended on the resource allocation policy of banking firms. Banks fund which is allocated to SBI, inter banks loan, securities or capital market, and intermediaries activities (business or commercial loan) can be seen as configuration resource bundles that create the strategic group (Hatten and Hatten, 1987; Dierickxx and Cool, 1989; Mehra, 1996). Similarity and dissimilarity of strategic group resulted from the business level strategies implementation, therefore strategic group analysis is viewed as within industry competition analysis.

## **B. Resources and Strategic Group Change**

### **a. Influences of Physical Resources, Financial Resources, and Past Performance on Strategic Group Change**

Unlike the previous research of Galan-Zazo and Zuniga-Vicente (2003) that showed physical resource as inhibitor, this research indicate that physical resource fail to act either as promoter or as inhibitor of strategic group change or strategic change. Other previous research that found physical resource as inhibitor of strategic change (Wernerfelt, 1989; Boeker, 1989; Dierickx and Cool, 1989; Eaton and Lipsey 1980; Eisenhardt and Martin, 2000; Teece and Pisano, 1994; 2004). Some found physical resources as driver of change (Rumelt, 1974; Pfeffer and Salancik, 1978; Chatterjee and Wernerfelt, 1995).

Similar finding of this research on financial resources that fail to act either as promoter or as inhibitor of strategic group change or strategic change, which is also in line with finding of Galan-Zazo and Zuniga-Vicente (2003). However, contradictory results found in other research, which show that financial resources with its flexible characteristic promote strategic changes (Chatterjee and Wernerfelt, 1995; Teece and Pisano, 1994; Teece et al., 1997; Barney, 1986b; Zajac and Kraatz, 1993; Hoshi et al., 1990; Aoki, 1988).

Past performance is found to have no significant influence on strategic change. However, since it has negative sign in regression result, it suggests that positive past performance can block change, while the negative past performance has potential to induce innovation and learning that can create change in strategic group subsequently. This finding in line with Sitkin (1992), Chandra et al. (2004) and Hom and Haynes (2007) and Galan-Zazo and Zuniga- Vicente (2003), but contradict with Hitt et al. (1998) and Bromiley et al. (2001).

### **b. Influences of Technological Capacity, Human Capital, Reputation, and CEO Succession on Strategic Group Change**

Technological capacity is found to have positive influence on strategic change, or it acts as promoter of strategic group change. This finding contradicted with Galan-Zazo and Zuniga-Vicente (2003), but in line with findings of Bharadwaj et al. (1993) and Roberts and Amit (2003). This research shows that deployment of ATM as technological capacity functions as dynamic capability (Helfat et al., 2007; Foss and Robertson, 2000; Barney and Clark, 2007) in reaching out customer is able to encourage change in terms of market sizes.

Human capital is found to have a negative influence on strategic change, and act as inhibitor of strategic group change. The higher productive capacity of employee the higher resistant to change of the strategic group, this due to competence of human resource can acts as mobility barrier and therefore function as stabilizer of strategic group hegemony.

Reputation is found to have positive influence on strategic change, and acts as promoter of strategic group change. The higher reputation of banking firm the better image it has, and therefore, the

wider opportunities to respond the market and more chance of strategic group change to happen. The finding is in line with Barker III and Duhaime (1997), Kraatz and Zajac (2001), Chatterjee and Wernerfelt (1995), and Zajac and Kraatz (1993). Other research found that reputation acts as a resistant factor of strategic change (Ferguson et al., 2000; Caves and Porter, 1977; Freeman, 1984; Dutton and Dukerich, 1991; Ferguson et al., 2000; Galan-Zazo and Zuniga-Vicente, 2003; Wartick, 1992; Rindova and Fombrun, 1997; Barney, 1986; and Cramer and Ruefli, 1994).

CEO succession is found to have positive influence on strategic change, and acts as promoter of strategic group change. The more frequent of CEO change the more frequent organization to make adjustment to the market requirement and therefore, strategic change is more often to take place due to corporate strategic refocusing by newly assigned CEO (Vicente-Lorente and Zuniga-Vicente, 2006; Barker and Duhaime, 1997; Goodstein and Boeker, 1991; Lant et al., 1992; Miller, 1993; Westphal and Fredrickson, 2001; Wiersema, 1992; Zuniga-Vicente et al., 2005; Grinyer and McKiernan; 1990; Bigley and Wiersema, 2002)

### **c. Influences of Bank Density, Firm Age, Firm Size, and Structural Complexity on Strategic Group Change**

Bank density is found to have positive influence on strategic change, and acts as promoter of strategic group change. As a measure of rivalry, the higher bank density, the more pressure to the strategic group change. This finding is in line with Vicente-Lorente and Zuniga-Vicente (2006), Zuniga-Vicente and Vicente-Lorente (2004, 2006), Carroll and Hannan (1989), Lee et al. (2002), and Kabanoff and Shane (2008).

Firm age is found to have positive influence on strategic change, and acts as promoter of strategic group change. The finding imply that the older average age of the firms, the more established the firms are, and more tendency to transform themselves through strategic group change, in order to strengthen its legitimacy and to achieve better performance. Boeker (1989) found that age can be either as inertial or as adaptive factor; this finding is confirmed by others (Baum, 1990; Hannan and Freeman, 1984; Kelly and Amburgey, 1991; Ruef, 1997; Galan-Zazo and Zuniga-Vicente, 2003; Sirmon and Hitt, 2009).

Firm size is found to have no influence on strategic change, and its fail to acts either as promoter or as inhibitor of strategic group change. Other researches also show their ambiguous finding (Baum, 1990; Hannan and Freeman, 1984; Haveman, 1993; Kelly and Amburgey, 1991; Haveman, 1993; Ruef, 1997; Zajac and Kraatz, 1993; Zajac et al., 2000, Galan-Zazo and Zuniga- Vicente, 2003). However, Haveman (1993) argue that firm size is political insulation and degree of beauracratization, the bigger is the size of the firms, the more rigid and more inflexible to change. Even though, some organizations are found to be more agile and flexible as the size grows.

*Structural complexity* is found to have negative influence on strategic change, and acts as inhibitor of strategic group change. The more branches or offices of the firms, the more complex the firms are, and more inert to change. Structural complexity represent the strategy implementation of the firms, the it should support the creation of better performance (Chandler, 1962; Hoskisson et al., 1993; Thompson et al., 2010), because the structural complexity must represent knowledge based integration and dynamic capability (Dagnino et al., 2008). Therefore, structural complexity must facilitate rather than block the strategic group change.

## **5. Perspective Integration of Resources Influences on Strategic Group Change**

The research utilizes resource based variables can be viewed from two perspectives. First, resources are used as strategic variables or dimensions in formation of strategic group, by considering market segment of each resource bundle. Therefore strategic dimensions of strategic group are the combination of resource based and market based perspectives. Second, resources are determinants of strategic group change, either as promoter or as inhibitor. Various perspectives that involve in explaining how strategic group changes take place are: (1) *resource-based view*; (2) *revolutionary vs. evolutionary change*; (3) *content, context, and process of change*; (4) *rational, learning and cognitive lenses of change*; (5) *adaptive vs. resistance of change*; and (6) *change cube*. Integrative view can be seen in Figure 3.

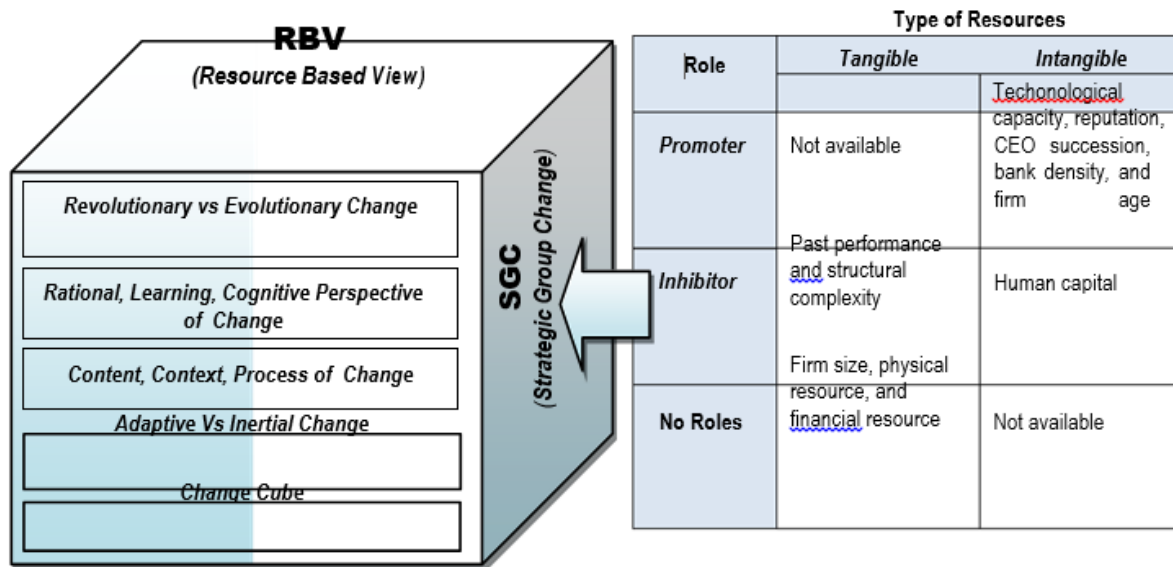


Figure 3. Various Theoretical Linkages in Strategic Group Change.

## Limitation, Future Research, Contribution, and Implication

### 1. Limitation and Future Research

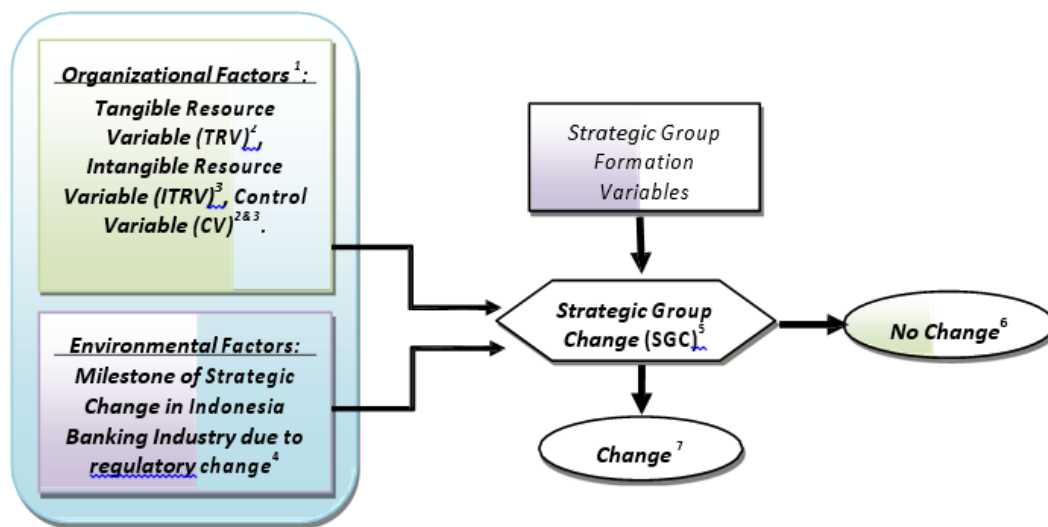
Limitations of the research are: (1) The research only determines which resources influence strategic group change whether they promote or inhibit. However subsequent consequences, i.e. regarding direction and magnitude, are not detected, and these can be an future research avenue; (2) Proxies used in this research, like other research which use econometric model, potentially can reduce the true meaning of the constructs. To alleviate this weakness, future research can adopt longitudinal analysis utilizing latent construct with multi dimension variables. Latent growth model (LGM) or longitudinal structural equation modeling can be utilized; (3) The weakness of logistic regression in panel data analysis in Eviews 5.1 cannot determine whether researcher can use fixed effect or random effect, for future research one can use more update version of software.

### 2. Contribution and Implication

#### A. Conceptual Contribution

- a. Strategic group formation in this research use mixed of resource based and market based strategic dimension, which are fund allocations in: (1) Bank Indonesia certificate (SBI

- segment); (2) Call money (inter bank loan market segment); (3) Securities (investment in capital market segment), and; (4) commercial loan (intermediation segment).
- Cluster analysis in this research has successfully identified newly formulated strategy typologies in banking firms: (1) conservative; (2) opportunistic; (3) speculative; and (4) progressive.
  - The research integrate 6 perspectives in strategic management: (1) resource- based view; (2) revolutionary vs. evolutionary change; (3) content, context, and process of change; (4) rational, learning and cognitive lenses of change, (5) adaptive vs. resistance of change, and (6) change cube, in order to explain strategic group change that influenced by tangible and intangible resources (see Figure 4.)



**Notes:**

Theoretical bases of antecedents and consequences of strategic group change: 1. Resource Based Perspective, Content of Change, Change Cube Perspective, 2. Rational Lens, 3. Cognitive Lens, 4. Context of Change, 5. Process of Change & Learning Lens, 6. Resistance/Inertia (strategic immobility), 7. Adaptive (strategic mobility): Drastic/ Revolutionary Change or Incremental/ Evolutionary Change

Figure 4. Conceptual contribution of the research

**Theoretical bases of antecedents and consequences of strategic group change:** 1. *Resource Based Perspective, Content of Change, Change Cube Perspective*, 2. *Rational Lens*, 3. *Cognitive Lens*, 4. *Context of Change*, 5. *Process of Change & Learning Lens*, 6. *Resistance/Inertia (strategic immobility)*, 7. *Adaptive (strategic mobility): Drastic/ Revolutionary Change or Incremental/ Evolutionary Change*

**B. Methodological Contribution**

Methodologically, research have contributions in two folds: (1) K-Means cluster analysis add more alternative in strategic group change study beside Hierarchical Cluster Analysis, Two Step Cluster Analysis, M-Clust Analysis, and Agent Based Cluster Analysis, (2) Longitudinal analysis with panel data analysis in strategic management as test of dynamic theory, with empirical test using secondary data.

### C. Managerial Implication

Managerial or policy implication of this research is to help policy or decision maker either in private or public sector (Managers, CEOs, Directors), especially in banking industry, in making assessment of strategic change in relation to tangible or intangible resources of the firms. Reading this research, hopefully, top executive awareness can be enhanced and proactive strategic move can be planned wisely.

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**CURRICULUM REFORM IN HIGHER EDUCATION  
(A CASE STUDY OF CURRICULUM IN THE CONTEXT OF CHANGE IN OFFICE  
ADMINISTRATION EDUCATION DEPARTMENT, SEBELAS MARET UNIVERSITY)**

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**Abstract**

Curriculum always develops continuously and periodically and can be influenced by policy makers, stakeholders, and teachers' communities. This research aims to analyse the curriculum reform in the context of change based on Indonesian Qualification Framework (IQF). This research used the deductive-inductive approach which consisted of three phases; observe previous curriculum, observe the need of current learning outcome, re-design curriculum. Researchers involved 35 respondents as focused group discussion (FGD) from industry stakeholders and teachers' communities in Solo-Raya. The result of this research shows that curriculum in the department of Office Administration Education should be adapted from stakeholders, policy makers, and teacher communities. Industrial partner as stakeholders, government as policy makers, and vocational high school teachers as teachers' communities, are simultaneously giving critical thinking of curriculum to improve learning outcomes. This research also indicates foreign language, character building, computer skill, and communication skill should be considered in curriculum. All findings above will be discussed in this paper.

**Keywords:** *curriculum reform, policy maker, Indonesian Qualification Framework (IQF)*

**Introduction**

Curriculums should adapt international trends and educational research need to be vigilant and active that make researchers have to publish their findings based on quality of education and educational outcomes. It will make easy to access them by policy makers and stakeholders (Brown & Beswick, 2014). Li & Ni (2012) argued the importance of the new curriculum system, real-life, learning methods, and participation to improve curriculum. New concept and terminology in teaching and learning influence theoretical and practical problem in education. It needs teachers review to improve quality of teaching simultaneously and continuously. This will improve the education system.

Ryder (2015) states that stakeholder as external environment in school has a significant implication for policy-maker, teachers and students. Then, local internal environment influence teacher development that can be identified according teachers' beliefs, practices and reflections, teacher communities, and teachers' experience to support curriculum reform. Shay (2015) state that the reasons for the curriculum reforms are based on their own mission.

Wong & Cheung (2015) state if governments play important role in the initiative of curriculum reform it will be a crucial process. Government through presidential decree or ministerial decree can release the guidance of government as policy maker, stakeholders, and teachers' community (Brown & Beswick, 2014). This research aims to analyse the the context of Curriculum reform in the department of Office Administration Education. This paper is organized as follows. In section

2, Indonesian Qualification Framework (IQF) educational management. In section 3, the methodology is presented. The result and discussion are presented in section 4. Finally, our work of this paper is summarized in the last section.

### Indonesian Qualification Framework and Educational Management

New paradigm of higher education in Indonesia relates to certain competency for every graduate. Details of competency are released in Indonesian Qualification Framework (IQF). IQF serves as fundamental references for understanding and defining competencies of graduates of academic, vocational, and professional education against the different levels (ACDP, 2015). The learning outcomes level of IQF is (i) value, ethics, moral as basic components; (ii) science, knowledge, or knowhow comprehension; (iii) work competencies; and (iv) level of autonomy and responsibility in work place (DGHE, 2012).

Every graduate of all level education has to have certain competency. The competency which supported by personal characteristic will guide graduates to high performance in the workplace. The characteristic can be identified as talent, skill, and knowledge (Zurnali, 2010). Boyatzis (2008) state that competency is a basic characteristic that guides or support high performance of working. Competency can be defined as an integrated capability to do jobs independently, measurable, and assessable in its field (Presidential decree No. 8/2012).

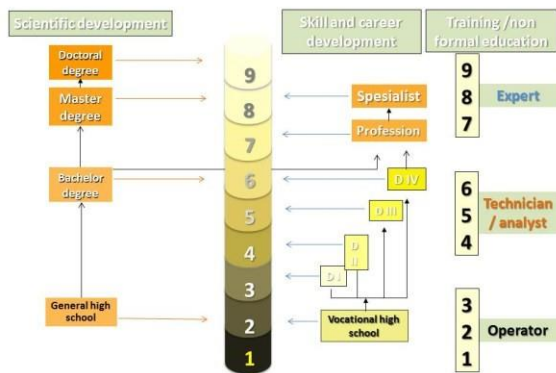


Figure 1. The Indonesian Qualification Framework (IQF) (DGHE, 2012)

Case, Fraser, Kumar, & Itika (2015) state an institutional autonomy has a strong effect to influence electing courses that make a good use of local opportunities; the state, the industry, and the institution. The state will consider the funding and accreditation. The industry as a partner school for potential employers has a power to supervise students on industrial attachment. The institution requires regular curriculum review to sufficient review for institutional accreditation. The principal, as top manager has power pushing middle and lower manager to implement new curriculum based on international trends. Qian & Walker (2014) argue that principals have an important role promoting teacher to response curriculum reform. Principals considering teachers data, teachers' strategy, teachers' culture, and research to identify the gap of curriculum reform. All of the components have a positive sign to support curriculum reform.

On the contrary, top manager cannot succeed to implement new curriculum if the middle and lower manager against the policy. Park & Sung (2013) explain teachers' role that assumes curriculum reforms were not innovative and create a work overload. They have to learn something

new and then implement it, but no programs are supported. Lin, Chang, Tsai, & Kao (2015) found a gap between teachers and students to implement curriculum. The gap is on the technology curriculum related to its implementation in teaching and learning process. Science and technology should be learned separately.

### **Methodology**

This research used the deductive-inductive approach that aimed to improve learning and teaching process in the Office Administration Education Department. This research consisted of three phases; observe previous curriculum, observe the need of current learning outcome, re-design curriculum. The first and the third phase, researchers observing and re-designing curriculum by themselves. In the second phase, researchers involved stakeholders and teachers' community as focused group discussion (FGD). Total participants of FGD were 35 respondents who consist of 28 vocational high school teachers and seven entrepreneurs in Surakarta; 26 males and 9 females. The range of age is 27 to 50 years old (mean = 40.1) and their working experience between 10 to 35 years (mean = 20.8). FGD was started with the researcher's presentation current curriculum in the department of Office Administration Education, then followed up by curriculum reform in developing countries, and ended with questions and answers session. In presentation session, participants criticize the former curriculum in higher education that it was not match with vocational high school curriculum. Some participants gave suggestions it must be adapted immediately. Yet, it did not start teachers searched a suitable material by themselves. The end of FGD, researcher formulated the prospective curriculum of higher education, then, participants gave some notes about some courses that must be deleted or added. The result of FGD was analyzed to improve the curriculum in the department of Office Administration Education.

### **Results and Discussions**

Curriculum in Office Administration Education department has been developed periodically to improve the learning process and to minimize the gap between higher education curriculum and vocational high school curriculum. The current improvement of higher education curriculum has been developed based on the Indonesian Qualification Framework (IQF). IQF is a platform for the higher education quality system as well as a reference of program standards and criteria (Prasetyo, Suyanto, & Senam, 2014). Based on Presidential Decree No. 08-2012, the definition of IQF has three point that to be emphasized; equalized, qualification, and work experience. Equalized refers to equating and integrating the process of learning outcome through education, training and work experience. Qualification means mastering of learning output that will be grouped based on IQF standard. Work experience means the experience of working in certain skill and certain time intensively resulting a competency.

Develop curriculum needs learning goals, learning methods, and learning process and evaluation to create a good competency of graduates. The structure of curriculum in higher education is developed based on curriculum in senior high school (education and culture (ministerial decree no. 49-2014). The competency of graduates are categorized; learner level development, Indonesian competent qualification, and competence mastery tiered. Higher education curriculum consists of institutional curriculum and core curriculum (Education ministerial decree no 232/U/2000). Institutional curriculum relates to learning materials that show the identity of the university. Core curriculum relates to a group of learning materials in the department through special courses to show its identity. The groups of courses are categorized into: theoretical courses, practical courses, field trips courses. All courses can be grouped based on its



characteristic; required, taken, and optional.

The courses in the department of Office Administration Education consist four groups; personality development (14 credits), behavioral work (27 credits), science and skill (14 credits), special work (73 credits) and social live (14 credits). Total credit courses are 142 credits. The graduates the department of Office Administration Education can work as educators, laboratory assistant, officer, office managers, and entrepreneurs.

Based on FGD results that curriculum in the department of Office Administration Education should be adapted with the current trends, stake holder, and teachers' community. Stakeholders in this case consist of industrial association and teachers association. The first stakeholders, industry association, suggested courses that should be considered by the department of Office Administration Education are foreign language and character building. Foreign language is important because in the globalization era, graduates student required to speak more than one international language. Character building as personal identity should be pushed and applied although it needs time to implement it.

Lavrenteva & Orland-Barak (2015) state that foreign language is important because some reasons; (1) language as a tool which equips individuals to understand people and culture, (2) building a broader vision of the linguistic and cultural diversity and developing students' intercultural communication skill, (3) cultural product and production, (4) guided of awareness culture in which the communication takes place. Valeeva, Baykova, & Kusainov (2016) argue that foreign language should be improved because it equips learners to develop knowledge, skill and ability, to contribute the personal identity, and to increase to scientific communication.

Character building needs to be taught in education and should be listed in the curriculum. It relates to the ability of students to decide a behavior in an appropriate manner, understanding moral value and choose to do the right thing. The benefit of character development in school is to help students in academic achievement and communication skill (Almerico, 2014). In Islamic theology, character building closest meaning to the value of *tauhidullah* that means point of thinking based on the philosophical right (Yapandi, 2015). The value should be trained and practiced in daily life by students, academicians, and people in certain communities.

The second stakeholder, teachers' association, has opinions about courses that should be considered by the department of office administration education are audiovisual editing, visual editing, web, publishing, and public relation skill. The key point of this suggestion are computer skill and communication.

The computer development is never ending, it improves continuously in software and hardware. This condition leads users of the computer to update their skills. Computer skill cannot be separated with information and communication technology (ICT) skill. Using of ICT has high impact to increase in educational motivation, question-making skill, spirit, and curricular score, and educational improvement (Keikha & Yaghoubi, 2010). Higher education students in Office Administration Education Department are prepared to be teachers in vocational senior high school. It means that student need learn computer skills continuously, especially software relates to vocational need. For instance, audiovisual editing, visual editing, web, publishing.

On the other side, teachers should have a good capability in communication. Teaching and learning will not succeed without good communication. Sakiti in Asemanyi (2015) state that communication is a purposeful proses to express, receive, and understand message containing factual information, feeling, idea, and need through symbols. The communication skill can be taught to students started by good perception, good coordination, and good language (Asemanyi, 2015)

## Conclusions

High competition of graduate students leads educators and other educational components to prepare students' competency steadily. A good and proper competency involves good curriculum, good learning, and good evaluation. Curriculum in higher education required to cover international trends that can adapt from stakeholders, policy makers, and teacher communities. The three partners gave suggestion to the department of Office Administration Education.

Stakeholder, especially industry, emphasized the foreign language and character building should be considered as a new subject in the curriculum. Policy maker, government, emphasized the certain competency as identity of school or university. Teachers communities emphasized the computer skill and communication skill. Education without computer nonsense to improve student capability. Then, communication is a basic skill of teaching and learning. No communication will no learning.

## Acknowledgments

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## A PLS-SEM ANALYSIS OF THAI CERAMIC ENTERPRISE INNOVATION, BUSINESS STRATEGIES & PERFORMANCE ON SURVIVAL

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### Abstract

The world ceramic market is currently estimated at \$369 billion, projected to rocket to \$705 billion by 2025. Since 1980, large corporations, led by aerospace companies, have amassed over 8,000 patents in structural ceramics. Ceramic is a material made of elements and metals extracted from soil and includes products such as glass, tile, and cement but it is now being spotlighted as a cutting-edge substance used in advanced technologies such as energy, IT, and the bio and medical industries. It is even being 3-D printed. These days, ceramic means much more than pottery, as innovative researchers are making the material wearable and power producing as well. Thailand as a member of a 600 million, 10 nation economic communities with a \$2.4 trillion GDP, has risen to become a leading ceramic manufacture. Therefore, the researchers wanted to undertake a study to research how innovation, business strategies and performance affect the Thai ceramic industry's survival. Quantitative data is being obtained from a proposed sample of 220 Thai ceramic industry executives and managers from a population size of 758 firms with qualitative research being conducted with 10 executives by the use of purposive sampling. Analysis will be conducted using Partial Least Square (PLS-Graph) software to apply Structural Equation Modeling (SEM).

**Keywords:** *AEC, ASEAN, business strategies, organization survival, Thailand*

### Introduction

According to Korea's Ministry of Trade, Industry and Energy, the scale of world ceramic market, currently estimated at 440 trillion won (\$369 billion), will rocket to 840 trillion won (\$705 billion) by 2025. Ceramic is a material made of elements and metals extracted from soil and includes products such as glass, tile, and cement but it is now being spotlighted as a cutting-edge substance used in advanced technologies in energy, IT, and the bio and medical industries (Korea JoongAng Daily, 2015). Since 1980, large corporations, led by aerospace companies, have amassed over 8,000 patents in structural ceramics and consolidated capabilities internally through acquisitions and mergers (Vicari & Schiavo, 2015)

The advanced ceramics market in the Asia-Pacific region is projected to register one of the fastest-growths mainly due to the presence of emerging economies such as China and India as well as emerging activities in the electronics, transportation, energy, and industrial sectors. Asia-Pacific is the biggest market for advanced ceramics, and accounted for a share of around 40% of the global market share in terms of value in 2014 which was majorly contributed by China (MarketsandMarkets, 2014).

The electronics industry is one of the largest end-user industries of advanced ceramics and this trend is projected to continue in the near future. More than 80 percent of up-to-date smartphone parts are ceramic which enables electric current to consistently flow on electronic circuits (Korea JoongAng Daily, 2015).

Asia-Pacific is the biggest market for the electronics industry, and accounted for a share of more

than 40% of the overall market size in the year 2014. It is also estimated that Republic of China followed by Japan, South Korea, and India are the fastest growing markets of advanced ceramics for the electronics industry in the region (MarketsandMarkets, 2014).

The U.S. and China are at the forefront of advanced ceramics consumption, while Germany, France, Japan, and U.K. are other key markets for advanced ceramics consumption. China is the key market in Asia-Pacific, consuming more than half of the demand for the advanced ceramics, followed by Japan, South Korea, and India where consumption is growing at a steady rate. Increase in the consumption of advanced ceramics for monolithic ceramics, ceramic matrix composites and ceramic coatings have been observed in Asia-Pacific due to continued industrialization and rise in the manufacturing sector of the region. Medical industry is projected to be the fastest-growing application segment followed by military & defence between 2015 and 2020 (Markets and Markets, 2014).

The Korean domestic market is expected to expand threefold in a decade. In particular, high-tech ceramic's share of the ceramic market is expected to jump to 70 percent. However, advanced businesses like Kyocera, Murata and TDK in Japan and Corning in the United States with fundamental technologies are far ahead of Korean companies (Korea Joong Ang Daily, 2015).

Ceramics is also used in construction but that too is both rapidly and radically changing. According to Tikul and Srichandr (2010), ceramic tiles are one of the most widely used materials in both commercial and residential buildings in Thailand. Presently the global ceramic tile market is expected to reach over \$125 billion by 2020 with Thailand having moved to the number one spot globally in the production of tile.

Ceramic tile dominates the industry, with demand estimated at over 70 million tons in 2014. Growth and development in the construction industry is expected to be the primary growth driver due to urbanization, higher per capita income, population increases and improving economies. Housing and construction are the largest application segments, valued over at \$65 billion in 2014. Aesthetic and durability advantages of these products are expected to drive demand in the civil construction sector over the next seven years (CiAdvanced, 2015).

Within the AEC (ASEAN Economic Community), Thailand's SCG Group acquired Vietnam's leading ceramic tile manufacturer, Prime (SCG, 2014) which moved SCG Group into the number one spot worldwide with a ceramic tile production capacity of 225 million square meters per annum (a 50% increase from 2012). This compares to the U.S.A.'s second place Mohawk Industries, with a total capacity of 220 million square meters (ASEAN Ceramics, 2013). Thailand's SCG Group now has expanded to 29 factories within the AEC, including 17 in Thailand, 4 in Indonesia, 1 in the Philippines and 7 in Vietnam with a total workforce of 14,000 people, generating 650 million euros in the tile business alone (Ceramic World Review, 2014).

In Thailand however, the ceramics industry is mostly made up of small to medium sized enterprises dispersed in different provinces across the country. These include the provinces of Saraburi, Nakhon Ratchasima, Lampang, Chiang Mai, Ratchaburi, Samut Sakhon, Nonthaburi, Chon Buri and Rayong. The industrial ceramics industry is one that is important both to Thailand and its economy which is continuously supported and promoted by the government.

From the above data, researchers decided to undertake a study using a structural equation model to develop a greater understanding of the importance of the Thai industrial ceramic industry and the variables effecting its survival. Thailand's large and geographical dispersed ceramics factories are mostly small to medium sized with preliminary data indicated 758 registered businesses nationwide, with a heavy concentration of 172 factories located in the northern, mountainous province of Lampang.

The study will therefore focus on the variables that influence organization survival. There are significant changes underway, heavily influenced by environmental regulations and technological innovation such as 3-D printing. Survival and sustainability in a highly competitive environment is no easy mission, therefore the reason for this research.

## Literature Review

### 1. Innovation

Innovation is defined as adding something new to an existing product or process. Drucker (1985) argued that innovation is the tool of entrepreneurship. In addition, both innovation and entrepreneurship demand creativity. No entrepreneur or enterprise, however successful and big, can continue to hold a place of leadership unless it recognizes that modern business operates in a world of galloping change which creates new problems, risk and opportunities and for which they have to mobilize the enterprise's resources before changes make their impact felt (Okpara, 2007).

Freeman and Soete (1997) elaborated on innovation effects on economics and stated that innovation is an essential condition of economic progress and a critical element in the competitive struggles of enterprises and nation states. Innovation is also critical for those who wish to accelerate or sustain the rate of economic growth in their own and other counties and is critical for the long-term conservation of resources and improvement of the environment. The cutting edge of structural ceramics research is carried out by only a handful of players and they tightly control R&D information, stifling the ability and motivation of outside start-ups to enter the field. Still, innovation bubbles beneath the surface, driven by the need for process disruption.

This is consistent with ceramic research innovation from UCLA engineers which hope to create a ductile ceramic that is hard, able to experience extreme heat and experience low corrosion. While the hardness of steel may withstand pressures of a gigapascal or two, transition-metal carbides can take up to a whopping 20 gigapascals. And they won't melt until they reach over 6,300°F (3500°C) — versus steel's melting point around 2,700°F (1500°C). (Wasserman S, 2015)

On a more 'down to earth' note, Thailand's SCG Group with 51,000 employees globally and one of the world's largest ceramic product producers is also focusing on research and development (R&D) and has steadily increased its high-value added (HVA) products and services which have an average margin 8% higher than normal products. HVA products now account for 37% of the group's total revenue, up from just 4% a decade ago (Wiriyapong, 2015).. It also acquired technology in United States and Europe to support its innovation drive and since the group projects HVA products to eventually account for half of its products; it's recruiting more PhD-level staff, including those in China, to step up innovation research.

This is consistent with Lemon and Sahota (2004) that states just as 'innovate or die' is one of the mantras of today's economy, knowledge is increasingly recognized as the key underpinning resource and that organizational learning plays an important part in ensuring that knowledge repositories are continually replenished and updated to enable efficient responses to changes in its competitive environment.

According to the study's research and examination of the literature, it was determined that there were 3 key manifest variants or observable variables related to innovation. Many scholars have studied these manifest variants or observable variables effects on innovation from which the researchers have synthesized the research to include *product innovation*, *process innovation* and *marketing innovation* in this study (Dachyar & Fatkhurrohman, 2011; Mutlu & Er, 2003; Seedee, Sulaiman, & Ismail, 2009; Chong, Chan, Ooi, & Sim, 2011).

## 2. Business Strategies

Business strategy refers to the tools that companies use to judge the competition in the market compared to its competitors (Meskendahl, 2010) which is the competitive strategy. Business strategy, or corporate strategy, is the fabric of verbal and non-verbal interactions in organizations setting the behavioural norms for the organizations long-term orientation (Johnson, Whittington, Scholes, & Pyle, 2011). As such strategy should affect daily actions but only or mostly those related to the organizations expectations of its major activities on a more distant horizon (Porter, 1996) and stated that a nation's competitiveness depends on the capacity of its industry to innovate and upgrade.

In Porter's (1985) earlier book on *Competitive Strategy* the concept of generic strategies cost leadership, differentiation, and focus – was introduced which represented the alternative strategic positions in an industry. This is consistent with Tanwar (2013) which discussed 'generic strategies' stated that basically, strategy is about two things: deciding where you want your business to go, and deciding how to get there. It was indicated that generic strategies include 'overall cost leadership', 'differentiation', and 'focus' (Tanwar, 2013) but if firms try to maintain cost leadership as well as differentiation at the same time, they may fail to achieve either.

Lo and Han (2014) discussed the competitive paradigm between globalization and local Chinese development in the ceramic tile industrial cluster, based on the Porter's theory in exploring the factors of the global competitiveness. They concluded that firms have to shape strategic thought and be flexible so that companies can quickly respond to challenges of nearby competitors. According to the study's research and examination of the literature, it was determined that there were 3 key manifest variants or observable variables related to *business strategies*.

Many scholars have studied these manifest variants or observable variables effects on innovation from which the researchers have synthesized the research to include *cost leadership strategy*, *differentiation strategy* and *focus strategy* in this study (Johnson, Whittington, Scholes, & Pyle, 2011; Lo, & Han, 2014; Meskendahl, 2010; Porter, 1985; Porter, 1990; Porter, 1996)

## 3. Firm Performance

De Waal (2007) studied the identifying factors that determine the continuous success of a high performance organization (HPO) and identified after an extensive review of the literature some common themes which included: sustained growth; better financial and non-financial performance compared to its peer group; long-term orientation; and finally, better results over a period of at least five years.

Kaplan and Norton (1992) revolutionized conventional thinking about firm performance metrics with the balanced scorecard. When Kaplan and Norton first introduced the concept in 1992, companies were busy transforming themselves to compete in the world of information; their ability to exploit intangible assets was becoming more decisive than their ability to manage physical assets. The scorecard allowed companies to track financial results while monitoring progress in building the capabilities needed for growth. There were 4 main processes of which, the third—*business planning*—enabled companies to integrate their business plans with their financial plans.

This is consistent with research by Škrinjar, Bosilj-Vukšić, and Indihar-Štemberger (2008) which showed that business process orientation leads to better non-financial performance and indirectly to better financial performance.

According to Zuriekat, Salameh, and Alrawashdeh (2011), performance measurement systems are considered information systems that are used to evaluate both individual and organizational

performance. In their study, they investigated the use of a variety of financial and non-financial performance measures identified in the literature to measure performance measurement systems and showed that companies benefit from performance measurement systems that incorporate a wide range of financial and non-financial performance measures.

Hilman and Kaliappen (2014) observed the psychometric properties of the organizational strategies and performance scales which were stated to consist of competitive strategy, market orientation, innovation strategy and organizational performance. It was determined that organizational strategies and performance measures can be useful in examining strategy and performance.

According to the study's research and examination of the literature, it was determined that there were 2 key manifest variants or observable variables related to *firm performance*. Many scholars have studied these manifest variants or observable variables effects on *innovation* from which the researchers have synthesized the research to include *financial performance*, and *non-financial performance* in this study (de Waal, 2007; Kaplan & Norton, 1992; Škrinjar, Bosilj-Vukšić, & Indihar-Štemberger, 2008; Hilman & Kaliappen, 2014; Zuriekat, Salameh, & Alrawashdeh, 2011).

#### 4. Organization Survival

Organizational survival has been argued to be a primary goal or objective every organization should have. In a survey of corporate board member policies and practices by Korn/Ferry International, management succession was stated as the third most important issue on the heels of financial results and strategic planning (Rothwell, 2010).

Bennet and Bennet (2011) proposed a new model for organizations that enables them to react more quickly and fluidly to today's fast-changing, dynamic business environment: the Intelligent Complex Adaptive System (ICAS). ICAS is a new organic model of the firm based on recent research in complexity and neuroscience, and incorporating networking theory and knowledge management, and turns the living system metaphor into a reality for organizations. There are eight characteristics of the ICAS: organizational intelligence, unity and shared purpose, optimum complexity, selectivity, knowledge centrality, flow, permeable boundaries, and multi-dimensionality. Technology enables connectivity, and the ICAS model takes advantage of that connectivity by fostering the development of dynamic, effective and trusting relationships in a new organizational structure.

Tolulope (2009) discovered in Nigeria that the ceramics industry's spatial distribution of the industries as well as the performance is determined by different factors. Gender lopsidedness was observed among ceramic wares producers with time commitments to production by manufacturers not long enough for firm profitability. Additionally, the production and the management systems of small-scale ceramic industries in South-Western Nigeria are hindered by many other factors.

According to the study's research and examination of the literature, it was determined that there were 3 key manifest variants or observable variables related to *organization survival*. Many scholars have studied these manifest variants or observable variables effects on innovation from which the researchers have synthesized the research to include *financial management*, *management* and *succession planning* in this study (Bennet & Bennet, 2011; Rothwell, 2010; Tolulope, 2009).

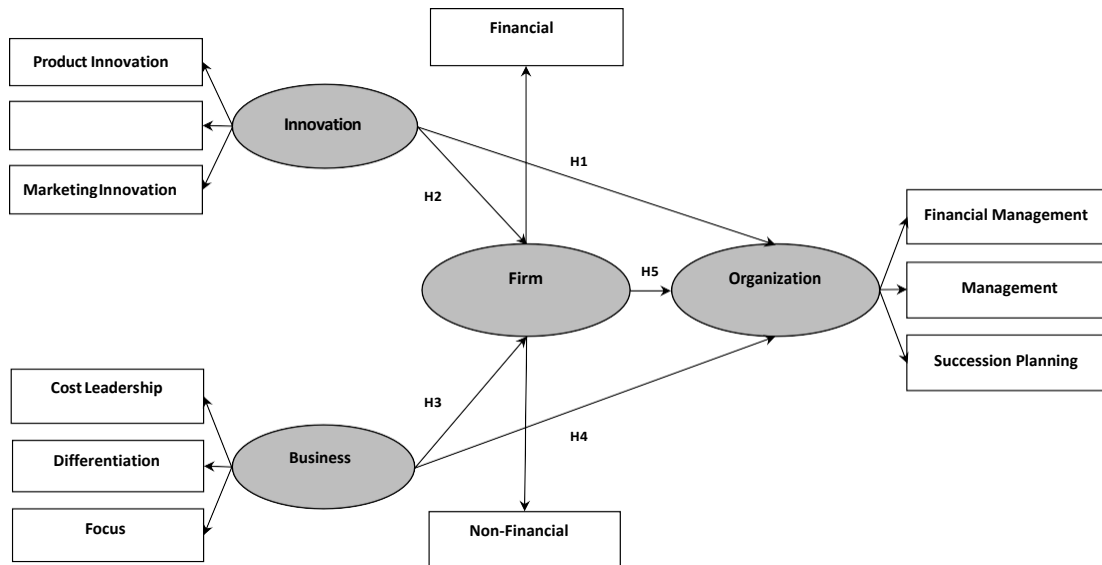
From the above conceptual review and development, the researchers have developed the following 5 hypotheses for the study (Figure x):



**Proposed Research Hypotheses Model**

- H1: *Innovation* has a direct effect on *Organization Survival*.
- H2: *Innovation* has a direct effect on *Firm Performance*.
- H3: *Business Strategies* have a direct effect on the *Firm Performance*.
- H4: *Business Strategies* have a direct effect on *Organization Survival*.
- H5: *Firm Performance* has a direct effect on *Organization Survival*.

**Proposed Conceptual Model (Figure 1)**



**Figure 1: Conceptual Framework**

## **Methodology**

This research aims to model the structure of the factors influencing the survival of the industrial ceramics industry of Thailand, so the researchers wish to determine the details and procedures from the methods below:

### **1. The Approach Used In The Study**

For this study the researchers used both quantitative and qualitative research from both primary and secondary data. The researchers have determined the following steps for this study:

#### **A. Secondary Data Research**

This was comprised of published research, internet materials, media reports, and data which has been cleaned, analyzed and collected for a purpose other than the needs assessment, such as academic research or an agency or sector specific monitoring reports (Acaps, 2012).

Therefore, secondly data is a research tool for development of the variables and the structural equation model in understanding the survival determinants of the Thai ceramic industry.

#### **B. The Quantitative Research Study**

Quantitative research will be performed from the primary data by collecting a questionnaire from the target sample. The questionnaire to be used to collect data is structured and written and a realistic, easy-to-understand format with are deemed to be reliable and reasonable. Further reliability validation will be undertaken as follows:

#### **C. Review of the questionnaire**

This was conducted by academic scholars to validate the investigation questions and the use of rhetoric and the simplicity and comprehension of the questions. During the question trial period, questions undergo a continual rigorous review and inspection for their clarity and ability to the meet the objectives of the research and to carry out data collection and statistical analysis.

#### **D. Quantitative Research**

Schumacker and Lomax (2010) stated that Structural Equation Modeling (SEM) uses a variety of models to show the relationships between observed variables with the same basic goal of providing a quantitative test of a theoretical model hypothesized by a researcher. Meldrum (2010) further stated that a sample size smaller than 100 should not be used in SEM as it is unreliable. This is consistent with other research on the 'Rule of 100' including Gorsuch (1983), Kline (1979), (MacCallum, Widaman, Zhang & Hong, 1999). No sample should be less than 100 even though the number of variables is less than 20 (Gorsuch, 1974; in Arrindell & van der Ende, 1985). Therefore, using a factor of 20 for each of the 11 variables from the research survey, it is anticipated that a total of 220 samples from Thai industrial ceramic firms are adequate to assure a reliable sample size (Schumacker & Lomax, 2010).

#### **E. Qualitative Research**

Qualitative research will involve confirming the model of the quantitative research. It is a collection of interviews with industry professionals involved in the ceramic industry including entrepreneurs, small and medium sized enterprises (SMEs) and those involved in industry promotion. Qualitative Research is to be

undertaken through the use of in-depth interviews with those involved in innovation, including plant managers, production managers and engineering managers. To confirm the model of quantitative research, the sample size for this research will be 10 individuals.

### **2. Population and Sampling**

The population in this study is 758 operators or managers of ceramic production facilities in

Thailand which have been registered and licensed by the Thai Department of Industrial Works within the Ministry of Industry (DIW, 2011).

### 3. Self-Administered Questionnaire (SAQ)

For this research, the measurement instrument or questionnaires utilized was prepared from the literature. A self-administered questionnaire (SAQ) is being used as it is exploratory in nature and serves as a starting point for other methodologies.

### 4. Research Quality Inspection Tools

The research will be conducted to determine the quality and reliability of the instruments used in the research. Tools used to measure quality are divided into 2 phases including content validity and reliability (Hale & Astolfi, 2014). The research is divided into two phases.

Phase I consists of an inspection by 5 experts.

Ceramic plant operators	2 managers
Mid-level SME professionals	2 managers
Ceramic industry academic	1 Professor

Questionnaires are constructed as a tool to measure concept definition and practice using a 5-Point Likert Scale (Likert, 1970). This research will conduct Confirmatory Factor Analysis (CFA) and subsequently reliability analysis to measure Cronbach's alphas (Cronbach, 1951) for this scale items to ensure internal consistency. Multi-item measures were developed based on Cronbach's alpha >0.68. This study will then calculate Cronbach's alphas for each construct. If the value is below 0.50, the research question will be cut off. This is considered highly reliable. The responses to the questions capturing focal constructs will use a five-point Likert scale (rating statements 1-5; 1 = strongly disagree and 5= strongly agree) (Likert, 1970).

#### Phase II

Phase II consists of measures to ensure the quality of the questionnaire. Berk (1984) stated that an evaluation of the congruence between items and objectives is the most important assessment during the content validation stage. If there is insufficient evidence that the items are measuring what they are intended to measure, the remaining item analyses are useless. An efficient measure for numerically assessing content experts' evaluations of items is the index of item-objective congruence (Rovinelli & Hambleton, 1977), in which ratings from content specialists are obtained in order to evaluate the match between test items and the table of specifications (Berk, 1984). For this study, 5 experts in their related fields were chosen with items having an IOC index higher than 0.5 being considered acceptable. Additionally, the index of Item-Objective Congruence (IOC) developed by Rovinelli and Hambleton (1977) will be employed to carry out the screening of questions to a group of 10 initially in the pilot study. The research will then proceed to select items that have an IOC index higher than 0.5, which will be considered acceptable.

### Data Collection

#### 1. Primary Data

Primary data will come from a collection of factors influencing the survival of ceramic industry enterprises within Thailand.

#### 2. Secondary Data

By studying theories and concepts related to the research from various sources, including books, articles, research papers, instruction manuals, etc.

#### 3. Data Analysis and Statistical Methods Used

Quantitative research is currently envisioned using the partial least squares (PLS) statistical method and hypothesis testing with PLS-Graph software (Chin, 2001), which analyses the display and model structure associated with the observed manifest variables with latent variables.

#### 4. Analysis of Quantitative Data

The analysis of quantitative data will be conducted using statistical analysis as follows:

1. An analysis will be conducted by descriptive statistics by characterizing the frequency, percentage, mean and standard deviation.
2. An analysis will be conducted using structural equation modeling (SEM) to determine the relationship of the factors influencing the survival of ceramic industry enterprises in Thailand.

#### 5. Analysis of Qualitative Data

To confirm the results of the quantitative analysis are credible and the findings reliable, the researchers will conduct interviews with those involved as professionals, entrepreneurs and SME managers in ceramic industry enterprises in Thailand.

#### Conclusion

Ceramics is as old as civilization itself but yet is a craft that is being used in the most advanced disciplines of technology, construction, aerospace, medicine, nanotechnology, etc. In all areas, innovation is a key player in the firm's survival as can be seen from the over 8,000 patents for structural ceramic since 1980, mostly aerospace related. Bringing the products to market using sound strategic decisions with a strong financial sheet are also keys to the firm's survival. From the research thus far and through case studies such as with Thailand's SCG Group, the researchers see the strategic importance of research & development and innovation on group competitiveness and even survival. Big companies 'consume' smaller companies as they become weak and non-competitive. Government policy can hinder or help companies grow and prosper. Everywhere you look in the world; ceramics is part of our life and what we call 'civilization'. It has been that way since humans settled into villages and started 'homes'. Now it will be part of our move into space and new frontiers. Ceramics is an exciting and extremely interesting industry and the researchers hope to continue their journey in the discovering of the companies and technology in this amazing industry.

In Thailand the research thus far for the industrial ceramics industry has seen the requirement for firms to become more adapt and embrace innovation and long-term business strategy to maintain their both their short-term and long-term competitiveness and industry sustainability.

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**THE EFFECTS OF BUDGETARY PARTICIPATION, BUDGETARY  
SLACK, AUTHORITY DELEGATION, AND ORGANIZATIONAL  
COMMITMENT ON MANAGERIAL PERFORMANCE  
AN EMPIRICAL STUDY ON LOCAL GOVERNMENT IN LAMPUNG,  
INDONESIA**

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**Abstract**

This paper aims to demonstrate whether budgetary participation, budgetary slack, authority delegation and organizational commitment positively affect managerial performance of local government work unit. This empirical study is conducted with local government work unit in district/city in Lampung Province, uses primary data by distributing questionnaires to 601 respondents, and tested by using Structural Equation Model. The study result proves that participation in budgeting preparation, budgetary slack, authority delegation, and organizational commitment will increase managerial performance of local government work unit in Lampung District/City.

*Keywords: budgetary participation, budgetary slack, authority delegation, organizational commitment, and managerial performance.*

**Introduction**

To determine a budgeting, in this matter, a process is needed, Mardiasmo (2005) stated that a stage of budgeting is an important thing because ineffective budgeting and it is not oriented to performance will be able to fail the plan that has been set. Budgeting is a managerial plan of action to facilitate the achievement of organization's goal. After the process of organization goal achievement, performance evaluation is needed to be done. The performance evaluation of public sector can be obtained from financial report that can be measured based on the budgeting that has been made. Where it evaluation can be done by analyzing variance between actual performance and the one that is budgeted, where analysis of variance will focus on income variance and spending variance (regular spending variance and investment/capital spending variance) (Mardiasmo 2002:123).

Young (1985) stated budgetary slack as an action estimating lower income and higher cost when agent is given an opportunity to choose work standard to improve performance. It will negatively affect public sector organization, which is when there is mistake on resource allocation and bias in performance evaluation of agent on its responsibility unit (Suartana, 2010). However, in the study from Blanchette et al. (2002), it stated that budgetary slack conducted ethically will be able to improve performance. In Lampung Province, in 2014, determined income budgeting plan had decreased from the previous year, while determined expense budgeting plan had increased. It indicates the existence of budgetary slack in budgeting preparation, especially income budgeting.

Decentralization authority delegation is needed because in decentralized structure of managers/subordinates are given bigger authority and responsibility in decision making. According to Miah and Mia (1996), decentralization is how far higher manager allows lower manager to take decision independently. It is supported by study of Gul, et all. (1995) stating that budgetary participation on performance will positively affect organization that its authority delegation is decentralization. Different from the study of Riyanto (1996), Marani and Supomo (2003) stating that decentralization does not positively affect managerial performance. The responsibility in delegating from top manager to lower manager will bring consequence of bigger responsibility of lower manager toward implementation of decision made. Furthermore, the study of Rachmawati (2009) and Setyarto (2008) proved that organizational commitment positively affects the performance of employees.

Based on the phenomena, theory and previous study results, then, the writer is willing to ensure more whether budgetary participation, budgetary slack, authority delegation, and organizational commitment will positively affect managerial performance of local government work unit (this empirical study is done in districts/cities in Lampung Province). For local government, the result of this study is expected to be able to give information about factors that affect managerial performance, especially in budgeting preparation at the level of local government work unit that manages Local Income.

#### Literature Review

According to Kennis (1979), budgetary participation is a level of manager participation in making budgeting where budgeting used will be an instrument in defining performance. Brownell (1982) defined participatory budgeting as a level of participation and individual influence in making budgeting. Milani (1975) also argued that the level of participation and the influence of subordinate in budgeting toward decision making in budgeting process is the main factor that differentiates between participatory budgeting (Stedry, 1960), so it allows subordinate to negotiate with superior in accordance with their targeted budgeting that can be obtained (Brownell and Melnes, 1986; Dunk, 1993).

According to Anthony and Govindarajan, (2005:85) budgetary slack is the difference of budgeting amount proposed by subordinate with the best estimation amount of organization. Budgetary slack is done by subordinate which is by presenting budgeting with low difficulty level so that it is obtained easily and this discrepancy tends to be done by subordinate because of knowing that their performance is measured by the level of budgeting attainment that has been determined together. According to Dunk (1993) budgetary slack is defined as the express incorporation of budget amounts that make it easier to attain. Budgeting discrepancy can easily occur if information owned by subordinate/MPP (agent) is more than information owned by superior (principal) about a responsibility center.

Authority delegation is authority giving by higher manager to lower manager to conduct a work with authorization explicitly from manager who gives authority at the time the authority is implemented (Marani and Supomo, 2003). According to Bruns and Waterhouse (1975), managers in an organization with high level of decentralization feels that they are the most influencing, participate more in budgeting plan and feel satisfied by activity relating to budgeting. Contrarily, in organization with low decentralization (centralization), managers feel that they are considered less responsible, less involve in budgeting plan and having pressure from superiors.

Mowday et al., (1982) in Pangastuti (2008) defined organizational commitment as: the relative strength of an individual's identification with and involvement in a particular organization. This organizational commitment proposed by Mowday has characteristics, which are: (1) strong belief and acceptance toward goal and value of organization; (2) readiness to work hard; (3) strong willingness to stand in organization. Characteristics of organizational commitment among others are: commitment to work, commitment in group, and commitment to organization (Michaels, 1998; Budiharjo (2008).

Government performance cannot be measured by earnings obtained where it is possible for government to have program and activity that can produce bigger income than their cost so that government will have surplus on the program. However, this does not make government performance evaluated good, but service quality is the main goal, whether service given is adequate, so Government Financial Report will be used by groups who are interested in evaluating whether government has done distribution of expense cost fairly (Mardiasmo, 2002:166). Managerial performance is the level of ability, competence of a manager in implementing management activities including planning, coordinating, investigating, arranging, negotiating, representing, supervising, and evaluating. Definition of managerial performance according to Mahoney et al. (1963), managerial performance is performance of individuals of organization members in managerial activities such as; planning, investigating,



coordinating, staff arranging, negotiating, and representing.

### **1. The Effect of Participation in Budgeting Making on Managerial Performance**

Participation in budgeting making gives a feeling of responsibility to lower manager and encourages creativity, because on lower manager who plans or creates budgeting, the objective of budgeting is most likely the personal objective, that causes higher level of objective congruence in this matter is the high job satisfaction. The effect of participation in budgeting making toward managerial performance has been previously studied by Brownell (1982) with instrument of Milani (1975) for budgeting participation, while its managerial performance instrument uses the one from Mahoney et al. (1963). They found that there is positive and significant relationship between participation and managerial performance as well as studies from Bronwel and Melnnes (1986), Agusti (2012), Fernando (2013).

H1: Participation in budgeting making positively affects managerial performance.

### **2. The Effect of Budgetary Slack on Managerial Performance**

Budgetary slack is created by manager in order to protect self from the risk of budgeting target that cannot be attained (Lukka, 1988; Onsi, 1973; Schiff and Lewin, 1970). When manager participates in budgeting, manager has greater responsibility to subordinate in order to be able to implement budgeting made better, as well as the existence of sanctions giving if it is less than budgeting target and compensation giving if it is able to exceed budgeting target. The existence of intervention possibility from higher management that is faced by managers if they are not able to attain budgeting target, managers will lose resources of organization, lose annual bonus or at the extreme point will lose job (Merchant and Manzoni, 1989). Parker and Nouri (1996) stated that if performance of a manager is evaluated based on running budgeting, then they will ensure their budgeting in the level that easily to be attained, one way is by including slack in their budgeting. According to the result of study from Dunk (1993) and Merchant (1981), budgetary slack will be low if the pressure of budgeting is low. Because manager performance is evaluated by budgeting as the only managerial performance evaluation, but according to Blanchette et al., (2002), budgetary slack done ethically will positively affect managerial performance, the study of Dunk (1995) stated that budgetary slack has positive role in affecting relationship of task difficulty and performance, in line with Wouters (2005) stating that the existence of budgetary slack can reduce budgeting pressure and uncertainty of budgeting target attainment that affects managerial performance. Therefore, the hypothesis that is developed is:

H2 : budgetary slack positively affects managerial performance

### **3. The Effect of Authority Delegation on Managerial Performance**

Authority delegation is a gift that becomes rights on task and responsibility to conduct something or order others to conduct something. Marani and Supomo (2003) stated that authority delegation is authority giving by higher manager to lower manager to implement an authorization explicitly from manager who gives authority at the time the authority is implemented. Therefore, subordinate or middle manager who is given authority delegation of superior or leader can help top manager in decision making, task, and responsibility with expectation that organization goal can be achieved. A manager who is given authority delegation will give effect of managerial performance, if middle management is given or not in budgeting making authority. According to the result of study from Merchant (1981), it found that budgeting system design will be effective in decentralized organization. Gul *et al.* (1995) in Fernando (2013) found that authority delegation positively affects managerial performance.

H3: Authority delegation positively affects managerial performance

#### 4. The Effect of Organizational Commitment on Managerial Performance

Organizational commitment is believed strong and supports value and target expected by organization (Mowday et al. (1982) in Pangastuti, 2009). According to Greenberg and Baron (1993), employee who has high organizational commitment is the employee who is more stable and more productive so eventually also more profitable for organization. Mowday et.al., stated that employee who has high organizational commitment will be more motivated to present in organization and tries to achieve organization goal (Pangastuti, 2008). Meanwhile, Randall et.al, (in Greenberg & Baron, 1993) stated that organizational commitment is related to high desire to share and sacrifice for organization. It is also supported by the study conducted by Fernando (2013) and Wulandari (2013) stating that organizational commitment has positive and significant effect on managerial performance of local government work unit. The formulation on hypothesis is as the following:

H4: Organizational commitment positively affects managerial performance

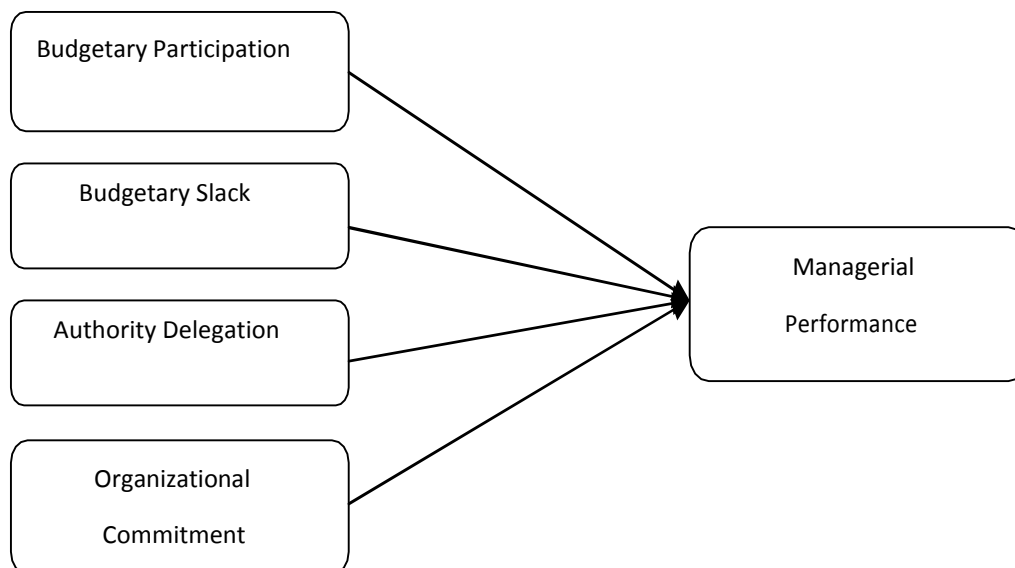


Figure 1. Research Framework

#### Research Method

##### 1. Data, population, sample, statistic analysis

This paper uses primary data by distribution questionnaires to respondent directly. Population in this study is local government work unit of Districts/Cities in Lampung Province. Sample selecting uses the method of Purposive Sampling, with criteria as the following:

1. Regions that have been established before 2007.
2. Work unit of local government that is Income Center where the responsibility center is that its manager achievement is evaluated based on the income generated.
3. Work unit of local government that has high income target. Local Real Income originated from Local Tax, Local Retribution, separated Local Resources Management and other legal Local Real Income.

Sample in this study is Income Agency, Department of Transportation, Market Department in 10 district/city governments in Lampung. 601 respondents are officials of echelon two, three, and four. Data statistic analysis uses Structural Equation Model (SEM) of Lisrel.

**2. Variable, Dimension, and Indicator Measurement**

Table 1. Dimension and Indicator of Variable

<b>Variable</b>	<b>Dimension</b>	<b>Indicator</b>
Budgetary Participation (X1) (Milani, 1975)	<ol style="list-style-type: none"> <li>1. Level of involvement in budgeting planning process</li> <li>2. Effect felt by Agency leader in budgeting planning process</li> </ol>	<ul style="list-style-type: none"> <li>Participation in budgeting making</li> <li>Satisfaction in budgeting making</li> <li>Needs to give opinion</li> <li>Willingness in giving opinion</li> <li>Magnitude of effect on budgeting determination</li> <li>Frequency of superior in asking opinion</li> </ul>
Budgetary Slack (X2) (Dunk, 1993)	<ol style="list-style-type: none"> <li>1. Budgeting standard,</li> <li>2. Budgeting achievement,</li> <li>3. Tight budgeting,</li> <li>4. Suppression budgeting,</li> <li>5. Efficiency Budgeting,</li> <li>6. Budgeting target.</li> </ol>	<ol style="list-style-type: none"> <li>1.1 Determination of budgeting standard for high productivity</li> <li>2.1 Easiness in target achievement</li> <li>3.1 Costs used must have limitations</li> <li>4.1 Few budgeting requirements</li> <li>5.1 Improvement of budgeting use efficiency</li> <li>6.1 Target is easily attained</li> </ol>
Authority Delegation (X3) Bruns and Waterhouse, 1975)	<ol style="list-style-type: none"> <li>1. Employee mutation,</li> <li>2. Budgeting allocation,</li> <li>3. Task implementation specification,</li> <li>4. Operational decision, Decision making of leaders.</li> </ol>	<ol style="list-style-type: none"> <li>1.1 Appointment and displacement of employee working relation from leader/head of agency or institution,</li> <li>2.1 Playing role in budgeting allocation, Suitability of the tasks mandated</li> <li>Task implementation that is in accordance with determined guidance</li> <li>4.1 Authority to make operational decision</li> </ol>
Organizational Commitment (X4) (Mowday et al., 1982)	<ol style="list-style-type: none"> <li>1. Strong belief and acceptance toward goal and value of organization</li> <li>2. Readiness to work hard</li> <li>3. Strong desire to stand in organization</li> </ol>	<ul style="list-style-type: none"> <li>Work evaluating system that is similar to organization</li> <li>A statement of pride working in organization</li> <li>2.1 Cooperation readiness to achieve organization goal</li> <li>3.1 Organizational opportunity to improve performance. Stay in organization even though changes occur in organization</li> <li>Selection of right working place that has been considered previously Great concern for the future of organization</li> </ul>

Managerial Performance (Y) (Mahoney et al., 1963)	Level of managerial Performance in: 1. Planning 2. Investigating 3. Coordinating 4. Evaluating 5. Supervising 6. Staffing 7. Negotiating 8. Representing	1.1 The role of goal and activity plan policy determination 2.1 Collecting information in the form of note and report 3.1 Report adjustment 4.1 Evaluation of working plan 5.1 Giving direction to development of subordinate 6.1 Placement of employee Plays role in determination of cooperation contract Has role in relating with external party 8.1 Performance evaluation and performance overall target
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## Results and Discussion

### 1. Result

Based on the result of validity test, all indicators have been valid except indicator KO1 because it has  $t_{cal} < 1.96$ . The result of reliability test obtained Composite Reliability value in each variable that is greater than 0.7, then all item of questions in study variables have been reliable.

Based on the measurement of Goodness of Fit Index, it is concluded that most of parameter has fulfilled most of requirements expected which are viewed from value of GFI, AGFI, RMSEA, ECVI, AIC, NFI, NNFI and CFI that have fulfilled the requirement of goodness of fit.

The testing result on study model can be illustrated as the following:

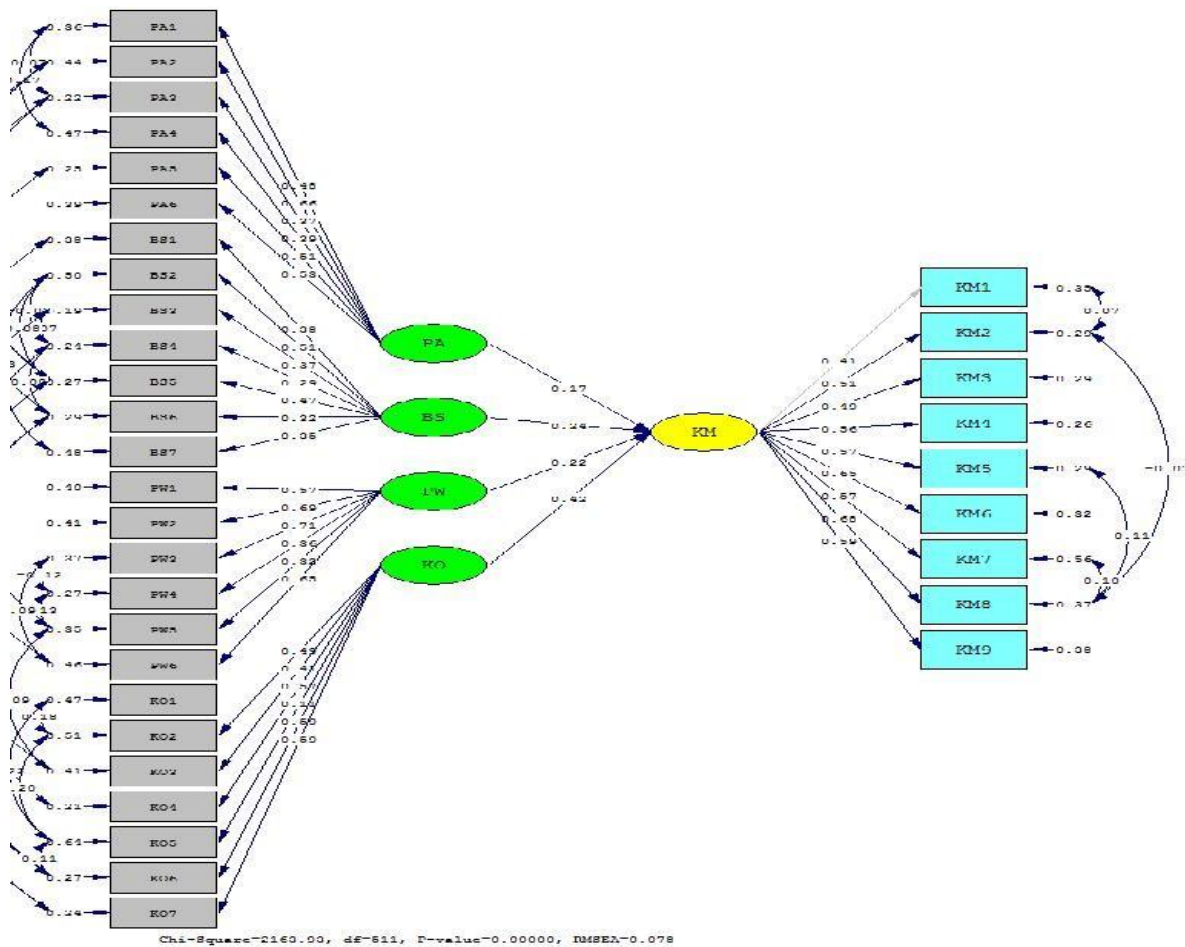


Figure 1. Testing Result of Structural Equation Model  
 Table 2. Testing Result of Hypothesis and SEM

Relationship Model	Coefficient	Std. Error	T Cal	Information
PA→KM	0.17	0.044	3.83	H1 is supported
BS→KM	0.24	0.051	4.82	H2 is supported
PW→KM	0.22	0.097	2.31	H3 is supported
KO→KM	0.42	0.090	4.69	H4 is supported

Research equation is:

$$KM = 0.17*PA + 0.24*BS + 0.22*PW + 0.42*KO$$

Errorvar.= 0.27 , R<sup>2</sup> = 0.73

Note:

- PA = Budgetary Participation
- BS = Budgetary Slack
- PW = Authority Delegation
- KO = Organizational Commitment
- KM = Managerial Performance

The testing result of hypothesis 1 proves that the effect of participation in budgeting making on managerial performance with path coefficient of 0.17 positively and significantly affects managerial performance of local government. The testing result of second hypothesis proves that Budgetary Slack positively and significantly affects managerial performance of district/city local

government with path coefficient of 0.24. The testing result of third hypothesis proves that authority delegation positively and significantly affects managerial performance of district/city local government with path coefficient of 0.22. The testing result of fourth hypothesis proves that organizational commitment positively and significantly affects managerial performance of local government of district/city in Lampung, with path coefficient of 0.42.  $R^2$  of 0.73 means that dependent variables (budgeting participation, budgetary slack, authority delegation, and organizational commitment) can explain independent variable (managerial performance) as much as 73%.

## **Discussion**

The study result proves that participation in budgeting making positively and significantly affects managerial performance of district/city government work unit in Lampung. Higher participation of in budgeting making of government work unit manager, then, managerial performance is also bigger. Participatory budgeting can be evaluated as managerial approach that can increase performance of each organization member in accordance with target that has been determined previously. Participation in budgeting making gives a feeling of responsibility to lower manager and encourages creativity, because to lower manager who plans or creates budgeting, then, budgeting objective is most likely also personal objective that causes higher level of objective congruence in this matter the high of job satisfaction. The result of this study supports the study of Bronwel and Melnnes (1986), Fernando (2013) and Agusti (2012).

The result of this study also proves that Budgetary Slack positively and significantly affects managerial performance of district/city government work unit in Lampung, but it does not mean that government is suggested to conduct budgetary slack. In this study, budgeting is used as the base to evaluate performance of local government work unit in the following year which is by looking at budgeting realization. In this condition, it allows employees to conduct budgeting discrepancy at the time determining income target, so even though the trend of income target is always increasing, but it is still easy to be realized (budgeting absorption). Budgetary Slack is created by manager in order to be able to protect self from the risk of budgeting target that cannot be attained (Lukka, 1988; Onsi, 1973; Schiff and Lewin, 1970). In line with the arguments from Cyert and March (1963), Merchant (1989) and Belkaoui (1989) in Yuhertiana (2011) stating that the existence of budgetary slack will make manager more creative, more freely to conduct their operational activity, manager is also able to anticipate the existence of uncertainty, so morally they evaluate budgetary slack as something that is positive and ethical. Moreover, budgetary slack also can prevent manager from budgeting pressure, so performance of manager will be more stable. The existence of intervention possibility from higher manager faced by manager if managers are not able to attain budgeting target, then manager will lose resources of organization, lose annual bonus or at the extreme point, will lose job (Merchant and Manzoni, 1989). The study result is in accordance with the study of Blanchette et al., (2002) that found budgetary slack done ethically will positively affect managerial performance, as well as the study of Dunk (1995) stating that budgetary slack has positive role in affecting relationship of task difficulty and performance similarly to Wouters (2005) stating that the existence of budgetary slack can reduce budgeting pressure and uncertainty of budgeting target attainment, so it positively affects managerial

performance.

Based on the result of this study, authority delegation is proven to positively affect managerial performance of district/city government work unit in Lampung. It means that the better authority delegation, the greater managerial performance. Subordinate who is given authority delegation from superior or leader can help top manager in decision making, task and responsibility with expectation that organizational objective can be achieved. The study result supports the study of Gul *et al.* (1995) in Fernando (2013), Marani and Supomo (2003), Merchant (1981), Zulfikar and Supriyanto (2016).

The result of this study also proves that organizational commitment positively affects managerial performance of district/city government in Lampung. The higher organizational commitment, the greater managerial performance. Strong organizational commitment inside individual will cause the individual to try hard in attaining organizational objective in accordance with organization goal and importance, as well as will have positive view and will try their best for organization importance. High commitment makes individual concern with the fate of organization and tries to make organization to be better. The study result supports the study of Mowday *et al.* (1982) in Pangastuti (2009), Greenberg and Baron (1993), Fernando (2013) and Wulandari (2013).

## Conclusions and Implication

### 1. Conclusion

- a. Participation in budgeting making, budgetary slack, authority delegation, and organizational commitment positively and significantly affect managerial performance of local government of district/city in Lampung. It means that higher participation in budgeting making, budgetary slack, authority delegation, and organizational commitment, then, managerial performance will be greater.
- b. Budgetary Slack has positively and significantly affects managerial performance of local government of district/city in Lampung. Where Budgetary Slack will be able to keep manager away from budgeting pressure and uncertainty of budgeting target achievement, so it affects on managerial performance improvement. This result is caused by performance evaluation of local government that is measured based on realization of budgeting target so that it needs to redefine evaluation of managerial performance. Budgetary slack is allowed as long as it is ethical. However, budgetary slack that is not ethical is not allowed.

### Implication

For local government of Lampung Province, it should give great opportunity for its employees to participate in local budgeting in order to improve managerial performance in the future. Moreover, the existence of budgetary slack in budgeting making will affect performance, so supervision is needed on managerial performance of local government work unit so that income potential in District/City of Lampung Province can be optimized. Local government party also needs to develop working commitment of the employees, so they have high commitment at work. In the matter of authority delegation, for instance its responsibility that is started from planning to implementation object, it is always initiated from staff to superior that can be more optimal.

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## THE VALUE RELEVANCE OF ENVIRONMENTAL PERFORMANCE: EVIDENCE FROM INDONESIA

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### Abstract

This study aimed to provide empirical evidence on the value relevance of environmental performance by testing the relationship between share prices of Indonesian listed corporations and their environmental performance ratings, called the PROPER ratings. PROPER (Program for Evaluation of Environmental Performance Ratings) is carried out by Indonesia Ministry of Environment, which annually evaluates and rates environmental performance of selected Indonesian companies and releases the results to the public. 62 listed companies participating in PROPER during 2002-2012 were identified as usable sample, resulting an unbalanced 256 firm-year observations. Following Clarkson et al. (2004) which modifies Ohlson (1995) model, share price is regressed against earnings per share, book value per share, PROPER ratings and other control variables commonly used in value relevance literature. The research findings are that superior environmental performance is associated with higher share price. Specifically, there is evidence that environmental performance information is incremental value relevant on that of the accounting information, and particularly on profitable firms.

**Keywords:** environmental performance, Indonesia, PROPER ratings, value relevance

### Introduction

This study aims to provide empirical evidence on the value relevance of environmental performance by testing the relationship between share prices of Indonesian listed corporation and their environmental performance ratings. Such ratings are annually by The Indonesia Ministry of Environment, through its' program called PROPER (Program for Evaluation of Environmental Performance Ratings). We find that superior environmental performance is associated with higher share price published. Specifically, there is evidence that environmental performance information is incremental value relevant on that of the accounting information, and particularly on profitable firms.

PROPER aims to target selected Indonesian companies whose operational impacts are considered significant to the environment. Initiated in 1995 as a pilot project funded by the World Bank, PROPER restarted in 2002 and fully funded by the state budget. The number of PROPER participants have increased overtime, from 82 in 2002 up to more than 1.000 in 2014. PROPER rates corporate environmental performance using color codes: black, red, blue, green, and gold, indicating the poorest to best environmental performance (Indonesia Ministry of Environment, 2007). One of its purposes is to provide rewards and punishment mechanism for targeted companies based on their environmental performance. By publicly releasing their environmental performance ratings to the stakeholders (2011), the Ministry expects that the PROPER ratings will influence the stakeholders in making investment and related decisions. For example, green investors and creditors may use PROPER ratings in

assessing the risks and return of the rated firms. Meanwhile, green consumers may find PROPER results useful for making purchase decisions.

However, after more than a decade of implementation, there has been little research undertaken to evaluate the effectiveness of the PROPER program, specifically on how different stakeholders value such information as a reward and punishment mechanism, as planned by the ministry. Furthermore, studies on how environmental performance information affects the capital market in an emerging economy, such as Indonesia, is relatively rare, in spite of extensive studies from more developed nations (e.g., Clarkson, et al. 2004; Goldar, 2003; Konar & Cohen, 2001; Stevens, 1984). This study contributes to the literature by providing empirical evidence on how corporate environmental performance influence their share prices. Using the framework by Ohlson (1995), share prices of Indonesian listed companies are regressed against their PROPER ratings and other control variables.

Previous studies on the relationship between environmental performance and financial performance have been extensive, but are inconclusive (Hughes 2000; Clarkson, et al. 2004; Hassel *et al.* 2005; Moneva & Cuellar 2009). Various measures of financial performance, both accounting and market measures, have been used in these studies and may contribute to the inconclusiveness. Other studies that investigate the relationship between environmental performance and environmental disclosures have also found mixed results (e.g. Hackston & Milne, 1996; Magness, 2003; Neu, et al., 1998; O'Donovan, 2002; Patten, 2002). Environmental performance was also measured using different proxies, such as environmental emissions (e.g., Clarkson, et al., 2004.; Decker & Jalbert, 2003; Johnson, 1995; Konar & Cohen, 2001; Shadbegian & Gray, 2003), companies with hazardous sites (Hutchison, 1997), and firms partially environmental responsible parties by US EPA (Mitchell, 1994).

These studies use only negative environmental performance indicating only poor performers and neglecting good environmental performers in the sample by classifying them into the control sample, i.e. the same category as average performers. We argue that positive environmental performance could also have information content. Therefore, the use of an environmental performance measure that distinguishes poor and good performers, such as PROPER ratings, provides exclusive contribution to the literature. One particular study by Nilsson (2003) uses a five-scaled index of environmental performance of listed Swedish companies provided by a rating firm, named Caring Company. Although such an index includes both poor and superior environmental performance, it may contain of potential validity and reliability problems, because such an index was derived from corporate annual reports, instead of an evaluation by authorized third party. Another study by Endrikat (2015) uses environmental events, i.e., company announcements with regards to managerial decisions, to measure negative and positive environmental performance. Similarly, this measure bears similar issues as compared to third party announcements, because corporate announcements involve much subjectivity of the internal management.

In relation to value relevance literature, prior studies have extensively examined how capital markets combine accounting information with "other information" for firm valuation. For example, Floros(2008) and Oehler, et al. (2013) investigated how political events, such as election, influence capital markets. Barth, et al.(1998) finds that brand value estimates are positively related to prices and returns, incremental to accounting variables. This is consistent with the findings in market valuation literature that find financial information provided by the

historical cost basis of accounting lack of relevance (Scott, 2003). This study also contributes to the empirical findings by testing how environmental performance affects firm value.

The results of this study provide contributions as follows. First, as the Indonesia Ministry of Environment's intention to provide a "stick and carrot" mechanism of the PROPER program, this study gives insight on whether investors, as the primary stakeholders, value corporate environmental performance information in the form of PROPER ratings, which is reflected in the share price. Such an evaluation may help the ministry to understand the effectiveness of PROPER program and how to improve its implementation. This study also provides implications for the managers of Indonesian corporations in developing strategies and managing environmental issues. By understanding how investors respond to environmental performance information, different strategies may be considered in the development of environmental management systems and the handling of their environmental and social reputations. Finally, as mentioned earlier, this study contributes to the literature by providing insight on the information content of environmental information by investigating the value relevance of corporate environmental performance.

## **Theoretical Framework and Hypothesis Development**

### **1. Theoretical Framework**

#### **a. The Concept of Value Relevance**

In capital markets research, accounting information is considered to be value relevant because it indicates future profitability, and is thus used by market participants in corporate valuation (Beaver, 2002). While only some economic activities are manifested in current earnings, other information about current economic performance and its implications for future profitability can be assessed by capital market participants (Jiambalvo, et al., 2002). If it has implication for future earnings, then it will be reflected in current share prices.

#### **b. Accounting Information**

Companies are competing for limited capital resources; therefore, information about earnings is of a particular interest for investors in relation to their investment decisions. Early studies (e.g., Ball & Brown 1968; Beaver 1968) expound that earnings information contributes to the changes in market value of a company, hence had been used to predict future earnings. Similarly, Nichols and Wahlen (2004) assert current period earnings offers wealth creation information that is useful for predicting future earnings.

Earnings information may be more value relevant to the market than the book value of equity for companies that have a good financial condition (Barth, et al., 1998) and may provide complementary information to book value of equity when abnormal earnings are more persistent (Ohlson, 1995). However, book value of equity (which is the information provided by the balance sheet) is adequate in determining the market value of a normal-growth corporation (Nwaeze, 1998), and is deemed to be more relevant than earnings information where losses are more prevalent and one-time items are substantially impounded in earnings (Barth et al., 1998). Therefore, the complementary value relevance of earnings and book value in various contexts has been a particular interest for extant value relevance studies.

#### **c. Environmental Information**

Jiambalvo et al. (2002) argue that sophisticated investors utilize information (i.e. financial and non-financial) to predict future earnings and this is impounded in current share prices. Accordingly, although non-financial information might not be manifested in current

earnings, it may have an impact on future earnings. Therefore, accounting information may not adequately represent future corporate financial performance.

The value relevance of information beyond earnings and book value has been investigated by many studies. For example, Hughes (2000) examines the value relevance of air pollution measures and finds that the market uses this information to estimate future environmental liabilities of the electric utility industry. Moneva and Cuellar (2009) investigate whether financial and non-financial environmental performance information is value relevant to the share market. They find that financial measures of environmental performance (environmental assets/investments, environmental costs, and provisions) are value relevant but non-financial disclosures (environmental policy and environmental management systems) are not. Clarkson et al. (2004) examine the value relevance of environmental capital expenditures of pulp and paper companies and find environmental capital expenditures for low polluting firms are value relevant to the market. Studies in the context of environmental performance information evidently show that environmental information is regarded as value relevant by investors and is useful for equity valuation. This summarizes that non-financial information has implications on the future financial performance of a company and provides additional information to that of earnings and book value of equity.

#### d. PROPER Ratings and The Value Relevance of Environmental Performance

PROPER is an environmental performance ratings which have been released by the Indonesia Ministry of Environment annually for more than a decade. Such ratings are given to companies whose operating facilities are considered having significant impact to the environment. PROPER has expanded its coverage from 82 in 2002 to more than 1,000 facilities in 2014. It evaluates and rates the participating companies into five color code ratings, black, red, blue, green and gold, from the worst to the best, respectively. Such ratings are given based on the documentation provided by the participating companies and the environmental audit performed by the ministry.

PROPER ratings provide information about corporate environmental performance to the stakeholders, such as equity investors. Companies with superior performance are expected to gain rewards by the increase in share price, and vice versa. In other words, environmental management system and corporate environmental performance are expected to influence corporate performance. A study by Clarkson et al. (2004) reveals that companies with good environmental performance are favored by the share markets as indicated by increased share prices. Management effort to manage company's environmental performance can influence its financial performance and thus companies need to calculate its sacrifice or investment to adopt cleaner production strategies (Porter & Linde, 1995; Russo & Fouts, 1997).

Previous studies support the argument that information about environmental performance is value relevant in particular context (P. Clarkson & Li, 2004; Hamilton, 1995; Hassel, Nilsson, & Nyquist, 2005; Hughes, 2000; Moneva & Cuellar, 2009). (P. M. Clarkson et al. (2004) investigates the value relevance environmental capital expenditure by firms in pulp and paper industry in the US from 1989 to 2000. Categorizing firms of good and poor environmental performance based on their capital expenditure, they reveal incremental economic benefits associated with environmental capital expenditure investment by low-polluting firms but not high-polluting firm.

Hughes (2000) examines the relation between the market value of equity and pollution measures sulfur dioxide emissions. He finds that the levels of sulfur dioxide emissions are

negatively associated with share prices. Hamilton (1995) reported that the higher pollution figures (such as air emissions or offsite shipments of toxic waste) were in a firm's TRI reports, the more likely print journalists were to write about the firm's toxic releases. Stockholders in firms reporting TRI pollution figures experienced negative abnormal returns upon the first release of the information. However, Hassel et al. (2005) finds environmental investments represent only increased costs, resulting in decreased earnings and lower market values. Using a sample of Swedish companies they find that the results of their study support the cost-concerned school, because the results indicate that environmental performance has a negative influence on the market.

Based on these inconsistent results, we believe that a new investigation on the value relevance of environmental performance information will have an important contribution to existing literature. Using a different context and measures of environmental performance, we expect that this particular study will provide empirical finding on how environmental related information influence the share markets. The use of Indonesia as an emerging economy and PROPER ratings are unique in this study and therefore are expected to provide significant contribution to the existing literature which is mainly from developed nations.

Information regarding environmental performance ratings can be value relevant if it provides additional information to the accounting numbers and helps investors access the future financial performance of the firms. As discussed earlier, firms with superior performance may gain benefits from such ratings because they are protected from environmental costs or liabilities. Firms with good PROPER ratings can have higher reputation and legitimacy, which may improve their competitive advantages, and future profitability. Since PROPER ratings indicate future profitability, we predict that PROPER ratings are valued by investors as reflected in share prices:

*Hypothesis 1: Environmental performance ratings are value relevant to the market.*

## **Research Method**

### **1. Sample Selection**

The population of this study consists of 71 unique listed companies covered under PROPER from the period of 2003 to 2012 (except for 2006 and 2007 when PROPER was suspended). This forms 313 firm-year observations. Since the sampling method is based on the availability of data, companies that do not provide the information needed for this study are excluded from the sample. After cleaning for the unavailable data, the final sample consists of 62 unique companies forming 256 firm-year observations.

### **2. Data Collection**

Two types of data sources used in this study are financial data and environmental performance data. The financial data was mainly collected from electronic database, OSIRIS. Where these database failed to provide such data, corporate financial reports from Indonesia Stock Exchange website and ICMD (Indonesian Capital Market Directory) were used to obtain financial figures. Data regarding environmental ratings (PROPER) was obtained from the website of the Indonesian Ministry of Environment when such ratings were released. Due to its limited economic resources, PROPER only evaluates companies whose environmental impacts are considered significant, but with expanded coverage over time. It includes listed and unlisted companies.

### 3. Statistical Method

This study uses panel data approach. The sample size of 256 observations formed an unbalanced panel. Based on Hausman test (Wooldridge, 2013) it is found that the preferred model to analyze the panel data is the fixed-effect model.

### 4. Research Model

The value relevance of environmental ratings in this study is examined using the Ohlson (1995) model modified by including the environmental ratings and control variables, in which we argue that environmental ratings are information incremental to those of accounting information. The model is as follows:

$$SP_{it} = \delta_0 + \delta_1 E_{it} + \delta_2 BV_{it} + \delta_3 Environmental\ Ratings_{it} + \delta_4 Control\ Variables_{it} + \varepsilon_1$$

Where,

SP	= Share prices of company <i>i</i> at year <i>t</i>
E	= Earnings per share of company <i>i</i> at year <i>t</i>
BV	= Book value per share of company <i>i</i> at year <i>t</i>
Environmental Ratings	= PROPER ratings of company <i>i</i> at year <i>t</i>
Control Variables	= Consists of Growth, Leverage, and Liquidity of company <i>i</i> at year <i>t</i>

### 5. Dependent Variable

This study uses share prices three months after the end of fiscal year. In this case the share prices used are share prices as of March 31 since the fiscal year end of all the samples at the related years is December 31. Share prices represent firms' expected future cash flows and therefore would provide a more objective measure of firms' financial performance.

#### - Independent Variables

##### Earnings

Earnings per share is the first independent variable in this study. It is measured by earnings before interest and taxes divided by number of shares outstanding. According to Ball and Brown (1968), Beaver (1968), and Tucker and Zarowin (2006), earnings which is the product of income statement have a role in determining firms' market value. This is because studies have shown that earnings contain information useful for shareholders to examine firms' value.

##### Book Value

Book value per share is the second independent variable which is measured by book value of equity divided by number of shares outstanding. Book value of equity is the product of balance sheet (or statement of financial position) and is deemed value relevant because it provides information that can affect the value of equity. Ohlson (1995) states that current book value can be a factor to determine future earnings, thus provides fair estimation for market value of the firms.

##### Environmental Performance (PROPER Ratings)

To operationalize the variable for environmental performance this study uses PROPER ratings. As mentioned earlier, PROPER is a performance evaluation program conducted by the Indonesia Ministry of Environment to selected Indonesian companies' facilities. The results are released to the public using five color-coded instruments; *black, red, blue, green and gold* represent environmental ratings from worst to best. In this study, we define these ratings into an order scale; 1 to 5 for black to gold, respectively.

Since PROPER evaluates and rates companies of their selection based on facilities, companies with more than one facilities will likely to earn more than one ratings and then the researcher averaged the ratings for the purpose of this study. For example, in 2001 PT. Indocement Tunggak Prakasa Tbk. (IDX ticker: INTTP) was awarded 2 blues and 1 green for its three facilities located in different areas. The average ratings for INTTP is 3,33. Furthermore, we categorized companies with PROPER ratings of larger than 3 as good performers, and poor performers otherwise.

- **Control Variables**

Growth

Growth is measured by percent of changes in sales. This is one indicator of firms' potential future financial performance because it provides information regarding future investment opportunity (Minnis, 2011). As a result, shareholders may consider that this information is valuable to capture firms' future performance.

Liquidity

Liquidity is measured by total assets divided by total liabilities. Liquidity is one indicator of firms' performance. Firms that are more liquid have more financial resources to conduct environmental related activities as a signal of their capacity in complying with environmental regulation.

Leverage

Leverage is measured by total liabilities divided by total assets. Leverage captures firms' capacity to finance their assets through debt (Clarkson, et al., 2008) . The higher the debts to assets ratio results in a highly leveraged company which makes it riskier to invest in. This means, if a company becomes default, shareholders may lose all their investments.

## Results and Discussion

### 1. Descriptive Statistics

The descriptive statistics of 256 observations are presented on Table 1. On average, the share prices of all companies are around Rp3,500 with the minimum of Rp50 and maximum of Rp55,050. This shows the relative wide range of samples. The earnings per share are approximately Rp164, while the book value per share has an average of Rp1,263. However, it can be seen from the table that there are companies with negative earnings which might influence the examination. The PROPER ratings are around 2.9 in which we categorized the samples as poor environmental performers, on average. The sample companies have PROPER ratings as low as 1 and as high as 4.5. The sales growth of average companies is 13% which is higher than the average inflation rate in Indonesia as presented in [www.inflation.eu](http://www.inflation.eu), thus could be said that the average sample companies have positive growth rate. The liquidity ratio shows that the average companies have total assets which are 2.85 times higher than total liabilities. This indicates that those companies are relatively liquid. The leverage is 0.55, indicating that samples have total liabilities of 55% of the total assets.



*Table 37 Descriptive Statistics*

<i>Variable</i>	<i>Obs</i>	<i>Mean</i>	<i>Std. Dev.</i>	<i>Min</i>	<i>Max</i>
SP	256	3533.86	7589.753	50	55050
E	256	164.2081	1034.606	-8330	4415
BV	256	1263.098	4033.619	-23417	15353
PROPER	256	2.94625	0.6448073	1	4.5
				-	
GROWTH	256	0.1328661	0.4896434	0.741594	5.825738
LIQ	256	2.851614	5.202012	0.4284	62.8832
LEV	256	0.5512289	0.3360641	0.0159	2.3345

Notes: SP: share price; E: earnings per share; BV: book value per share, PROPER: proper ratings, GROWTH:sales growth; LIQ: liquidity; LEV: leverage

## 2. Classical Assumptions

We ran the classical assumptions tests for regression analysis and found some issues of normality, heteroscedasticity, and autocorrelation. We use STATA package which is able to address these issues, which are common in panel data. The Saphiro-Wilk test(Gujarati, 2004) of normality shows that all the variables are not distributed normally ( $p$ -value < 0.05). In addition, when predicting the cook's distance, 21 of 256 observations are found to be influential outliers. Therefore, at first those observations are retained with the consideration that the additional hypothesis testing would be conducted by excluding the influential outliers to test for robustness of the results. Testing for heteroscedasticity problem by using Breusch-Pagan/Cook-Weisberg test(Gujarati, 2004), we found the  $p$ -value of less than 0.05, which indicates the existence of heteroscedasticity problem in the model. We use robust standard errors to correct for heteroscedasticity.

To test for multicollinearity problem we conduct variance inflation factor (VIF) test. The results show that none of the VIF is larger than 10, thus indicate that collinearity problem does not exist among the independent variables(Gujarati, 2004). Autocorrelation problem is tested using Wooldridge test (Wooldridge, 2013)for autocorrelation in panel data. It is found that the  $p$ -value of the test is less than 0.05, indicates autocorrelation problem in the samples. This problem is controlled by clustering the observation(Wooldridge, 2013).

## 3. Regression Results

To test the hypothesis the first regression is conducted on the pooled samples. Table 2 presents the results. It is found that the model is not significant at all ( $p$ -value = 0.3198), indicates that the independent variables cannot explain the changes in share prices. However, reflecting on the descriptive statistics where on average the samples are comprised of poor performers, it would be problematic to draw an early conclusion about the results. Therefore, additional testing is conducted to refine the results.

*Table 38 Regression Results for Pooled Data*

<i>Variable</i>	<i>Coefficients</i>	<i>P&gt;t</i>
E	0.747	0.165
BV	0.919	0.134

PROPER	1,327.39	0.097
GROWTH	128.952	0.45
LIQ	36.101	0.382
LEV	2,325.12	0.542
<u>_cons</u>	<u>-3062.585</u>	<u>0.371</u>
Dependent Variable	SP	
R-squared	0.228	
Adj. R-squared	0.210	
F	1.198	
Prob>F	0.3198	
N	256	

legend: \*p<0.05; \*\* p<0.01; \*\*\* p<0.001

Given that on the descriptive statistics it is shown that there are firms with negative earnings and book value, we argue that this negative accounting information might bias the results. Therefore, we exclude the negative earnings and book value and rerun the test. The results are available on Table 3 below.

*Table 39 Regression Results for Positive Earnings and Book Value Firms*

Variable	Coefficients	P>t
E	7.486***	0.000
BV	-0.191	0.817
PROPER	1,783.091*	0.035
GROWTH	3.152	0.987
LIQ	14.501	0.712
LEV	863.286	0.854
<u>_cons</u>	<u>-3945.546</u>	<u>0.199</u>
Dependent Variable	SP	
R-squared	0.415	
Adj. R-squared	0.397	
F	6.596	
Prob>F	0.0000	
N	206	

legend: \*p<0.05; \*\* p<0.01; \*\*\* p<0.001

After excluding negative earnings and book value, 206 observations remained. The results on Table 3 shows that the model is significant at 0.001 level ( $p$ -value = 0.000), suggests that the independent variables are able to explain the changes in dependent variable. The adjusted  $R^2$  is 0.397 which means that 39.7% of the changes in dependent variable can be explained by the independent variables.

Among the accounting information, it can be seen that only earnings is positive and significant ( $p$ -value = 0.000). However, the significant influence of book value to the share prices does not exist. This shows that the market values information of accounting earnings

rather than that of book value, meaning that earnings are more value relevant to the market. PROPER is significantly positive at 0.05 level ( $p$ -value = 0.035). There is evidence that environmental ratings would be value relevant on companies that have better financial performance. This is parallel to the argument that better financial performance is indicative of firms' capacity to better perform environmentally (Al-Tuwaijri, Christensen, & II, 2004; Bosworth & Clemens, 2011).

A study by Clarkson et al. (2004) finds that the market favors information about capital expenditure investment of low polluter firms but not that of high polluters. This indicates that the market could potentially value PROPER ratings of good and poor performers differently. Therefore, the third regression analysis is conducted over the split samples to compare to examine whether the findings are consistent with the notion. The results are shown in Table 4.

*Table 4 Regression Results for Split Samples*

Variable	Good Performers		Poor Performers	
	Coefficients	P>t	Coefficients	P>t
E	13.849**	0.002	0.563	0.203
BV	1.311	0.152	0.709	0.282
PROPER	1,677.690*	0.030	442.732	0.262
GROWTH	-50.906	0.928	255.674	0.295
LIQ	77.310*	0.017	25.406	0.322
LEV	8,407.412*	0.015	1,230.39	0.521
_cons	-1.18e+04**	0.003	85.82	0.968
Dependent Variable	SP		SP	
R-squared	0.763		0.193	
Adj. R-squared	0.735		0.168	
F	31.70		0.686	
Prob>F	0.0000		0.6616	
N	57		199	

legend: \* $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$

When conducting the regressions among the split samples, it is found that compared to poor performers that comprised of 199 observations, the number of observations for good performers is reduced remarkably to 57 observations. This means that most of the observations have PROPER ratings equal to or less than 3. Although the poor performers outnumbered the good performers, the regression model for good performers is significant at 0.001 level ( $p$ -value = 0.000) and gives the highest explanatory power compared to other regressions (adjusted  $R^2 = 73.5\%$ ).

Table 4 shows that, for good performers, earnings are positive and significant at 0.01 level ( $p$ -value = 0.002), meaning that information about earnings is still regarded as value relevant to the market, consistent with previous results. It is also found that PROPER is positive and significant at 0.05 level for good performers ( $p$ -value = 0.030) relative to poor performers. This confirms that the market values environmental performance of good and poor

performers differently. Two of the control variables, i.e. liquidity and leverage are both positively significant at 0.05 level ( $p$ -value = 0.017 and 0.015 respectively). The findings show that financial condition of good performers is valuable to the market compared to that of their counterparts. These significant results are absent in the regression of poor performers.

To test the robustness of the results, additional tests are conducted after excluding the influential outliers. This exclusion reduced the sample size to 235 observations. The results on Table 5 are fairly consistent for earnings across all the regressions, although not for PROPER. In fact, the significant result of PROPER that exists in the previous regression on the positive earnings and book value observations is now absent. Nevertheless, all the results from previous regressions hold when the test is conducted among good performers. This shows that besides accounting information, information about environmental ratings is value relevant to the market. Specifically, the market values the environmental performance of good performers more than that of their poor counterparts.

*Table 41 Robustness Test*

Variable	Pooled		Positive Earnings and BV		Good Performers		Poor Performers	
	Coefficients	P>t	Coefficients	P>t	Coefficients	P>t	Coefficients	P>t
E	2.796**	0.009	6.461*	0.031	13.185**	0.008	1.341***	0.000
BV	0.61	0.075	0.509	0.333	0.584	0.369	0.048	0.424
PROPER	552.668	0.305	802.544	0.116	2,368.063*	0.011	128.189	0.501
GROWTH	-212.829	0.162	-222	0.321	279.7	0.257	2.841	0.974
LIQ	622.38	0.215	429.406	0.436	1,833.625**	0.008	27.956	0.850
LEV	4,193.41	0.201	1,811.67	0.572	17311.212*	0.042	-322.214	0.750
_cons	-4203.851	0.293	-3940.202	0.275	-2.22e+04**	0.010	1,212.15	0.251
Dependent Variable	SP		SP		SP		SP	
R-squared	0.313		0.427		0.798		0.209	
Adj. R-squared	0.295		0.408		0.771		0.182	
F	2.099		1.823		844.5		12.25	
Prob>F	0.0674		0.112		0.0000		0.0000	
N	235		193		53		182	

legend: \* $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$

### **Conclusion, implication, and limitation**

This study investigates whether corporate information of environmental performance is value relevant. Using environmental performance ratings by Indonesia Ministry of Environment, called the PROPER ratings, we test whether such information influences share prices in Indonesian capital market. Prior studies from different contexts using various measures of environmental performance have resulted in mixed findings. The use of Indonesia as an emerging economy and PROPER ratings, which indicate both negative and positive environmental performance, are unique to this study. Such uniqueness provides significant contribution the existing literature that reveals how financial and non-financial information are both value relevant (Jiambalvo et al., 2002; Clarkson et al., 2004).

We use a sample of 62 firms during 2003-2012 and resulted in 256 firm-year observations as our final sample. Following Clarkson et al. (2004) that modified Ohlson (1995) model to find the value relevance of environmental performance, we regressed share price with earnings (EPS) and book value (BVS), adding PROPER ratings and other control variables commonly used in the literature, namely growth, liquidity, and leverage.

We did not get significant result for the overall model using the pooled data. However, after excluding firms with negative EPS and BVS, we find that PROPER, as well as earnings, are positively associated with share price, whereas book value of equity and other financial information are not. This finding is consistent with prior studies which find that firm's financial performance is indicative of its capacity to better perform environmentally (e.g., Clarkson et al., 2004; Al-Tuwaijri et al., 2004). When we split the sample into good and poor performers, we find that such positive relationship between PROPER and share price only exists among good performers. This confirms that the market values environmental performance of superior and inferior performers differently.

Furthermore, we conduct four additional tests for robustness by repeating the procedures, but excluding outliers. Similar to the prior procedure, the results show consistency in the association of earnings and share price. However, PROPER was only significant when poor performers were excluded from the sample, which indicates that good news regarding environmental performance are better valued by investors than its bad news. Overall, this study confirms that "other information" does have information content.

We emphasize some limitations of this study. First, due to limited funding, PROPER only rates small portion of listed companies, mostly those who are large and sensitive to the environment. This selection creates potential issue in sample selection bias, because stock market could value environmental performance of smaller and less environmentally sensitive firms. Second, we did not observe different types of corporate environmental performance other than PROPER. Environmental events involving corporations which are reported by the press and environmental information reported by management in the annual reports and company websites may also contain information for investors in assessing firm value. These limitation not control for in our tests potentially confounds inferences.

Extensive research in this topics employed archival method using secondary data. This opens opportunities for further investigations in this issue. The use financial analysts in an experimental or survey setting will advance the research methodology and improving the understanding of how stock market values environmental information. Finally, this study also offers practical implications for management and regulators, such as the Indonesian Ministry of Environment, on the effectiveness of PROPER program. Our finding shows that Indonesian capital market values positive rather than negative environmental ratings, implying that the rewards mechanism seems to function better than the punishment.

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**ANALYSIS OF EFFECT OF JOB SATISFACTION, ORGANIZATIONAL SUPPORT  
AND LEADERSHIP STYLE ON THE WORK MOTIVATION AND  
PERFORMANCE OF EMPLOYEES**

**(Case Study at PT. Bank Mandiri Tbk. South Sulawesi)**

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**Abstract**

Banking Business is a business of trust, so that the safety factor for customers who save their money in the Bank is the main thing in the business, and this factor becomes the mainstay for bank Mandiri, in this case, in particular PT.Bank Mandiri Tbk throughout South Sulawesi, in competition with privately owned banks, In order to achieve an excellent quality of service, is determined by the work outcome of each individual employee. Therefore, this research is directed to investigate the effect of job satisfaction, organizational support, and leadership style on job motivation in improving employee performance.

To answer the objectives that have been set in this study, the questionnaire used as a tool to collect data relating to the variables of job satisfaction, organizational support, leadership style, employee motivation, and employee performance which distributed to 110 respondents employees of PT. Bank Mandiri Tbk throughout South Sulawesi.

Based on the analysis by using SEM (Structural Equation Modeling), it can be concluded that in order to improve employee motivation, so that the employee's performance can be increased, it can be pursued by improving leadership style that already exists, improves employee job satisfaction, and increasing the organizational support of the employees.

**Keywords:** Job satisfaction, leadership style, employee motivation, employee performance

**Introduction**

**Background**

Banking Business is a business of trust, so that the safety factor for customers who save their money in the Bank is the main thing in the business, and this factor becomes the mainstay for bank Mandiri, in this case, in particular PT.Bank Mandiri Tbk throughout South Sulawesi, in competition with private banks,

Susskind et al., (2000) found that support of organizations can be used to increase the motivation of workers whose jobs description are directly related to the customer, so we can say that organization supports variable positively affected the work motivation of workers. An important factor that determines the performance of the employees pursuant to Yammarino et al (1993) is the leadership (leadership). The Leadership describes the relationship between the leader (leader) with a led (follower) and how a leader directing his followers, and will determine how far the follower able to achieve the objectives or expectations of the leader. (Locander et al 2002; Yammarino et al 1993).

Each leader has a leadership style that is different, leadership style has a meaning that



is how leaders influence subordinates to be able to do something or to be able to pursue something, in order to achieve organizational goals. This conclusion was supported by Chen (2004) which states that the high level of support demonstrated by the leadership of the company capable of providing high motivation of employees to work better and achieve the target, The research by Chen (2004) showed that the leadership style positively significant effect on job satisfaction and employee performance, The problems that occurred in PT.Bank Mandiri Tbk is the leader usually only give a command to employees, regardless of function or meaning of the true leader, the leaders were oriented to the achievement of the target, resulting in less attention to the vision and mission of the Bank Mandiri which is "Serving with heart, towards the best.

Related matters and affects the performance of employees is job satisfaction. As defined, job satisfaction is a situation where there is a fulfillment or non-fulfillment of the desire for a job (Timmreck, 2001). Employee satisfaction associated with employee expectations from a supervisor, co-workers, and dealing with the expectations of the work. When in the work environment, employees are not getting what is expected, such as a fair promotion opportunity, good income, good coworkers and a fun manager, and satisfaction with the work that they live day-to-day, then the employee's performance will be reduced.

A discussion of employee satisfaction can not be separated from the fact that employee satisfaction can be achieved when all employee expectations can be met in performing job duties. Job satisfaction is a reflection of the feelings and attitudes of individuals towards work, which is the interaction between the concerned with the work environment. Luthan (1997) stated that there are five factors that influence job satisfaction, namely: income, work colleagues, growth opportunities, employment, and supervisor.

Kartikandari (2002) states that the employee's performance is that the work or the level of success of an employee in carrying out the work, was influenced by internal and external factors. The internal factors eg motivations, goals, expectations, while external factors examples are company's physical and non-physical environment.

### **Problem Formulation**

Employee motivation provides the positive behavior of the perpetrator organization in improving employee performance. Intrinsic and extrinsic motivation as a basic way of viewing the responses that describe appreciation to individuals within the organization. Intrinsic motivation refers to the appreciation of the performance of a task coming from the individual who run the task. Extrinsic motivation refers to the performance of an activity caused by activity leading to some external rewards (rewards given by others rather than implementers of assignments) as well as wages, status, friendship, recognition. Employee motivation is strongly influenced by the organizational support of job satisfaction.

Based on the above matters, the problem in this research is: "how organization supports provided by PT. Bank Mandiri Tbk, leadership style and job satisfaction levels of employees, thereby increasing employee motivation, which affects the employee's performance that is strong and able to work in accordance with the company's expectations, by deploying all the capabilities they have for the advancement of PT. Bank Mandiri Tbk. "Thus the question in this study can be formulated as follows:

1. Does the job satisfaction, influence the work motivation?
2. Does the organization support influence the work motivation?
3. Does leadership style can affect motivation for work?
4. Does the work motivation influence the employee performance?

5. Does the job satisfaction influence the employee performance?
6. Does the leadership style influence the performance of employees?

### **Research Objectives and Benefits**

#### **Objective**

1. To examine and analyze the effects of the job satisfaction on work motivation.
2. To examine and analyze the effects of organizational support on work motivation.
3. To examine and analyze the effect of leadership style on the work motivation.
4. To examine and analyze the effect of the work motivation on employee performance.
5. To examine and analyze the effects of the job satisfaction on employee performance.
6. To examine and analyze the effect of leadership style on employee performance.

#### **Benefits of research**

1. The results of this study are expected to enrich the concept or theory that supports the development of human resources, particularly with regard to the effect of motivation on employee performance.
2. The results of this study are expected to be used as consideration or input to the company in managing the company's performance through employee motivation.

## **LITERATURE REVIEW**

### **Theory basis**

#### **Employee Performance**

According to Stolovic and Keeps (1992) in the Casio (1992) is a set of performance results achieved and refers to the act of accomplishment and execution of any work requested. Bernadin and Russel (1993) defines performance as a "record of comes produced on a specified job function or activating during a specified time period" (record of success generated from a particular job function / activity over a specified period). Meanwhile, according to Casio (1992) the performance refers to the employee achievement on a given task.

From the above notions of performance, then performance can be interpreted as a record of success of a job / task that has achieved through evaluating / assessing the performance of employees by the organization over a specified period and the performance is the result of qualitative and quantitative.

Mc. Kenna and Beach (1995) concluded that the performance factors are most commonly used as an indicator of research are knowledge, abilities, skills, attitude towards work (enthusiasm, commitment, and motivation), quality of work, volume of production and interaction (communication, relationships in the group).

Dessler (1997) provide examples of employee performance assessment criteria includes quality, productivity (quality and efficiency), employment by using a measured science of knowledge.

According to Mannheim Bilhah et al., (1997) that the performance of employees affected by work motivation. Meanwhile, according to Mc.Cormick and Tiffin (1974) there are variables that can affect the performance of employees, namely the individual variables and situational variables. The Individual variable consists of experience, education, gender, age, motivation, physical, personality and attitude. While situational variables related to physical and occupational factors includes working methods, arrangements and conditions, work equipment, working space setting, noise, lighting and temperature. Steers (1985) argues

there are several important factors that affect the performance of the ability, personality and work interests; clarity and acceptance of work and the work motivation.

### **Work Motivation**

Work motivation Motivation are the driving (driving force) that exist in a person to act (Fuad Mas'ud, 2004). The concept of motivation in the literature have frequently emphasized \_ the stimulation arising from someone either from within (intrinsic motivation) or from outside (extrinsic motivation). On the other hand, motivators or gratification such as achievement, responsibility, and appreciation to support the job satisfaction. Motivator closely associated with the work itself, or the resulting in direct outcomes, such as promotion opportunities, personal growth opportunities, recognition of responsibility and achievement. Improvements in the mission lead to the increasing of employment satisfaction and motivation to work better.

### ***Basic Theory of Motivation***

The basic concept of employee motivation refers to several previous studies eg motivation studies play an important role in the resulting performance of the company (Pullins et al., 2000). The concept of motivation in the literature have frequently emphasized in the stimulation arising from someone either from within (intrinsic motivation), or from outside (extrinsic motivation).

Dimensions of employee motivation in this study are as follows: (1) Intrinsic motivation, and (2) Extrinsic motivation. Intrinsic motivation is the state that creates a condition in which individuals who are intrinsically motivated appear "to be part of the job" undertaken (krivonos, 2006). While extrinsic motivation is an overview of work done with the purpose of completing some of the objectives of non-assignments such as reducing feelings of guilt, trying to please a friend, get a promotion. Extrinsic motivation refers to the performance of an activity caused by activity leading to some external rewards (rewards given by others instead of implementers of the task) as well as wages, status, friendship, recognition, uncommon benefits and so forth (krivonos, 2006).

### **Job satisfaction**

Job satisfaction In simple terms, the definition of job satisfaction is the satisfaction be perceived by a worker on an individual basis through the comparison between the inputs that being used and the results obtained. does the result in accordance wit the expected outcome ?. The closer to the level of expectation of the results obtained, an employee's job satisfaction will also be higher. It also can not be separated from a variety of factors from both internal and external of workers.

Goldtorpe et.al (in Fraser, 1983), has conducted a trial on the issue of intrinsic and extrinsic. In that study seen whether a worker, oriented inward or oriented outward, as a tool of fulfillment outside his job, or all his necessity are already getting fulfillment from his own work. The results are the first group is more likely to the working class and the second group tends to be to the middle class.

### **Organizational support**

Support organizations can be considered as something that is very important for the behavior of the employee's job. Organizations have an obligation to develop an environment conducive to consumer orientation. (Grönroos (1990) found that the support of the

organization and management will increase the motivation of the behavior of the customer orientation, of its workers.

Locke (1976) and Schein (1998) suggested that, an individual interested in and feel comfortable in the organization, due to the similarity of characteristics between the two. Meglino, (1989) suggested that individuals who have the same values with the organization, then they will easily interact efficiently with the value system of the organization, reducing the uncertainty, and conflict and increase satisfaction and improve performance.

Susskind et al., (2000) argues that corporate support can be used to increase the motivation of workers who in touch with customers, so we can say that company support variables can contribute positively to the motivation of workers. Support from organization developed by Susskind et al (2000) consists of three items, namely respect for the values, the willingness of the company to help and concern from the company.

Positive support from the leadership and all staff member, will create a conducive situation of working environment. By gaining such support, the performance of employees will be encouraged to be better. In addition, positive support also raise the spirit of workers team, so that they can trust each other and help each other, then will be generated good relations between employees within the work environment (Shaam et al., 1999).

## **Leadership**

### **Concept of Leadership**

Issues of leadership have coincided with the beginning of human history, which since humans realized the importance of living in groups to achieve common goals. They need someone or some people who have advantages than others, regardless of what form the human group was formed. It can not be denied, because humans always have limitations and specific advantages.

According to Rival (2004), leadership is also said to be a process of directing and influencing the activities that are related to the work group members. Three important implications contained in this are:

Leadership involves others either subordinates or followers. Leadership involves the distribution of power between the leader and the group members equally, because the group members are not powerless.

Siagian (1997) argues that the role of leaders in the organization is very central to the achievement of the objectives of the various targets which has been set earlier. According to Siagian (1997) leadership behavior has a tendency on two things: namely the consideration or relationship with a subordinate and structure of the initiation or outcome achieved. The tendency of leadership describes the intimate relationship with a subordinate, for example be friendly, helpful and defend the interests of subordinates, willing to accept subordinate consultations and provide welfare.

Leadership is the process that is used by the leader to direct the organization, and a process of setting the example to the behavior of the followers (subordinates) (Mas'ud, 2004). While the style of leadership is the norm of behavior used by someone, by the time attempt to influence the behavior of others or of subordinates. Leaders can not use the same style of leadership to lead his subordinates, but must be adapted to the characters of subordinates, of subordinates ability level, and in each subordinate task.

An effective leader has their own method of leadership, in applying a particular style of leadership they must first understand who are the subordinate they lead ,understand the

strengths and weaknesses of their subordinates, and understand how to harness the power of subordinates to offset the weaknesses they have. The term style is one method being used by a leader in influencing followers (Miftah Thoha, 2001).

In the past two decades, the concept of transactional (transactional leadership) and transformational (transformational leadership) develops and got the attention of many academics and practitioners (Locander et.al., 2002; Yammarino et.al., 1993). This is according to Humphreys (2002) and Liu et al (2003) due to a concept popularized by Bass in 1985 is able to accommodate the concept of leadership which has a comprehensive spectrum, including covers behavioral approach, situational approach, as well as contingency approach. Therefore, this study focuses on the concept of transformational and transactional leadership.

Bass et al (2003) and Sarros and Santora (2001) explains that the character of contingent reward describe the reciprocal positive relationship between leaders and subordinates because leaders provide explanations and guidance in the process of achieving objectives in an effort to spur the performance of the subordinate. Instead, management by exception (active or passive) according to Yammarino et al (1993) can negatively impact the performance the subordinate because of subordinates afraid to make mistakes in order to avoid penalties, thereby making the subordinate feel to work under pressure. This condition causes the organization process will not be effective. While passive management by exception does not encourage the subordinate to work hard. As long as the target is reached and the system of organization is running properly, everyone will contend and happy. However, there is No adventure or a new challenge.

### Previous Research

Previous research is very important as a foundation for the preparation of this study. Its purpose is to find out the result of that has been done by previous researchers.

**Table 2.1**  
**Previous research results**

No	Researcher	Research	Research Result
1	Adi Parminto (1991)	The influence of factors of job satisfaction to employees performance at PT. XXI-XXII plantations in East Java	Job satisfaction consists of variable salary, the job itself, supervision, promotion, working groups, working conditions and motivation have a positive influence on employee performance PT. XXI-XXIII plantations in East Java
2	Chruden (1998) dan Timmreck (2001)	Job satisfaction	Job satisfaction as the fulfillment of the needs and desires of individuals who obtained from work, job satisfaction derived from the job itself / from individual personal relationship to the environment.

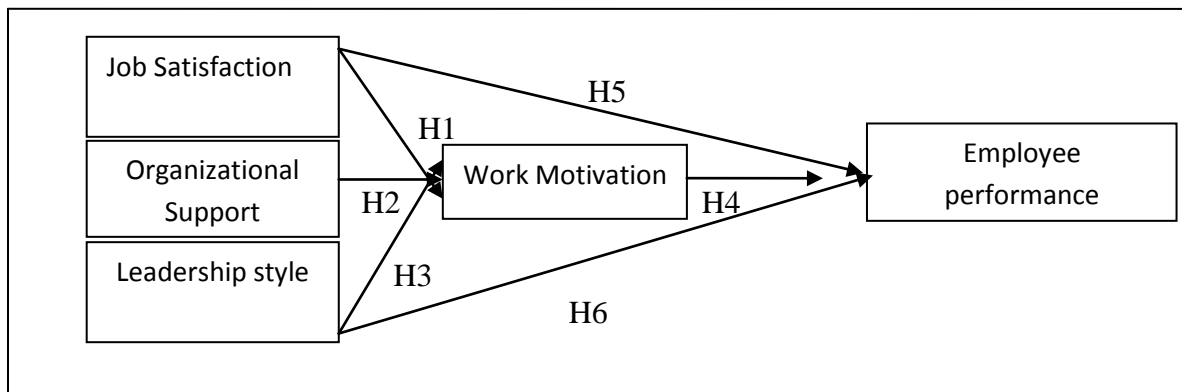
3	Cheri Ostroff (1992)	Analysis of influence of the factors of motivation and job satisfaction on employee performance,	The results showed that job satisfaction which has a positive significant impact on employee motivation and employee performance
4	Dyer dan Parker (1975)	Motivation and job satisfaction	Job satisfaction has a positive significant impact on employee motivation
5	Emilia Rossyana Putri (2001)	Analysis of the influence of the motivation factors of work on employee performance at	Motivational factors such as salary, environment employment, promotion, interpersonal relationships, and job security have positive influence on employee performance
6	Ferry Agustian	The influence of job satisfaction and motivation on employee performance (study on PPD PT.Pusri Central	There is a positive influence between motivation with employee performance
7	Harel dan Tzafrir (2001)	Motivation and job satisfaction	Job satisfaction has positive significant influence on employee motivation
8	Kirkman dan Shapiro (2001)	The influence of job satisfaction and motivation	Job satisfaction has positive significant influence on employee motivation and employee performance
9	Becker dan Klimoski (1989)	Performance	Performance is not just related to the quantity, but also relate to quality, and other things that support the realization of the two. The dimensions of the work are new ideas, quality, quantity, cooperation.
10	Kurniasari dan Forestry (2006)	leadership style positive and significant influence on employee performance	The results support the study of Chen (2005), which states transactional leadership increases job satisfaction, and employee performance. Kurniasari and Forestry (2006) mentions

			The relationship of transformational leadership has a significant influence on the performance. Toyib (2005) state leadership influence on employee performance.
11	Kreitner & Kenichi (2005)	Motivation (of job satisfaction positively and significant effect on the performance of employees)	Motivating factors associated with work which offers achievement, recognition, challenging work, responsibility and advancement prospects. These motivating factors will improve employee performance.
12	Mc Cue & Gianakis (1997)	The relationship between the job satisfaction and performance	The award/reward system within the organization greatly affect the level of satisfaction of the professionals
13	Perry et al (2006)	Motivation and job satisfaction	Job satisfaction has a positive significant impact on employee motivation
14	Tierney et al (1999)	The relationship between Motivation and job satisfaction	Intrinsic motivation of employees for creative tasks will have a positive influence on employee job satisfaction.
15	Cooke, Ernest F (1999)	Employee performance, motivation work, leadership	Motivation and leadership influence significant positive on employee performance.

**RESEARCH METHODS**

**Research Framework**

Based on the above hypothesis, the research framework can be described as follows:



**Figure 2.1**

## **The influence of Job Satisfaction, Organizational Support and Leadership Style on Work Motivation Work to Improve Employee Performance**

### **Hypothesis**

- H1 : Job satisfaction positively effects on the work motivation.
- H2 : Support from organization affected positively on work motivation.
- H3 : Leadership Style positively effects on the motivation Of work.
- H4 : Motivation affected positively on performance Of employees.
- H5 : Job satisfaction has positive influence on employee performance.
- H6 : Leadership Style positively effects the performance of Employee

### **Research sites location**

The location of this research is PT. Bank Mandiri throughout South Sulawesi, consisting of Luwu and vicinity of Bank Mandiri Branch, Sidrap Branch and vicinity, Takalar Branch and surrounding areas in South Sulawesi.

### **Types and Sources of Data**

The type of data that will be used in this research is the data subject, the research data of opinion, attitude or character of a person or group of people who become subjects of research / respondent (Indriantoro & Supomo, 2002).

While the data source of this research is the primary data source, ie research data obtained directly from the source data which is collected specifically and directly related to the issues that have been examined (Indriantoro & Supomo, 2002). Primary data needed in this research is data obtained from the respondents' answers to the question posed by researchers. The respondents who answered the questionnaire eventually are all employees of PT. Bank Mandiri Tbk throughout South Sulawesi.

In addition to primary data, this study also used secondary data. Secondary data is the data type, which its collection is not done directly by the researcher (Indriantoro 7 Supomo, 1999). Secondary data this study were obtained from PT. Bank Mandiri Tbk South Sulawesi. Secondary data were also obtained via the the Internet, as well as journals that are required in this study.

### **Population**

The population is a collection of individuals or objects of research that have the qualities and characteristics that have been set. Based on the quality and characteristics of the population can be understood as a group of individuals or objects of observation that has at least one common characteristic (Cooper and Emory, 1995).

Hair (1995) states that the appropriate sample size for SEM is between 100-200 samples. With reference to the opinion of Hair, the number of samples to be used in this study ranged between 100-200 samples. Therefore the number of employees at some random PT.Bank Mandiri branches amounted to 110 people, the sampling technique used in this research was the census method that the entire population is used as a sample.



## **Method of collecting data**

### **Questionnaire**

Methods of collecting primary data by distributing questionnaires used in this study. The questionnaire is the collection of data obtained directly from respondents, conducted by providing a list of questions to respondents who has been adapted to the purpose of research. A closed question is made using a numerical scale. Research using Numerical Scale 1-7.

### **Interviews**

The interview is the method of data collection by using a question and answer to the respondents, namely by using a questionnaire to be filled with descriptions by respondents. Interviews were also used to expand the firmament of research on other data that is not formulated in the questionnaire, but would have strategic implications for PT. Bank Mandiri, making it feasible to conduct any further research. In addition, interviews were also used to supplement data collected through questionnaires.

### **Validity and Reliability**

Before the study was conducted, necessary to test the validity and reliability, to the list of the questions used. Testing the validity and reliability of the questionnaire, intended to be a list of questions used to obtain research data, have a high level of validity and reliability that meet the required limits.

### **Data analysis technique**

The method used in this research is a quantitative method. Latent variables (constructs) that exist, realized in the manifest variables (indicators) and further elaborated into question items. The answer to the question of respondents was measured with a scale, so the result is in the form of figures (scores). Furthermore, this score is processed with statistical methods. From a wide range of analysis tools researchers identified several tools that fit the needs of the research hypotheses for verification. There are two types of Analytical tools that will be used in this study such as of test data and the second to test the model.

1. Data Test
  - a. Univariate normality test / Multivariate
  - b. Outliers Univariate test / Multivariate
2. Model Test
  - a. Goodness of Fit Test
  - b. The effect test (Regression Weight)

To perform data analysis in this study using Structural Equation Modeling analysis techniques or Structural Equation Model (SEM) of a statistical software package of AMOS, namely in the modeling and testing of hypothesis. SEM is a combination of factor analysis and regression analysis.

The use of AMOS program is because: suitable for analyzing problems that are structural, and are used to analyze and test the hypothesized model, because the AMOS program can be used:

1. Estimating the unknown coefficients of a linear structural equation; accommodate models that include latent variable; accommodate measurement error either dependent or independent; accommodating issues of causation, simultaneous and mutual dependence.
2. The advantage of SEM is able to analyze multivariate simultaneously.

While the purpose of the use of multivariate techniques is to expand the ability of

researchers to explain and achieve statistical efficiency. The following is The reasons why SEM is an interesting techniques are:

- a. Provides a method which can explain many relationships (multiple relationships) simultaneously, quickly and efficiently statistically.
- b. Its ability to assess the relationship (relationship) in a comprehensive manner has made a transition from exploratory to explanatory (Hair et al, 1995).

With these considerations, the AMOS used to test the research model proposed in the theoretical framework. With SEM, will perform statistical testing research models simultaneously. This study uses two kinds of analysis techniques, which is done in stages as follows:

1. Measurement Model (Measurement Model) Measurement Model or the measurement model is intended to confirm the dimensions developed in a variable / factor which has been studied. The Unidimensionality of Research variables will be tested in forming a latent variable.
2. Structural Model (Structural Model)  
*Structural Model* is a model regarding the structure of relationships that form, or explain the causality between variables / factors been studied. With this program will also be measured the causality relationship between the various concepts of the variables measured. Hypothesis testing performed through the Goodness of Fit of research models and relationships in the model presented (Hair, et al, 1995).  
According to Ferdinand (2002) a SEM modeling requires the sample size, the normality of the data, the absence of outliers and the absence of problems in multicollinearity and singularity. While To create a complete modeling of SEM.
3. The conversion of Flowchart into Equation  
After the theoretical model developed and described in the flowchart, the next step is to convert the model specification into a series of equations, consisting of:
  - a. Structural equation (structural equation), which was formulated to express causality between various constructs and are usually prepared with the following guidelines:  
**Endogenous variable = Exogenous Variable + Endogenous Variable**
  - b. Specification measurement model equation (measurement model), where researchers determine which variables that measure which construct , as well as define a series of matrices that show the correlation between the hypothesized constructs or variables.
4. Evaluate the criteria of Goodness of Fit.  
At this stage, implement the testing of the suitability of the model through the study of various criteria of goodness of it. For the first action taken is to evaluate whether the data that being used meet the assumptions of SEM.

## DATA ANALYSIS AND DISCUSSION

### Descriptive Analysis

#### Overview of Respondents Research

The first descriptive analysis performed in this study is an analysis of the demographic data of respondents. This analysis was conducted to obtain an overview of gender, age, education, and the tenure of respondents working period.

#### Respondents Gender

The first demographic analysis conducted on data by gender. According to Robbins (2006), an analysis of the data by gender needs to be performed because of the important differences between men and women that can affect their performance. The differences are related to problem-solving skills, analytical skills, driving competition, motivation, sociability, and learning the ability. The results of the analysis of the data by gender are presented in Table 4.1 below.

**Table 4.1**  
**Distribution of Respondents' Gender**

<b>Gender</b>	<b>Frek</b>	<b>%</b>
Male	45	40.9
Female	75	59.1
<b>Total</b>	<b>110</b>	<b>100</b>

*Sources: Primary data processed, 2016*

### **Respondent's age**

The second demographic analysis conducted on the age of the respondents. According to Robbins (2006), an analysis of the data the age of respondents needs to be done, because of the important issues concerning the relationship between the age and employee performance related to a positive quality that is brought into the work, namely the experience, judgment, strong work ethic, commitment to quality, and a low-level of resignation. The results of the analysis are presented in Table 4.2 below.

**Table 4.2**  
**Respondent's Age Distribution**

<b>Age (years)</b>	<b>Freq</b>	<b>%</b>
25 – 34	40	36.4
35 – 44	50	45.5
45 – 54	30	18.1
<b>Total</b>	<b>110</b>	<b>100</b>

*Sources: Primary data processed, 2016*

The data in Table 4.2 above shows that most respondents (45.5%) are 35-44 years old. It can be concluded that employees in the study have had a number of positive qualities that are brought into the work, namely the experience, considerations, strong work ethic, commitment to quality, and a low level of resignation.

### **Respondent's education level**

The third demographic analysis conducted on the respondents' education. Analysis of the education necessary to analyze, because each type of job imposes different demands on a person, and that everyone should have the ability to match the demands of the job. Where the capabilities required for an adequate job performance on a particular job depends on the capability requirements requested for the job. The results of the analysis are presented in Table 4.3 below.

**Table 4.3**  
**Respondent's Distribution of Education**

<b>Education</b>	<b>Freq</b>	<b>%</b>
D3	20	18.1
S1	80	72.7
S2	10	09.1
<b>Total</b>	<b>110</b>	<b>100</b>

*Sources: Primary data processed, 2016*

The data presented in Table 4.3 shows that most respondents have educated as S1 (72.7%). This is because the rules require, minimum education of employees is S1. In addition, based on the data presented in Table 4.3 can also be concluded that, with the fulfillment of minimal formal education eligibility, the employee which in place performed the research, mostly have had minimal ability to be able to carry out the work task.

**Respondent's Tenure (length of employment)**

The next Demographic analysis perform is on the data of the length of employment (tenure) of respondents. According to Robbins (2006), duration / tenure someone in a company shows seniority of an employee, where seniority is closely related to the productivity of an employee and the level of staff turnover. The results of the analysis are presented in Table 4.4 below.

**Table 4.4**  
**Respondent's Tenure Period distribution**

<b>Tenure (years)</b>	<b>Freq</b>	<b>%</b>
1 – 5	22	20.0
5 – 10	50	45.5
> 10	28	25.5
<b>Total</b>	<b>110</b>	<b>100</b>

*Sources: Primary data processed, 2016*

Based on the data in Table 4.4 shows that most of the respondents have had a working period / tenure of 5-10 years (45.5%). This could be an indication that most of the respondents in the study were able to demonstrate a high productivity and can also be an indication of the low level of resignation (turnover) of employees.

**An overview of Respondent's answer on Research Variables**

Analysis on the respondent's answers on the variables of research was conducted to obtain an idea of the tendency of respondents to the items which being used to measure these variables, as well as to determine the condition of the variables examined in the study.

This analysis was conducted to gain an insight into the respondents' answers regarding the variables used in this study. This the analysis was done by using index analysis, to describe the perception of respondents, regarding items of questions, that has been posed.

**Job Satisfaction Variables**

Descriptive analysis of the variables of the study, was first conducted on job satisfaction variables. This analysis was conducted to obtain an overview of the respondents' answers to the items used to measure job satisfaction variables.

An analysis of employee satisfaction need to be implemented, because job satisfaction is a reflection of the feelings of employees to their work, where it will have an impact on employee attitudes towards work on daily basis, and to the work environment, which in turn affect the productivity of labor or work performance of employees (performance) , The descriptive analysis conducted on job satisfaction variables are presented in Table 4.5 below.

**Table 4.5**  
**Job satisfaction Variable Description**

Indicator	Respondents response Frequency About Job satisfaction							Index	Category
	1	2	3	4	5	6	7		
Salary (X1)	7.3	9.1	20.0	19.4	24.2	13.3	6.7	58.7	Medium
Promotion (X2)	6.7	14.5	14.5	18.8	15.8	12.1	17.6	61.3	Medium
Coworkers (X3)	4.8	15.2	22.4	18.8	16.4	12.1	10.3	57.7	Medium
Supervisor (X4)	14.5	15.2	15.8	12.1	21.2	13.9	7.3	54.5	Medium
The job itself (X5)	12.7	18.2	15.2	17.6	19.4	8.5	8.5	53.2	Medium
<b>Mean</b>	9,2	14,4	17,6	17,3	19,4	12	10,1	<b>57.1</b>	<b>Medium</b>

Sources: Primary data processed, 2016

Descriptive analysis of the variables of job satisfaction shows that job satisfaction has a variable index value of 57.1 where the value of this index is included in the medium category. Based on the above information it can be concluded that job satisfaction of employees at PT. Bank Mandiri South Sulawesi has not been optimal.

### Organizational Support Variable

Subsequent analysis is the analysis of the answers of respondents regarding the variable organizational support. This analysis aims to obtain an overview of the respondents' answers to the items used to measure the variables of the organizational support.

Analysis of the organizational support that is applied in PT. Bank Mandiri Tbk South Sulawesi, need to be implemented, because with the support from organization and support from management, then, will be able to increase the motivation of 'customer orientation' behavior of workers. The results of the analysis are presented in Table 4.6.

**Table 4.6**  
**Organizational Support variable descriptions**

Indicators	The frequency of response Respondents About Organizational Support							Index	Category
	1	2	3	4	5	6	7		
Welfare care Support (X6)	11.5	16.4	12.7	19.4	12.1	17.0	10.9	57.0	medium
Organization assisting the task (X7)	10.3	14.5	21.2	23.6	11.5	7.9	10.9	54.1	medium
Leaders help solve the problem (X8)	7.3	10.3	21.2	16.4	17.6	13.3	13.9	60.3	medium
Leaders willing to listen to problems (X9)	12.7	17.0	15.8	15.8	13.9	10.9	13.9	55.7	medium

Colleagues willing to listen to problems (X10)	13.3	15.2	21.2	15.8	15.2	7.9	11.5	53.4	medium
Fellow aid / colleagues willing to give a help(X11)	4.2	14.5	17.6	20.6	21.2	12.7	9.1	59.2	medium
<b>Mean</b>								<b>56.6</b>	<b>medium</b>

*Sources: Primary data processed, 2016*

Descriptive analysis of the organizational support variable showed that organizational support variable has an index value of 56.6 where the index value categorized as the medium category. Of the six indicators being used to measure the organizational support variable, an indicator of 'colleagues willing to listen to the problem' (X10) perceived the lowest by the respondents. While the indicator of the 'leadership is willing to help to solve the problem' (X8) perceived the highest by respondents, so it can be concluded that in the place where research is conducted, the leadership is more dominant in providing support to employees.

### **Leadership Style Variable**

Subsequent analysis is the analysis of the answers of respondents regarding the leadership style variable. This analysis is important to performed, is to gather information on respondents' answers to the items used to measure the variable of leadership style.

Analysis of the leadership style that is applied in PT. Bank Mandiri Tbk South Sulawesi is necessary because of a person's leadership style, involves the ability of a leader to make decisions and influence his subordinate or members in achieving organizational goals. The results of the analysis are presented in Table 4.7.

**Table 4.7**  
**Leadership Style Variable Description**

Indicators	The frequency of response Respondents About Leadership style							Index	Category
	1	2	3	4	5	6	7		
Instilling a sense of pride (X12)	9.7	13.3	19.4	16.4	19.4	10.3	11.5	57.1	medium
Instilling values of the organization (X13)	7.9	17.6	20.0	16.4	20.0	10.3	7.9	55.1	medium
Having a vision that spurs (X14)	12.1	15.8	14.5	16.4	17.6	17.6	6.1	55.5	medium
Being able to think of new ways (X15)	5.5	8.5	19.4	12.1	23.6	14.5	16.4	64.2	medium
Impose more employees (X16)	6.7	17.6	13.9	20.6	17.0	16.4	7.9	57.7	medium
Contingent reward (X17)	9.1	11.5	10.9	18.2	13.9	11.5	24.8	64.3	medium

Management by expectation (X18)	3.6	10.9	17.0	18.2	20.0	17.0	13.3	63.5	medium
Mean								<b>59.6</b>	<b>medium</b>

*Sources: Primary data processed, 2016*

Descriptive analysis of the variable of leadership style shows that leadership style variable has an index value of 59.6, where the value of the index included and categorized in the medium category. Of the seven indicators used to measure the leadership style variable, an indicator of 'instilling organizational values' (X13) the lowest perceived by the respondents. While indicators of 'contingent reward' (X17) is the highest perceived by respondent means that the style of leadership that is applied in PT. Bank Mandiri (Persero) Tbk South Sulawesi tend to apply the transformational leadership style.

### Work Motivation Variable

The next analysis is, analysis of the respondents' answers regarding work motivation. This analysis aims to obtain an overview of the respondents' answers to the items used to measure work motivation variable.

Analysis of employee motivation in PT. Bank Mandiri Tbk South Sulawesi is necessary because motivation is driving force (activator) existing in a person (employee) to take action. The results of the analysis are presented in Table 4.8.

**Tabel 4.8**  
**Work Motivation Variable Description**

Indicators	Frequency response Respondents About Work Motivation							Index	Categor
	1	2	3	4	5	6	7		
Awareness on the job (x19)	13.3	10.9	14.5	11.5	14.5	21.2	13.9	60.3	medium
The challenge in working (X20)	12.1	16.4	18.8	17.0	13.9	14.5	7.3	53.9	medium
Learning new things (X21)	16.4	13.3	16.4	18.8	15.2	12.1	7.9	53.0	medium
The amount of income (X22)	21.8	13.9	16.4	14.5	10.9	5.5	17.0	51.9	medium
Mean								<b>54.8</b>	<b>medium</b>

*Sources: Primary data processed, 2016*

Descriptive analysis of the variable of work motivation, shows that work motivation variable has an index value of 54.8, where the value of the index included and categorized in the medium/moderate category. Of the four indicators used to measure the work motivation variable, an indicator of the amount of income (X22) the lowest perceived by the respondents. While indicators of awareness for the job (x19) is a highest perceived by respondent, meaning that factors of concern or awareness on the job as a motivator most likely to play a role in motivating employees to generate a good performance.

### Performance Variable

This analysis was conducted to obtain an overview of the respondents' answers to the items being used to measure the performance variable. Analysis of the performance variables is necessary because it shows the success rate of an overall employee during the specified period, in performing the task, compared to the standard of the work, the target or goals or criteria that have been determined in advance and has agreed upon. As for the results of the analysis are presented in Table 4.9 ,

**Tabel 4.9**  
**Performance Variable Description**

Indicators	Frequency of response of Respondents About performance							Index	Category
	1	2	3	4	5	6	7		
Quality (X23)	5.5	15.2	17.0	24.2	17.6	13.9	6.7	57.4	Medium
The task on time (X24)	12.7	13.3	15.2	18.2	12.1	20.0	8.5	56.8	Medium
Work without supervision (X25)	16.4	13.3	18.8	13.3	21.2	10.9	6.1	52.4	Medium
Work Planning (X26)	17.6	14.5	17.0	12.1	17.6	11.5	9.7	53.0	Medium
Better results (X27)	12.7	18.2	15.2	15.2	13.3	13.9	11.5	55.2	Medium
Meet the contribution target (X28)	11.5	15.8	19.4	18.2	12.1	15.2	7.9	54.4	Medium
<b>Mean</b>								<b>54.8</b>	<b>medium</b>

*Sources: Primary data processed, 2016*

Descriptive analysis of the performance variables showed that performance variable has an index value of 54.8. Wherein the index value included in the medium category. Indicators of quality (X23) is a highest perceived by the leadership, meaning at PT. Bank Mandiri (Persero) Tbk South Sulawesi tend to give priority to the quality of the work.

### **Validity and Reliability Test**

#### **Validity Data Test**

Test the validity of the questionnaire, conducted with the aim to determine the reliability of the questionnaire. The reliability of the questionnaire means that the questionnaire is able to measure what should be measured. The validity Measurement in this study indicates the amount of variance of the indicator extracted by constructs / developed latent variable. Extract Variance value that can be accepted is minimal 0:50.

**Table 4.10**  
**Validity Data test Result**

Variable	Variance Extract	Nilai
Job satisfaction	0.6	Be accepted
Organizational support	0.5	Be accepted
Leadership style	0.5	Be accepted
Work motivation	0.6	Be accepted



Performance	0.5	Be accepted
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*Sources: Primary data processed, 2016*

Validity test results using Extract Variance values presented in Table 4.10 shows that Extract Variance value for each variable has fulfilled the required criteria. This shows that the amount of variance of the indicator extracted by constructs / latent variable that was developed has able to measure what should be measured.

### Reliability Test

Test of reliability is a reliability test which aims to find out how far a measuring instrument reliable or trustworthy. Reliability test indicates the extent to which a measuring instrument can provide relatively similar results when performed measurements back on the same object. Reliability test in this research is done by using the value of Reliability Construct. The minimum reliability value of dimension / indicator forming latent variables that can be received is equal to 0.70.

**Table 4.11**  
**Reliability Test Result**

Variable	Reliability	Reliability value
Job satisfaction	0.8	Be accepted
Organizational support	0.8	Be accepted
Leadership style	0.8	Be accepted
Work motivation	0.8	Be accepted
Performance	0.8	Be accepted

*Sources: Primary data processed, 2016*

Reliability test results which presented in Table 4.11 shows that the value of Reliability Construct for each latent variable > 0.7 so that it can be concluded that the measuring instrument of each latent variable reliable or trustworthy.

### Inferential analysis

Inferential analysis technique used in this study is the Equal Structural Modeling (SEM). In the SEM analysis, there are two stages the analysis that must be done, first, perform testing of the factors that make up each of the variables, where testing is done using confirmatory factor analysis models and second, perform testing of regression weight in the full model analysis.

### Confirmatory Factor Analysis (Confirmatory Factor Analysis)

This confirmatory factor analysis, is the phase measurement of the dimensions that make up the latent variables in the research model. Latent variables or constructs that are used in this study model consisted of five constructs of the total number of indicators are 28. The goal of the confirmatory factor analysis is to examine unidimensionality of indicators forming respective latent variables. The following will describe the results of the confirmatory factor analysis of each construct.

### Confirmatory analysis Exogenous Variables

Confirmatory factor analysis phase is the first stage of measurements made on the indicators that make up the exogenous variables consisting of three variables with 18 indicators. The results of data processing for confirmatory factor analysis of exogenous variables described below.

**a. Feasibility Test of Exogenous Variables Model**

Analysis of the first stage, carried out in an exogenous variable confirmatory factor analysis is to conduct feasibility testing of the confirmatory exogenous variables which are presented in Table 4.12.

**Table 4.12**  
**Feasibility Test of Exogenous Variables Result**

<i>Goodness of Fit Index</i>	<i>Cut-off Value</i>	<b>Result</b>	<b>Model Evaluation</b>
Chi-Square	Kecil (<159.8135)	119.923	Baik
Probability	$\geq$	0.766	Baik
RMSEA	$\leq$	0.000	Baik
GFI	$\geq$	0.927	Baik
AGFI	$\geq$	0.906	Baik
CMIN/DF	$\leq$	0.909	Baik
TLI	$\geq$	1.015	Baik
CFI	$\geq$	1.000	Baik

*Sources: Primary data processed, 2016*

From the results of confirmatory testing the feasibility of the model of exogenous variables is known that the model can fulfill the criteria of goodness of fit predetermined demonstrated by testing value of  $\chi^2$  goodness of fit amounted of 119.923 with a probability equal to 0,766 and measures the feasibility of the other models are in either category are showed no differences between the models predicted with observational data. Thus the predicted model fit with the values of the observations which have been already qualified.

**b. Unidimensionality Testing and Convergent Validation of Exogenous Variables**

Furthermore, the analysis of the second phase of the confirmatory factor analysis of exogenous variables is to test the significance of the indicators that make up the exogenous variables which analyzed from the value of standardized regression weight of each indicator presented in Table 4.13

**Table 4.13**  
**Regression Weight Confirmatory Factor Exogenous Variables**

			Std.Est	Estimate	SE	CR	P
X1	Ä	Job satisfaction	0.714	1.000			
X2	Ä	Job satisfaction	0.814	1.087	0.120	9.048	0.000
X3	Ä	Job satisfaction	0.636	0.984	0.141	6.972	0.000
X4	Ä	Job satisfaction	0.622	0.932	0.132	7.042	0.000
X5	Ä	Job satisfaction	0.606	0.936	0.135	6.955	0.000
X7	Ä	Organizational	0.610	0.910	0.139	6.526	0.000
X8	Ä	Organizational	0.719	1.051	0.142	7.418	0.000
X9	Ä	Organizational	0.643	0.889	0.130	6.819	0.000
X10	Ä	Organizational	0.610	0.857	0.131	6.524	0.000
X13	Ä	Leadership Style	0.510	1.000			
X14	Ä	Leadership Style	0.517	0.853	0.171	4.973	0.000
X15	Ä	Leadership Style	0.706	1.257	0.214	5.886	0.000
X16	Ä	Leadership Style	0.697	1.170	0.200	5.859	0.000

X17	Ä	Leadership Style	0.753	1.277	0.211	6.049	0.000
X18	Ä	Leadership Style	0.682	1.209	0.209	5.780	0.000
X12	Ä	Leadership Style	0.633	1.091	0.193	5.653	0.000
X11	Ä	Organizational	0.705	0.904	0.124	7.278	0.000
X6	Ä	Organizational	0.652	1.000			

Sources: Primary data processed, 2016

Results of confirmatory analysis of exogenous variables showed that all 18 indicators or dimensions forming respective exogenous variables indicate the value of standardized regression weight > 0.4, CR > 2:00 and the probability of < 0.05 so that it can be concluded that all 18 indicators can be used as the determinant / measuring the variables exogenous.

**c. Discriminant Validity of Exogenous Variables**

In the test implementation of exogenous variables model that are not constrained (free models) generate Chi Square value amounted of 119.923 with a probability equal to 0.766 and df of 132. At this discriminant validity test, exogenous variables models tested by constrained .

The results of the analysis of the constrained exogenous variables testing model show that the model of the constrained exogenous variables generate Chi Square value amounted of 124.491 with a probability equal to 0.731 and Df amounted to 135.

Based on the test results on exogenous variables free model and constrained model above, furthermore, we able to conduct the different test of Chi Square on both models as presented in the following table.

**Table 4.14**  
**The different test of Chi Square of Exogen Variable**

Free			Constrain Model			Dif. Chi Square
Chi Square	df	Probability	Chi Square	df	Probability	
119.923	132	0.766	124.491	135	0.731	4.568

Sources: Primary data processed, 2016

Based on the data in Table 4:14, is generated a difference between the value of free models and constrain models was 4,568 smaller than its cut of value amounted to 7.8147 at 5% error level and based on the different test of Chi Square, constrained model can not be denied. However, the chi-square value generated on the free models lesser than the value of Chi Square on constrained models show that the three constructs are not perfectly correlated because the discriminant validity can be achieved.

**Confirmatory Analysis of Variable Endogenous**

The second stage of the confirmatory factor analysis is phase of measurements made on the indicators that make up the endogenous variables consisting of two variables with 10 indicators. The results of data processing for confirmatory factor analysis of endogenous variables described as below.

**a. Feasibility Testing of Model Endogenous Variables**

The first analysis phase in the confirmatory factor analysis carried out in the endogenous variable is to conduct the feasibility testing of confirmatory models of endogenous variables that are presented in Table 4:15.

**Table 4.15**  
**Endogenous Variable Feasibility Test Result**

<i>Goodness of Fit Index</i>	<i>Cut-off Value</i>	<b>Result</b>	<b>Model Evaluation</b>
Chi-Square (df=34)	Kecil (<48.6024)	25.248	Good
Probability	$\geq$	0.861	Good
RMSEA	$\leq$	0.000	Good
GFI	$\geq$	0.968	Good
AGFI	$\geq$	0.949	Good
CMIN/DF	$\leq$	0.743	Good
TLI	$\geq$	1.025	Good
CFI	$\geq$	1.000	Good

Sources: Primary data processed, 2016

From the results of feasibility testing the confirmatory models of endogenous variables is known that the model can fulfill the criteria of goodness of fit that has been determined previously, demonstrated by testing value of  $\chi^2$  of goodness of fit amounted 25.248 with probability equal to 0,861, and measurements of the feasibility of the other models are in either category which showed no differences between the models predicted with observational data. Thus the predicted model fit with the values of the observations which have been already qualified.

**b. Unidimensionality Testing and Convergent Validity of Variables Endogenous**

Furthermore, the second phase analysis of the confirmatory factor analysis of endogenous variables is to test the significance of the indicators that make up the endogenous variables which analyzed from value of standardized regression weight of each indicator presented in Table 4:16

**Table 4.16**  
**Regression Weight Factor**  
**Endogenous Variable confirmatory**

			Std.Est	Estimate	SE	CR	P
X23	Ä	Performance	0.765	1.000			
X24	Ä	Performance	0.678	0.993	0.123	8.073	0.000
X25	Ä	Performance	0.552	0.839	0.129	6.494	0.000
X26	Ä	Performance	0.575	0.844	0.124	6.832	0.000
X27	Ä	Performance	0.613	0.964	0.132	7.290	0.000
X28	Ä	Performance	0.594	0.930	0.134	6.953	0.000
X19	Ä	Work Motivation	0.710	1.000			
X20	Ä	Work Motivation	0.738	0.965	0.121	7.944	0.000
X21	Ä	Work Motivation	0.634	0.939	0.134	7.018	0.000
X22	Ä	Work Motivation	0.624	0.795	0.118	6.738	0.000

Sources: Primary data processed, 2016

Results of confirmatory analysis of endogenous variables, showed that the ten indicators or dimensions which forming each endogenous variable indicates value of standardized regression weight > 0.4, CR > 2:00 and the probability of <0.05 so that it can be concluded that the ten indicators can be used as the determinant / measuring endogenous variables.

**c. Discriminant Validity test of Endogenous Variable**

Based on the test of endogenous variables model that are not constrained (free models) generate Chi Square value of 25.248 with probability equal to 0,861 and Df amounted to 34. In this discriminant validity test models endogenous variables were tested by being constrained.

The results of the analysis of the constrained model testing endogenous variable indicate that the constrained endogenous variable model generate Chi Square value of 27.537 with a probability of 0.811 and df at 35.

Based on test results on the free models and constrained models of endogenous variables above, it is possible to conduct the different test of Chi Square on both models as presented in the following table.

**Table 4.17**  
**Distinction test of Chi Square For Endogenous Variables**

Free			Constrain Model			Dif. Chi Square
Chi Square	df	Probability	Chi Square	Df	Probability	
25.248	34	0.861	27.537	35	0.811	2.289

*Sources: Primary data processed, 2016*

Based on the data in Table 4:17, is generated the difference value between free models and constrain models was 2,289 smaller than its cut value amounted of 3.8415 at 5% error level, then based on this different test of Chi Square , the constrained model can not be denied. However, the chi-square value is generated on the free models lesser than the value of Chi Square on constrained models show that the three constructs are not perfectly correlated, as for this reason the discriminant validity can be achieved.

**Full Model Analysis**

After conducting a confirmatory analysis of the indicators which forming latent variables, further analysis is an analysis of Structural Equal Modeling (SEM) in a full model method. The test results of the feasibility (goodness of fit) of full model SEM are presented in Table 4:18.

**Table 4.18**  
**Full Model Feasibility Testing Results**

<i>Goodness of Fit Index</i>	<i>Cut-off Value</i>	<b>Result</b>	<b>ModelEvaluation</b>
Chi-Square (df=341)	Kecil (< 385.0622)	357.867	Good
Probability	≥ 0,05	0.254	Good
RMSEA	≤ 0,08	0.017	Good
GFI	≥ 0,90	0.874	Marginal
AGFI	≥ 0,90	0.851	Marginal
CMIN/DF	≤ 2,00	1.049	Good

TLI	$\geq 0,95$	0.988	Good
CFI	$\geq 0,95$	0.989	Good

Sources: Primary data processed, 2016

Based on the results of testing the feasibility of the model presented in Table 4:18 is known that the model we analyzed is a recursive model with sample number amounted of 165, the value of Chi-Square = 357 867 with  $df = 341$  and probability 0.254. Chi-Square results indicate that the models which have been studied equally with empirical data which mean that the model is fit.

## Research outcome discussion

### Research Summary

Business banking is a business of trust, so that the safety factor for customers who save their money in the Bank is the main thing and this factor becomes the mainstay for the bank, in this case, in particular PT.Bank Mandiri Tbk throughout South Sulawesi, in competition with private banks , It should be emphasized that in order to achieve the vision and mission of the Bank, the company determined some goals that are aligned to stakeholders, that include providing the highest quality of services, accompanied with added value to customers for the sake of maintaining relationships with customers as a sustainable partnerships. The improvement of the quality of services provided by banks could encourage the achievement of the banking business success today and in the future.

One of the factors that affect the performance of employees is job satisfaction. Results of research conducted by Ostroff (1992), Dyer and Parker (1975), Harel and Tzafir (2001), Kirkman and Shapiro (2001), Perry et al (2006) showed that job satisfaction has a positive influence on employee motivation. In addition to the job satisfaction, Shaam et al (1999), Susskind et al (2000), states that the support of organizations can also be utilized to increase the motivation of workers who are in touch and deal with customers directly, so we can say that the organizational support variable might positively effect on the motivation of workers. Besides having a strong organizational support, the company must also have leadership that can bring the company achieve the objectives and goals.

This study is an attempt to answer the research problem, which at the chapter I mentioned that the problem of this research is how the organizational support given by PT. Bank Mandiri Tbk, leadership style, and the level of job satisfaction of employees thus increasing employee motivation that impact on employee performance which is strong and able to work in accordance with expectations by deploying all the capabilities they have for the advancement of PT. Bank Mandiri Tbk. In response to the study, employees of PT. Bank Mandiri Tbk took as respondents.

The questionnaire has been designed to find out how the respondents' perceptions of job satisfaction, organizational support, leadership style, employee motivation, and employee performance. From the results of the analysis reveal that to improve employee performance, can be done by increasing employee motivation at work, in which this high employee's work motivation can be achieved by increasing employee's job satisfaction, organizational support, and leadership style.

Job satisfaction which examined in this study was measured using five indicators covering satisfaction on salary, satisfaction on promotion, satisfaction on coworkers, satisfaction on the supervisor, and satisfaction with work itself. Where of the five indicators, indicators of satisfaction on work is the lowest perceived by the respondents.

The organizational support which examined in this study was measured using six indicators include: organization concerned with the welfare, the organization helped complete the task, leadership help solve the problem, the leadership would listen to the problem, colleagues willing to listen to the problem, and colleagues willing to provide assistance. Where of the six indicators, an indicator of colleagues willing to listen to problems is the lowest perceived by the respondents.

The questionnaire was prepared in such a way in order to measure the variables studied. The number of respondents which used in this study were 110 respondents who are employees of PT. Bank Mandiri Tbk. Collected data were analyzed by Structural Equation Modeling analysis techniques.

The test results of SEM showed value of goodness of fit for the the model developed in this study are Chi-Squares = 357.867, probability = 0.254, CMIN / DF = 1049, GFI = 0,874, AGFI = 0,851, RMSEA = 0,017, TLI = 0,988, and CFI = 0,989. While the results of hypothesis testing show that six hypotheses proposed in this study, all of them can be received significantly.

## **Closing Conclusion**

Based on the results of research and discussion that has been presented in the previous chapter, therefore, can be taken some conclusions as follows:

1. Job satisfaction has a positive influence on work motivation. It can be concluded that the higher the level of employee satisfaction, the higher employee motivation of PT. Bank Mandiri Tbk South Sulawesi.
2. Support from the organization has a positive influence on work motivation. It can be concluded that the better the support of an organization of PT. Bank Mandiri, the more it will increase employee motivation of PT. Bank Mandiri in South Sulawesi.
3. The style of leadership has a positive influence on work motivation. It can be concluded that the better the style of leadership at Bank Mandiri South Sulawesi, the more it will increase employee motivation of Bank Mandiri South Sulawesi.
4. Work Motivation has a positive influence on employee performance. It can be concluded that the higher motivation of employees of Bank Mandiri in South Sulawesi will further improve the performance of employees of PT. Bank Mandiri South Sulawesi.
5. Job satisfaction has a positive influence on employee performance. It can be concluded that the higher employee satisfaction , the better the performance of employees of PT. Bank Mandiri South Sulawesi.
6. The style of leadership has a positive influence on employee performance. It can be concluded that the better the style of leadership at Bank Mandiri South Sulawesi the better the performance of employees of Bank Mandiri in South Sulawesi.

## **Policy implications**

1. The leadership style variable:
  - a. The leader must show a good behavior that makes organization proud, either inside and outside the organization.
  - b. Leaders are applying the values espoused in the organization of each activity / activities.

- c. Leaders are able to provide a vision that can encourage employees to work for the organization.
  - d. Leaders are not stodgy conservative but able to think out of the box and modern and innovative.
  - e. Leader enforces employee / subordinate as a partner / partner.
  - f. Leaders are willing to give a reward in the form of praise and flattery to employees who are able to demonstrate a good level of performance.
2. Organizational Support Variable:
    - a. Organization provides the opportunity for employees to improve their capabilities and skills concerning the task implementation.
    - b. Leaders and management are willing to help employees who have difficulty in completing tasks.
    - c. Promote solidarity between fellow colleagues through activities of familiarity.
  3. Job satisfaction Variable:
    - a. Providing promotional opportunities equitably to every employee who is able to demonstrate a good performance.
    - b. Provide incentives equitably . Proportionally with duties and responsibilities were undertaken.
    - c. Placing employees on the department in accordance with the educational background in order to create comfort in the work.

### **Research limitations**

The limitations found in this study are:

1. There are several respondents whose in answering the questionnaire are incomplete and should be returned, to be completed.
2. There are some respondents who are less eager to answer the questionnaire due to no rewards provided (souvenir) in this case due to limited funding.
3. Respondents are not in their post, when approached for filling out the questionnaire, so that they have to be visited and asked for the second time.
4. The GFI (0874) and AGFI (0851) situated in the marginal category.

### **Future Research Agenda**

Research on the analysis of the factors that affect the work motivation and its influence on employee performance is likely to be developed further in future research. Things that might be developed is on further research can be considered to add a variable that can affect the performance of employees such as variable of occupational safety (Borg & Elizur, 1992) that are empirically proven to have a significant impact on employee performance as well as adding a number of respondents and indicators for improve or enhance the value of GFI and AGFI.

### **Suggestion**

SuggestionBased on the research and the description above, with all my limitations of knowledge and experience as an author, the author tries to give advice relating to performance improvement and motivation through leadership styles, organizational support, and job satisfaction,

1. In order to improve the motivation and performance of employees of PT. Bank Mandiri Tbk South Sulawesi, the company should pay more attention to job



satisfaction, organizational support, as well as leadership style in order to synergize with each other, leaders able to be a working partner and collaborate with subordinates, establish familiarity among employees, provide mutual support motivation to employees whose performance is less good and provide achievements on the employees who have a higher potential.

2. The Bank Mandiri South Sulawesi need to conduct regular evaluation regarding job satisfaction, organizational support, and leadership style, so that disadvantages associated with three variables can be improved in the future in order to increase motivation and performance of the employees.

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## EMPLOYMENT AND EMPLOYABILITY FOR ECONOMIC AND SOCIAL INCLUSION IN INDIA

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### Abstract

Indian economy's stellar performance over last two decades has been shaped by three quintessential socio-economic-political forces such as, democracy, demand (market) and demography which defines Indian economic outlook. While India is buoyed with new found confidence by information, communication and technological revolution, yet there has been a marginal improvement in the lives of a large number of underprivileged by the economic growth especially in the late'00. There has been a significant rise in inequality with the slowdown in fall in poverty numbers and rise in unemployment. Against this backdrop, the role of education hardly needs any emphasis. Investment in education, employment, health and other basic economic and social infrastructure expands human capacity to participate in new economic and social opportunities. While growth ensues resources released for a sustained improvements in human capacities, expanded human capacities enable people to make greater contributions to growth. Investment in skill-based higher education is to expand human capacity in terms of "employability". It broadens and makes equally accessible to lower income strata to seek out economic opportunities. This results in improved income distribution over time. Sound policies and institutions at the first place are sine-qua-non for creating economic opportunities and to promote social inclusion. Therefore, it is important for ensuring economic and social justice access to quality and 'decent' employment opportunities for all. A key element of promoting social and economic justice should be to ensure that men and women can earn a fair level of income from their work and enjoy decent working conditions. This should be the prime agenda in our Millennia Goal.

**Keywords:** Employment, Employability, Economic inclusion, Social inclusion, India

### INTRODUCTION

India at 69 continues to be a fascinating story of a nation rich with economic, social and cultural diversity. The young-India has entered into the twenty-first century buoyed by a new found confidence in its economic prosperity and propelled by skillful-youth-led information, communication and technological revolution. Three quintessential socio-economic-political forces such as, democracy, demand (market) and demography are defining character of Indian economic outlook. However, notwithstanding the attainment of higher economic growth, for being one among the countable few during these times of collapsed global economy, the large underprivileged quite untouched by the rapid economic growth during the 90s and especially in the late'00. Even after over five decades of post-independence and over a decade and halve of economic reforms, the "human face" remains elusive! Not only that along with economic growth there has been a significant rise in inequality with the slowdown in fall in poverty numbers, but also there has been widening gap in rural-urban incidence of poverty, top-bottom income quintile inequality, and male-

female unemployment rate. And it is the later that is alarmingly emerging as a gargantuan macroeconomic and social policy problem of “jobless growth” to deal with. Ironically, the chief architects of reforms only now are showing the urgency for achieving “inclusive” growth for long-term political and social stability.

Unfortunately, the post-independence efforts to make the growth process more inclusive at best ended up as the politics of ‘populism’. The Nehruvian Socialism fostered the *petit bourgeoisie*; the “intermediate regime” defining the politics of Indian policy making (Mody 2006). The piecemeal and ad-hoc policy making, in trying to appease diverse interest groups in the guise of inclusion, has succeeded very little in being inclusive *insofar* as benefiting the large underprivileged. Notwithstanding the change in the composition of intermediate class and their influence with the emergence of and realignment of new groups during reforms, policy making continues to vacillate between the interests of powerful new ‘elite’ in the one hand and on the other by the growing political assertiveness of a large underprivileged social class (Vaidyanathan 2007). The experiences at the state level highlighting the tension between political democracy vis-à-vis market-oriented reforms points to an intensification of these tensions. The fine balance between the two, therefore, squarely depends on the ‘delivery’ of reform measures and politics capacity in satisfying diverse interest groups including the larger poor (Rao, 2007). But for that to happen first the democratic state need to be clear as to what type of economic reforms will be macroeconomic-political-socially sustainable. Any quintessential policy strategy must aim at mobilizing fiscal resources for the provision of basic education, employment, health and infrastructure that is accessible to the large underprivileged rural mass.

### **The Politics of Inclusion and Negligence of Education**

An all-around emancipation/participation be it economic, social and political processes is inclusion. The espousal of individual freedom irrespective of religion, caste, language, region, gender and age is very core of Indian nationhood (Mody 2006). Breaking down social hierarchies in order to make the political process more inclusive of diverse economic and social groups lays a strong foundation for economic prosperity. Unfortunately the post-independence history failed on the process of inclusive growth for that the political class and the policy making have been vacillating between one of growth agenda and populism.

The need for inclusion through spread of education, employment and income can be found as early as in the writings of social entrepreneur Visvesvaraya and in Bombay Plan of 1944 as a prerequisite for nation building and higher and stable economic growth. Subsequently five-year planned development programmes are made as instruments for achieving inclusion. The state-guided public sector were entrusted with the responsibility for improving the standard of living and equitable distribution of income, through mobilising fiscal resources, land reforms, public utility services, investing in basic and heavy industries and setting up of small and medium scale enterprises dispersed across regions. The latter two was to generate required employment and to produce consumer goods for the middle class. However, in practice in contrast to South-East Asia, Indian planners conspicuously remained rather silent on primary and secondary education. Therefore, in mid 70s India witnessed the rise in rural unemployment and hence the deterioration in the politics of inclusion. The mid 80s witnessed small doses of reforms but neither could be sustained or comprehensive enough to generate employment and income and one had to wait for the comprehensive economic reform measures during early 90s that are carried out in the wake of

macroeconomic crisis. The policy making continues to be populist ridden on the name of inclusion, piecemeal and ad-hoc and trying to appease diverse interest groups with little success in being inclusive insofar as benefiting the large underprivileged in creating sustainable livelihoods through employment and income generation. It is in the backdrop of state failing in its objective of generating employment and livelihoods that the role of education in long term economic growth needs any further emphasis.

### **Trends in Quantity and Quality of Employment Generation**

The employment growth was just halve a percent per annum from 2004-05 to 2011-12 during the period that saw the highest growth of GDP of 8.5% per annum giving rise to the phenomenon of “Jobless Growth”. Low productive agriculture sector still is the biggest contributor to employment of 245 million by 2009-10 (Table 1). While the manufacturing sector is shedding its labour, sectors such as, constructions and services dominated largely by informal workforce have seen the highest growth in employment numbers of more than 10% and 20% during 2009-10 (Table 2). The employment elasticity at the aggregate output level has decreased sharply from 0.79 during 1977-78 to 1982-83 to 0.17 during 2009-10 to 2011-12 (Basu and Das,2016). With both the manufacturing and non-manufacturing sector showing a negative employment elasticity to gross value added (output) and it is only the services showing highest employment elasticity (Table 3). Therefore, there is rise in the proportion of informal employment in the unorganized sector which has increased from 41% in 1999-2000 to 58% in 2011-12. Quite disturbing to observe that subsequently casualisation of labour force has been unabated especially in the rural area and there is a significant spike during the recent years and the real wages of casual labour is just around one-third of regular labour for male and less than one-fourth for the regular female labour force (Chowdhury 2011).

**Table 1: Sectoral Contribution to Employment Generation**

Sectors	Employment (in millions) 1999-2000	Employment (in millions) 2004-05	Employment (in millions) 2009-10
Agriculture	237.67	258.93	244.85
Manufacturing	44.05	55.77	50.74
Mining	2.17	2.64	2.95
Electricity, Gas & Water Supply	1.13	1.3	1.25
Construction	17.54	26.02	44.04
Services	94.2	112.81	116.34
Total	396.76	457.46	460.22

Source: Planning Commission, Twelfth General Commission Report, 2015

**Table 2: Employment Growth at Sectoral Level**

Sectors	Rural	Persons	Urban	Persons
	2004-05	2009-10	2004-05	2009-10
Agriculture and allied	72.7	67.6	8.8	7.5
Mining	0.5	0.6	0.8	0.6
Manufacturing	8.1	7.2	24.6	23.0

Electricity, gas and water supply	0.2	0.2	0.7	0.6
Construction	4.9	9.4	8.0	10.2
Trade, hotel and restaurant	6.1	6.4	24.6	24.3
Transport, storage and communication	2.5	2.9	8.6	8.7
Finance, real estate, etc	0.5	0.6	5.3	6.7
Public administration, other services	4.5	4.8	18.7	18.5

Source: Chowdhury (2011)

**Table 3: Employment Elasticity to Gross Value Added**

Sectors	Elasticity		CAGR	
	1999-00 to 2004-5	2004-05 to 2009-10	1999-00 to 2004-5	2004-05 to 2009-10
Manufacturing	0.84	-0.42	1.44	-1.04
Non-Manufacturing	0.76	-0.31	4.01	-2.29
Services	0.45	-0.01	7.05	8.52
Total	0.44	0.01	5.60	7.10

Source: Planning Commission, Twelfth General Commission Report, 2015

The evidence emerging out of NSSO 2011-12 data on the nature of employment outside of crop production is quite striking. Among the employees in the AGEGC and non-agricultural sectors about 79 per cent had no written job contract. The proportion was about 85 per cent in rural areas (86 per cent for males and 81 per cent for females) and about 73 per cent in the urban areas (73 per cent for males and 72 per cent for females). Moreover, the proportion of employees without written job contract has increased between 2004-05 and 2011-12 for males and females of both rural and urban areas. In the AGEGC and non-agriculture sector, the proportion of employees without written job contract increased from 74 per cent in 2004-05 to 79 per cent in 2011-12. During this period, this proportion increased from 79 per cent to 86 per cent for rural males, from 78 per cent to 81 per cent for rural females, from 68 per cent to 73 per cent for urban males and from 69 per cent to 72 per cent for urban females. So, there is lot to be desired in terms of the quality of employment too. One may infer from this trend that the demographic dividend may turn into demographic liability unless higher educational attainment translates as employment opportunities to both the genders equally.

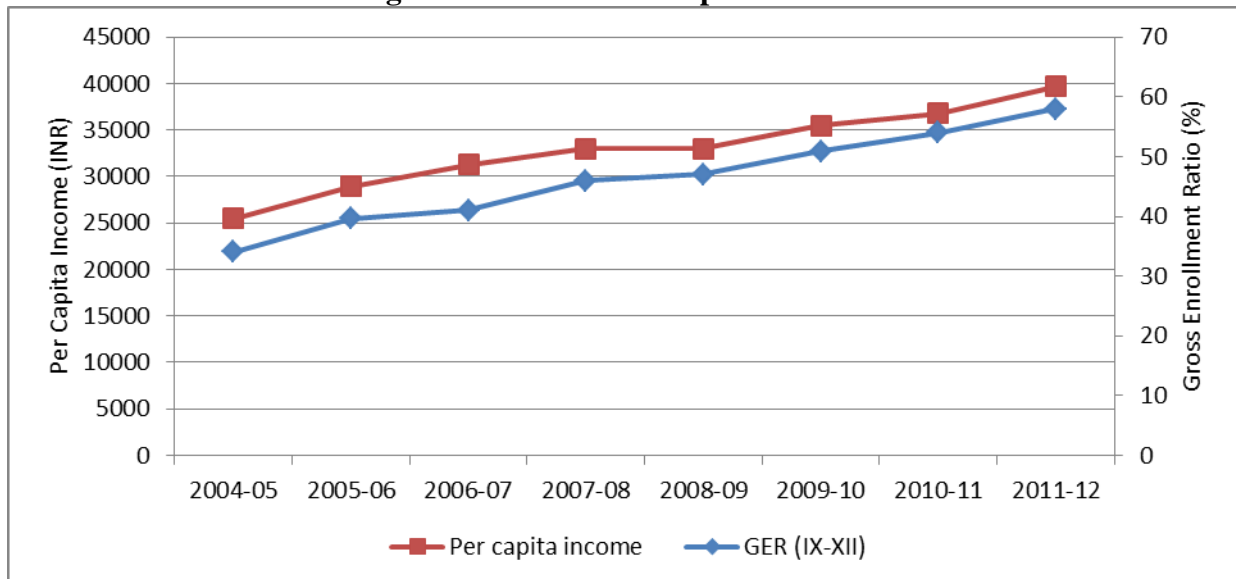
### **Education and Employability and The Role of Government**

The role of education is a *sine-a-qua-non* for economic growth and development of a nation. Education provides a growing number of young and skilled human capital; a source of productive labour supply. Indian educational system is characterized by a wide and varied curricula offered by a growing number of universities and colleges in India. Commensurate with the economic development, one notices a proportional rise in gross enrollment rate (high



school and college going) along with the rising per capita income India as can be seen from Figure 1.

**Figure 1: GER vs Per Capita Income**



Source: Economy Indicators, Economic Times, September 2014

While sustained economic growth led to rise in enrollment and hence rise in adult literacy rate, the unemployment rate which was showing a declining trend during 90's and in the early '00, has risen in the last decade and half. Moreover, while with increased social mobility one witnesses increased accessibility of urban female to higher education, but that has not been equally translated in terms of employment opportunity. This can be seen in Table 4 that the highest incidence of unemployment rate is in the higher education category both for rural and urban male labour force and it is even much higher for rural and urban female force. Further, during the last decade it has risen substantially. Figure 2 reinforces these above observations as there has been a reversal in trend and a substantial rise in the incidence of unemployment among urban female labour force.

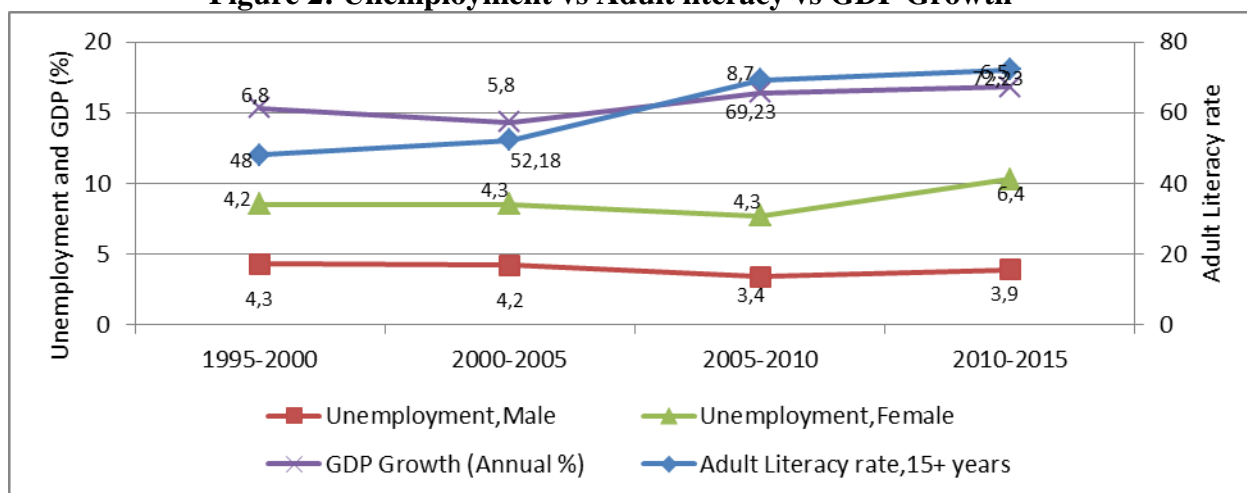
**Table 4: Unemployment Rates by Education Levels for Population Above 15 Years**

General level of education	Rural Male			Rural Female		
	1993-94	1999-00	2004-05	1993-94	1999-00	2004-05
Not Literate	1.8	3.0	2.7	2.2	2.7	2.5
Upto Primary	1.9	3.0	3.0	2.6	2.6	3.1

Secondary and above	8.3	7.3	6.5	19.8	19.8	18.2
All	3.1	3.9	3.8	2.9	2.9	4.2
	Urban male			Urban female		
	1993-94	1999-00	2004-05	1993-94	1999-00	2004-05
Not Literate	2.2	3.1	2.8	2.2	2.0	2.5
Upto Primary	3.5	4.1	3.7	4.8	3.6	4.0
Secondary and above	7.0	6.9	6.2	19.6	15.8	17.9
All	5.2	5.6	5.2	7.9	7.3	9

Source: NSSO Report 2015

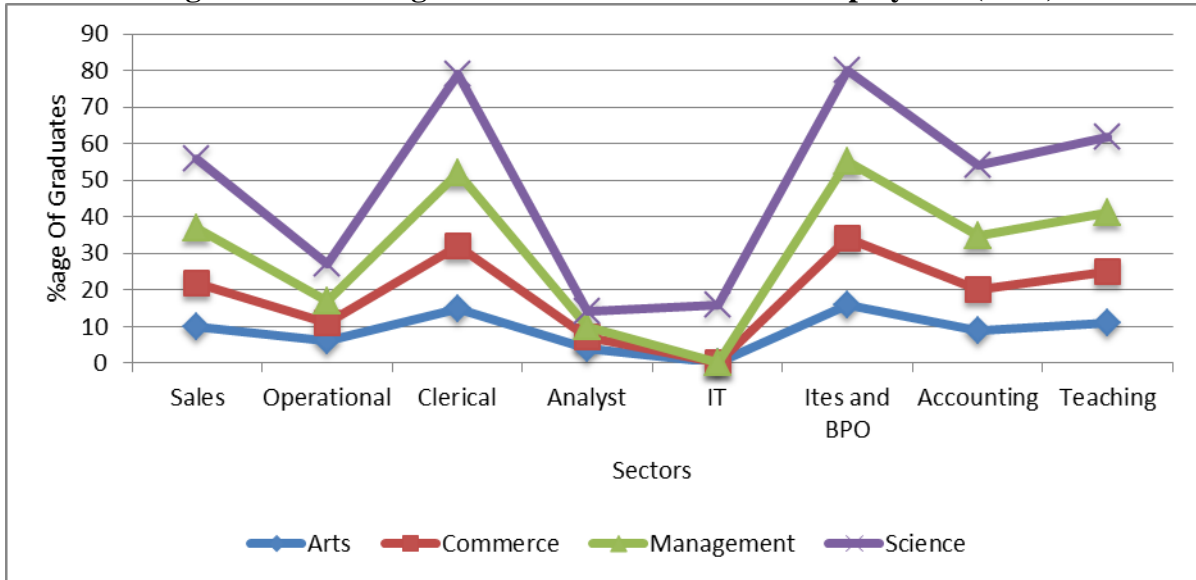
Figure 2: Unemployment vs Adult literacy vs GDP Growth



Source: World Bank, Data Bank on Key Indicators: <http://databank.worldbank.org/data>

Thus the failure to absorb growing labour force points out the structural flaws in the present educational system and why it needs to change its objective of employment to employability goal. Some of the deficiencies in the present education system are such as, (i) the present educational system generates and fortifies, but only partially, the type of knowledge that is relevant to our changing societal structure, (ii) technology associated with a particular stream of knowledge found to be inappropriate or wanting to the present stage of development in India in terms of its employment potential, and (iii) the current infrastructure in India, both physical and financial, is not at par with the current skill requirements for employment. The global rankings are one the most telling indicator of the quality of higher education in India currently is the employment outcomes of its graduates. As Figure 3 shows the vast majority of graduates in India, i.e., of the order of 75% or more are not even considered employable.

Figure 3: Percentage of Graduates Considered Employable (2012)

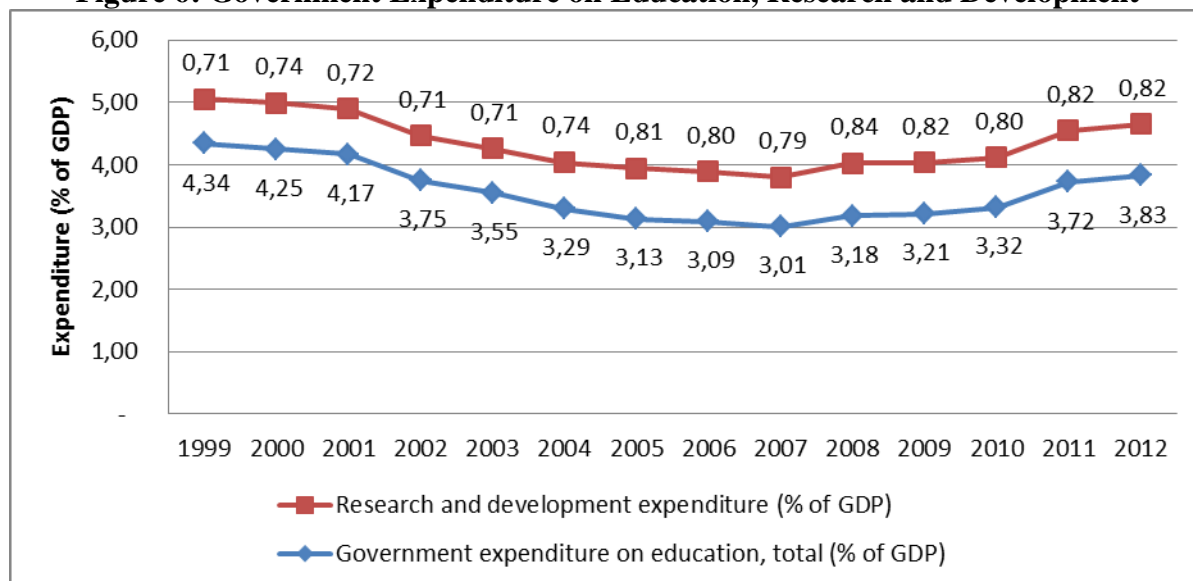


Source: [http://www.aspiringminds.in/docs/national\\_employability\\_report\\_graduates\\_2013](http://www.aspiringminds.in/docs/national_employability_report_graduates_2013)

Since independence, while the enrolment at various levels has gone up substantially but the achievement in terms of Gross Enrolment Rate (GER) in higher education is still very low. As the level of education increases, talent enrolment decreases resulting in very low GERs in graduation and above academic levels. The obvious question for a rapid expansion of higher education is whether or not quality can be maintained. India is already facing some serious hurdles in this respect. In spite of an elaborative higher educational system not only that there are very few Indian institutions are globally ranked but also it lags behind in some of the key benchmarks compared to the higher educational institutions of emerging economies. While the trends show that there is substantial increase in GERs at higher education levels, the enrolments continue to be very discouraging if we observe the actual numbers, as can be seen in Table 3. One can observed that there is sharp drop in the educational enrolment numbers at the post graduate and at higher technical and doctoral levels. This drop in numbers is one of the key reason for the lack of employability.

Unfortunately, the role of state appears to be abysmal in promoting education and employment. As can be seen in Figure 6 government expenditure in education as percentage of GDP is below 4 percent and in promoting research and development is abysmal. It is now that the government seems to have woken-up and showing earnestness as now it is running around 15 prominent skilled development programmes (Table 6).

**Figure 6: Government Expenditure on Education, Research and Development**



Source: World Bank, Data Bank on Key Indicators: <http://databank.worldbank.org/data>

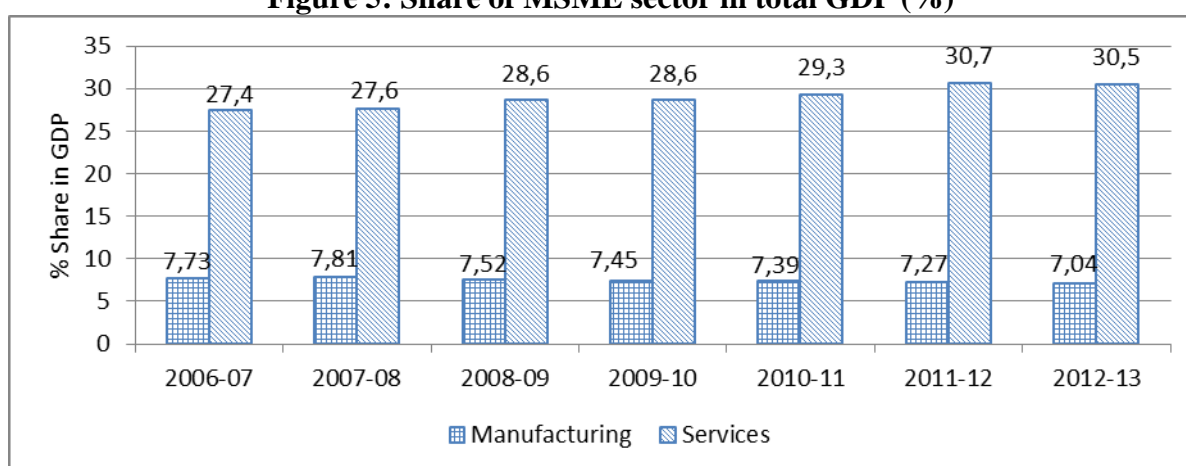
**Table 6: Government Skill Development Initiatives**

Scheme	Ministry	Sector
Digital India Programme	MoC&IT	Digitally Empowered Nation
Integrated Child Development Services	MoWCD	Child Development
Kasturba Gandhi Balika Vidyalaya	MoHRD	Education
Livestock Insurance Scheme (India)	MoA	Education
Mahatma Gandhi National Rural Employment Guarantee Act	MoRD	Rural Wage Employment
Midday Meal Scheme	MoHRD	Health, Education
National Literacy Mission Programme	MoHRD	Education
Pradhan Mantri Kaushal Vikas Yojna	MoSD&E]	Skill Development
Pradhan Mantri Jan Dhan Yojana	MoF	Financial Inclusion
Saksham or Rajiv Gandhi Scheme for Empowerment of Adolescent Boys	MoWCD	Skill Development
Sabla or Rajiv Gandhi Scheme for Empowerment of Adolescent Girls	MoWCD	Skill Development
Sampoorna Grameen Rozgar Yojana	MoRD	Rural Self Employment
Swabhiman	MoF	Financial Inclusion
Swarnajayanti Gram Swarozgar Yojana	MoRD	Rural Employment
Pradhan Mantri Kaushal Vikas Yojana	MoSD&E	Skill Development

## MSMEs and Employment

The Micro, Small and Medium Enterprises (MSME) sector has emerged as a highly vibrant and dynamic sector of the Indian economy over the last five decades. MSMEs not only play crucial role in providing large employment opportunities at comparatively lower capital cost than large industries but also help in industrialization of rural & backward areas, thereby, reducing regional imbalances, assuring more equitable distribution of national income and wealth. MSMEs are complementary to large industries as ancillary units and this sector contributes enormously to the socio-economic development of the country. There are over 6000 products ranging from traditional to high-technology items, which are being manufactured by the MSME Sector in addition to provide wide range of services. As per MoSPI, Central Statistical Organisation estimates of contribution of MSME sector to GDP is significant to the manufacturing sector and fairly to the services sector (Figure 5).

**Figure 5: Share of MSME sector in total GDP (%)**



Source: Annual Survey of Industries, CSO MOSPI 2013-2014

As per the results of Fourth All India Census of MSME, the sector contributes significantly to the number of enterprises, employment and output of the country. Based on the data sets of Fourth All India Census of MSME, augmented with data sets of EC, 2005 and growth rates observed during Fourth (1998) and Fifth (2005) Economic Census, the performance of MSME Sector in terms of employment generate and fixed assets is significant (Table 5).

**Table 5: Performance of MSMEs**

Year	Total Working Enterprises (in Lakh)	Employment (in Lakh)	Market Value of Fixed Assets (Rs. in Crore)
2006-07	361.76	805.23	868,543.79
2007-08	377.36	842	920,459.84
2008-09	393.7	880.84	977,114.72
2009-10	410.8	921.79	1,038,546.08
2010-11	428.73	965.15	1,105,934.09
2011-12	447.64	1,011.69	1,182,757.64
2012-13	447.54	1,061.40	1,268,763.67
2013-14	488.46	1,114.29	1,363,700.54

Source: MSME Annual Report 2014-2015

The estimated number of enterprises growth at 3.76% annually in case of manufacturing sector and 0.47% for services sector respectively in registered sector during 2001-02 to 2006-07, as per Fourth All India Census of MSME 2006-07, The growth in the estimated number of MSME was 2.61% for the period referred above, taking manufacturing and services together. The employment increased at an annual growth rate of 9.84% for manufacturing sector and 2.06% for services sector during 2001-02 to 2006-07. As per Fourth All India Census of MSME 2006- 07 while the growth rate of estimated number of enterprises and employment recorded for the service sector was 32.83% and 36.11% respectively during the period of 2001-02 to 2006-07, but taking into account the expanded coverage of the sector, the growth rate was 10.03% and 10.88%.

### **Policy Imperative for Employment and Sustainable Livelihoods**

Investment in education, employment, health and other basic economic and social infrastructure expands human capacity to participate in new economic and social opportunities. While growth ensues resources released for a sustained improvements in human capacities, expanded human capacities enable people to make greater contributions to growth. Investment in skill-based higher education is to expand human capacity in terms of “employability”. It broadens and makes equally accessible to lower income strata to seek out economic opportunities. This results in improved income distribution over time. Sound policies and institutions at the first place are sine-qua-non for creating economic opportunities and to promote social inclusion. Therefore, it is important for ensuring economic and social justice access to employment opportunities for all. Further, as empirical evidence has shown that along with the number of jobs created in the growth process, it is equally important to look into the quality and decency of jobs too for that there is a strong linkage between productivity and decency of jobs. The quality and decent jobs, those that pay a fair wage rate, provide social security, offer good working conditions, and allow a voice at work, improve productivity. In developing Asia, including India, a substantial share of poor people are already at work, i.e., they are the “working poor”, particularly among migrant workers. For them, it is not the absence of economic activity that is the source of their poverty, but the lack of decency and low productivity of that activity. A key element of promoting social and economic justice should be to ensure that men and women can earn a fair level of income from their work and enjoy decent working conditions. This should be the prime agenda in our Millennium Goal.

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## **GAINING AN UNDERSTANDING OF THE RATIONALE FOR THE FLUCTUATIONS IN THE YEMENI ECONOMY: CONSIDERING THE ARAB SPRING**

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### **Abstract**

This paper, by way of an analytical research review, examines the reasons for the fluctuations in the economic growth of the country of Yemen during the period from 2000 to 2014. We have found that very low number of papers have written about the topic. Yemen, as a developing country, has been under the influence of an Arab Spring. The term 'Arab Spring' refers to the series of independent uprisings that occurred in 2010 across the Arab world. These uprisings originated in Tunisia and rapidly took hold in Libya, Egypt, Bahrain and also in Yemen. There is a lack of understanding concerning the economic growth status in the existing literature during this period. Despite oil prices having appreciated and the unemployment rate having improved, particularly after the Arab Spring, political instability has dominated the scope of determinants for economic growth in Yemen. To address the objective of this study, we utilize vector error correction model to examine the impact of candidate variables. This review and analysis could provide an additional understanding in terms of the factors contributing to economic growth in Yemen; particularly before and after the Arab Spring.

### **INTRODUCTION**

Economic growth is a key element in macroeconomic studies. It is through comprehending and understanding the status of economic growth in one country or a number of countries, that proper policy guidelines and standardisation can be formulated. A country's stability, its oil price and its tourism industry are all important determinants for the economic growth status. There are a number of studies which have examined the determinants of economic growth in developing countries. However, there is a dearth of studies in the context of the country of Yemen. Yemen is a small country located in the Arabic peninsula, with a population of 27 million people. It has struggled to develop due to the independence hurdles, followed by the unity war, and exacerbated by period of transformation during the Arab Spring. During this period of time Yemen encountered instability, with unemployment as well as increases in the price of oil through the reduction and elimination of subsidies on oil derivatives.

The economy was badly hit by downturn in the order of 13 per cent and this has been attributed, in the main, to the country's ongoing 2011 protests. A rebound in 2012 was due to a slight improvement in trade, manufacturing and agriculture. Worth noting, the production of oil, which contributes more than 70 per cent of the country's budget, was not fully operational due to continuous attacks on the oil locations. Moreover, Yemen's unemployment rate is the highest among the countries in the region. The situation has worsened with the deportation of illegal Yemeni workers in the Gulf; with 700000 Yemeni workers having been reported as arriving in Yemen from Saudi Arabia. Yemen also has the highest poverty rate among the Middle Eastern and North African (MENA) countries; and alarmingly in 2010 the



poverty rate was close to 17 per cent of the total population. The Gross Domestic Product (GDP) is influenced by the fluctuated deficit in the budget and wages consume 11 per cent of the total GDP amount in 2012 as Table 1.0 indicates.

**Table 1.0 Yemen's Real GDP Growth**  
**Real GDP Growth per Year in Yemen**

Year	Real GDP (percentage)
2000	5.93
2001	5.93
2002	5.93
2003	5.04
2004	5.76
2005	4.64
2006	5.14
2007	4.64
2008	3.48
2009	3.6
2010	7.7
2011	-12.7
2012	2.4
2013	3.0
2014	6.0

Source :World Bank

These obstacles have impacted upon Yemen's economic growth; however this impact has yet to be reviewed. According to Aisen and Veiga (2013), political instability is likely to create volatility and frequent change in policies. Tensions such as this are potentially harmful to the macroeconomic performance of any country (see also Campos and Nugent, 2002). Moreover, a recent study conducted by Ingram *et al.* (2013) found that political instability is likely to jeopardise the peace and security of a country. Fletcher and Morakabati (2008) have also highlighted similar outcomes. Therefore, political instability is an important factor impacting upon the economic growth of a country as shown in Table 2.0 below.

The purpose of this study is to undertake an analytical review of the role of political instability, oil price and tourism on the economic growth of Yemen before and after the time of the Arab Spring. Within the neoclassical growth framework, a comparison is made of the performance of economic growth in relation to the proposed independent variables of the oil price, political instability and tourism. Therefore, a better level of understanding provides more informative insight for researchers and policy-makers who are interested in the economic growth status in Yemen. Yemen was chosen as the focus of this study because empirical analysis of the country in this context is relatively scarce. Indeed, the author of this paper intends to examine to what extent the proposed factors have changed in relation to the occurrence of the Arab Spring.

**Table 2.0 Yemen's Unemployment, Oil Price and Inflation Rate**

Unemployment (percentage)	Inflation Rate (percentage)	Crude Oil Price Average	Tourism	Political Instability Index
16.2	10	30.38	73000	-1.3

Unemployment (percentage)	Inflation Rate (percentage)	Crude Oil Price Average	Tourism	Political Instability Index
16.2	10	25.98	76000	-1.3
16.2	12.2	26.18	98000	-1.4
16.2	10.08	31.08	154667	-1.5
16.2	12.2	41.51	273732	-1.6
16.1	11.8	56.64	336070	-1.4
16.1	14.8	66.5	382332	-1.3
15.7	10	27.34	948000	-1.5
15.3	19	99.67	1023000	-1.9
15	5.4	61.95	1028000	-2.2
14.6	19.5	79.48	1025000	-2.3
17.8	9.9	94.88	829000	-2.3
29	14.1	97.98	874000	-2.3
29	12.0	102.52	990000	-2.3
29	12.0	59.96	105000	-2.3

Source: World Bank

## LITERATURE REVIEW

For this paper, the examination of the articles for the review of the literature commenced by exploring the determinants of economic growth. A number of articles explaining the determinants of economic growth theoretically and empirically using microeconomic and macroeconomic values were found. From these articles, two main strands can be distinguished. The first is the neoclassical view, which is based on Solow's growth model, and has emphasised the importance of investment. Secondly, the more recent theory of endogenous growth, as developed by Romer and Lucas, has drawn attention to human capital and innovation capacity. Furthermore, important contributions on economic growth have been provided by Myrdal's cumulative causation theory, and by the New Economic Geography School. In addition, other explanations have been highlighted in the literature concerning the significant role non-economic (in the conventional sense) factors play on economic performance. Indeed, three highly influential early studies of the determinants of economic growth are: Barro (1996); Fischer *et al.* (1993); and Levine and Renelt (1992). They were among the first to use the Penn World Tables data (Summers & Heston, 1991), and to interpret their results in light of theoretical models of economic growth developed in the late 1980s (e.g., Lucas, 1988; Romer, 1986). It is worth noting that the GDP growth rate and GDP per capital income were the most common proxies for economic growth. Payne (2010) indicates that most of the previous studies are based on a time-series model and very few are based on panel data models. For this paper a focus was made on reviewing the studies concerning panel data models since they are closest to our study and hence provide some insights into the relationship between the independent variables and economic growth.

Furthermore, for this paper a significant element was to detect the most important determinants of economic growth in developing countries. The search resulted in many determinants such as Foreign Direct Investment (FDI) (Mielnik and Goldemberg, 2000; Hsiao and Shen, 2003; Nguyen and Nguyen, 2007); exchange rate (Cortes-Jimenez and Pulina, 2006); tourism (Cortes-Jimenez and Pulina, 2009); financial development (Tang, 2003), energy consumption (Belloumi, 2009), education, export (Awokuse, 2003) etc. In

addition, (Awokuse1 and XIE, 2015) used a selected developing countries model to investigate the role of agriculture in promoting economic growth. The results showed that it plays an important role in determining the economic growth. In contrast, the results for some other countries indicate that having a vibrant aggregate economy is a prerequisite for agricultural development. Furthermore, narrowing our search to Yemen, as a context, has indicated there are some studies related to economic growth in developing countries and MENA countries. However, studies focussing on Yemen are few. One such study (Dahan, 2014) found that both income and efficiency variables have a significant impact, as expected, on the demand for energy consumption in Yemen and away from the oil price, tourism and political stability influence on economic growth. Furthermore, (Mehra and Musi, 2013) showed a long term relationship exists between investment and GDP, when examining a number of countries of which Yemen was amongst those. Therefore, a study in the Yemeni economic context is an added merit to the current ongoing research.

### **Political Instability**

Yemen, as one of the least developed countries, has suffered from political instability for a long time. The occurrence of the Arab Spring in 2011 was preceded by the unity war in 1997 and an examination during this period has shed light on the issues related to economic growth while being politically unstable. The literature review reveals that political instability could adversely influence investment, lead to higher levels of unemployment, an increased rate of inflation, and increases the risks thereby impacting upon the growth of the economy as demonstrated in Figure 1.0.

### **INSERT Figure 1.0**

As indicated in Figure 1.0, political instability is negatively related to economic growth, and it is empirically proven to reduce the economic growth in the MENA region (Chor and Salah, 2014), and the high inflation rate is associated with high levels of political instability which is proven by examining a sample of 100 countries by utilising panel data analysis (Aisen and Veiga, 2008). Moreover, the literature has documented the existence of a relationship between political instability and economic growth using the Generalised Method of Moments (GMM) analysis and the results has proven that GDP, inflation and investment has a negative relationship with political stability. In addition, similar result have been attested to when Aisen and Veiga (2013) examined the relationship between political instability and economic growth of 169 countries using GMM estimator from 1960 to 2004, and the results showed that human and physical capital is lowered because of political instability.

Accordingly, the majority of research consistently documents the negative influence of political instability on economic growth. However, the studies are lacking in empirical evidence in relation to the influence of political instability on economic growth in Yemen, and as Yemen has its unique status and historical charters it is therefore a necessity to pursue an examination of political instability and economic growth in the Yemen context.

In general, the previous papers examining the political stability-growth links may be classified into four groups. The first strand in the economic literature argues that political instability has a negative impact on economic growth, but that there is no causality in the opposite direction (Alesina *et al.*, 1996). Another group of contributions supplies evidence that economic growth causes political stability, but not vice versa (Borner and Paldam, 1998). Another tendency in the literature argues that causality in the relationship between political instability and economic growth runs both ways (Zablotsky, 1996; Gyimah-Brempong and

Traynor, 1999). Finally, the last group of papers contains evidence supporting a lack of causality between the variables (Campos and Nugent, 2000).

Brunetti (1997) comprehensively surveyed and summarised the main political variables affecting economic growth, and concluded that among several variables, the measures of policy volatility and subjective perception of politics are the most successful in cross-country growth regressions, while democracy is the least successful. Alesina *et al.* (1996) utilised data from 113 countries from 1950 to 1982 to show that GDP growth is significantly lower in countries during time periods with a high propensity of government collapse. Chen and Feng (1996) show that regime instability, political polarisation and government repression all have a negative impact on economic growth. In a more recent paper, Jong-a-Pin (2009) used factor analysis to examine the effect of 25 political instability indicators and their effect on economic growth. The main finding is that higher degrees of instability of a political regime lead to lower levels of economic growth. In regard to private investment, Alesina and Perotti (1996) indicated that socio-political instability generates an uncertain politico-economic environment, raising risks and reducing investment. Alesina *et al.* (1996) used growth rates of GDP per capita as the dependent variable and government changes to measure political instability. They examined a panel of 113 countries and found that political instability had a negative impact on GDP growth, whereas there was no dependence in the opposite direction. Within a similar research framework Campos and Nugent (2000) found for African countries that political instability was a reason for slower economic growth. However, no relationship was found for any other group of countries.

There is inconsistency concerning the measurement of political instability from the qualitative to ready indicators, from the change of governments to mass civil protest. However, the majority of articles agreed that political instability adversely impacts the economic process and growth. With respect to Yemen, unfortunately, the author of this paper was not able to locate studies which take into consideration the political instability and economic growth. Thus, an examination on political instability would add value to the previous studies.

### **Oil Price**

Oil prices remains a subject of importance, as a change in oil price can influence a country's economic growth and is dependent on a variety of conditions such as domestic consumption, domestic production cost, and rate of imported oil to the rate of exported oil. Countries have adjusted their annual budget in accordance with the fluctuation in the rate of oil prices. An increase of oil price is documented to increase the currency value, and increase the purchasing power in oil exporting countries on a condition that an effective use of oil revenue is applied. Indeed, some studies did argue that the wrong fiscal policy may harm the effectiveness of oil income. In addition, an increase in the oil prices may enhance the profitability of the energy sector for oil exporting countries, and this may also appreciate the demand of labour and capital.

Hamilton (1983), in a pioneering paper, showed that the increase in oil prices has caused almost every post-World War Two recession in the United States of America (US). Subsequent to the Hamilton paper in (1983) some researchers have examined countries like Canada, United Kingdom (UK), Japan and other OECD countries by mainly investigating the economic activities and its response to oil stocks. However, there are considerable studies on oil prices in relation to employment because rising energy prices meant an increase in the cost of product. Uri (1996) studied the relationship between oil prices and agricultural

employment covering the US agricultural employment between 1947 and 1995. On the other hand, Darby (1982) argued that changes in oil prices has no effect on changes in real Gross National Product (GNP) and hence no impact on the employment rate.

Extensive studies have examined the relationship between oil prices and economic growth. The result are mixed; in the developed countries context as indicated by Cuñado and Pérez de Gracia (2003), Jiménez-Rodríguez and Sánchez (2005), and Mork, Olsen, and Mysen (1994). Cuñado and Pérez de Gracia (2003) documented that the relationship has appeared to be positive for Denmark but negative for the UK, and the same outcome was seen when the effect was examined in Norway and Denmark in the industrial context. However, studies examining Saudi Arabia, as one of the main oil exporting countries, have documented that 1 dollar of decrease in oil price corresponds to 2.5 billion dollar loss for Saudi GDP annually (Brown and Yucel, 2000). In fact, the exchange rate and inflation rate has a significant relationship with the Saudi economic growth rate (Aleisa and Dibooglu, 2002).

In the case of Yemen, Yemen produces approximately 160,000 barrels a day. Yemen depends largely on oil income, and oil accounts for large share of Yemen GDP. The country's economy is dominated by the production and export of crude oil, which generates 70 to 80 per cent of government revenues and most of the country's foreign exchange reserves. As a result, Yemeni consumers are highly vulnerable to shifts in international commodity prices, domestic oil output, the country's overall fiscal position and domestic security.

Therefore, the author of the paper found little evidence documenting the impact of oil prices on the Yemeni economy, and further examination in this context may enhance the literature concerning developing countries within the Middle East. and this current study can provide an in-depth investigation, not only in the past in Yemen, but can examine the economy in more recent times to include the occurrence of the Arab Spring.

## **Tourism**

Yemen is a country with a potential tourism character, with historical places to visit and beautiful islands are the special merits of the country. Furthermore, Yemen is also a destination for many religious groups as a land which is mentioned in the Holy Book. However, subsequent Yemeni governments have not given full support to build unique tourism infrastructure due to political instability.

The 2011 revolution took a heavy toll on the travel and tourism industry, as violence erupted in several areas, and the rise of extremism and militant groups caused more fears among international tourists. A recent election in 2012 did not seem to solve the country's inherent and deeply rooted issues, and with travel warnings still in place in many countries, advising their residents against travel to Yemen, it is a difficult time for the country's travel and tourism operators. In fact, tourism outlets were forced to close amidst the revolution and violence, as occupancy levels often reached just 5 per cent at the height of the violence in 2011 and early in 2012. While many are likely to reopen their doors gradually, performance will remain poor and losses incurred have been substantial and difficult to recover for many operators.

In examining the period prior to the Arab Spring, in 1996 the international arrivals were estimated at 60 000 and tourist earnings stood at US\$39 million, and by 2000 the tourism industry contributed 1.7 per cent to GDP which is 135 million USD. About 56 per cent of the GDP can be accounted by international tourist visitation with arrivals in 2000 totalling 72,836. In 2012 the central statistics in Yemen revealed that the arrivals reached 459,329 persons, where in 2013 the number amounted to 439,846 only from international

countries whereby Yemeni people stayed abroad and returned for vacations numbered to 495,720 as indicated in Table 1.0.

Furthermore, the tourism and economic growth relationship has been extensively researched in the regional context, and a debate has appeared on the casual relationship between tourism and economic growth, as high economic growth could provide benefits for the tourism industry where tourism is also good for economic growth. However, a question can be posed; does economic growth cause tourism development or does tourism development lead to economic growth? Based on the previous research, three different empirical results can be found: bidirectional causality between tourism and economic growth; unidirectional causality with either the tourism-led growth; or economic-driven tourism growth hypotheses.

**METHOD**

The source of the data collection is derived from different data bases. For oil price the author of this study utilised data provided by US Energy Information Administration web site; in particular the crude oil price per year provided from reports published by the International Energy Agency in regard to world oil price and demand. For the other variables in the study the author relied upon the World Bank database and the Trading Economic website, as these two sources provided reports on unemployment, tourism, inflation and the GDP rate. The author has indeed browsed into articles and previous studies to gain more accurate information related to economic indicators. Yemen’s Ministry of Tourism was one of the sources relied upon for research data about tourism by examining the statistics from 2006 and 2008. The study uses data from 2000 to 2014, and as the Arab Spring happened during 2010 in Yemen, thus 2010 is the year of differentiation between the period before Arab Spring and after the Arab Spring. Moreover, the E views software is used to examine the stationary of data, cointegration test reaching to vector error analysis .

$$\ln GDP_{it} = \beta_0 + \beta_1 \ln K_{it} + \beta_2 \ln TR_{it} + \beta_3 \ln EC_{it} + \beta_4 \ln POL_{it} + \varepsilon_{it}$$

$$\ln GDP_{it} = \lambda_i + \mu_t + \beta_0 + \beta_1 \ln K_{it} + \beta_2 \ln TR_{it} + \beta_3 \ln EC_{it} + \beta_4 \ln POL_{it} + \varepsilon_{it}$$

$$\ln GDP_{it} = \alpha_i + \delta_1 \ln GDP_{it-1} + \delta_2 \ln K_{it} + \delta_3 \ln TR_{it} + \delta_4 \ln EC_{it} + \delta_5 \ln POL_{it} + \xi_{it}$$

**RESULTS**

Firstly, we conducted a stationary data analysis using the unit root test, the result confirmed the existence of a unit root status, thus, we had to convert the data by creating a new objects in E views, these objects represent the old variables multiplied by Difference (D), the result showed no unit root test at 5% level in majority of the variables where all variables showed non-existence of unit root status at first difference as per showed below in Table 8.1. Secondly, we proceeded to perform the cointegration test, the result showed there is a strong possibilities of cointegration status. Therefore, we proceeded to implement the vector auto regression (VAR) analysis which would help in capturing the interdependences among variables. We found that a relationship do appear between tourism, political instability, unemployment ,oil price and economic growth in Yemen Table 8.2.

**Table 8.1 Unit root Test**

Variable	Level		First Difference	
	ADF	PValue	ADF	Pvalue
Oil Price	-3.96	0.0130	-5.06	0.0028
Tourism	-1.8	0.3	-3.20	0.047
Po Instability	-3.35	0.035	-3.17	0.04
Unemployment	-2.66Non	0.021Non	1.70	0.99
Inflation	-7.018	0.0001	-5.468	0.002
GDP	-3.57	0.026	-5.20	0.0029

The result of Var test Showed that , oil price has a significant negative relationship with oil price at 5% level, but we found a bi-directional relationship, we justify that by assuming that, the reason for the diagnosis divergence in the use of these two criteria, which arrives often in the reality are due to a small sample and less data. Indeed, increases in oil prices have caused growth in Yemeni economic to lower performance. Provided, tourism has appeared to be negatively related to GDP on directional basis at 5% level, the number of tourism is decreased during the period of the Arab spring which caused economic growth to downsize. In addition, unemployment is appeared to be negatively related to GDP at 5% level on bi-directional basis. The high rate of unemployment is Yemen is a result of low economic growth and vice versa. Moreover, politically instability is negatively and significantly related to economic growth on directional basis at 5% level , the Yemeni economy has experienced a heavy turbulence of political instability which was the main reason why economic was performing badly.

## CONCLUSION

For this paper, the author reviewed the economic growth status in Yemen, and the analytical review involved an examination of the factors documented in the literature critical to economic growth in Yemen, of which oil prices, political instability, inflation, tourism status and unemployment rate were the key factors. It was found that the Yemeni economy suffers from political instability due to the occurrence of the Arab Spring, and the political instability caused tourism to depreciate, in spite of an improvement in the employment and inflation rate. However, an increase in the price of oil could not provide ample room to

improve the political instability indicator. Meanwhile, An analytical review of the data during the period of political instability showed that from 2008 to 2014, the political instability in Yemen adversely impacted on the economy, and the percentage of disturbance in the political process have caused conditions which have increased the level of uncertainty. However, the data showed that prior to Arab Spring there was some increment in uncertainty but not the high level of deviation in comparison to the years after the Arab Spring.

The surprising fact in the figures is that unemployment rate had been very high prior to Arab Spring but experienced an improvement after the occurrence of Arab Spring which implicitly contradicted a comprehension of political instability worsening with unemployment rate depreciated simultaneously. Furthermore, the tourism industry had been in recession, as tourists tended to leave the country in the presence of public protests, with protestors appearing on the streets in Yemen, and this fact corresponds to a downward trend of political instability. Worth noting, inflation rate and oil prices have experienced an improvement in the years after the Arab Spring. Indeed, the GDP has shown vitality since the occurrence of the Arab Spring in Yemen and even though it showed revival towards 2012 to 2014, the GDP improvement may have been influenced by the improvement in the oil prices.



Vector Autoregression Estimates  
Date: 08/28/16 Time: 12:31  
Sample (adjusted): 3 15  
Included observations: 13 after adjustments  
Standard errors in ( ) & t-statistics in [ ]

	GDP	OILPRICE	TOURISM	UE	PI
GDP(-1)	-6.882998 (0.74964) [-9.18174]	-12.64650 (4.19298) [-3.01611]	128625.9 (76092.9) [1.69038]	1.582147 (0.31992) [4.94540]	-0.134210 (0.10107) [-1.32783]
GDP(-2)	-12.90619 (1.49060) [-8.65842]	-23.17816 (8.33738) [-2.78003]	247916.1 (151304.) [1.63853]	4.155469 (0.63614) [6.53233]	-0.281676 (0.20098) [-1.40153]
OILPRICE(-1)	-0.416117 (0.07331) [-5.67596]	-1.220198 (0.41006) [-2.97567]	24471.97 (7441.62) [3.28853]	0.114132 (0.03129) [3.64787]	-0.004254 (0.00988) [-0.43037]
OILPRICE(-2)	-0.327766 (0.06701) [-4.89151]	-1.231118 (0.37479) [-3.28480]	21100.24 (6801.62) [3.10224]	0.109351 (0.02860) [3.82393]	-0.008894 (0.00903) [-0.98442]
TOURISM(-1)	-2.05E-05 (2.2E-06) [-9.14839]	0.000121 (1.3E-05) [9.63047]	0.979502 (0.22767) [4.30221]	3.60E-06 (9.6E-07) [3.76243]	-2.73E-07 (3.0E-07) [-0.90118]
TOURISM(-2)	2.35E-05 (6.7E-06) [3.52389]	-5.19E-05 (3.7E-05) [-1.38907]	-1.717749 (0.67816) [-2.53297]	-5.73E-06 (2.9E-06) [-2.00810]	-6.50E-07 (9.0E-07) [-0.72134]
UE(-1)	-18.37706 (2.14106) [-8.58316]	-32.11279 (11.9756) [-2.68151]	343845.1 (217330.) [1.58213]	6.792204 (0.91374) [7.43344]	-0.441815 (0.28868) [-1.53047]
UE(-2)	18.41523 (2.08453) [8.83423]	27.92502 (11.6595) [2.39505]	-439082.0 (211592.) [-2.07513]	-5.778826 (0.88961) [-6.49589]	0.396469 (0.28106) [1.41063]
PI(-1)	31.54733 (7.00734) [4.50204]	100.9927 (39.1943) [2.57672]	-1361507. (711286.) [-1.91415]	-10.44539 (2.99051) [-3.49284]	1.390390 (0.94480) [1.47162]
PI(-2)	-18.83721 (6.50593) [-2.89539]	-174.5504 (36.3898) [-4.79669]	1724740. (660391.) [2.61170]	5.821800 (2.77653) [2.09679]	-1.410419 (0.87720) [-1.60787]
C	160.2693 (17.3706) [9.22648]	277.3007 (97.1594) [2.85408]	-1323245. (1763218) [-0.75047]	-46.72148 (7.41322) [-6.30245]	2.192909 (2.34208) [0.93631]
R-squared	0.995453	0.995429	0.992269	0.999368	0.988208
Adj. R-squared	0.972720	0.972572	0.953617	0.996210	0.929246
Sum sq. resids	1.393150	43.58512	1.44E+10	0.253736	0.025326
S.E. equation	0.834611	4.668250	84717.96	0.356186	0.112531
F-statistic	43.78880	43.55046	25.67138	316.4048	16.76011
Log likelihood	-3.929220	-26.30968	-153.7916	7.140455	22.11937
Akaike AIC	2.296803	5.739951	25.35255	0.593776	-1.710673
Schwarz SC	2.774837	6.217985	25.83058	1.071810	-1.232639
Mean dependent	3.433077	65.05308	620523.2	18.93846	-1.869231
S.D. dependent	5.053176	28.18739	393364.0	5.785548	0.423054
Determinant resid covariance (dof adj.)		0.000000			
Determinant resid covariance		0.000000			

System: UNTITLED  
 Estimation Method: Least Squares  
 Date: 08/28/16 Time: 12:38  
 Sample: 3 15  
 Included observations: 13  
 Total system (balanced) observations 65

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-6.882998	0.749640	-9.181739	0.0000
C(2)	-12.90619	1.490595	-8.658416	0.0000
C(3)	-0.416117	0.073312	-5.675964	0.0002
C(4)	-0.327766	0.067007	-4.891513	0.0006
C(5)	-2.05E-05	2.24E-06	-9.148386	0.0000
C(6)	2.35E-05	6.68E-06	3.523889	0.0055
C(7)	-18.37706	2.141059	-8.583164	0.0000
C(8)	18.41523	2.084532	8.834226	0.0000
C(9)	31.54733	7.007338	4.502042	0.0011
C(10)	-18.83721	6.505932	-2.895389	0.0160
C(11)	160.2693	17.37059	9.226476	0.0000
C(12)	-12.64650	4.192981	-3.016113	0.0130
C(13)	-23.17816	8.337385	-2.780027	0.0194
C(14)	-1.220198	0.410059	-2.975666	0.0139
C(15)	-1.231118	0.374792	-3.284801	0.0082
C(16)	0.000121	1.25E-05	9.630472	0.0000
C(17)	-5.19E-05	3.74E-05	-1.389069	0.1950
C(18)	-32.11279	11.97564	-2.681508	0.0230
C(19)	27.92502	11.65947	2.395051	0.0376
C(20)	100.9927	39.19433	2.576717	0.0276
C(21)	-174.5504	36.38980	-4.796686	0.0007
C(22)	277.3007	97.15936	2.854082	0.0171
C(23)	128625.9	76092.91	1.690380	0.1218
C(24)	247916.1	151304.3	1.638527	0.1324
C(25)	24471.97	7441.622	3.288527	0.0082
C(26)	21100.24	6801.615	3.102239	0.0112
C(27)	0.979502	0.227674	4.302207	0.0016
C(28)	-1.717749	0.678156	-2.532969	0.0297
C(29)	343845.1	217330.3	1.582132	0.1447
C(30)	-439082.0	211592.4	-2.075131	0.0647
C(31)	-1361507.	711286.4	-1.914147	0.0846
C(32)	1724740.	660390.8	2.611696	0.0260
C(33)	-1323245.	1763218.	-0.750472	0.4703
C(34)	1.582147	0.319923	4.945403	0.0006
C(35)	4.155469	0.636139	6.532326	0.0001
C(36)	0.114132	0.031287	3.647869	0.0045
C(37)	0.109351	0.028597	3.823930	0.0034
C(38)	3.60E-06	9.57E-07	3.762430	0.0037
C(39)	-5.73E-06	2.85E-06	-2.008099	0.0724
C(40)	6.792204	0.913737	7.433436	0.0000
C(41)	-5.778826	0.889613	-6.495889	0.0001
C(42)	-10.44539	2.990511	-3.492844	0.0058
C(43)	5.821800	2.776527	2.096792	0.0624
C(44)	-46.72148	7.413221	-6.302454	0.0001
C(45)	-0.134210	0.101074	-1.327833	0.2137
C(46)	-0.281676	0.200977	-1.401529	0.1913
C(47)	-0.004254	0.009885	-0.430369	0.6761
C(48)	-0.008894	0.009035	-0.984424	0.3481
C(49)	-2.73E-07	3.02E-07	-0.901183	0.3887
C(50)	-6.50E-07	9.01E-07	-0.721345	0.4872
C(51)	-0.441815	0.288680	-1.530467	0.1569
C(52)	0.396469	0.281058	1.410628	0.1887
C(53)	1.390390	0.944802	1.471621	0.1719
C(54)	-1.410419	0.877197	-1.607870	0.1389
C(55)	2.192909	2.342083	0.936307	0.3712

Determinant residual covariance 0.000000

Equation: GDP = C(1)\*GDP(-1) + C(2)\*GDP(-2) + C(3)\*OILPRICE(-1) + C(4)\*OILPRICE(-2) + C(5)\*TOURISM(-1) + C(6)\*TOURISM(-2) + C(7)\*UE(-1) + C(8)\*UE(-2) + C(9)\*PI(-1) + C(10)\*PI(-2) + C(11)

Observations: 13

R-squared	0.995453	Mean dependent var	3.433077
Adjusted R-squared	0.972720	S.D. dependent var	5.053176
S.E. of regression	0.834611	Sum squared resid	1.393150
Durbin-Watson stat	3.184449		

Equation: OILPRICE = C(12)\*GDP(-1) + C(13)\*GDP(-2) + C(14)\*OILPRICE(-1) + C(15)\*OILPRICE(-2) + C(16)\*TOURISM(-1) + C(17)\*TOURISM(-2) + C(18)\*UE(-1) + C(19)\*UE(-2) + C(20)\*PI(-1) + C(21)\*PI(-2) + C(22)

Observations: 13

R-squared	0.995429	Mean dependent var	65.05308
Adjusted R-squared	0.972572	S.D. dependent var	28.18739
S.E. of regression	4.668250	Sum squared resid	43.58512
Durbin-Watson stat	3.167021		

Equation: TOURISM = C(23)\*GDP(-1) + C(24)\*GDP(-2) + C(25)\*OILPRICE(-1) + C(26)\*OILPRICE(-2) + C(27)\*TOURISM(-1) + C(28)\*TOURISM(-2) + C(29)\*UE(-1) + C(30)\*UE(-2) + C(31)\*PI(-1) + C(32)\*PI(-2) + C(33)

Observations: 13

R-squared	0.992269	Mean dependent var	620523.1
Adjusted R-squared	0.953617	S.D. dependent var	393364.0
S.E. of regression	84717.95	Sum squared resid	1.44E+10
Durbin-Watson stat	2.967819		

Equation: UE = C(34)\*GDP(-1) + C(35)\*GDP(-2) + C(36)\*OILPRICE(-1) + C(37)\*OILPRICE(-2) + C(38)\*TOURISM(-1) + C(39)\*TOURISM(-2) + C(40)\*UE(-1) + C(41)\*UE(-2) + C(42)\*PI(-1) + C(43)\*PI(-2) + C(44)

Observations: 13

R-squared	0.999368	Mean dependent var	18.93846
Adjusted R-squared	0.996210	S.D. dependent var	5.785548
S.E. of regression	0.356186	Sum squared resid	0.253736
Durbin-Watson stat	2.545756		

Equation: PI = C(45)\*GDP(-1) + C(46)\*GDP(-2) + C(47)\*OILPRICE(-1) + C(48)\*OILPRICE(-2) + C(49)\*TOURISM(-1) + C(50)\*TOURISM(-2) + C(51)\*UE(-1) + C(52)\*UE(-2) + C(53)\*PI(-1) + C(54)\*PI(-2) + C(55)

Observations: 13

R-squared	0.988208	Mean dependent var	-1.869231
Adjusted R-squared	0.929246	S.D. dependent var	0.423054
S.E. of regression	0.112531	Sum squared resid	0.025326
Durbin-Watson stat	2.959633		

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## **COST EFFICIENCY AND DYNAMIC OF CONSTRUCTION SECTOR AND BUSINESS IN INDONESIA**

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### **Abstract**

Government of Republic of Indonesia is encouraging construction sector growth in national medium term development plan because it plays important role in economy. This will become more interesting for business and government. Therefore business and government need to study efficiency level of construction sector for their decision making process.

This research used time-series Leontief Input-Output Table, on changes in coefficient of technology overtime as a measurement of construction sector cost efficiency.

The results showed that construction sector growth in 2000-2008 was accompanied by increase of efficiency. This was good situation for business and government. However, in 2008-2010, the tendency of inefficiency arised. This means that construction sector growth required higher input proportion than ever before. Trend of coefficient shows that in medium term future, construction sector still tend to become more inefficient. This dynamic may weigh on construction business and impede infrastructure development plan in Indonesia in the future.

*Keywords: Input-Output Table, Efficiency, Technology Coefficient.*

### **INTRODUCTION**

In National Development Plan Year 2015-2019, Indonesia will built roads, railways, transport, electricity, oil, gas, information and communication technology, water resources, drinking water and housing infrastructures. This infrastructures provide a foundation for achieving higher economic growth and welfare of the population in the future. This infrastructure (construction sector) has an important role in economic growth and have strong backward linkage to other sectors. National Development Plan Agency (Bappenas) estimated the investment needed reaches Rp.4.796.00 billions. The government of RI is expected to provide government budget as much as 42%, 22% of state- owned enterprises and 36% of public private partnership.

The plan is an big opportunity for business in construction sector in the medium to long term future. In anticipation of the plan, government and businesses need to study the level of production efficiency in construction sector as an essential input for policies and strategies setting. Therefore, this study aimed to identify the efficiency in construction sector and forecast its trend into the future.

**LITERATURE**

**Production Efficiency**

Production is a process of transforming inputs into outputs serve the market. Production activities are an important part of the business. Lipczynski and Wilson (2004: 35-64), states that,

*Production in economics can be thought of as any activity which alters the form of materials, their quality and their availability over space and time. It can be thought of as a process of transformation of goods and services into different goods and services.*

The linkage between production and effort choosing a particular technology for leading efficiency. From the viewpoint, the goal is to try to use the minimum input to achieve a given level of output. Production manager, with a variety of technology studies can properly take into account the technical efficiency of production methods. However, it's need to take into account the cost of production or cost- efficiency or economic efficiency. Production efficiency is an important goal in the production, as Barro and Sala-i-Martin (1995;146-150) stated that; ... a firm increases its physical capital learns simultaneously how to produce more efficiently.

The concept of efficiency in Lipczynski and Wilson (2004: 35-64) is;

*Two fundamental concepts of efficiency:*

*technical and economic efficiency. Technical efficiency relates to the actual physical material ratios of inputs to outputs. Economic efficiency is the relationship between input prices or costs and output values. .... From a range of technically efficient input combinations, a firm selects that combination that costs the least.*

**Leontief Input Output Table.**

Input-Output Table is a picture of the circular flow of the broad economy developed developed by Wassily Leontief. This table described the structure of the economic system that emphasizes the importance of technological change with a mechanistic understanding.

Structure of standard Input-Output Table and position of coefficient of technology ara as follows;

		Intermediate Demand			Final Demand	Total Output
		Sector 1	Sector 2	Sector 3		
Inter- medi- ate Input	Sector 1	w11	w12	w13	FD1	X1
	Sector 2	w21	w22	w23	FD2	X2
	Sector 3	w31	w32	w33	FD3	X3
Value Added		VA1	VA2	VA3		
Total Input		X1	X2	X3		

Figure 1. Coefficient Technology in I-O Table Structure

The usefulness of IO Table are various as described by Thirwall (1994; 246-263);

*Input-Output may be used for projections and forecasting purposes. Information of this nature is important if planning is to achieve consistency and if future bottlenecks in the productive process are to be avoided. Input-Output Table also to show the strength of linkages between activities in an economy to portray the technology of an economy.*

Further description about the use of IO Table came from Rosenberg (Drejer, 1999: 32-35):

*The usefulness of input-output analysis is breaking open the 'black box' in which the primary factors of production, capital, and labor are somehow transformed into a flow of the final output, [and input-output analysis] displays a wealth of information on the sectoral flow of intermediate inputs. The technique makes it possible to study the process of technological change by examining changing intermediate input requirements.*

### **Measuring Production Efficiency With Leontief Input-Output Tables**

The key information for study of efficiency is the IO matrices or so called coefficient of technology. Interpretation of the coefficient matrix between the input or inverse Leontief as actual embodiment described also by Leontief technology (Drejer, 1998: 2);

*Technology in a Leontief input-output framework is represented by a technical coefficient of the which express average values, partly by referring to groups of industries (a on certain degree of aggregation is unavoidable) with different cost structures, partly by referring to the whole series of techniques applied simultaneously in each line of production reaching from the oldest techniques the which is still applied to the most recent technique which has just been introduced in the most modern production units (Leontief, 1953: 23).*

Raa (2005:108-125) describe the measurement of inefficiency by using IO Table as follows;

*the degree by which a net output vector could be extended until the production possibility frontiers (PPFs) was hit is a measure of the inefficiency of the economy. Inefficiency may be due to different misallocations.... and or underutilization.*

Within framework of this study, changes in cost efficiency will be analyze by using the coefficient input to the output, especially in the construction sector. Specification of the model that will be used in this research is to follow the basic framework of the model input-output table.

## **METHODOLOGY AND DATA**

### **Research Variables and The Model**

The I-O Table above can be converted into the following general equation Raa, 2005);

The analysis was based on the results of technological coefficient changes over time. Steps being taken in preparation of data are as follows (Muftiadi, 2015):

$$\mathbf{x} = (\mathbf{I} - \mathbf{A})^{-1} \mathbf{fd} \quad (1)$$

Specification:

X = output

I = identity matrix

A = coefficient Leontief technology

fd = final demand

Each output of production sectors need input. Each input coefficients (Leontief Technology) is obtained by;

$$a_{ij} = \frac{w_{ij}}{X_j} \quad (2)$$

Research variables are the coefficient of technology ( $a_{ij}$ ) in equation (2). It is a demand for a wide range of input supplies summation. The analysis was based on the results of technological coefficient changes over time. Steps being taken in preparation of data are as follows (Muftiadi, 2015):

1. To calculate coefficient technology of construction sector for 2000,2005,2008, and 2010.
2. To transform all construction sector value- added into year 2000 constant prices.
3. Analyze changes in technology coefficients( $a_{ij}$ ) over time. Possibilities are, if:
  - $(a_{ij})_{t-1} < (a_{ij})_t$  = indicates decrease in efficiency of production.
  - $(a_{ij})_{t-1} > (a_{ij})_t$  = indicates increase of efficiency in production
  - $(a_{ij})_{t-1} = (a_{ij})_t$  = indicates no changes.
4. To plot the value added and coefficient technology in a scatter diagram. Track path on coefficient changes year on year.
5. Analyze value-added in relation to changes in production technology coefficients. This analysis shows the comparability between output growth with technological changes in the time line of research. Likely the result of plotting are as follows;
  - Value-added increase as the process production is more efficient.
  - Value-added increase as the process production is more inefficient.
  - Value-added decrease as the process production is more efficient.
  - Value-added decrease as the process production is more inefficient.
6. To forecast path and future value of coefficient technology and its value added. This trends will be linier or non-linier depend on the path of data. Higher value of coefficient technology indicates trend of inefficiency vice-versa;

$$a_{ij} = f(t) \quad (3)$$

7. Analyze the trends of production technology coefficients over time.

### **Data Collection**

The Input-Output Table data obtained from the Indonesia Statistics, The Central Statistics Agency (BPS) Jakarta Indonesia, Year 2000, 2005,2008 and 2010, especially on construction sector.

## **RESULT**

### **Construction Sector**

During period of 2000-2014, construction sector always grew higher than the rate of economic growth. Construction sector grew 6.87% on average , while the economy grew 5.42%. GDP of the construction sector in 2014 reached Rp.1.014.541 billions. However, 2011- 2014 data showed a decrease in the growth rate of the construction sector, while economic growth remain higher than the previous year.

Average contribution of construction sector on GDP reached 8.28% which is likely to increase, so that in 2011-2014 the contribution reached 10.11%. This growth and contribution is expected to provide a foundation of better economic growth in following years. Refer to this situation, then government targeted to develop various infrastructures in year 2015- 2019.



Table 1. Construction Sector and The Economy 2000-2014

	2001 -2005	2006 -2010	2011 -2014	Average
Construction Growth (%)	6.24	7.69	6.65	6.87
Construction per GDP (%)	6.32	8.78	10.11	8.28
Economic Growth (%)	4.73	5.74	5.89	5.42
Construction Inflation (%)	12.00	20.43	5.78	12.79

Source: Indonesia Statistics (2016)

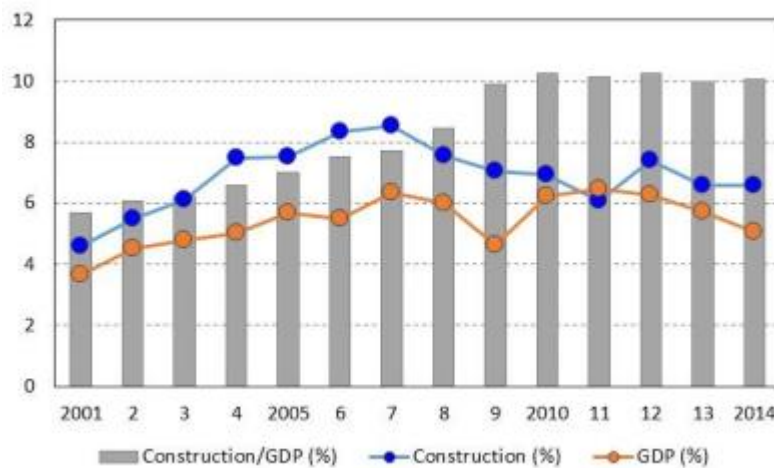


Figure 2. Construction and Contribution of Construction Sector and Economic Growth 2000-2014 (%)

The number of enterprises in construction sector in 2014 as many as 129,819, declined 1,04% from 2011 (134,004 enterprises). This sector absorbed labor as many as 946,424 person, increase almost 29,04% from 2011.

### Changes in Efficiency

From processed Input-Output data, construction sector technology coefficient obtained in 2000, 2005, 2008, and 2010 as well as its value added (GDP) data of the same year.

Table 2. Construction Sector Coefficient of Technology and Value Added

Year	Coefficient of Technology	Value Added (Rp. Billions)
20	0.664	76,573
20	0.642	103,598

20	0.637	131,010
20	0.653	150,022

Source: Indonesia Statistics (2000,2005,2008,2010)

Data in table no.3 are plotted in a scatter diagram then drawn the path changes, so it looks like as follow,



Figure 2. Construction and Contribution of Construction Sector and Economic Growth 2000-2014 (%)

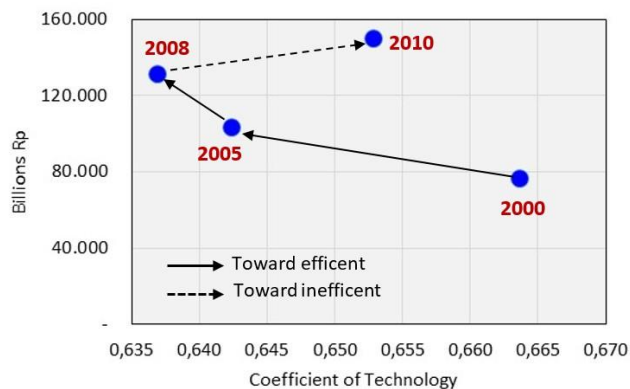


Figure 3. Path Changes of Construction Efficiency and Its Value Added

In 2000, the technology coefficient of construction sector was 0.664 and then decreased to 0.642 in 2005. The decline of coefficient showed an increase efficient production in the construction sector. That is, by 2005, the fewer proportion of inputs used to produce construction sector (more efficient) than proportion of the inputs in 2000. The increase in efficiency is accompanied by an increase in value added (GDP) of the construction sector.

In 2005, the technology coefficient was 0.642 and then decreased to 0.637 in 2008. The decline coefficient showed an increase efficient production in the construction sector.

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In 2008, the technology coefficient of construction sector was 0.637 and then increased to 0.653 in 2010. The increase coefficient showed a decrease in efficient production in the construction sector. That is, by 2010, the higher proportion of inputs used to produce construction sector (less efficient) than the proportion of the inputs in the previous year. The decline in efficiency is also accompanied by an increase in value added (GDP) of construction sector.

Highest increase of production efficiency in construction sector was from year 2000 to 2005. The increase is due to the new balance of Indonesian economy after the monetary crisis in 1998. Since then the construction sector to move more efficiently. However, the increase in efficiency is then run slow, later on 2010 tend to be inefficient. The efficiency level of production in 2010 fell back to near efficiency level in 2000. It could be argued that the decrease in the efficiency of year 2008-2010 was very fast, compared to an increase of efficiency from year 2000-2005. The data above shows that, although the production efficiency continues to become more/less efficient, but the construction sector continues to grow. Growth in this sector does not seem too affected by the change in efficiency level. The key growth of this sector is a continuity of demand increase and as the result of government policy to build infrastructure to maintain the momentum of economic growth. In general, although construction sector continued to experience growth in its operations, but it tends to be accompanied by wasteful use of resources. For the national development process, it is an big opportunity cost. Similarly, for business, this cost is actually not add to company's profits. Various factors that cause the inefficiency of the construction sector. of the authority in the overlapping investment. Natsir (2013.14-15), explaining as follows;

*Strategic issues concerning investment in infrastructure and construction sectors include high investment risk, the cost of economic transactions is high, the credibility of investors who are still in doubt, the supply chain of materials and construction equipment have not been solid, distortion of the construction market is still large, land acquisition for infrastructure development, which is still very complicated, low investment cost recovery and the authority.*

All those factors need to be anticipated and solved by business sector dan government.

### **The Future Trend**

Based on data from Table 3, and then this paper predict the dynamics of coefficient of technology and value added of construction sectors with respect to time.

Dynamic of coefficient technology pattern was non-linear (cubic) with respect to time. Determination coefficient is 0.909. It is expected that after the year of 2010, construction sector increasingly inefficient. The added value of the construction sector is likely to have a dynamic linear growth pattern over time, with a determination coefficient of 0.999. The trend shows that in 2014, the construction sector production is much less efficient than 2010. But construction sector is still continue to grow in the future. AECOM Technology Corporation, one of the world's largest construction companies in Asia Construction Outlook 2013 says that Indonesia is a country with the fastest growth rate of the construction market in the region, on top of China and India (Kiprah;2013).

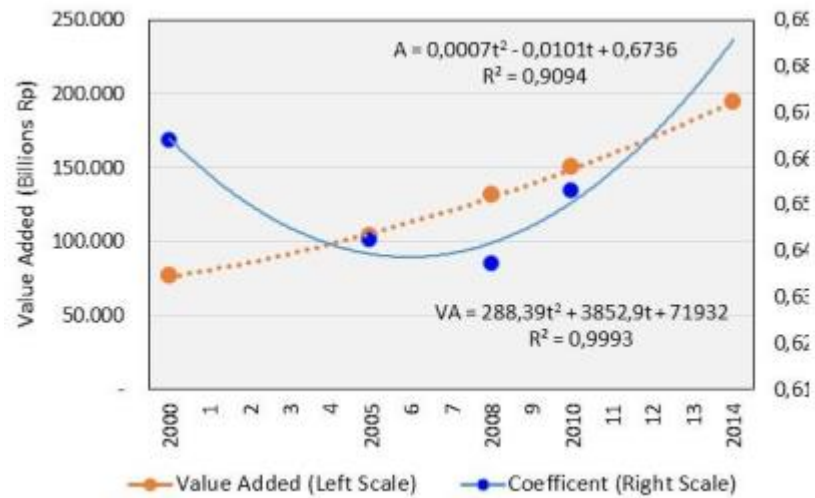


Figure 4. **Dynamic Trend of Efficiency and Value Added of Construction Sector.**

Assuming that the trend coefficient will remain constant, or no change in policy, construction sector is increasingly inefficient. This situation is clearly less favorable for the government's efforts to encourage the growth of construction sector on a large scale infrastructure in 2015- 2019. Similarly to the business on construction sector, which is partly the result of their hard work will be lost in inefficiency (deadweight lose). These circumstances clearly require the attention of government and business in construction sector, including businesses in other sectors that are closely related to the construction sector.

Bank Indonesia (Central Bank) Policy to lower Certificates of Bank Indonesia rate and the government's efforts to encourage simplification of licensing for accelerating infrastructure development is expected to reduce the trend of the inefficiencies in the future.

## CONCLUSION

As a source of growth, construction sector always grew higher than the rate of economic growth and continue its contribution to economy in 2000-2014. Construction sector growth in 2000-2008 was accompanied by increase of efficiency but then became inefficient in 2008-2010. The tendency of inefficiency arised in the future. This means that construction sector growth required higher input proportion for future economic growth. This dynamic may weigh on construction business and impede infrastructure development plan in Indonesia in the future.

Factors causing inefficiency comes from onstruction business systems itself, logistics sector support, transaction costs and insufficient overnment policies to support the construction sector.

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## THE DEVELOPMENT OF FLYPAPER EFFECT AND INCLUSIVE ECONOMIC GROWTH MODEL ON BORNEO ISLAND

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### Abstract

This study aims to determine whether there flypaper and inclusive growth on Borneo island. Source data used is secondary data in the form of financial statements Local Government on Borneo island from 2006 to 2013. This study uses 5 variables, namely the general allocation fund, local revenue, capital expenditure, economic growth, and public welfare. The contribution of this study to show whether there flypaper effect and inclusive economic growth in Borneo island. The analysis technique used is the Partial Least Square ( $\alpha = 0.05$ ). Tests conducted in seven samples of different areas but with same model. The results showed that 1) general allocation fund give a positive effect but the effect on capital expenditures is not significant; 2) local revenue has positive and significant impact on capital expenditures; 3) capital expenditure has negative and significant effect on economic growth; 4) economic growth has positive and significant effect on public welfare.

**Keywords:** flypaper effect, inclusive economic growth, public welfare

### INTRODUCTION

In Act 32 of 2004 on Regional Government, the autonomous region has the meaning that the rights, powers and obligations of autonomous regions to set up and manage their own affairs and interests of local communities in accordance with the legislation. The implementation of regional autonomy in Indonesia is regulated by Law No. 32 of 2004 on Regional Government which separates the functions of the Local Government (Executive) to the function of the Regional Representatives Council (Legislature). Separation of functions as expressly provided in the Act indicates that the executive planning, execution, and reporting on local budgets is a manifestation of the service to the public, while the legislature active role in implementing the legislation, budgeting, and oversight.

In Law No. 32/2004 states that for the implementation of the authority of the Regional Government, the Central Government will transfer Balance Fund, which consists of the General Allocation Fund (DAU), Special Allocation Fund (DAK), and DBH consists of taxes and natural resources. Besides the Balance Fund, the Regional Government has its own funding sources in the form of local revenue (PAD), financing, and other income.

Indonesia, Malaysia, Philippines, and Thailand have the same revenue sources such as local taxes (property, hotels and restaurants as well as entertainment tax), licenses, fees, and revenues from Local Owned Enterprises (Saffel and Basehart, 2001). But in practice, the transfer of the central government is a major source of funding for local governments to finance their daily operations and reported in the calculation of the budget. The purpose of the transfer was to reduce the fiscal gap between government and ensure the achievement of minimum service standards across the country.

The budget process begins with making the agreement between the executive and the legislature on Budgets and Public Policy Priorities and Budget Ceiling that will serve as

guidelines to prepare the budget revenue and expenditure budget. Executive draft budget correspond Public Policy Budgets and Priorities and Budget Ceiling then submitted to the legislature to be studied and discussed before it is set as Local Regulation (Badrudin, 2011).

The scope of the budget is relevant and important in local government. This corresponds to the budgetary impact on the performance of the government, with respect to the functions of government in providing services to the public. Furthermore, the council will oversee the performance of the government through the budget. This form of supervision in accordance with agency theory in this case the local government as an agent and Parliament as a principal.

Importance of budgeting will affect the economic growth that will also have an impact on the welfare of the community, because with the increase in economic growth is expected to be accompanied by an increase in community welfare improvement. Economic growth combined with increasing public welfare can be done if the capital expenditure allocated appropriately. Economic growth can be realized if the fiscal decentralization in countries/cities can run well. The extent to the local government to determine the allocation of expenditure their region, become a very important factor in determining the fiscal decentralization. Inclusive economic growth can be achieved if an area can spend capital expenditures appropriately.

Capital expenditure could be funded with block grants and revenue. If the capital expenditure in an area more dominant funded using public funds allocation, this region still relies on the transfer of funds from the central government or called flypaper effect. Flypaper effect is phenomenon to describe when a dollar of exogenous intergovernmental fiscal transfer leads to significantly greater public spending than an equivalent dollar of citizen income: money sticks where it hits (Inman, 2008). Some other empirical studies of flypaper effect were conducted, e.g., Deller et. al., (2007). In the implementation of regional autonomy, local government is able to manage its own finances and financing its capital expenditure are expected to rely more on the local revenue. If the economic growth of a region can be improved, it is expected to improve welfare society and reduce poverty. This is an inclusive economic growth (Todaro and Smith, 2006). In this study the researchers chose the island of Borneo as samples with the consideration that not too many researchers who studied the island of Borneo and in addition it has a province of Kalimantan spread in quadrant one, three, and four on the Klassen typology. Researchers wanted to see whether there is economic growth and increased prosperity evenly throughout the province, especially in West Kalimantan and South Kalimantan, which are in quadrant four which means that the area is an area that remains very needs special attention because it has the lower amount of GDP per capita and a lower growth rate compared to other regions (Badrudin, 2015).

### **Research Purposes**

This study aims to determine how the influence of General Allocation Fund (DAU) and the Local Revenue (PAD) on Capital Expenditure, effect of Capital Expenditure on economic growth, and see how the influence of economic growth on public welfare.

### **Research Contribution**

Previous studies have examined the relationship between DAU, PAD, Capital Expenditure, economic growth, and prosperity separately with different models. In this study, researchers wanted to test how the relationship between DAU and PAD to Capital Expenditure, Capital Expenditure on economic growth, and economic growth in the

welfare of the community in 1 models, but these models are tested for 7 samples of research in the area of the island of Borneo. The hypothesis to be tested would show how the results if the model was applied in every province, every district, every city, and Borneo as a whole.

## **LITERATURE STUDY AND HYPOTHESIS DEVELOPMENT**

### **Literature Study**

Much research in various fields of study to apply basic science research agency theory as though it is still a lot of controversy in it (Eisenhardt, 1989). Moe (1984) argues that in government there is a connection in agreements principal-agent that can be traced through the budget process, namely, voter to legislature, the legislature to the government, the minister of finance to budget users, the prime minister to bureaucrats, and officials and service providers. In a government agency relationship between the executive and the legislature, the executive and the legislative is the principal agent. The problems facing the legislature can be interpreted as a phenomenon called agency problems. Similarly, in the public sector, in Law No. 32 of 2004 on Regional Government, the autonomous region has the meaning that the rights, powers and obligations of autonomous regions to set up and manage their own affairs and interests of local communities in accordance with the legislation. The implementation of regional autonomy in Indonesia is regulated by Law No. 32 of 2004 on Regional Government which separates the functions of the Local Government (Executive) with the function of representing the people (Legislature). The law also stipulates that the legislature has the authority to select, appoint, and dismiss heads of regions. This shows the inequality between the executive and legislative positions. The purpose of the position inequality is permitted to delegate legislative authority to the head area chosen by the consequences dismissed if the regional head can not perform as desired legislative authority. Relationships that are not parallel can be called by the agency relationship. Agency theory can be applied in public organizations (Lane, 2003).

In Law No. 32/2004 states that for the implementation of the authority of the Regional Government, the Central Government will transfer Balance Fund, which consists of the General Allocation Fund (DAU), Special Allocation Fund (DAK), and Profit Sahring Fund (DBH) consists of taxes and natural resources. Besides the Balance Fund, the Regional Government has its own funding sources in the form of local revenue (PAD), financing and other income.

According to Law No. 33/2004 proportion of DAU between provincial and district/city defined by the balance of powers between provincial and district/city. But when the response or the larger shopping areas financed by transfer rather than by the PAD will display a phenomenon called flypaper (Hines and Thaler, 1995). Local government will use transfers received from the central government to increase spending. Transfer will increase the consumption of public goods, but not a substitute for local taxes. The phenomenon in much of the literature referred to as flypaper effect. Phenomena which occur in developing countries, governments rely more on transfers than PAD. According to Law No.33/2004 revenue (PAD) is a local earned income levied by local regulations in accordance with the legislation. The scope of the budget is relevant and important in local government. This corresponds to the budgetary impact on the performance of the government, with respect to the functions of government in providing services to the public. Furthermore, the council will oversee the performance of the government through the



budget. This form of supervision in accordance with agency theory in this case the local government as an agent and Parliament as a principal.

Lately, research in the public sector is also an increased focus on the contribution of public capital to economic growth. In this study, the public capital of a country depicted in Capital Expenditure. Capital spending is said to be one of the factors that affect a country's economic growth and in previous studies there are many studies showing that capital spending has a positive impact on economic growth. Therefore, researchers wanted to see also whether the Borneo Island Capital expenditures also have a positive impact on economic growth.

It is generally known that economic growth is an indicator that is commonly used to look at the success of the development. In the implementation of development, high economic growth is the main target for developing countries because economic growth has a close relationship with an increase in the goods and services produced within the community, so that more and more goods and services produced in the welfare of society will increase. Social welfare is a way to associate welfare with social choices objectively obtained by summing the satisfaction of individuals in society.

## **HYPOTHESIS DEVELOPMENT**

### **The influence of the DAU to the Capital Expenditure**

To provide support to the implementation of regional autonomy has issued Law 33/2004 on Financial Balance between Central and Local Government. Sources of financing for local governments within the framework of the financial balance between central and local governments implemented on the basis of decentralization, deconcentration, and assistance.

BPS states that General Allocation Fund (DAU), is funding from the state budget allocated for the purpose of financial equalization between regions to finance its expenditures within the framework of the implementation of decentralization. In connection with the financial balance between central and local government, it is a consequence of the transfer of power from central government to local governments. Thus, there is significant transfer in the state budget from central government to local governments, and local governments can freely use this fund is to provide better services to the public or for other purposes that are not important.

Based on empirical research conducted by Holtz-Eakin et. al. (1985) states that there is a very close link between the transfer of the central government and local government spending. Specifically, they assert that variables local government policy in the short term adjustment (adjusted) to transfer the received, enabling the response of non-linear and asymmetric. Research conducted by Simanjuntak, et.al (2013) showed that DAU has a real connection with capital expenditure. Based on research that has been done before and theories of other supporters, then the hypothesis can be formed as follows:

### **H1: DAU has positive effect on capital expenditure**

### **The influence of the PAD to the Capital Expenditure**

The decentralization policy is intended to realize the independence of the region, the autonomous regional government has the authority to regulate and manage the interests of the local community at its own initiative based on the aspirations of the people (Law 32/2004). The region's ability to provide funding from areas highly dependent on the ability to realize the economic potential into forms of economic activity that is able to create a revolving fund for sustainable regional development.

The amount of authority of the legislature in the budget process (Law 32/2004) opened the door for the legislature to "impose" his personal interests. Legislative position as a supervisor for the implementation of government policy, can be used to prioritize their preferences in budgeting. To realize his personal interests, politicians have a preference for allocations containing lucrative opportunities and have a long-term political impact. Therefore, the legislature will recommend the executive to raise the allocation to the sectors that support their interests. Legislators tend to propose a reduction of allocations for education, health, and other public spending that is not job programs and targetable.

According to research conducted Iskandar (2015) local owned revenue (PAD) is the own source of local revenues that should be constantly increased to be capable of bearing a part of expenditure burden required for implementing governmental affairs and development activities. It is expected to be steadily increasing year by year so that the self-sufficiency of broad, real, and responsible regional autonomy can be realized. The key characteristics of a local government that is capable in implementing its autonomy may be characterized by regional financial capacity and dependency to central aid. These findings support the research hypothesis which states PAD positive effect on the capital expenditure local government district/city in Indonesia, and it is consistent with research findings Simanjuntak, et.al (2013). With the increase in local revenue, the region will also indirectly improve public facilities by allocating capital spending by a larger amount because of their financial resources to fund the repairs to the facility. Based on previous research findings and theories supporting the hypothesis can be formed as follows:

## **H2: PAD has positive effect on capital spending**

### **The Effect of Capital Expenditure to Economic Growth**

The relationship between public investment and growth could even turn negative once public capital is above a certain threshold. For example, maintaining and/or expanding the existing capital stock may require high (and potentially distortionary) tax rates, which would reduce growth, all else being equal (Aschauer 2000; Barro 1990). Thus, the productivity of public investment can vary depending on the initial stock of public capital. Capital expenditure is part of the fiscal policy, which is a government action to regulate the course of the economy by determining the amount of government revenues and expenditures each year, which is reflected in the documents the State Budget (APBN) for national and local budget (APBD) for local or regional.

Some researchers studied more on the interpretation of the relationship by focusing on public capital as a factor of growth in the private sector. This argument is based on the provision of infrastructure and services from the government to the private sector, and the flow of public investment explain some variation of private sector output will eventually boost economic growth (Zemgulene, 2012). So it can be said that one form of public investment is in the form of public infrastructure (Hjerpe, et al., 2007).

Todaro (2006) says there are three major factors or components in economic growth. First, the accumulation of capital which includes all forms and types of new investments were invested in land, physical equipment and human resources. Second, population growth the next few years by itself bring labor force growth. Third, advances in technology.

Fixed assets held as a result of capital expenditure is the main prerequisite in providing public services by local governments. To add to the fixed assets, the local government allocated funds in the form of capital expenditure in the budget. Capital

expenditure allocation is based on the local needs for facilities and infrastructure, both for the smooth implementation of the tasks for the government and public facilities.

Substainability of economic growth can be achieved by an area if the area can always improve

the existing infrastructure in the region. Capital expenditures intended to obtain local government fixed assets, namely equipment, buildings, infrastructure and other fixed assets. With the increase in government spending, particularly capital spending is expected to boost the local economy, which in turn can spur the growth of per capita income. Besides the increased capital expenditures are also expected to be a driving factor in the emergence of new investments in the area of optimizing the utilization of various resources that can ultimately boost regional economic growth.

Capital expenditure is expenditure that benefits exceed one fiscal year and will add an asset or property as well as the area will have consequences add to shopping routine such as maintenance costs.

Barro (1990) states that public investment and significant positive effect on economic growth. Then some research done to find evidence that public investment has positive influence on economic growth. Many studies conducted in developed countries and developing countries to see how the statistical relationship between aggregate infrastructure investment and GDP growth. For research conducted by Stephan (2003) indicate a positive relationship between public investment and GDP. Based on the results of previous studies, the hypothesis can be formed as follows:

### **H3: The capital expenditure has positive influence on economic growth.**

#### **The Effect of Economic Growth to the Public Welfare**

Economic growth according to Todaro and Smith (2006) is a study of the increased production of goods and services in economic activities. Economic growth is also a science that studies the increase in Gross Domestic Product (GDP) or Gross National Product (GNP) regardless of whether the increase in GDP/GNP was larger or smaller than the rate of population growth. If a country can provide economic goods, it is hoped that people can use so that the society welfare is increasing and reducing poverty. This is an inclusive economic growth. Economic growth is a picture of an economies of the region. Sustainable economic growth can increase the prosperity of society. For the region, this indicator is important to know the success of development in the future. Economic growth characterized by increasing the amount of goods and services (output) generated by a particular area in this study is the island of Borneo.

Furthermore, indicators used to measure economic growth is the growth rate of Gross Domestic Product (GDP). In the context of the regional economy, the size of which is often used is the Gross Domestic Product (GDP), the sum of gross value added (gross value added) generated by all sectors of the economy in the region. Economic growth is measured using real GDP is to provide an overview of the gross value added produced by the production units in an area within a certain period. According to BPS, GDP at current prices is the sum of the production value or the income or expenditure is assessed according to the prices prevailing during the year.

Furthermore, the development of the amount of the value of GDP is one indicator that can be used as a measure for assessing the success of development of a region, or in other words the economic growth of a region can be reflected through the growth in value of GDP. Economic growth is also a change in the value of the economic activity of the year for one period to another by taking the average in the same time, it is to say

economic growth rate should be compared with the level of national income from year to year. What is meant by regional economic growth is the increase of people's income that occurred in the area, which is the entire value added that occurred in the area. Added revenue is measured in real terms, that is expressed in constant prices.

Increased the welfare of society is an appropriate indicator to assess the success or failure of the implementation of regional autonomy. The failure of regional autonomy shown by the unchanged or even lowered the public welfare. On the other hand, the success of regional autonomy should be seen from the growing prosperity of society (Badrudin and Siregar, 2015).

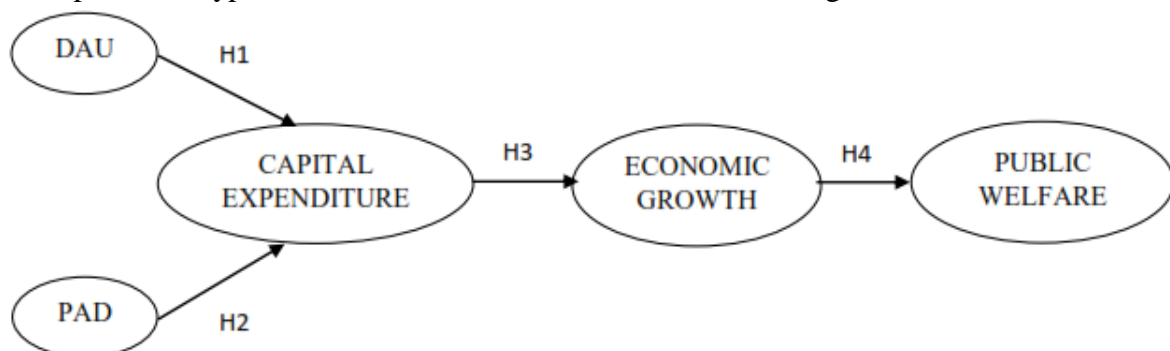
If the people's income increases could mean that the level of welfare is also increasing. The welfare of society can be measured by the Human Development Index. The government's role in improving the HDI can also be influenced by the realization of state spending in the public service.

The role of government policy and the implementation of regional autonomy and fiscal decentralization is based on pertimbangan that daerahlah better know the needs and standards of care for people in the region, thereby granting regional autonomy is expected to spur increased prosperity in the region through increased economic growth.

According to Kuznets one of the characteristics of modern economic growth is the high growth of output per capita (Todaro, 2006). Growth in output is meant is the GDP per capita, high output growth to make changes in consumption patterns in fulfillment. This means increasing economic growth, the higher per capita output growth and changing consumption patterns in this case the level of people's purchasing power will also be higher. High purchasing power will improve the Human Development Index for the purchasing power of people is one of the composite indicator in the HDI-called indicators of income. It can be concluded that the higher economic growth will improve the Human Development Index. Research conducted by Badrudin and Siregar (2015) shows that economic growth and has a positive and significant relationship to the public welfare. Based on existing theories, it can be established the following hypotheses:

**H4: Economic growth positively affects the public welfare.**

Based on the background of the problem, the study of theory, prior research and development of hypotheses, it established a framework of thinking as follows:



**Figure 1**  
**Theoretical Framework**

**RESEARCH METHODS**  
**Sources and Data Research**

The data used in this research is secondary data. The data obtained from the Directorate General of Budget Ministry of Finance in the form of data Realized budget from 2006 to 2013. The data is data DAU, the data PAD, GRDP data, and the Human Development Index data Borneo Island. Due to limitations on the availability of data, the period of the study is the year 2006-2013. The data used is by using a data sample 4 provinces in Kalimantan except for the new North Borneo inaugurated on October 25, 2012.

**Variables and Operational Definitions**

Classification of variables is based on theoretical and empirical studies as a reference framework of thinking that consists of two variables are exogenous and endogenous. Exogenous variables are variables that affect the operation of a model economy and the variable is not affected by any relationship described by the model. Exogenous variables in this study is the DAU and PAD. According to Law No. 33 of 2004, DAU has a definition that funds from the state budget allocated to the purpose of equalization of fiscal capacity among regions to fund the needs of the region in the implementation of decentralization, while the PAD has a definition of regional income sourced from the local tax, the results of retribution, results management wealth separated areas, and others are legitimate, which aims to provide flexibility to local governments in funding dig in decentralization as a manifestation of the principle of decentralization.

Endogenous variables are variables that are influenced by exogenous variables. Endogenous variables in this study are: (a) an endogenous variable that has a meaning *intervening* variables that take effect when the exogenous variables affect the endogenous variables depend. Endogenous variables intervening in this study is the capital expenditure by Government Accounting Standards (SAP) has a definition of expenditure made in the context of capital formation that are adding fixed assets / inventory that benefit more than one accounting period, including the expenses for the maintenance cost nature maintain or increase its useful life, as well as increasing the capacity and quality of assets; (b) an endogenous dependent variable is the variable that is influenced by exogenous and endogenous variables intervening. Dependent endogenous variables in this study is the economic growth and prosperity. Economic growth is described by the value of GDP over prices come into force in a region. According to BPS, GDP at current prices is the sum of the production value or the income or expenditure is assessed according to the prices prevailing during the year. According to Law No. 11 of 2009, the Social Welfare is the fulfillment of the conditions of material, spiritual, social and citizens in order to live a decent and able to develop themselves, so that they can perform their social function. Public welfare in this peneitian illustrated with HDI value of an area. According to BPS, the definition of IPM explain how residents can access development results in obtaining income, health, education, and so forth.

**DATA ANALYSIS**

**Descriptive Statistics**

**Table 1**  
**Descriptive Analysis Results**

	<b>PAD*</b> <b>(Rp)</b>	<b>DAU*</b> <b>(Rp)</b>	<b>Capital</b> <b>Expenditure*</b>	<b>Economic</b> <b>Growth %</b>	<b>Public</b> <b>Welfare</b>
Mean	48.691,04	316.377,66	340.320,19	5,73	71,62
Minimum	1.187,85	1.365,82	36.593,75	-8,36	62,13

Maximum	470.719,06	997.880,07	23.624.390,60	22,39	79,87
Standard Deviation	57.594,77	168.960,95	1.160.253,74	2,70	3,38

Remarks: \*) In millions of rupiah

Source: Output (data processed, 2016)

Based on the results of descriptive analysis in Table 1, it appears that the Local Revenue had an average of Rp48.691.044.423 and standard deviation amount of Rp57.594.772.608 which is has high amount of standard deviation. Value indicates that there is a distance between the data and the value of the average is equal to plus minus Rp57.594.772.608. The highest value represented by the Local Revenue Balikpapan City in 2013 amounted Rp470.719.063.633, while the lowest value for the original income represented by the District of North Kayong in 2008 amounted Rp1.187.844.759 General Allocation Fund has an average of Rp316.377.633.301 and standard deviation amount of Rp168.960.948.795 which is has higher amount of standard deviation than the amount of standard deviation from Local Revenue. Value indicates that there is a distance between the data and the value of the average is equal to plus minus Rp 168.960.948.795. The highest amount of general allocation funds represented by the East Kutai Regency in 2009 amounted Rp997.880.086.844, while the lowest value General Allocation Fund represented by Kutai in 2011 amounted to Rp1.365.820.000. Capital Expenditure on Borneo island has an average of Rp340.320.193.754 and standard deviation amount of Rp1.160.253.740.292 which is has the highest amount of standard deviation than the amount of standard deviation from Local Revenue and General Allocation FundS. Value from standard deviation indicates that there is a distance between the data and the value of the average is equal to plus minus Rp1.160.253.740.292. The highest value Capital Expenditure represented by Sukamara in 2013 amounted Rp23.624.390.602.615, while to the lowest value in Capital Expenditure represented by Tapin on 2013 by Rp36.593.746.359. Economic growth that occurs on Borneo island an average of 5.73% and standard deviation amount of 2,70% which is has low amount of standard deviation. Value indicates that there is a distance between the data and the value of the average is equal to plus minus 2,70%, the figure shows that the rate of economic growth in the island of Borneo is still low. In table 1 shows that there is an imbalance of economic growth due at the maximum rate of economic growth was able to show a value of 22.39%, which represents the increase in the economic growth of East Kutai in 2006, but the minimum value obtained from descriptive statistics unbelievably far to the maximum value that is equal - 8.36% which would indicate the lowest economic growth have occurred in the city in 2011. Lastly, Public Welfare on the island of Borneo has an average of 71.62% and standard deviation amount of 3,38% which is has low amount of standard deviation. Value indicates that there is a distance between the data and the value of the average is equal to plus minus 3,38% the highest level of social welfare represented by the City of Balikpapan in 2013 at 79, 87% and the lowest level of social welfare represented by the City of Sambas in 2006 amounted to 62.13%.

### Inductive Analysis With Partial Least Square (PLS)

Inductive analysis using Partial Least Square (PLS) includes research *goodness of fit model (inner model)*, which serves to determine the suitability of a model used in the study using variables General Allocation Fund, Local Revenue, Capital Expenditure, economic growth, and public welfare. Results of testing the *goodness of fit model* can be seen in Table 2 below:

**Table 2**  
**Value Goodness of Fit Models**

APC = 0.113, P =	Good if P
ARS = 0.022, P =	Good if P
AVIF = 1.062	Good if $\leq 5$

**Source:** Output (data processed, 2016)

Based on the results of model testing, Average R-Squared value (ARS) obtained a value of 0.022 with a P-value = 0.162. Based on these results can be concluded that the value of the ARS is not significant because the P-value > 0.05, while the value of 0.022 indicates that the variables in the study are only able to affect the dependent variable of 2.2% and the remaining 97.8% is influenced by other factors beyond the variables in research. Average value of Path Coefficient (APC) of 0.113 with a P value = 0.004, this means a significant APC value for the value of P < 0.05. Because APC generated significant value, it can be proved that the endogenous and exogenous variables have a cause and effect relationship either directly or indirectly. In this research multicollinearity model is not happen, it is proved from the Average Variance Inflation Factor (AVIF) of 1,062 whose value  $\leq 5$ .

**DAU has positive effect on Capital Expenditure**

Testing hypotheses regarding the influence of DAU to the Capital Expenditure conducted using seven different samples but with the same model. Table 3 shows how the relationship between the DAU to the Capital Expenditure on Borneo island. Data from the table shows that overall on Borneo island DAU has a positive relationship but not significant to capital expenditures for the p-value was 0.37 greater than the significance level set at 5%. The path coefficients indicate a positive direction that is equal to 0.02. Based on the results obtained, when testing was conducted overall in H1 Borneo island is not accepted, the test results showed that although the DAU provides a positive effect on capital expenditure but not significant influence exerted.

However, when tested separately for each province, the results indicate a positive and significant influence of the DAU to the Capital Expenditure. Positive and significant influence are represented with the results obtained from the three provinces of the four provinces in Kalimantan, the province of West Kalimantan, South Kalimantan and Central Kalimantan. The results obtained are consistent with Klassen typology picture. The position of Central Kalimantan province are in quadrant 1, that area is growing fast, provinces that are in quadrant it should be given more attention by the local government because even though the area is growing fast but has the GDP per capita is still low, so it needs the intervention of the central government to develop it.

West Kalimantan and South Kalimantan both are in quadrant 4 on Klassen typology. Provinces that are in quadrant 4 is referred to as disadvantaged areas so it needs special attention as compared to other areas of the province that are in quadrant 4 have the amount of GDP per capita and its growth rate is lower.

East Kalimantan Province is located in quadrant 3 on Klassen typology. Provinces that are in quadrant 3 is the area of advanced but depressed. Areas that are in quadrant 3 has reached a high level of economy, but its growth rate is relatively lower than the provincial average. East Kalimantan Province has been more able to rely on the original income so that the DAU of the local government despite positively affect capital expenditure, the resulting effect is not significant. Therefore it can be concluded that the

test results for each province in accordance with the concept of Klassen typology. Overall hypothesis one that DAU positive effect on capital spending is rejected.

**Table 3**  
**Hypothesis 1**  
**DAU Has Positive Effect on Capital Expenditure**

No.	Samples	Coefficient	P-Value	R 2	Prediction	Finding	Conclusion
1	The whole province	0.02	0.37	0.02	+	+	Rejected
2	The entire district	-0.00	0.48	0.02	+	-	Rejected
3	Citywide	-0.13	0.23	0.59	+	-	Rejected
4	West Kalimantan	0.53	<0.01	0.58	+	+	Accepted
5	South Kalimantan	0.48	<0.01	0.22	+	+	Accepted
6	Central Kalimantan	0.07	<0.01	0.01	+	+	Accepted
7	East Kalimantan	-0.18	0.02	0.37	+	-	Rejected

**Source:** Output (data processed, 2016)

**PAD has positive effect on Capital Expenditure**

H2 testing is also done by testing seven samples of different but with the same model. Table 4 shows how the relationship between the PAD to the Capital Expenditure on Borneo island. Data from the table shows that when H2 tested as a whole on the island of Borneo, the PAD has a positive and significant relationship to the Capital Expenditure. This is indicated with a p-value < 0.01 were smaller than specified signfikansi level of 5% and koefisisen lines also showed a positive effect amounting to 0.13. From the results obtained it can be concluded that the second hypothesis, namely PAD positive effect on Capital Expenditure accepted. These test results support the results of research conducted by Simanjuntak, et.al (2013) and Iskandar (2015) which showed that the original income positive effect on capital expenditure in a region.

However, if the H2 to be further investigated in the table shows that in South Kalimantan and Central Kalimantan PAD would have a negative relationship and no significant effect on capital spending. When viewed from Klassen typology of Central Kalimantan and South Kalimantan are in quadrant 1 and 4 have in common that should receive special attention from the government. Central Kalimantan is at region that expand rapidly, but less able to develop or allocate assets appropriately so we need government intervention. Meanwhile, South Kalimantan Province is located in quadrant 4 that are classified as disadvantaged areas that do require special attention from the government. So when it is associated with one hypothesis, these two provinces was more relying on transfers from the government in the form of DAU and seen that phenomenon flypaper effect on these two areas.

**Table 4**  
**Hypothesis 2**  
**PAD Has Positive Effect on Capital Expenditure**

No.	Samples	Coefficient	P-Value	R 2	Predictio	Finding	Conclusion
1	The whole province	0.13	<0.01	0.02	+	+	Accepted
2	The entire district.	0.14	<0.01	0.02	+	+	Accepted
3	Citywide	0.73	<0.01	0.59	+	+	Accepted



4	West Kalimantan	0.35	<0.01	0.58	+	+	Accepted
5	South Kalimantan	-0.04	0.40	0.22	+	-	Rejected
6	Central Kalimantan	-0.04	0.05	0.01	+	-	Rejected
7	East Kalimantan	0.54	<0.01	0.37	+	+	Accepted

**Source:** Output (data processed, 2016)

### Capital expenditures negatively affect economic growth

Testing for H3 is also done by testing seven samples of different but with the same model. Table 5 shows how the relationship between the Capital Expenditure to Economic Growth in the island of Borneo. Results from the table show that when H3 is tested in its entirety on the island of Borneo, Capital Expenditure has a negative and significant effect on economic growth. It is seen from the path coefficient values indicate a negative number that is equal to -0.15, but the p-value obtained is <0.01 smaller than the significance level has been determined, and the p-value figures indicate that the influence given is significant. Negative and significant impact possible. That is because on Borneo island phenomenon of economic growth that occurred was exclusively economic growth.

Exclusive economic growth can occur because of development that do not qualified or not equitable or could be caused by increased government spending in capital expenditure but not accompanied by a decrease in poverty or unemployment on the island of Borneo. This can be demonstrated by three of the four provinces in Kalimantan is the province of East Kalimantan, West Kalimantan, and South Kalimantan Klassen typology is in quadrant 3 and 4 which show that these areas the level of growth is still slow. While Central Kalimantan are in quadrant 1, which indicates that the area is growing rapidly, although not able to efficiently allocate capital expenditure so that the GDP per capita which is owned still low. But the government gave special attention to the area that is in quadrant 1 still has a chance to grow better. So from the results obtained and the analysis of the results it can be concluded that the hypothesis that states the Capital Expenditure has positive effect on economic growth declined.

**Table 5**  
**Hypothesis 3**  
**Capital Expenditure Has Positive Influence on Economic Growth**

No.	Samples	Coefficien	P-Value	R 2	Predictio	Findin	Conclusion
1	The whole province	-0.15	<0.01	0.02	+	-	Rejected
2	The entire district.	-0.21	<0.01	0.05	+	-	Rejected
3	Citywide	-0.28	<0.01	0.08	+	-	Rejected
4	West Kalimantan	0.31	<0.01	0.09	+	+	Accepted
5	South Kalimantan	0.07	0.35	0.01	+	+	Rejected
6	Central Kalimantan	0.11	0.16	0.01	+	+	Rejected
7	East Kalimantan	-0.27	<0.01	0.07	+	-	Rejected

**Source:** Output (data processed, 2016)

### Economic growth has positive influence on public welfare

Testing the hypothesis for the H4 is also done by testing seven samples of different but with the same model. Table 6 shows how the relationship between the Economic Growth of the Public Welfare on the island of Borneo. From the results obtained, when

testing the hypothesis as a whole then in Table 6 shows that the economic growth gives a negative influence on the welfare of society. The effect is shown by the path coefficient of -0.15. However, when viewed from the level of significance, given the influence of economic growth on the welfare of society can be said to have a significant effect. This is indicated with a p-value  $<0.01$ , the value is smaller than the specified significance level of 5%.

If further investigation, the data contained in Table 6 shows that three of the four provinces in Kalimantan, namely South Kalimantan, Central Kalimantan, and East Kalimantan have test results that provide economic growth and a significant positive impact on economic growth. West Kalimantan Province also showed a positive influence of economic growth on public welfare, but the effect is not significant. The results of this study are also consistent with the theoretical basis proposed by Kuznets stating that one of the characteristics of modern economic growth is the high growth of output per capita (Todaro, 2006). Growth in output is meant is the GDP per capita, high output growth to make changes in consumption patterns in fulfillment. This means increasing economic growth, the higher per capita output growth and changing consumption patterns in this case the level of people's purchasing power will also be higher. High purchasing power will improve the Human Development Index for the purchasing power of people is one of the composite indicator in the HDI-called indicators of income. The fourth hypothesis testing results also support the results of research conducted by Badrudin and Siregar (2015) which showed that economic growth has positive an significant influence on people's welfare. If the economic growth, the better the income levels will also increase. Addition of the increase in revenue occurred public will be able to better meet their needs and this shows that the welfare of the community in the form of income began to increase so that the public welfare can be achieved. So from the results obtained can be concluded that the four hypotheses that economic growth positively affects the welfare of the community received.

**Table 4**  
**Hypothesis 4**  
**Economic Growth Positively Affects The Public Welfare**

No.	Samples	Coefficient	P-Value	R <sup>2</sup>	Predictio	Finding	Conclusion
1	The whole province	-0.15	$<0.01$	0.02	+	-	Rejected
2	The entire district.	0.10	0.02	0.01	+	+	Accepted
3	Citywide	-0.27	$<0.01$	0.07	+	-	Rejected
4	West Kalimantan	0.03	0.43	0.00	+	+	Rejected
5	South Kalimantan	0.41	$<0.01$	0.17	+	+	Accepted
6	Central Kalimantan	0.56	$<0.01$	0.32	+	+	Accepted
7	East Kalimantan	0.22	$<0.01$	0.05	+	+	Accepted

**Source:** Output (data processed, 2016)

## CONCLUSION

Researcher expects that General Allocation Fund has positive effect on capital spending, but based on the results obtained DAU provides a positive effect on capital expenditure but not significant influence exerted.

Data from the table shows that when H2 tested as a whole on the island of Borneo, the PAD has a positive and significant relationship to the Capital Expenditure. From the results obtained it can be concluded that the second hypothesis, namely PAD has positive effect on Capital Expenditure accepted. These test results support the results of research conducted by Simanjuntak, et.al (2013) and Iskandar (2015) which showed that the original income has positive effect on capital spending in a region.

Capital expenditures negatively affect economic growth. Exclusive economic growth can occur because of development that do not qualified or not equitable or could be caused by increased government spending in capital expenditure but not accompanied by a decrease in poverty or unemployment on the island of Borneo. This can be demonstrated by three of the four provinces in Kalimantan is the province of East Kalimantan, West Kalimantan, and South Kalimantan. Those provinces are in quadrant 3 and 4 Klassen typology which show that these areas level of growth is still slow. While Central Kalimantan is in quadrant 1, which indicates that the area is growing rapidly, although not able to efficiently allocate capital expenditure so that the GDP per capita which is owned still low.

Economic growth has positive influence on people's welfare. The results of the study in accordance with the opinion of Professor Kuznets stating that one of the characteristics of modern economic growth is the high growth of output per capita (Todaro, 2006). Growth in output is meant is the GDP per capita, high output growth to make changes in consumption patterns in fulfillment. This means increasing economic growth, the higher per capita output growth and changing consumption patterns in this case the level of people's purchasing power will also be higher. High purchasing power will improve the Human Development Index for the purchasing power of people is one of the composite indicator in the HDI-called indicators of income. The fourth hypothesis testing results also support the results of research conducted by Badrudin and Siregar (2015) which showed that economic growth has positive and significance effect on people's welfare. If the economic growth, the income levels will also increase. Addition of the increase in revenue occurred public will be able to better meet their needs and this shows that the welfare of the community in the form of income began to increase so that the public welfare can be achieved.

## **IMPLICATIONS**

Based on the analysis of the hypothesis and the hypothesis of the two in all districts/cities on the island of Borneo, it turns out, if examined further seen that in South Kalimantan and Central Kalimantan PAD would have a negative relationship and no significant effect on capital spending. When viewed from Klassen typology of Central Kalimantan and South Kalimantan are in quadrant 1 and 4 have in common that should receive special attention from the government. Central Kalimantan is at region that expand rapidly, but less able to develop or allocate assets appropriately so we need government intervention. Meanwhile, South Kalimantan Province is located in quadrant 4 that classified as disadvantaged areas that do require special attention from the government. So when it is associated with hypothesis one, these two provinces was more relying on transfers from the government in the form of DAU and seen that phenomenon flypaper effect on these two areas.

Based on the results of hypothesis three and four seem that the economic growth that occurred in Indonesia is the exclusive economic growth. This is because economic growth has not been evenly distributed in Kalimantan. Exclusive economic growth can occur because of development that do not qualified or not equitable or could be caused by

increased government spending in capital expenditure but not accompanied by a decrease in poverty or unemployment on the island of Borneo. It can be concluded that the allocation of capital expenditures in Kalimantan has not been so efficient that the expected increase in economic growth has not been achieved.

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**BUILDING ECONOMICS EQUILIBRIUM MODEL IN INDONESIA TOWARD  
MACROECONOMIC VARIABLES, NEW CONSENSUS MACROECONOMICS  
APPROACH**

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Debt management and budget deficit in Indonesia is based on ACT No 17 of 2003 and followed by Government Regulation No 23 of 2003, in which government sets maximum limit on government debt of 60 % GDP and maximum limit on budget deficit of 3 %. This concept like Maastricht Treaty which is used in some European Countries which are facing high debt and to be default countries, which the researcher worried about. The weakness of this concept is that it does not describe when government is supposed to do the policy deficit, balanced, or surplus budget. As long as GDP increases, government debt can be increased, regardless of whether the economy needs it or not. Debt burden make fiscal space limited and it has happened in Indonesia in 1990's. It is important to build an equilibrium model to control debt and budget deficit and the important thing is it keeps fiscal sustainability and economic growth. Fiscal sustainability happened if debt is kept stable. This research is conducted by using New Consensus Macroeconomic (MKB) school to make an optimal decision through inter temporal choices. Using micro foundation and adding debt stabilizing deficit variable, Arestis model was elaborated. The result found that deficit debt stabilizer in the model for a long term, gives positive impact on output gaps, the level of prices, exchange rates, current account, and primary budget deficits in Indonesia but it has no impact on the level of interest rates. Conversely, in a short term, debt deficit stabilizer in model gives positive impact toward output gap, exchange rate, and the primary deficit budget, but it does not significantly influence interest rates, the level of price, and current account.

**Keywords:** *fiscal rule, fiscal sustainability, debt stabilizing deficit*

**Introduction**

Debt management and budget deficit in Indonesia are based on on ACT No 17 of 2003. Government set maximum limit on debt ratio at 60 % of GDP and maximum limit on budget deficit ratio of 3 %. The weakness of this concept is, debt will increase every year whether the economy needs it or not. As long GDP increase, the debt will always increase and the debt ratio is not more than 60%. In fact, GDP will always increase because the price increases every year. Indonesia has experienced this condition in 1997 In that year government debt ratio was 89 % of GDP so that restraints the economic growth is to -13, 2 %. Having those experiences, another concept of debt management is required and budget deficit able to execute the fiscal sustainability and economic stability in the long run.

One of management debt and budget deficit properties related to the steady state is debt stabilizing deficit. This is the fiscal rule concept that maintaining the level of budget deficit is stable. The concept of maintaining this stabilization of the debt is known as debt stabilizing deficit. The advantage of this policy according to Rahmani (2009) and Mitchell et.al.(1999) Mitchell *et al*, that the fiscal can be sustained. The question is if the concept is implemented in Indonesia, how can it influences the performance of the macroeconomic ? This study is a deductive research which examines the implementation of New Consensus Macroeconomics as an economic thinking in a general equilibrium. Arestis model is modified by using some

assumption, adding fiscal variable in each equation and the model to be debt stabilizing deficit model.

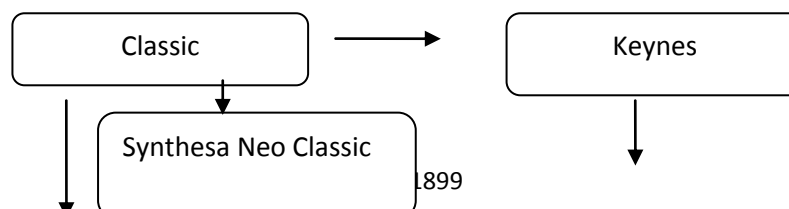
Theoretically and empirically it is find that the budget deficit influences the macroeconomic performance such as economic growth, inflation, interest rate, and exchange rate. Ballassone (2005), for instance, found that the elevating of budget deficit will increase the aggregate and encourage economic growth. Sargent and Wallace (1981) stated that in a long run, budget deficit will influence inflation, but not in short run. Metin (1998) found that in Turkey when budget deficit is increased it will increase the inflation and decrease the domestic revenue. Cebula (1997) described that in the long run, budget deficit will influence the interest rate. The relation between budget deficit and interest rate is observed by Beare (1978) and Laubach (2009) They found that the increase of budget deficit through the sale of bonds will increase the interest rate and Laubach (2009) also found that when the budget deficit increased 1 % the interest rate will increase by 25-30 point base in the long run. Burney (1992) and Bernheim (1988) found that twin deficit, the condition of economy experiences the increasing of budget deficit which will drive the increasing of the real domestic exchange rate. Based on some research, It is needed to conduct a research of building model against the macroeconomic performance in Indonesia.

The school of thought of this study is by utilizing the idea of New Consensus Macroeconomic (NCM). NCM is the latest development of newest macroeconomic concept that is the convergence of New Keynesian and Business Cycle Theory. Aspects which attach to the NCM relatively are in accordance with the economy in Indonesia. *First*, economic is facing imperfect market competition. *Second*, the economy in Indonesia often experiences shock particularly from supply shock, such as disaster, technology development, disturbance of goods distribution, and demonstration of workers. *Third*, agent makes inter temporal choices decision using some relevant information. *Fourth*, the economy is facing sticky price. *Fifth*, monetary policy in Indonesia implements Taylor Rule to maintain the stabilization of price through the determination of interest rate target and inflation.

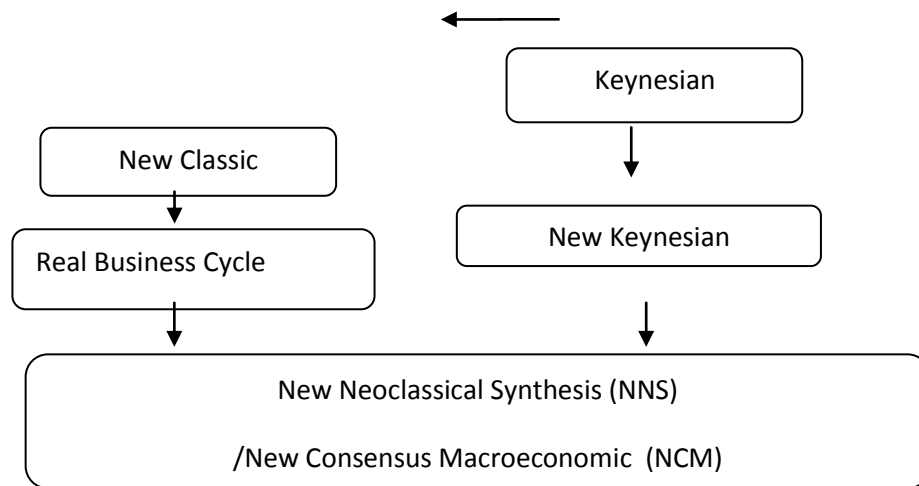
The objective of this research is, *first*, to estimate the effect of implementing the debt stabilizing deficit model against the macroeconomic performance in Indonesia such as economic output gap, level of domestic price, domestic interest rate, exchange rate, current account, and budget primary deficit; *second*, to estimate the pattern of output gap response, domestic price level, domestic interest rate, exchange rate, current account, and budget primary deficit when facing shock. The contribution of this research is to give the alternative model of fiscal policy with deficit and government debt controlled. This situation can fulfill the sustainability of fiscal and economic growth in the long run.

## Material and Method

New Consensus Macroeconomics (NCM) is appropriate with some assumptions established. The terminology of NCM conceptually similar to New Neoclassical Synthesis (NNS). NCM is the convergence concept between the New Keynesian and Real Business Cycle Theory. If the terminology of New Neoclassical Synthesis (NNS) is used, then the thinking tends to use Real Business Cycle Theory that more to use the rationality of decision of the economic and market actors in facing the shock of supply. If New Consensus Macroeconomic (NCM) is used, the thinking tends to use the New Keynesian that put the role of the government.







Source: Insukindro (2010)

**Figure 1. New Consensus Macroeconomic Among Other Economic Thought**

NCM has some properties, such as a dynamic model, representative agent, general equilibrium and empiric verification. NCM contains two main elements: optimization between time and the importance of fiscal policy derives from New Keynesian thinking as well as the decision of looking forward price setting as the core of the thinking of the Business Cycle Theory. Those two elements put into a dynamic model to describe the real economic fluctuation. The economic actors counter imperfect market competition or incomplete market countering the sticky price. This sticky price indicates that the price experiences adaptation but slow. The initial NCM is developed by Giese and Wagner (2007) by building IS-LM-IA model in a closed economy in monetary policy domination. The economy is assumed of three blocks, finance block, investment block, and consumption block and stock. Model was developing continuously by Tcherneva (2008) by adding the government expenditures variable on IS equation. Arestis model (2009) is stressed and applied to the role of fiscal policy. It is assumed that fiscal policy is seen in the magnitude of output gap equation and central bank controls the rate of inflation and exchange rate. This model consists of six equations reduced forms as follows:

1.  $Y_{gt} = a_0 + a_1 Y_{gt-1} + a_2 E_t(Y_{gt+1}) + a_3 [R_t - E_t(P_{t+1})] + a_4 (rer)_t + s_1$
2.  $P_t = b_1 Y_{gt} + b_2 P_{t-1} + b_3 E_t(P_{t+1}) + b_4 [E_t(P_{wt+1}) - E_t \Delta(er)_t] + s_2$
3.  $R_t = (1 - c_3) [RR^* + E_t(P_{t+1}) + c_1 \cdot Y_{gt-1} + c_2 (P_{t-1} - P^*)] + c_3 \cdot R_{t-1} + s_3$
4.  $(rer)_t = d_0 + d_1 [R_t - E_t(P_{t+1})] - [(R_{wt} - E_t(P_{wt+1}))] + d_2 \cdot (CA)_t + d_3 E(rer)_{t+1} + s_4$
5.  $(CA)_t = e_0 + e_1 (rer)_t + e_2 Y_{gt} + e_3 Y_{gwt} + s_5$
6.  $er_t = rer_t + P_{wt} - P_t$

In order to focus on fiscal policy effect, these equations are modified by adding debt stabilizing deficit variable in each equation. According to Edwards (2003), the sustainability of fiscal is condition where the government is able to maintain expenditure, tax and other fiscal policy in the long term without any doubt of any default on some of its obligations. The sustainability of fiscal is a condition where State Budget is dynamically able to conduct its function as catalyst and economic stabilizer and able to meet various expenditure requirement or obligation safely in the long term. To set of fiscal sustainability, debt must be

maintained. According to Farmer (2002:311), debt is stable for every year if debt this year is equal to last year. Debt stabilizing deficit variable is constructed by Favero and Monacelli (2005) as follows  $d_t^* = -\frac{(i_t - g_t)}{(1 + g_t)} b_{t-1}$  where  $d_t^*$  is debt stabilizing,  $i_t$  is interest rate,  $g_t$  is economic growth, and  $b_{t-1}$  is government debt last period. The equation is as follows:

$$B_t = (r \cdot B_{t-1}) + B_{t-1} + (G_t - T_t)$$

$$B_t = (1 + r)B_{t-1} + (G_t - T_t)$$

$$\frac{B_t}{Y_t} = 1 + r \left( \frac{B_{t-1}}{Y_t} \right) + \frac{G_t - T_t}{Y_t}$$

$$\frac{B_{t-1}}{Y_t} = \left( \frac{B_{t-1}}{Y_{t-1}} \right) \left( \frac{Y_{t-1}}{Y_t} \right) \text{ dan } \frac{Y_{t-1}}{Y_t} = \frac{1}{(1 + g)}$$

$$\frac{B_t}{Y_t} = \left( \frac{1 + r}{1 + g} \right) \frac{B_{t-1}}{Y_t} + \frac{G_t - T_t}{Y_t}$$

If  $\frac{B_t}{Y_t}$  is  $b_t$ ,  $\frac{B_{t-1}}{Y_t}$  and  $\frac{Y_{t-1}}{Y_t} = \frac{1}{(1+g)}$  is budget primary deficit, consequently government budget equation is:  $\frac{B_t}{Y_t} = \left( \frac{1+r}{1+g} \right) \frac{B_{t-1}}{Y_t} + \frac{G_t - T_t}{Y_t}$ . Volume of debt depends on the payment of debt interest expense, level of the economic growth, as well as the consideration of the condition of budget primary deficit incurred. Debt interest burden is higher than economic growth as the result, government debt will increase, but if the debt interest expense is lesser than economic growth, consequently government debt ratio will decrease. For the reason, debt stabilizing deficit variable is added in all equation, IS, Inflation Adjustment (IA), Monetary Policy (MP), Exchange Rate, Current Account and also is added fiscal policy equation. Debt stabilizing deficit model has seven equation and the model in the long run are:

1. IS  $y_t^d = a_0 + a_1 r_t^d + a_2 d_t^* + a_3 e_t + a_4 E[y_{t+1}^d] + \varepsilon_{1t}$
2. IA  $p_t^d = b_1 y_t^d + b_2 d_t^* + b_3 \{E[p_{t+1}^d] - E[p_{t+1}^w]\} + \varepsilon_{2t}$
3. MP  $r_t^d = c_0 + c_1 y_t^d + c_2 E[p_{t+1}^d] + c_3 d_t^* + c_4 r^* + \varepsilon_{3t}$
4. Exchange Rate  $e_t = f_0 + f_1 [r_t^d - r_t^w] + f_2 d_t^* + f_3 CA_t + f_4 E[e_{t+1}] + \varepsilon_{4t}$
5. Current Account  $CA_t = h_0 + h_1 [y_t^d - y_t^w] + h_2 d_t^* + h_3 e_t + \varepsilon_{5t}$
6. Fiscal Policy  $\bar{d}_t = j_0 + j_1 y_t^d + j_2 d_t^* + \varepsilon_{6t}$
7. Debt Stabilizing Deficit  $d_t^* = -\frac{(i_t - g_t)}{(1 + g_t)} b_{t-1}$

Time series data usually face spurious regression. To avoid spurious regression, unit root test is conducted by using ADF test and Phillips Perron Test. The unit root test on error term is also used in this step to make sure that there are no problems in heteroscedasticity and autocorrelation (I(0)). In order to examine whether there is as long term relation between variables, co-integration test has to be conducted with Johansen co-integration approach. The whole variables have already the same grade of integration in first difference and are followed by building Vector Error Correction Model (VECM). VECM according to Boschi (2005) is to analyze long term and short term variables behavior in dynamic equation system model. In order to process VECM, his study used Two Stage Least Square (2SLS). The next step is continued by doing simulation with converting debt stabilizing deficit magnitude (dt) is (+/-) 1 % on each equation and assuming other variables considered constant. The simulation result on each question response pattern is observed. Using lag optimum test, the model in the short run has four optimum lag. So, for the short run model, the debt stabilizing deficit model, are

1.  $\Delta_4 y_t^d = \alpha_0 + \alpha_1 \Delta_4 (r_t^d) + \alpha_2 \Delta_4 (d_t^*) + \alpha_3 \Delta_4 (e_t) + \alpha_4 \Delta_4 (E[y_{t+4}^d]) + \alpha_5 \text{ect}(-4)$

2.  $\Delta_4 p_t^d = \beta_1 \Delta_4 (y_t^d) + \beta_2 \Delta_4 (d_t^*) + \beta_3 \Delta_4 \{E[p_{t+4}^d] - E[p_{t+4}^w]\} + \beta_4 \text{ect}(-4)$
3.  $\Delta_4 r_t^d = \gamma_0 + \gamma_1 \Delta_4 (r_t^*) + \gamma_2 \Delta_4 (y_t^d) + \gamma_3 \Delta_4 (E[p_{t+4}^d]) + \gamma_4 \Delta_4 (d_t^*) + \gamma_5 \text{ect}(-4)$
4.  $\Delta_4 CA_t = \varphi_0 + \varphi_1 \Delta_4 [y_t^d - y_t^w] + \varphi_2 \Delta_4 (d_t^*) + \varphi_3 \Delta_4 (e_t) + \varphi_4 \text{ect}(-4)$
5.  $\Delta_4 \bar{d}_t = \theta_0 + \theta_1 \Delta_4 (y_t^d) + \theta_2 \Delta_4 (d_t^*) + \theta_3 \text{ect}(-4)$

Where:

$y_t^d$  is output gap

$r_t^d$  is interest rate

$r^*$  is policy interest rate

$e$  is rupiah exchange rate against euro

$p^d$  is domestic price level

$ca$  is current account

$d^*$  is debt stabilizing deficit

$\bar{d}$  is primary budget deficit

$[r_t^d - r_t^w]$  is domestic interest rate balance with the interest rate of European Union

$[y_t^d - y_t^w]$  is domestic output gap with output average in Europe Union

$(E[y_{t+4}^d])$  is output gap expectation

$(E[e_{t+4}])$  is expectation rupiah exchange rate against euro currency

$\{E[p_{t+4}^d] - E[p_{t+4}^w]\}$  is balance between domestic price expectation with average price expectation in Europe Union,  $ECT(-4)_{ia}, ECT(-4)_r, ECT(-4)_e, ECT(-4)_{ca}, ECT(-4)_{dt}$  are

Error correction term  $\alpha_0, \gamma_0, \varphi_0, \delta_0, \theta_0$  are constant,  $i_0 > 0$

$\alpha_1, \alpha_2, \alpha_3, \alpha_4, \beta_1, \beta_2, \beta_3, \gamma_1, \gamma_2, \gamma_3, \gamma_4, \varphi_1, \varphi_2, \varphi_3, \varphi_4, \delta_1, \delta_2, \delta_3, \theta_1, \theta_2$  are coefficient elasticity independent variable independent to dependent variable

### Result and Discussion

The main problem of time series, is un-stationer data. Unit root test can be used to check it. The test founded that there are 13 un-stationer data. In order to avoid the spurious regression, the un-stationer data are differentiated to get stationer. It used ADF and PP test, the result is followed.

**Table 1. Unit Root Test Approaching ADF test and PP Test.**

Variable	Symbol	ADF Test		PP test	
		I(0)	I(1)	I(0)	I(1)
Output Gap	$y_t^d$	-2.9972	-3.9590*	-8.6423*	-16.2279*
Interest Rate	$r_t^d$	-1.3785	-2.6500*	-0.9965	-3.0101*
Debt Stabilizing Deficit	$d^*$	-	-5.3187*	-5.1423*	-11.5607*
		3.9362			
		*			
Exchange Rate	$er_t$	-	-4.4016*	-3.9242*	-7.8070*
		3.2113			
		*			
Price domestic	$p_t^d$	-1.5516	-4.6102*	-2.5658	-6.7698*
Interest rate Policy	$r_t^*$	-1.9442	-3.4172*	-1.3490	-2.9566*

Current Account	$CA_t$	-2.4219	-3.7250*	-4.1901*	-9.8270*
Primary Deficit	$\bar{d}_t$	-2.3820	-4.2079*	-5.5203*	-7.5966*
Output Gap in Euro Union	$[y_t^w]$	-	-3.6536*	-6.5088*	-17.3570*
		4.9214	*		
Interest rate (Libor)	$[r_t^w]$	-1.4673	-2.2313*	-1.8254*	-5.5811*
Price in Europe union expectation	$E[p_{t+1}^w]$	-0.2292	-3.2004*	-0.6562	-7.9090*
Domestic Price expectation	$E[p_{t+4}^d]$	-1.6918	-4.2580*	-2.8389	-8.2891*
Nominal Domestic Exchange Rate Expectation	$E[r_{t+4}^d]$	-3.1693	-4.3693*	-6.0497*	-8.5462*
Output Gap Expectation	$E[y_{t+4}^d]$	-2.5249	-3.2731*	-8.6562*	-8.5462*
Domestic output gap with output average in Europe Union	$[y_t^d - y_t^w]$	3.4228	-3.0650*	-9.3520*	-26.7115*
		*			
Domestic interest rate balance with the interest rate of European Union	$[r_t^d - r_t^w]$	-2.2793	-3.0311*	-1.9256	-4.0212*
Balance between domestic price expectation with average price expectation in Europe Union	$\{E[p_{t+4}^d] - E[p_{t+4}^w]\}$	2.2528		-1.2515	-12.0963*
		0.9959			
		6			

After all data stationer in first difference, it is continued with co-integration test and here the result.

**Table 2. Johansen Cointegration Test**

<b>Aggregate Demand Equation (IS)</b>					
Ho	H1	Trace Statistics	5 % Critical Value	Max-Eigen Statistic	5 % Critical Value
r=0	r=1	123.8841*	88.8038	53.4055*	38.3310
r≤1	r=2	70.4785*	63.8761	29.6995	32.1183
r≤2	r=3	40.7790	42.9152	19.2245	25.8232
r≤3	r=4	21.5545	25.8721	15.2292	19.3870
r≤4	r=5	6.3252	12.5179	6.3252	12.5179
<b>Aggregate Supply Equation (IA)</b>					
r=0	r=1	120.9358*	63.8761	67.4777*	32.1183
r≤1	r=2	53.5812*	42.9152	27.7295*	25.8232
r≤2	r=3	25.7285	25.8721	20.7723*	19.3870
r≤3	r=4	4.9561	12.5179	4.9561	12.5179
<b>Monetary Policy Equation (MP)</b>					
Ho	H1	Trace Statistics	5 % Critical Value	Max-Eigen Statistic	5 % Critical Value
r=0	r=1	148.4161*	88.8038	53.7393*	38.3310
r≤1	r=2	94.6766*	63.8761	46.8366*	32.1183

$r \leq 2$	$r=3$	47.8400*	42.9152	21.4729	25.8232
$r \leq 3$	$r=4$	26.3671*	25.8721	17.7882	19.3870
$r \leq 4$	$r=5$	8.5788	12.5179	8.57887	12.5179
<b>Exchange Rate Equation (E)</b>					
$r=0$	$r=1$	136.4804*	76.9727	81.4144*	34.8058
$r \leq 1$	$r=2$	55.0659*	54.0790	29.8823*	28.5880
$r \leq 2$	$r=3$	25.1836	35.1927	19.7852	22.2996
$r \leq 3$	$r=4$	5.3984	20.2618	3.8075	15.8921
$r \leq 3$	$r=4$	1.5908	9.1645	1.5908	9.1645
<b>Current Account Equation (CA)</b>					
$r=0$	$r=1$	68.6894*	63.8761	32.4139*	32.183
$r \leq 1$	$r=2$	36.2754	42.9152	25.9973*	25.8232
$r \leq 2$	$r=3$	10.2781	25.8721	8.4769	19.3870
$r \leq 3$	$r=4$	1.8011	12.5179	1.8011	12.5179
<b>Fiscal Policy Equation (FP)</b>					
$r=0$	$r=1$	81.0397*	42.9152	42.4538*	25.8232
$r \leq 1$	$r=2$	38.5859*	25.8721	25.4541*	19.3870
$r \leq 2$	$r=3$	13.1317*	12.5179	13.1317*	12.5179

The result found that each equation in the model has at least one long term relation. Table 3 indicates that all the data variable are stationer and regression technique can be continued to prediction.

**Table 3. Unit Root Test at Error Term using ADF test**

Equation	Symbol	ADF Test	
		I(0)	Prob
Output Gap	$y_t^d$	-5.9494	0.0000
Inflation Adjustment	$p_t^d$	-7.3768	0.0000
Interest Rate (monetary policy)	$r_t^d$	-3.3493	0.0083
Exchange Rate	$er_t$	-6.2113	0.0000
Current Account	$CA_t$	-4.1010	0.0024
Primary Budget Deficit (fiscal policy)	$\bar{d}_t$	-3.8266	0.0053

In short term model, the changing of dependent variable is not only described by the changing of the independent variable but by the in-stability of the variable of the past as well. The ECT rate and its rate are between 0 and negative 1. The ECT rate coefficient indicates are hat the speed of the adjustment of a variable is returning to its stability when countering shock. This condition indicates that the prediction that resulted from the equation system is valid, because there are between 0 and 1. The result of estimation short and long terms is in Table 4.

**Table 4. The Estimation of Short Run (SR) and Long Run (LR)**

Equation	Variable	SR Coefficient	T Stat	LR Coefficient
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Output Gap (dyd)	Drd	0.0002	0.9670	0.0003
	Dds	0.0097*	-1.2762	0.0041*
	Dle	0.6041	4.4168	-1.1110*
	dydf	0.0008*	6.3763	0.0012*
	ect_is(-4)	<b>-0.6318*</b>		
Inflation Adjustment (dpd)	Dyd	-0.5608	-0.3109	-7.7164
	Dds	0.0006	0.4835	0.1678
	dpgapf	1.3509*	10.5770	1.1698
	ect_ia(-4)	<b>-0.7992*</b>		
	Interest rate (drd)	Dyd	-117.5666*	-2.6573
dpdf		-0.5148	-0.2522	0.7876*
Dds		-0.0247	-0.7773	-0.1012*
Drs		0.6943*	8.7726	0.8749*
ect_r(-4)		<b>-1.2187*</b>		
Exchange Rate (dle)	drgap	0.0040	1.8204	-0.0101
	Dds	0.0021**	8.2592	-0.0002
	Dca	-0.0145**	-2.5519	-0.0115
	Dlef	1.0716*	1.1109	1.0107
	ect_e(-4)	<b>-0.4390**</b>		
Current Account(dca)	dygap	26.7827	0.7047	-4.5221
	Dds	-0.0026**	-0.0448	-0.0826
	Dle	-12.7432**	-2.5116	0.3230
	ect_ca(-4)	<b>-0.4852*</b>		
Primary Deficit (ddt)	Dyd	-131.461**	-0.7444	42.0545
	Dds	0.4003*	3.2838	0,0041
	ect_kf(-4)	<b>-0.5405*</b>		

\*significant at  $\alpha=1\%$ , \*\* significant at  $\alpha=5\%$ ,\*\*\* significant at  $\alpha=10\%$ ,

Based on the result, if debt stabilizing deficit model is implemented in Indonesia, in the long run it has positive influence on output gap, price level, and budget primary deficit but negative influence on current account. Debt stabilizing deficit does not influence significantly on interest rate and exchange rate as a monetary instruments variable. When debt stabilizing deficit is implemented in the economy, besides primary deficit increase, it will also increase the output gap. Government spending will push actual output and leaving potential output. The increasing of demand from government spending increases the level of domestic price. In the other side, policy of budget deficit in the long run has a negative effect on current account but in the long mechanism. The longer steps, the less significant the variable is Budget deficit which is financed by loan causes currency inflow, local currency will appreciate, and it penetrate current account. The appreciation of rupiah result in the net export performance decreases. The decrease of the foreign trade will penetrate the current account deficit. It is also founded that fiscal variables are not supported well by monetary variables. It is approved when debt stabilizing deficit is implemented, it has no influence on interest rate and exchange rate. The central of bank will control interest rate by central bank rate (BI Rate) without considered budget deficit condition or other. It is a monetary rule concepts. This situation describes that there is lack of coordination between central bank ( or Bank Indonesia) and Ministry of Finance as fiscal authority to achieve their target goal variables. So, the Central Bank must build a good coordination with fiscal authority to make

a better macro economic performance, economic growth, and fiscal sustainability. It also find that, fiscal policy is less effective than monetary policy, related to the time lag. The expectation on the domestic goods price encourages instantly when the government just informs the media to increase civil servant salary. When the expectation is too high, this expectation tends to encourage the economic actors to purchase goods real time that may trigger the increase of the goods price. The increase of the goods price will encourage Central Bank (Bank of Indonesia) to play its role in stabilizing the price through interest rate policy that the market interest rate will increase. When the actual price increases, central bank will make some effort to hold the increase of this goods price by influencing that the interest rate decreases until the aggregate offering shifted to the right. To make a fiscal sustainability, it should be considered as the implementing of Fiscal Policy Rule.

The short run analysis has the same form and sign with the long run. When debt stabilizing deficit model is implemented, it has positive influence on output gap and primary deficit but negative influence on current account. The main differences is on price level. If debt stabilizing deficit model is implemented, domestic price level is not a significantly influence. Fiscal policy on debt stabilizing deficit model has no influence on domestic price and this finding is understandable. It indicates that sticky price is in the economy in the short term.

Coefficient rate in the interest rate equation statistically significant at the rate 1.2187. This ECT rate indicates that interest rate equation is shaped from interest rate policy. Theoretically when the interest rate gap enlarges as the result of that the interest rate is increased continually compared to the average interest rate in the European Union countries, the capital will flow into the country that in the long term will strengthened the rupiah rate (appreciation), yet from the result of the research indicates the other way around. Floating exchange rate system used Indonesia is very much influenced by the world condition. For the investors, other than the consideration to obtain yield from the long term investment in a country, foreign investors will consider the external factors in a country as well. External factors are mentioned such as security and convenience in doing business, legal certainty, facility are mentioned, and infrastructure licensing. As long as those factors are not fulfilled, no capital flows into the country. The implication of the debt stabilizing deficit has influence on rupiah exchange rate. When the government must pay its debt obligation, the government will purchase more foreign currencies. The demand on the foreign currencies is not only needed by the government but also the speculators. The increase of demand foreign currency causes depreciation in rupiahs. Depreciation in rupiahs causes negative of current account. This finding is in accordance with the theory and the assumption of the research.

Exchange rate has negative effect on the output gap. It means that if the rupiah exchange rate against the foreign currency is experiencing appreciation, this condition will result in decreasing output gap. The appreciation of exchange rate in the long term significantly will increase the production cost, particularly manufactured production industry in Indonesia that still using imported raw material. If in the long run, when cost of production is increased, the national production level will decrease. This condition resulting the output gap decreased. The expectation toward the output gap increases 1 % this will encourage the increasing gap by of the actual output gap by 1.11 billion IDR and on the other hand, when the expectation toward the output gap decreases then the actual output gap will decrease.

The expectation of the exchange rate has a positively significant influence on rupiah exchange rate on euro currency. The increase of the exchange rate expectation will encourage the actual exchange rate to follow the same direction of its expectation. In the long term there is negative relationship between domestic output gap and average output level in the European Union countries toward the current account in Indonesia. When the output gap is

getting bigger and away from the potential output, the goods price tends to be even bigger. As the recovery economic crisis influence does not complete that spread in some parts of developed country and Indonesia, this resulting the domestic demand on imported goods is not automatically significant. Yet, in the short term it is the opposite. In the long term, debt stabilizing deficit has positive influence on budget primary, output gap has relationship with budget primary deficit. In the short term when the output gap increases by 1 trillion IDR, this will result in the increase of demand, which primary deficit will increase the deficit by 131%. This condition indicates how important is the fiscal policy to address the requirement of financing because of the increase of demand. From the simulation, it indicates that when the shock occurs in the form of adding and subtracting of the magnitude of 1 % of debt stabilizing deficit from data base line debt stabilizing deficit, response pattern of output gap equation, price, interest rate, exchange rate, current account, and budget primary deficit have the same pattern with response pattern before simulation is conducted which is return to the equilibrium. If debt stabilizing deficit is added 1 % those five equations indicate that the curve position is below the curve before simulation is conducted. When the magnitude of debt stabilizing deficit subtracted 1 % base line, curve position is above the curve position before simulation is conducted where the its coefficient higher compared to simulation earlier for all equations. It means that it is important for government to keep the debt stable.

### **Conclusions**

*First*, if debt stabilizing deficit model is implemented in Indonesia, in the long run it has positive influence on output gap, price level, budget primary deficit but negative influence on current account. Debt stabilizing deficit does not influence on interest rate and exchange rate as a monetary instrument variables. In the short run, fiscal policy does not influence significantly on domestic price level, interest rate, and exchange rate. These variables are neither significant in long run nor short run because these variables are controlled by Central Bank. So, the Central Bank must build a good coordination with fiscal authority to make a better economic performance, economic growth, and fiscal sustainability. *Second*, sticky price happened in economic phenomena in Indonesia. *Third*, the inflation equation is the fastest equations in adjusting to the new equilibrium. It happened because inflation rate or monetary variable is directly controlled by central bank. In the other side, fiscal equation is the slowest equation in adjusting to the new equilibrium. Fiscal policy face the *policy lag*, it means if fiscal policy is implemented, it need a long time to execute the policy because new fiscal policy must be approved by legislative. It is the reason why fiscal policy is less effective than monetary policy. *Fourth*, all expectation variable have a positive influence and significant on each represented variables, such as actual price level, actual exchange rate, and output gap. So, in order to make a good macroeconomics and policy, expectation variable must also be considered. *Fifth*, conducting simulation on the magnitude of debt stabilizing deficit, it is indicated that the increasing of debt stabilizing deficit causes the economic performance to be lower than before. It responds that it is important for government to implement counter cycle strategy when economy is growing to keep debt stabilizing, but it still needs further discussion.

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## THE IMPORTANCE OF ASMAUL HUSNA'S VALUES AND ETHICS TO DEVELOP ETHICAL LEADERSHIP IN THE ACCOUNTING PROFESSION

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### Abstract

Religion and Spirituality play important roles in defining ethics and culture in many parts of the world and can have a significant effect on business practice. Under the religion of Islam, the Islamic holy book, Al-Quran, provides guidance with respect to issues to run the human conducts and where all ethics are coming from. The word of Asma Ul Husna is also coming from the Al-Quran. It introduces all values and characters of Asma Ul Husna which is defined as the beauty names of God.

When we see the business practice, from the beginning of the twenty-first century, there are many violations of the code of professional conduct by especially for accounting firms which will lead to a loss of public trust on public accounting profession. It was also plagued with extensive, evasive, and disheartening the Indonesian businesses and political leadership failures in other arena.

In response to these ethical leadership failings, renewed interest in developing accounting more professionals with strong ethical principles and ethical leadership behaviors emerged. In many firms, training and development in ethical behavior from the leadership training companies, are now at the forefront of communications and professional development efforts. The Asma Ul Husna has been trained also to know Who and What The God is. Now, Indonesia is still seeing situations to keep and maintain all principles to avoid the failure. From these principles, it will create key factors of imagery accountant profession determined by Trust from citizens to use accountant services.

In response to the call for leaders who are ethical and moral, this research study examined a model of ethical values leadership in Indonesia and its impact on leader effectiveness for leaders among the accounting profession and other professions, which is knowing the Asma Ul Husna and choosing and practicing each characters to their firms. This research is willing to know after each characters of Asma Ul Husna implemented, are the firms able to get with strong ethical principles?, Will it create ethical and transformational leadership after learning the Asma Ul Husna? and , also Does it have significant contributions leader effectiveness to implement accounting ethics cultures in any countries?

Asma Ul Husna is based on the premise of Islamic guidelines and principles, which can be universally applied and customized by any country which is belief about Islam.

**Keywords:** Asma Ul Husna Values, Accounting Ethics, Culture, and Leadership

### The Model

This study attempts to contribute to the leadership and accounting literature by proposing and empirically testing a multifaceted model for explaining the Nobel Values effectiveness of God Spot to create antecedents of effective leadership in accounting profession. The proposed model examines the contribution of ethical leadership behavior in the evaluation of the effectiveness of a leader. (Avolio & Gardner, 2005; Brown & Treviño, 2006; Brown et al., 2005) while also considering the potential moderating influences of subordinate expectations for ethical leadership and the perceived ethical climate of the organization. Analysis of these moderating variables and the context in which leaders and subordinates are

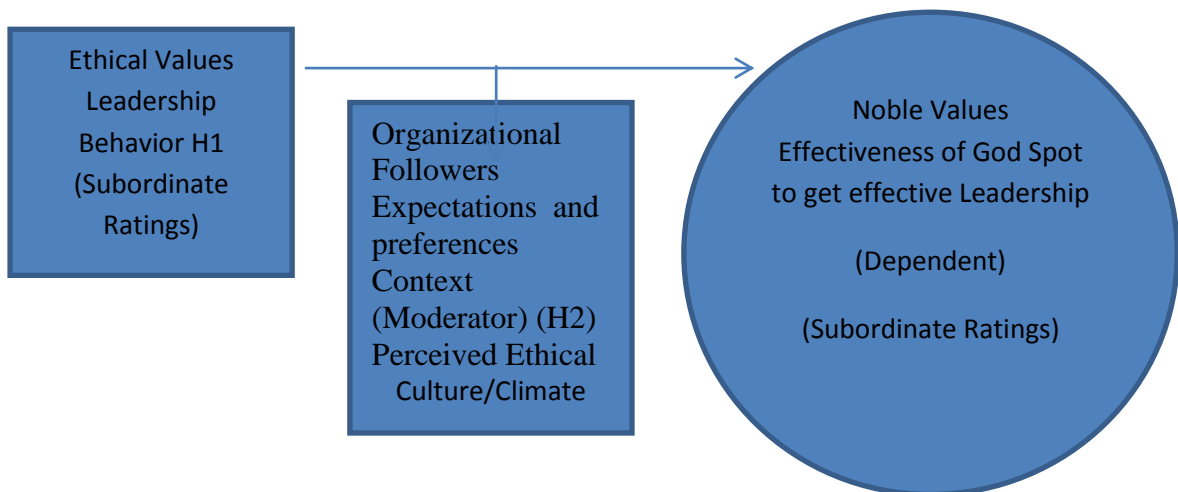
submersed are essential to understand the impact of ethical values leadership and the true effective Nobel Values of God Spot to create antecedents of effective leadership. (De Meuse, Dai, & Hallenbeck, 2010; Lord & Maher, 1993; Norton, 2010; Yukl, 2010; Yukl & Mahsud, 2010). This multifaceted model is presented in Fig. 1.

The model is adaption from accounting literature, but the writer has found the other concepts to create new things to contribut the leadership effectiveness from the Nobel Values effectiveness of God Spot.

**Hypotheses**

Based on variable relationships in the multifaceted model of Nobel Values effectiveness of God Spot to seek te leader effectiveness, two research questions are presented for consideration in this study:

1. In a univariate model, to what extent does ethical value leadership predict Noble values Effectiveness of God Spot?
2. Do the organizational follower expectations and preferences for ethical behaviors and the perceived ethical climate of the organization moderate the relationship between ethical values leadership behavior and Noble Values Effectiveness of God Spot?



**Survey Method**

**Data Collection Procedures**

To test the hypotheses, data were collected to (a) measure the ethical values leadership behaviors in a leader; (b) measure the transformational leadership behaviors in a leader after practicing the Asma Ul Husna Characters; (c) evaluate other control variables, including the number of years the subordinate has worked for the leader, the number of years subject has worked for the organization, and the subordinate’s gender; (d) assess the subordinate’s evaluation of noble values effectiveness of God Spot to get the effective leadership; (e) assess the superior’s evaluation of of noble values effectiveness of God Spot to get the effective leadership; and (f) examine if the follower’s expectations of ethical leadership, and an organizational culture had a moderating influence. Detailed procedures were as follows.

**Sample**

The data were collected from individuals who work for a large regional certified public accounting firm in Jakarta and Lampung, Indonesia. The majority of the professionals are from public accounting firms in the region. It provides the calculation for the sample. The

actual sample size was determined from the number participants will be fulfilled minimum 100 Participants using PLS models analysis.

***Online Questionnaire***

The investigation utilized online questionnaires to collect data from subjects. The subjects were asked to evaluate a specific direct supervisor or leader of their organization. They were asked to respond to all questions describing the attributes of the focal leader. An email will be sent to each individual within each organization that explained the survey, encouraged participation, assigned a specific leader to be evaluated, and provided a link to the online survey.

***Participation Request***

The individuals were directly asked if they would be willing to participate. Subjects were informed that answers would be confidential and anonymous; the questionnaire would be using online and tabulated by an independent third party. The survey will be ensured that no one responded twice

## CORPORATE SOCIAL RESPONSIBILITY MOTIVES : PATH IN CREATING SOCIAL AND BUSINESS PERFORMANCE

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### Abstract

Various forms of CSR activities will deliver different values for different parties associated with those CSR activities, because has perceived that it was driven by different motives. This empirical study examines the role of health CSR activities–CSR activities concerning health and well-being of mothers and children–in creating social and business performance. The survey conducted in five locations in Indonesia, using 450 respondents who are the customers of three companies-as object of research- that operate in Indonesia. Using multiple regression analysis, the result shows that different motivations will be generated from CSR activities that had been conducted by three brands, and has different path to influence social and business performance.

**JEL Classifications:** M00

**Keywords:** *Corporate Social Responsibility, CSR's motives, Brand Attitude, Children Quality of Life, Customer Loyalty.*

### Introduction

The advancement of technology and improvement in economic conditions affect the quality of life and drive the speed of changing patterns of consumption, which in turn will have impacts on the environment. Companies are demanded to emphasize the importance of evaluating performance through the parameters of economic prosperity, environmental quality, and welfare of the community, known as the People-Planet-Profit. The implication of ethical responsibilities is that companies must operate according to the high standards, norms, and expectation of their stakeholders.

Their responses by doing philanthropic activities to show that businesses are-in fact-are form of good corporate citizenship. Firms should act in socially responsible ways and embrace Corporate Social Responsibilities (CSR) as a key component of their overall strategy (Kotler and Lee, 2005). In the past two decades, corporate social responsibility (CSR) has emerged as an important construct in both academic literature and business practices (Fatma and Rahman, 2015)

Corporate Social Responsibilities (CSR) activities have the potential needed to create a strong bond between companies and their stakeholders, including customers and society (Peloza and Shang, 2011). Barnett (2007) stated that the ability of CSR activities to create values for companies depend on their ability to create a positive relationship with the companies' stakeholders. Not only that CSR activities can create profits, they also have impacts on social and environmental issues (Peloza dan Shang, 2011) CSR and the issue of sustainability are the two common themes repeatedly used in the discussion of economic contributions, social, environment, and the consequences of business activities (Torugsa, O'Donohue, dan Hecker, 2013).

The different forms of CSR activities will result different values for all interested parties that involved. These CSR activities have different impact on companies' profits, even to the value of those companies (Malik, 2015). Liu, Wong, Shi, Chu, and Brock (2014) have stated that three different forms of CSR activities will improve perceptions on the quality of a brand, which in turn will make the brand more preferable. Some researchers have also shown that CSR activities have impact on consumers' behavior (Maignan and Ferrel, 2004; Luo and Bhattacharya, 2006, Du, Bhattacharya, and Sen, 2007). CSR will build an image of a company, which in turn will improve the customers' loyalty (Plewa, Conduit, Quester, and Johnson, 2015). CSR activities are not only social activities which will burden companies' budget. Satisfied and loyal consumers are intangible assets that will produce income in the future. Therefore, CSR activities are social activities which can also be an investment for the company.

The main objective of CSR activities is to maximize benefits for the social welfare of societies, which also shows the companies' responsibility to the effects of business activities on consumers, employees, shareholders, and the rest of the society in which the companies operate. (Narwal and Singh, 2013). Companies must engage in CSR activities to avoid the negative image and mistrust from stakeholders.

Previous research in Indonesia have shown that CSR activities of Pertamina, Toyota, Sampoerna, Lifebuoy, and Aqua-Danone affected the quality of life of the recipient society, and also the customers' behavior. (Balqiah, Setyowardhani and Khairani, 2011). Another research has shown that there is a positive, significant relationship between CSR motives and children's quality of life (Balqiah, Setyowardhani, Daryanti, Mukhtar, and Khairani, 2012), and society's quality of life (Balqiah, Astuti & Yuliati, 2013) These researches have proven the impact of CSR activities on society and less fortunate children, who are also stakeholders of a company.

To continue previous researches, this research is conducted by choosing companies which conducted some CSR activities and has committed in building a better quality of life for society for several years. Authors choose CSR activities directed at children's health, because children as future generation, and future customers. The purpose of this study is to identify what is the customer perception toward CSR motives, and how it could influence the quality of life (represent social performance), and attitude toward brand (as business performance), further increase customer loyalty (as business performance) in a competitive market situation.

In the next section, this paper will explain about some construct and literature review as foundation to develop a conceptual framework. Further, it discusses the methodology adopted in this study and discussion of result followed by the conclusion and, finally, a discussion on future research and research implications.

## **Literature Review**

### **A. Corporate Social Responsibility**

According to Vidaver-Cohen and Brønn (2015), Corporate responsibilities involve three principal components: conducting business transactions in a sincere and transparent fashion, considering the welfare of all organizational constituents in managerial decisions, and seeking to exert a positive impact on society and the environment beyond minimal requirements of the law Maignan and Ferrell (2004) have shown the importance for a company to expand the scope of their social contributions to stakeholders other than customers through various social initiatives. Some of a company's stakeholders are directly involved in production activities, such as employees and managers, and some other are outside the

scope of production, such as investors and partners. Other stakeholders are the parties outside the companies that become involved with the company or various reasons. The examples of this type of stakeholders are customers and local communities.

Kotler and Lee (2005) defined CSR as the commitment to improve the community well-being through the chosen business activities which contributes companies' resources. The companies' social initiatives can be seen from the companies' main activities to support social causes and to fulfill the commitment to do CSR. There are various forms of CSR activities that companies can choose from. The types of this social initiative, according to the two authors are:

- a. Cause Promotions: Companies provide funds or other resources to increase awareness and concerns on a social issue or to support fundraisings, participations and mobilization of volunteers for that particular cause.
- b. Cause-Related Marketing: Companies commit to contribute or donate a portion of their revenues for a particular cause based on product sales.
- c. Corporate Social Marketing: Companies support fundraisings or start a campaign to promote changes in behavior to improve the public health, safety, environment, or well-being in general.
- d. Corporate Philanthropy: Companies make direct contribution to charities or special causes in the forms of grants, donations or services.
- e. Community Volunteering: Companies support and encourage their employees, intermediaries or other partners to voluntarily donate their time to support social or community organizations and activities.
- f. Socially Responsible Business Practices: Companies adopt business practices and make special investments to support social causes in order to improve community well-being and to protect environment.

## **B. CSR Motives**

Many CSR activities are driven directly or indirectly by stakeholders (Kießling, Isaksson, and Yasar, 2015). Various forms of CSR activities will deliver different values for different parties associated with those CSR activities. CSR activities will have impacts on corporate profits and the value of a firm (Malik, 2015; Gonzalez-Rodriguez, Diaz-Fernandez, and Simonetti, 2015).

Different individuals and different stakeholders may perceive CSR practice differently (Story and Neves, 2014). Individuals use context and environment to make attributions concerning the CSR motives. Companies that perform many activities related to CSR have some background derived from different strategies, such as reactive or proactive strategy (Groza, Pronschinske, and Walker, 2011). A reactive strategy is implemented in an effort to respond or neutralize negative issues related to the company, whereas a proactive strategy is implemented before the emergence of these negative issues. The reasons for selecting a CSR strategy, of course, will give different effects on the formation of consumer attitudes towards CSR activities, brands and companies doing CSR. A research by Groza *et al* (2011) has shown that a proactive strategy of CSR generates more positive attitude compared to a reactive strategy. Furthermore, this positive attitude can encourage higher purchase intentions of the target customers and increase the loyalty of existing customers.

According to Ellen, Webb, and Mohr (2006), there are four motives which becomes the reason to carry out CSR activities. The first factor is the value-driven attributions. These attributions produce the motive to care about the cause of CSR activities. The second factor is the stakeholder-driven attributions. These attributions reflect responses to the expectations of



different stakeholders. The third factor is the egoistic attributions, which bring the firms' participations to more prominent self-centered reasons (e.g., taking advantage of the cause). The fourth factor, strategic attributions that relate the firms' participation to self-centered goals reflecting typical business objectives (e.g., making a profit). Egoistic-driven motives deal with exploiting the cause rather than helping it. Strategic-driven motives support the executives in attaining business goals (e.g., increase market share, create positive impressions). Stakeholder-driven motives are related to the support of social causes solely because of the pressures from stakeholders. Finally, values-driven motives are related to benevolence-motivated giving (Vlachos, Tsamakos, Vrechopoulos, and Avramidis, 2009). Executives may contribute to CSR for various reasons. CSR activities are driven by two main motives of the executives namely extrinsic and intrinsic motives (Graafland and Schouten, 2012). Extrinsic motives are the financial motives, in which CSR must contribute to the long term financial performance of the company. Intrinsic motives are the non-financial ones, such as managers' personal values and beliefs that can be an important motivating factor for CSR, particularly in Small and Medium Enterprises (SMEs) or even in larger companies. The other intrinsic motive is altruism. Executives may contribute to CSR because they enjoy helping others or want to contribute to the others' prosperity.

### ***C. Quality of Life***

Jozefiak, Larsson, Wichstrøm, Mattejat, and Ravens-Sieberer (2008) defined quality of life as a subjective assessment related to well-being in terms of physical and mental health, self-esteem, perception of personal activities (playing or hobby), and perceived connection with friends and family as well as school. One instrument measuring the children quality of life is KIDSCREEN, which was based on the definition of quality of life as a multidimensional measure that includes physical, emotional, mental, social, and behavioral components related to well-being and function, as perceived by children or other individuals (Ravens-Sieberer, Herdman, Devine, Otto, Bullinger, Rose, and Klasen, 2014). KIDSCREEN dimensions consist of physical well-being, psychological well-being, moods and emotions, self-perception, autonomy, parent relations and home life, social support and peers, school environment, social acceptance (bullying), and financial resources.

The corporate social responsibility supports the belief that businesses can work together with governments and other stakeholders to promote a better life. CSR is the commitment of businesses to contribute to sustainable economic development, to work with employees, their families and the local community, and to improve the overall quality of their lives (World Business Council for Sustainability Development, 2004). CSR activity should be directly related to the provision and delivery of products that minimize negative impacts for consumers. CSR may be conducted with the purpose of improving the lives of the public at large, who is also one of the stakeholders of the company.

### ***D. Brand Attitude***

Consumers' attitude towards brands is the consumers' way to attach the brand in their memory that affects their buying behavior (Low and Lamb, 2000). This attitude is significant in marketing because it will form a perception in consumer behavior.

Attitude toward brand in multi attribute model is a function of some relevant attributes and benefits that describes the functional and symbolic benefit of one brand (Keller, 2008). Functional benefit of a brand describes the intrinsic advantage of product or service, while the symbolic benefit describes the extrinsic advantage of a product and relates to the social

actualization needs. Keller (2008) stated that the symbolic benefit is relevant to symbolic products.

### **E. Customer Loyalty**

Customers have varying levels of loyalty to the brand, the store, and the company (Kotler and Keller, 2011). Loyalty is a commitment to buy back or re-subscribe to the preferred product or service in the future although it may be influenced by situational factors and marketing efforts which lead to switching behavior (Oliver in Kotler and Keller, 2011). Customer loyalty is defined as " a deeply held commitment to rebuy or repurchase a preferred product/service consistently in the future, thereby causing repetitive same-brand-set purchasing, despite situational influences and marketing effort having the potential to cause switching behavior " (Oliver, 1999, p. 34)

Dick and Basu (1994) concluded that loyalty is associated with behavior, which is not enough to explain how and why the brand loyalty is developed. In the concept of loyalty, Dick and Basu (1994) also suggested to consider the attitudes and conditions that direct consumers to the buying behavior. One of the loyalty consequences is word of mouth, which is defined as the willingness of consumers to communicate their product experiences to other. Reich held (1996) in Gupta and Lehmann (2005) stated that the more customers have relations with company, the more profit that company will get.

### **Methodology**

#### **Research Model**

CSR initiatives towards society lead to the creation of added value not only for the society but also for the company. These initiatives reflect a brand personality that is in line with altruistic values, therefore might resulted in the connections and identification states with the customers (Sen, Bhattacharya, & Korschun, 2006). Customers are known to specially notice the more tangible aspects of companies that might influence their buying decisions directly, such as quality, innovation, compliance to standards, guarantees and other information provided about the product (Maignan and Ferrell, 2004). As a result, customers usually respond more positively to customer-centric initiatives than to other types of the CSR motives.

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Maignan and Ferrell (2004) also presented a theoretical framework that demonstrates how important it is for companies to expand the contribution of their social activities not only to customers but also to other stakeholders through various social initiatives. Some of the stakeholders are directly related to the production activities of the company (e.g. the employees and managers), and some of the stakeholders are indirectly related and only

supporting some activities of the company (e.g. investors and partners). Other stakeholders are outside parties which became involved with a company for various reasons (e.g. customers, regulators, and local residents). The local residents can be actively supporting the CSR activities of the company or they may benefit directly from the CSR activities.

Companies use CSR activities to build and strengthen the relationship with their multiple stakeholders, such as consumers, suppliers, competitors, investors, etc (Raghubir, Roberts, Lemon, and Winer, 2010). When CSR activities target society, the goal is usually to improve education, health, welfare, happiness, and stability of the society. The success of such activities can be measured by using the Quality of Life indicators, namely economy, social, health, subjective assessment on happiness and life satisfaction (Sirgy, Yu, Lee, Wei, Huang, 2012).

The conceptual model of this research is intended to evaluate the relationship between health CSR and customers' loyalty and also perceived quality of life. This model is built through an extensive literature study. The effects of CSR on general quality of life is in accordance with previous studies (Sirgy and Lee, 1996; Wilkie and Moore, 1999; Sen, *et al*, 2006; Castaldo, Perrini, Misani, dan Tencati, 2009; Raghubir *et al*, 2010; Balqiah *et. al*, 2011, 2012). The main difference between previous studies and this research is the constructs of attitude towards brand, and the type of CSR activities.

Consumers' perceptions of companies' motives for engaging in CSR influence their evaluation and responsiveness to CSR activities (Becker-Olsen, Cudmore, & Hill, 2006; Ellen *et al*, 2006; Vlachos *et al*, 2009). Consumers distinguished between others-centred, self-centred, and win-win motives. Most consumers assumed companies have mixed motives for their CSR activities. The research model is depicted in Figure 1.

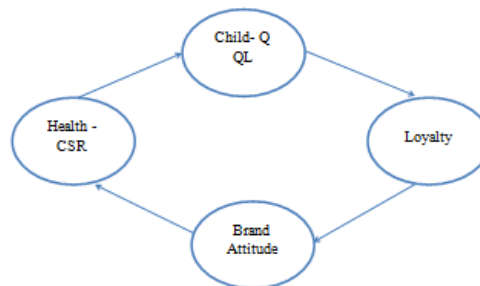


Figure 1: Research Model

## Hypothesis

Marin, Cuetas, and Roman (2016) explained about the possibility that CSR activities will create positive or negative customer's perception toward the company. Becker-Olsen *et al* (2006) also had some arguments that there are various motivations of consumer responses to CSR actions. When motivations are considered to be profit related, attitudes toward the firm are likely to be negative; however, when motivations are considered socially motivated or society/community focused, attitudes are likely to be enhanced.

Ellen *et al* (2006), also identify four different motivations that had different impact on customer's responds. Egoistic motives related to exploiting the cause rather than helping it, strategic motives that support the attainment of business while benefiting the cause, stakeholder-driven motives related to supporting social causes solely because of pressure from stakeholders, and values-driven motives related to benevolence-motivated giving. When motivations are considered firm serving or profit-related, attitudes toward firms are likely to

diminish; when motivations are considered socially motivated, attitudes toward firms are likely to be enhanced (Becker-Olsen *et al.*, 2006).

In this paper, the author investigates specifically CSR activities involve with children's health. When customers perceived the CSR activities were implemented to focus on society and to give to society, especially children, it will create more positive attitude to the brand. Otherwise, if customer perceived those activities are only concerned about business aspects, such as sales, and profit, it will create negative attitude.

#### Hypothesis 1: CSR motives will influence Brand Attitude

According to Sheehy (2014), there is a perception from political participants that mention CSR as a means to advance particular preferences with respect to corporate and economic policy of distinct political philosophies. On the other side, customers increasingly expect business to consider human rights in their employment practices and demonstrate stewardship toward the natural environment, therefore companies around the globe suggests that managers no longer see social engagement as ancillary to economic performance but rather as an integral component of corporate strategy on which they will be judged by their constituents (Bronn and Vidaver-Cohen, 2009). Social Initiative in the business context is defined here as any program, practice, or policy undertaken by a business firm to benefit society. However, customers distinguished between other centered, self-centered, and win-win motives, and most customers assume companies have mixed motives for their CSR activities (Öberseder, Schlegelmilch, and Murphy, 2013). If CSR's motives are sincere on giving back to society by providing social projects for people in need (e.g. children as vulnerable stakeholder), it could increase their quality of life, vice versa.

#### Hypothesis 2: CSR motives will influence Child's Quality of Life

Concerning the four-type of CSR activities of the firm (Carroll, 1991, 1999), there must be social activities that focus on supporting core business activities in relation to all stakeholders. Two-sided coin of CSR activities, one side as social activities that "give" to society, and the other side is to create competitive advantage (Gupta, 2002; Hult, 2011; Hunt, 2011; Huang and Rust, 2011). Bronn and Vidaver-Cohen (2009) discuss about instrumental motives of CSR which revolve fundamentally around managerial beliefs that engaging in social initiatives can have a direct impact on profitability. It can be concluded that the performance of the company in social activity will have an impact on the performance of the company in business. Creating a good quality of life for children who are the target of CSR activities will surely build a positive attitude of customers towards the brand. Based on this reasoning, we propose the following:

#### Hypothesis 3: Child's Quality of Life positively influence Brand Attitude

Corporate Social Responsibility (CSR) creates strong relationships to the stakeholder, enhance profit, and also has impact to social and environment issues (Peloza dan Shang, 2011). Social exchange is based on the expectation of trust and reciprocation, as the exact nature of the return and the time frame is left unspecified (Lii and Lee, 2012). When company engages in a CSR activity, consumers may perceive the company to be altruistic, which lead to more favorable attitudinal and behavioral evaluation of the same company. We propose here that these results shed some light on this issue of when brand attitude, that

reflect the business capabilities, and child quality of life that reflect social initiative, have a joint impact to the customer perception and loyalty. We expect that perception about a value of company offering (brand) and quality of life will positively influence customer's loyalty to the company's products. Based on this reasoning, we propose the following:

Hypothesis 4: Child's Quality of Life positively influence Customer Loyalty

Hypothesis 5: Brand Attitude positively influence Customer Loyalty

### **Data**

Data were collected by cross-sectional survey at 5 area/cities: Makassar and Kupang (representing eastern part of Indonesia) and Jabodetabek, Padang, and Surabaya (representing western part of Indonesia), using self-administered questionnaires from 450 respondents (30 respondents from each brand and area) that were selected by purposive sampling. The objects are AQUA-DANONE (mineral water), PERTAMINA (lubricant product), FRISIAN FLAG INDONESIA (milk). The background to study these firms are the heterogeneity of health CSR activities that they do to support society, (eg. AQUA supply clean water for children; PERTAMINA help children and mothers' healthy lifestyle; and FRISIAN FLAG induce children to drink milk and lead a healthy lifestyle). These firms are big and well-known companies, and have done continuous health CSR activities during the past years.

Questionnaire development is done by conducting a study of the literature and previous studies associated with each construct. The questionnaire consists of 33 questions with six points liker scale regarding five research constructs: 16 questions for Health CSR, 8 questions for Quality of Life, 3 questions for Brand Attitude, and 6 questions for Loyalty. Before the main survey, authors conducted a pretest using 30 respondents to ensure reliability and validity of the constructs. The pretest was done to refine the questionnaires by reducing response error. Furthermore, after 450 questionnaires were collected, a factor analysis and multiple regression analysis with SPSS 22 were used to test the hypotheses at  $\alpha=5\%$ .

### **Result and Discussion**

The sample included 45.1 per cent male and 54.9 per cent female, 55.1 per cent customers in the sample were under 25 years, 29.6 per cent between 25 and 39 years and 13.3 per cent over 40 years. Regarding education, 68.3 per cent lower do not have bachelor degree, 31.7 per cent bachelor and higher.

#### **A. CSR motives**

There are three (3) dimensions of Health-CSR exploratory factor analysis that represent three (3) motives of companies to conduct CSR activities, as perceived by their customers (see Table 1). The three motives are business, moral, and stakeholder motives. The name of each motives (factors) represented the items in each factors. This research shows that business and stakeholder orientations are negative, and moral is positive motive. Business motive concern financial benefit, that is economic performance. Stakeholder motive is reactive to stakeholder expectation, that is strategic consideration. Business and stakeholder motives represent strategic and egoistic motives that are perceived by customers as negative motives. This is similar with the perception of internal stakeholders who assumed that companies only executed CSR activities because they are forced by their employees and shareholders. This is not perceived as sincere and considered as negative motives. This motive might be perceived as institutional motives for social initiatives, suggesting that companies engage in social initiatives primarily due to institutional pressures

(Bronn and Vidaver-Cohen, 2009). On the other side, moral obligation is perceived as a positive motive, because this motive shows that companies has concerns about social aspects of the business.

**Table 1: Loading Factor of CSR's motives**

Variables	Factors		
	1	2	3
Moral responsibilities		.65	
Care to society		.78	
Positive benefit beliefs		.76	
It easy for customers involved in		.65	
Balancing take and give to society		.51	
Meet the customer's expectation			.60
Respond to employee's expectation			.84
Respond to shareholder's expectation			.77
Respond to society's expectation			.61
Get benefit through collaboration	.70		
Support business activities	.74		
Minimize income tax	.67		
Publicity'	.77		
Get more customers	.87		
Retain customers	.85		
Increase profit	.89		
<b>CSR's MOTIVES</b>	<b>Business</b>	<b>Moral</b>	<b>Stakeholder</b>

**B. The Effect of CSR on Brand Attitude**

There are difference direction how CSR motives could influence Brand attitude. The result in table 2 (Model 1).

**Table 2: Mutiple Regression Analysis**

Indpendent Variables	Model 1 : Brand Attitude as Dependent	Model 2 : Child-QOL as Dependent	Model 3 : Loyalty as Dependent
CSR Moral	0.378*	0.351*	
CSR Stakeholder	0.056	0.111*	
CSR Business	-0.115*	-0.053	
Child-QOL	0.165*		0.648*
Brand Attitude			0.262*
Rsquare	<b>0.185</b>	<b>0.108</b>	<b>0.395</b>

Moral motives that represented positive motive increase Brand Attitude, while Business motives that represented negative motive decrease Brand Attitude. This result in accordance with Ellen *et al* (2006) that mention positive motives will positively impact on customer

perception, and negative motive can decrease it. Refer to Bronn dan Vidaver-Cohen (2008), negative motives as an instrumental motives, the reason why company conducted social initiatives because it concern to business performance, such as brand attitude. It can be seen on table 3, the highest mean of Moral Motives is Pertamina (4.79), and the highest mean of Stakeholder and Business Motives are Aqua (4.17 and 3.82), while the highest mean of Brand Attitude is Aqua (5.03). All companies have high mean Brand Attitude (larger than 3). Despite both motives has impact on Brand Attitude, Moral Motives has stronger impact on Brand Attitude than Business Motives. Therefore Hypothesis 1 is supported.

**Table 3: Mean of Constructs in Each Location**

Dimensiona (Motives)	Firm	Location					TOTAL
		Jabodetabek	Padang	Surabaya	Makasar	Kupang	
CSR_Moral	Pertamina	4.75	4.69	4.72	4.53	<b>5.25</b>	<b>4.79</b>
	Frisian Flag	4.45	4.81	<b>4.77</b>	4.46	4.82	4.66
	Aqua	<b>4.95</b>	<b>4.83</b>	4.59	<b>4.56</b>	4.89	4.77
CSR_Stakeholder	Pertamina	4.21	3.67	<b>4.16</b>	<b>4.41</b>	4.08	4.11
	Frisian Flag	3.66	<b>3.87</b>	4.06	4.12	3.87	3.91
	Aqua	<b>4.64</b>	3.78	3.88	4.03	<b>4.48</b>	<b>4.17</b>
CSR_Business	Pertamina	4.06	3.46	3.98	<b>3.79</b>	3.53	3.76
	Frisian Flag	4.38	<b>3.75</b>	<b>4.32</b>	2.77	<b>3.57</b>	3.76
	Aqua	<b>4.43</b>	3.72	4.11	2.79	4.06	<b>3.82</b>
Brand Attitude	Pertamina	4.61	4.62	4.69	4.24	5.20	4.67
	Frisian Flag	4.49	4.82	4.58	<b>5.08</b>	4.97	4.79
	Aqua	<b>5.06</b>	<b>5.03</b>	4.70	4.98	<b>5.40</b>	<b>5.03</b>
Child-QOL	Pertamina	4.18	4.30	4.20	4.11	<b>4.48</b>	4.25
	Frisian Flag	4.21	4.70	4.45	<b>4.85</b>	4.54	<b>4.55</b>
	Aqua	4.22	4.42	4.03	4.50	<b>4.66</b>	4.37
Loyalty	Pertamina	4.18	4.36	4.12	3.88	4.77	4.26
	Frisian Flag	3.66	<b>4.56</b>	3.69	<b>4.14</b>	4.48	4.11
	Aqua	<b>4.72</b>	4.42	<b>4.16</b>	3.91	<b>5.35</b>	<b>4.51</b>

This result confirm Öberseder, Schlegelmilch, and Murphy (2013), CSR is multifaceted construct. It has more than one customer's perception toward CSR activities. It this result, there 3 dimensions of CSR that reflected 3 motives which is combination of positive and negative motives. Further, Customers' perceptions of the underlying motivations for the act may drive their evaluations of the firm and impact beliefs, attitudes, and intentions (Becker-Olsen, *et.al*, 2006). In terms of positive motives in the attribution process of consumers' reactions to CSR action, consumers are likely to accept attributions because they consider companies to be acting with sincere and benevolent intentions, care, and tend to view CSR activities as derived from companies' moral behaviour (Vlachos *et al*, 2009). Corporate social responsibility can bolster perceptions of product performance and that this effect is more pronounced when consumers believe that a company's motivation for engaging in prosaically behavior is benevolence rather than self-interest (Chervev & Blair, 2015).

**C. The Effect of CSR on Child-Quality of Life**

Two type of CSR motives could influence Child-Quality of Life positively (Table 2, Model 2). Moral and Stakeholder Motives increase Brand Attitude. Despite CSR activities is perceived a response to stakeholder expectation, this action still could increase the child-

quality of life. CSR support the belief that businesses can work together with government and other stakeholders to promote a better life, since CSR itself is basically the commitment of a business company to contribute to sustainable economic developments by working with employees and local communities to improve their overall quality of life (World Business Council for Sustainability Development, 2004). Therefore, stakeholder motives-negative and reaction motives-has contribute to society. It could be, there is belief this activities still has positive impact to society. Despite both motives has impact on Brand Attitude, Moral Motives has stronger impact on Child-Quality of Life than Stakeholder Motives. Therefore Hypothesis 2 is supported.

Intrinsic CSR practices can be described as practices perceived as sincere (Story and Neves, 2005), organizations engage in these practices because they care (Vlachos *et al.*2013). In this research, if a company conducted CSR-concerning health of children-respondents (customers) truly believe it driven by caring to society. This attribution is related to the moral motives of the firm, in which customers trust the ‘benevolent’ of the company, and CSR activities could improve quality of life for children. Extrinsic CSR practices are perceived to be conducted because there is intention of getting something back or to avoid some kind of punishment from the community in general (Vlachos *et al.* 2013). In this research, CSR activities has driven by stakeholder because company react to stakeholder expectation. This does not mean that organizational practices are ineffective or not good for the community, but that stakeholders might perceive that the organization is being strategic in its investment (Story and Naves, 2005). In this case, stakeholder motives could be interpreted has both intrinsic and extrinsic motives. Refer to Amaeshi and Adi (2007), CSR is a complicated construct that has been tied into a duality of either/or economic maximization and benevolent practices.

### **The Effect of Brand Attitude and Child-Quality of Life on Loyalty**

Both Child-Quality of Life and Brand Attitude could influence Loyalty positively (Table 2, Model 1 and Model 3). Child-Quality of Life has direct and indirect effect to build Loyalty. This result indicated that social performance can increase business performance, because Child-Quality of Life (social performance), has direct positive impact on Brand Attitude and Loyalty (business performance) and also has indirect effect to Loyalty through Brand Attitude (business performance). Therefore Hypothesis 3, 4, and 5 are supported.

This result confirms that instrumental motives revolve fundamentally around managerial beliefs that engaging in social initiatives can have a direct impact on profitability – improving revenue or protecting existing profit levels (Bronn and Vidaver-Cohen, 2009). In this research, brand attitude and customer loyalty, as a representation of business performance, can enhance revenue and profitability. Different path in evaluating the CSR activities effectiveness indicate that different CSR’s motives will have different impact on attitude and consumer behavior (Bronn and Vidaver-Cohen, 2008; Becker-Olsen, *et al*, 2006; Mari´n, *et al*, 2015). Being socially responsible is important, but firms must also make a conscious decision about the ratio of doing good thing to strategic benefits in their CSR activities. The sustainability concepts direct the need to harmonize the social aspect and the business aspect of the company in creating value.

### **Conclusion**

The stakeholders might have different perceptions of the reasons why a company is engaged in CSR activities (Ellen *et al*, 2006; Bronn and Vidaver-Cohen, 2009; Feldman and Vasquez-Parraga, 2013; Cantrell *et al* 2014). The results of this study is consistent with the findings



that Health CSR activities have positive and negative motives as perceived by customers, namely Moral, Stakeholder, and Business Motives. Each motives have different impact on social performance and business performance that indicate there is still obtain strategic objective, despite doing social initiatives. Companies that fulfill their responsibilities by carrying out health CSR activities (consideration social) will be able to improve customer perceptions on the quality of life in places where the company conducts its CSR activity (consideration people). This in turn will impact positively on brand attitude and customer loyalty (business considerations).

In this research, only focus on philanthropy activities concerning health of children, future research could investigate the effectiveness of other type of CSR activities or combination some activities . Regarding of Quality of Life, future research should consider the difference of quality of life in different location, and refine the measurement of child-quality of life.

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## THE MODEL OF CORPORATE SOCIAL RESPONSIBILITY IMAGE IN BUILDING BRAND EQUITY

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### Abstract.

This research aims to develop the model of Corporate Social Responsibility (CSR) image in building brand equity, as empirical support for the model proposed by Chahal and Sharma (2006) and Hoeffler and Keller (2002). Data of 564 individually potential consumers were collected using on-line and off-line surveys and analyzed using Two Step Approach of SEM (Structural Equation Modeling). The main finding is that while CSR communication has the greatest role in creating positive CSR image and brand equity, compared to CSR dimensions and company credibility. On the other hand, economic responsibility has no significant effect both on CSR image and brand equity. Another important finding is that CSR image acts as a mediating variable. It can be concluded that CSR communication is a strategic tool to eliminate the stakeholders' skepticism toward the CSR activity in building the strong brand equity value.

### Introduction

CSR currently becomes a part of business strategies to gain competitive advantage (Drumwright, 1996; Du et al., 2007; Pérez, 2009; Alcaniz et al., 2010), so many Indonesia public listing companies disclose their CSR activities during 2006-2008 (Fairuzza, 2011). However, stakeholders especially communities and consumers skeptically perceive it as the legal obligations fulfillment and the artificial activity. The activity does not provide either social benefits or empower the stakeholders' life quality and prosperity. It concerns only to the managements' subjective desire and economic benefits but not to the stakeholder's needs (Hadi, 2011; Ardana, 2008; Ambadar, 2008). Speed and Thompson (2000); Webb and Mohr (1998) also state that the CSR practice is a selfish activity of the company (Alcaniz et al., 2010).

Those sceptical thinkings rise to the negative CSR image (Pomering and Johnson idea, 2009), even though the company has a good corporate credibility (Alcaniz et al., 2010). Meanwhile, Hoeffler and Keller (2002); Ricks Jr. (2005); Chahal and Sharma (2006); Poolthong and Mandhachitara (2009); Pomering and Dolnicar (2009); Perez (2009), Lai et al. (2010). On the other side, Dawkins and Lewis (2003) stated that the CSR practice should be implemented to anticipate the declining of the company credibility, such as CSR implementation in Indonesia. Most of CSR practice by large, credible, trustworthy public listed Indonesian companies is conducted to maintain the company credibility in order to be credible and knowledgeable. This is in line with Erdem and Swait idea (1998; 2004) that the expertise and trustworthiness credibility of the company effects on CSR image. Contrary, western companies do not pay attention to the company's credibility when implementing the CSR activity. The most important for them is how to win the competition as a business strategy (Kotler and Lee, 2005, p. 9; Du et al., 2010a).

On the other hand, Pomering and Dolnicar (2009) and Hedberg and Malmborg (2003) suggested that company should build strong communication through the activity of CSR communication in order to boost the positive CSR image. Meanwhile, Melo and Galan (2011) reveal that the positive CSR image can build strong brand equity.

Furthermore, the research finding of Ricks Jr. (2005) showed that the activity of proactive philanthropy as part of a philanthropic strategy type has an effect on the company's positive brand association, but this effect does not apply to brand evaluation. This finding implies that the economic and ethical-legal responsibility of CSR dimension (Carroll, 1979, 1991, 1999, 2006) are required to investigate the effect of the CSR image on brand equity.

In addition, the result of empirical test by Lai et al. (2010) to prove Hoeffler and Keller (2002); Chahal and Sharma thought (2006), is that the buyer's perception on CSR activity has a positive effect on brand equity. However, the specific research about the effect of various CSR dimensions on a negative or positive CSR image in building brand equity strength has not much been done (Beckmann, 2006, p.164; Chomvilailuk and Butcher, 2010; Vaaland et al., 2008; Singh et al., 2008; Polonsky and Jevons, 2006), neither do especially by including the variable CSR communication and the company credibility. Beckmann (2007) also stated that research on consumer perception of CSR is still limited and the spectrum of CSR dimensions used is incomplete.

Therefore, this research objectives are 1) to test the effect of three-dimensional CSR from Carroll (1979, 1991, 1999, 2006) whether it is a dominant effect compared to the company credibility and CSR communication on CSR image; 2) to examine the effect of CSR dimensions and CSR communication on brand equity, whether mediated by CSR image or not.

### **Literature Review and Hypothesis**

Stakeholder theory, legitimacy theory, social contract theory, and attribution theory are implemented to test the effect of CSR dimension, company credibility, and CSR communication on CSR image in building brand equity. In particular, the first three theories have an important role to discuss about the effect of CSR dimensions (economic, ethical-legal, and philanthropic responsibility) on CSR image. Meanwhile, attribution theory plays a role mainly for arguing the effects of the CSR dimensions, CSR communication, and company credibility on CSR image and then consequentially build brand equity value.

#### **1. The effect of CSR Dimension on CSR Image**

Multidimensional concept of CSR from Carroll (1979, 1991, 1999, 2006), which was developed by Salmons et al. (2005) in economic, ethical-legal, and philanthropic responsibility, is expected to have a positive impact on CSR image (Brown and Dacin, 1997; Maignan and Ferrell, 2001; Murray and Vogel, 1997; Sen and Bhattacharya, 2001; Sen et al., 2006). Economic responsibility is the company's activities to provide economic benefits such as providing fair wages according to labor productivity. Ethical - legal responsibility is a responsible activity of the company to legally operate and run the business operations in accordance with the applicable laws and norms to avoid the dangers and losses to society. Philanthropic responsibility is a responsible activity of the company in the form of charity. Meanwhile, Brown and Dacin (1997) defines CSR image is an impression of the CSR activity. The negative CSR image will arise whenever the CSR activity is skeptically perceived by the public. The CSR activity just fulfills a legal obligation, is a cosmetic activity and does not provide social benefits.

The effect of CSR dimension on CSR image is based on stakeholder theory. In general, stakeholder theory suggests that management's decisions should adopt not only fulfill the company's profits, but also to meet the stakeholders' needs (Freeman, 1994). The company requires stakeholders to maintain the balance of business sustainability and business growth itself. If the company's CSR activity is consistent with the fulfilling of stakeholders'

needs, the positive image of CSR will be created. Stakeholders are all parties involved in the business activities of both internal and external, that directly and indirectly affect and are affected by the company activity (Luke et al., 2005 in Hadi, 2011; Clarkson, 1995; Freeman, 1984).

Satisfying the stakeholders' needs are expected to create legitimate stakeholders over the company's CSR activity. If the legitimacy of the company's CSR activity is created, the company's operations will be sustained, maintained, and safe, away from protests and anger of the stakeholders. This is consistent with legitimacy theory that the company sustainably operates within a system of norms, bounded values, and beliefs that exist in the community or other stakeholders, so that the stakeholders get satisfaction on that CSR activity (Suchman, 1995; Woodward et al., 1996). It means that if the fulfillment of stakeholders' needs are met through CSR activities, the legitimacy of stakeholders can be obtained as a vehicle for the company to put itself in the stakeholder environment, so it creates more secure corporate sustainability. This condition can create a harmonious relationship between the company and stakeholders, in accordance with the perspective of social contract theory.

Social contract theory based on Plato thought, then which was formulated by Thomas Hobbes (1588-1679), later developed by John Locke (1632-1704) in Hadi (2011, p . 96), suggests that people keep their life and environment mutually through a social contract or agreement, in order to maintain the regularity of the laws of nature and get a harmonious life. CSR activity in the perspective of social contract theory would be responded positively by stakeholders if the CSR activity is consistent with the needs of stakeholders. The positively beneficial CSR activities can erode the skeptical thinking of the stakeholders and create a harmonious interrelationship between the company implementing CSR and stakeholders. This condition is expected to create a positive CSR image. Petkus and Woodruff (1992 ) revealed that consumers as one of the stakeholders expect the companies to implement CSR activities in order to eliminate skeptical thinking over the company's operational activities that are detrimental, such as the devastation of the environment and the creation of dangerous or unsafe products for consumption, as a result of the illegal requirement. This condition allows company to implement ethical-legal responsibility. It means that ethical-legal responsibility can enhance the positive CSR image.

Philanthropic responsibility activity also has an impact on the company's CSR image and hinder skeptical thoughts or negative publicity (Ricks Jr., 2005). The stakeholders will portray a positive CSR activity if they perceive philanthropic responsibility activity could provide benefits and is an effective activity to targeted stakeholders. This is consistent with the scheme concept by Wright (1986 in Ricks Jr., 2005) that if the activities of philanthropic responsibility is seen as a scheme to eliminate the negative publicity, then everything related to CSR activities will be associated as a positive scheme, so as to create the positive CSR image.

Economic responsibility is also expected to establish a positive CSR image. Economic responsibility activity is fundamentally aimed to get the company's revenue growth or sustainable profit growth in the long run (Poolthong and Mandhachitara, 2009; Salmones et al., 2005). If the companies gain sustainable profit in the long run, it is expected to produce larger scale of its business opportunity. The larger scale of the business tends to receive a higher level of attention from the public or other stakeholders. This condition is expected to encourage companies to implement higher CSR activities (Stanwick and Stanwick, 1998). When the larger the scale of the business, the greater the opportunity for the company to invest in CSR activities in order to fulfill the needs of stakeholders in the long run, so that a

positive CSR image is created (McWilliam and Siegel, 2001). Therefore, the proposed hypothesis are:

- H1a: Economic responsibility has a positive effect on CSR image
- H1b: Ethical-legal responsibility has a positive effect on CSR image
- H1c: Philanthropic responsibility has a positive effect on CSR image

## **2. The Effect of the CSR Dimension on Brand Equity**

The CSR dimension is predicted to have an effect not only on CSR image but also on brand equity. This statement is consistent with the idea and the findings of Melo and Galan (2011); Lai et al. (2010); Chahal and Sharma (2006); Becker-Olsen and Hill (2006); Ricks Jr (2005); Salmones et al. (2005); Jones (2005); Klein and Dawar (2004); Blumenthal and Bergstrom (2003); Yan (2003); Girod and Michael (2003); Hoffler and Keller (2002); Sen and Bhattacharya (2001); Brown and Dacin (1997). They concluded that the CSR activity dimension essentially has strong relationship to build brand equity value, after the positive CSR image was created.

Specifically, Chahal and Sharma (2006) which refers to Lichtenstein's et al. idea (2004) proposed that if the CSR activity provides social benefits, CSR can create the positive CSR image and build strong brand equity, so that the CSR activity is considered as a means of competitive advantage (Aaker, 1996a, 1996b; Polonsky and Jevons, 2006). This implies that CSR image has a function as the mediating effect to intervene the effect of CSR activity dimension on brand equity.

Brand equity established as the result of co-creative interaction between company's brand and stakeholders, is a set of brand assets and liabilities linked to a brand, its name and symbol that add to or subtract from the value provided by a product or service of the firm perceived by customers (Aaker, 1991, 1992a, 1992b, 1996b). The higher co-creative interaction between the brand and the company's products or services, the more brand equity value will grow. It will bring about the positive image of the CSR activity. Then, the positive image of the CSR activity will increase the powerful value of the company's brand equity (Jones, 2005). This means that economic, ethical-legal, and philanthropic responsibility have a positive effect on brand equity. This statement is also supported by Podnar and Golob (2007), Becker-Olsen and Hill (2006); Ricks Jr. (2005); Varadarajan and Menon (1988), and consistent with attribution theory (Dean, 2003, referring to Kelley, 1973 and Kelley and Michela, 1980; Schiffman and Kanuk, 2007, p. 258). Based on attribution theory, the result of causal inference in understanding CSR activity, CSR communication, and credibility of the company, creates the positive CSR image as an outcome of a cognitive process of the stakeholders. Then, the positive CSR image attributes to strengthen the positive value of brand equity, such as in term of support and appreciation for building the committed loyalty to the company's brand. Thus, the CSR image in this research serves as an intervening variable mediating the effects of CSR activity on brand equity. Therefore, the proposed hypothesis are:

- H2a: Economic responsibility has a positive effect on brand equity, either mediated or not mediated by CSR image.
- H2b: Ethical-legal responsibility has a positive effect on brand equity, either mediated or not mediated by CSR image.
- H2c: Philanthropic responsibility has a positive effect on brand equity, either mediated or not mediated by CSR image.



### **3. The Effect of CSR Communication on CSR Image**

CSR communication is a tool to convey information CSR activities that aim to eliminate skeptical thinking over the company's CSR activities and to obtain causal inference over positive CSR activities, so that the positive CSR image is created (Du et al., 2010b; Pomeroy and Johnson, 2009; Jahdi and Acikdilli, 2009; Morsing and Schultz, 2006; Maignan et al., 1999).

Brown and Dancin (1997), Sen and Bhattacharya (2001) revealed that consumer response to the positive CSR information activity when the information is presented through the effective CSR message format. The positive response has led to the positive CSR image. This is consistent with information process theory (Miller, 1956, also cited in Tian et al., 2011). Firstly, the focused attention by stakeholders is to assess the idea of CSR message through the process of remembering information, awareness and associations. Later it forms over CSR information and then end up with interest and desire on positive CSR information, so that the positive CSR image is created. Reminding process on the idea of CSR information creating the positive CSR image is consistent with attribution theory (Sparkman Jr. and Locander (1980). Therefore, the formulated hypothesis is:

H3: CSR communication has a positive effect on CSR image.

### **4. The Effect of CSR Communication on Brand Equity**

Not only can CSR communication produce the positive image of the CSR activity, but also can strengthen the brand equity value. This statement is supported by Johnson (1984 in Cobb-Walgren et al., 1995); Aaker and Biel, 1993 in Cobb-Walgren et al. (1995); Cobb-Walgren et al. (1995); Jeong (2004); Ven (2008); Pomeroy and Dolnicar (2009); Polonsky and Jevon (2009); Hsu (2012). They said that in order to build strong brand equity value, the company should be encouraged to establish effective and intensive CSR communication. Balabanis et al. (1998) revealed that positive CSR performance relates to economic performance measured with brand equity, when the CSR activities are effectively communicated (Barwise, 1993; Keller, 1993; Aaker and Jacobson, 1994; Ambler and Barwise, 1998; Selnes, 1993; Simon and Sullivan, 1993; Lasser et al., 1995). It implies CSR image, as a mediating variable, can build the positive brand equity value.

Based on attribution theory, CSR communication could create stakeholders' commitment on sustaining CSR activity. The commitment would create the stakeholders' loyalty, in order to strengthen the brand equity value. Therefore, the hypothesis in this model is:

H4: CSR communication has a positive effect on brand equity, either mediated or not by CSR image.

### **5. The effect of Company Credibility on CSR Image**

The company credibility measured by the dimensions of trustworthiness and expertise will have a chance to make the consumer react to the positive CSR image (Alcaniz et al., 2010). The trustworthiness credibility is defined as corporate behavior that acts honestly and correctly. The expertise dimension measures the company's ability to produce and deliver the high performs of products or services (Aqueveque and Encina, 2010). If stakeholders 'perception and confidence exist caused by emotional factors over the CSR activity, the credibility of trustworthiness is a key element in determining the positive CSR image.

Goldsmith et al. (2000) revealed that the company's credibility can influence consumer reactions in assessing the company's CSR activities and is expected to shape the attitude in creating the positive CSR image. In particular, Lafferty and Goldsmith (2005); Trimble and Rifon (2006) revealed that consumers use the company's credibility as an instrument to eliminate skeptical thoughts of consumers about negative CSR activities. If they feel the CSR activities provide economic and social benefits, the positive CSR image is created. Erdem and Swait (1998, 2004) stated that the company credibility plays a role as a major determining factor in creating the positive CSR image.

In addition, the theoretical framework of the contrast effect proposed by Dean (2003) and balance theory by Heider (1958, also cited in Alcaniz et al., 2010) explains that the trustworthiness and expertise have a positive effect on the company's CSR image. In balance theory perspective, consumers will look for a balanced and harmonious set of beliefs on the brand and be motivated to reconcile unsuitable thought about the company, so that the potential scenario of the CSR perceived skeptics will be corrected by the perception of trustworthiness and expertise credibility (Basil and Herr, 2006 in Alcaniz et al., 2010). Therefore, the hypothesis of this study are formulated as follows.

H5a: The company's credibility: Trustworthiness has a positive effect on CSR image.

H5b: The company's credibility: Expertise has a positive effect on CSR image.

## **6. The Effect of CSR Image on Brand Equity**

The positive CSR image has a positive effect on the value of the company's brand equity. This statement is supported by the idea of Bronn and Vrianni (2001); Ogrizek (2002); Hoffler and Keller (2002); Blumenthal and Bergstrom (2003); Yan (2003); Girod and Michael (2003); Klein and Dawar (2004); Chahal and Sharma (2006).

Hsu (2012); Lai et al. (2010); Jones (2005); Brickley et al. (2002 in Lai et al., 2010); Varadarajan and Menon (1988); Smith and Higgins (2000) revealed that the higher expectation of stakeholders in the CSR activity is fulfilled, so that the positive CSR image is created and builds the more valuable brand equity. In particular, Hsu (2012); Chahal and Sharma (2006) revealed that the positively perceived CSR is considered as a means of competitive advantage to build the positive brand equity. This occurs corresponding to the attribution theory perspective. The CSR activity that previously is perceived positively will lead to attribute the positive CSR image as an outcome of CSR activity providing positive benefits (Vlachos et al., 2009). When the CSR image is positively created, the causal inference will be created in the form of positive commitment to the company's brand, thus brand equity building is positively created. Therefore, the formulation of the following hypothesis is

H6: CSR image has a direct positive effect on brand equity.

## **Methodology**

This research applies survey design and uses judgmental sampling method (Hair et al., 2009, p. 322; Malhotra, 2007, p. 332-335; Neuman, 2000, p. 198), with the respondents criteria, as follows 1) respondents know the CSR activities, 2) respondents know the products or services of the company which implements CSR; 3) respondents know and ever see and or are looking at CSR activities that are communicated through online and or offline media. Using 564 questionnaires as the statistical tool, as a result of non-bias response, that were collected from 638 copies of questionnaires.

The measurement using a 7 points interval scale is derived from the previous instruments. The CSR dimension measurement uses the concept of Carroll (1979, 1991, 1999, 2006), developed by Salmones et al. (2005). CSR Image refers to the instrument of Alcaniz et al. (2010). Instrument credibility adopts the instrument by Alcaniz et al. (2010) in the context of CSR activity. Brand equity instrument adopts a three-dimensional measurements of Chang and Liu (2009); Lai et al. (2010). The measurement of brand equity is considered as a single indicator measurement because of the validity test results showing the factor loading values above 0.5. Meanwhile, CSR communication measurement uses the concept of communication effectiveness (Birth et al., 2008; Boush et al., 1994), by adopting a hierarchical model of AIDA (Aware, Interest, Desire, and Action).

The validity test used face validity, convergent validity and discriminant validity (Malhotra, 2007, p. 279; Kerlinger and Lee, 2000, p. 671; Hartono, 2008, p. 63-64). The validity test results demonstrate valid, unless the item number of the philanthropic construct (PR3: sponsorship event; PR4: donation to the healthy, education, and religion activity; PR5: improving social welfare) and the brand equity item (BE5: difficulty in imagining the brand of the company's products or services). Reliability test results carried out with coefficient Cronbach's Alpha and Composite Reliability (Sekaran, 2003 in Hartono, 2008, p 36; Hair et al., 2006, p. 137; Hartono, 2008, p. 52), show reliable items and consistent with the valid item's measurements with the values above 0.70.

Structural Equation Modeling (SEM)-based covariance model with AMOS 4:01 application is used to test the hypothesis with a single composite indicator method. The sample size fulfills a qualified sample size (Hair et al., 2006, p. 744; 2010, p. 662) and the normality of the data based on the value of Mahalanobis Distance statistic (Hair et al., 2006, p. 77) also meets the requirement of SEM.

## **Results**

The model meets the recommended value index of the model fit, measured by 1) the index of Absolute Fit, consisting of the value of Normed Chi-square ( $\chi^2/df$ ; atau CMIN/DF) index 1.046 (the recommended value  $\leq 5.00$ ), the value of Goodness of Fit Index (GFI) 0.999 (the recommended value  $> 0.90$ ), the value of RMR index 0.002 (the recommended value  $< 0.05$ ), and the value of RMSEA index 0.009 (the recommended value  $< 0.07$ ); 2) Incremental Fit Index, measured by NFI 0.998 (the recommended value  $> 0.95$ ) and CFI index 1.000 (the recommended value  $> 0.95$ ); 3) Parsimony Fit Index, measured by AGIF index 0.983 (the required index  $> 0.90$ ).

The Estimated SEM Results in Figure 1 show that three proposed hypothesis are not supported because the value of CR (*critical ratio*) is less than 1.96 in two tailed or less than 1.64 in one tailed of  $\alpha$  significance 0.05 (Byrne, 2001, p.76; Hartono and Abdillah, 2009, p. 87).

The results of the mediating effect test in Table 1 show that only two hypothesis of the mediating effect are supported, that can be seen from the value of estimated parameter total increases (Hair et al., 2006, p. 866-870; Baron and Kenny, 1986). The other two hypothesis are not supported because it does not meet the mediating effect testing requirements (Baron and Kenny, 1986).

**Table 1. The Mediating Effect Hypothesis Testing, Based on SEM Model**

Proposed Hypothesis	Standardized Estimated Value of the Regression, Indirect Effect	Total Effect of Estimated Regression Value	Hypothesis Testing Results: Direct Effect	Hypothesis Decision
H2b: Ethical-legal Responsibility has a positive effect on Brand Equity indirectly, mediated by CSR Image	= 0.123x 0.276 = 0.034	= 0.178+0.034 = 0.212	$\beta = 0.178$ CR $\geq 1.64$	<b>Supported</b>
H4: CSR Communication has a positive effect on Brand Equity Indirectly, mediated by CSR Image	= 0.374 x 0.276 = 0.103	= 0.361+0.103 = 0.464	$\beta = 0.361$ CR $\geq 1.64$	<b>Supported</b>

Source: The Results of Data Analysis (2015), based on SEM, under AMOS 4:01

### Discussion

The effect of economic responsibility shows positively insignificant on CSR image and brand equity. These results also demonstrate the effect of mediating role of CSR image is not supported in the effect of economic responsibility on brand equity. These findings confirm the findings of Salmones et al. (2005); Podnar and Golob (2007), Du et al. (2010b); and consistent with stakeholder, legitimacy, social contract, and attribution theory.

The insignificance of the economic responsibility effect occurs because the company's motives in implementing CSR activities are perceived by prospective customers solely for the sake of the corporate profit improvement in the long run, not for the motive of the company's commitment to care for the social needs. This perception occurs, corresponding to the measurement instrument use, developed by Salmones et al. (2005). Instrument measurement of economic responsibility taken from Salmones et al. (2005) does not include the context of economic activity that is consistent with the economic needs of potential customers, such as the measurement by Jackson and Apostolakou (2010); Wibisono (2007).

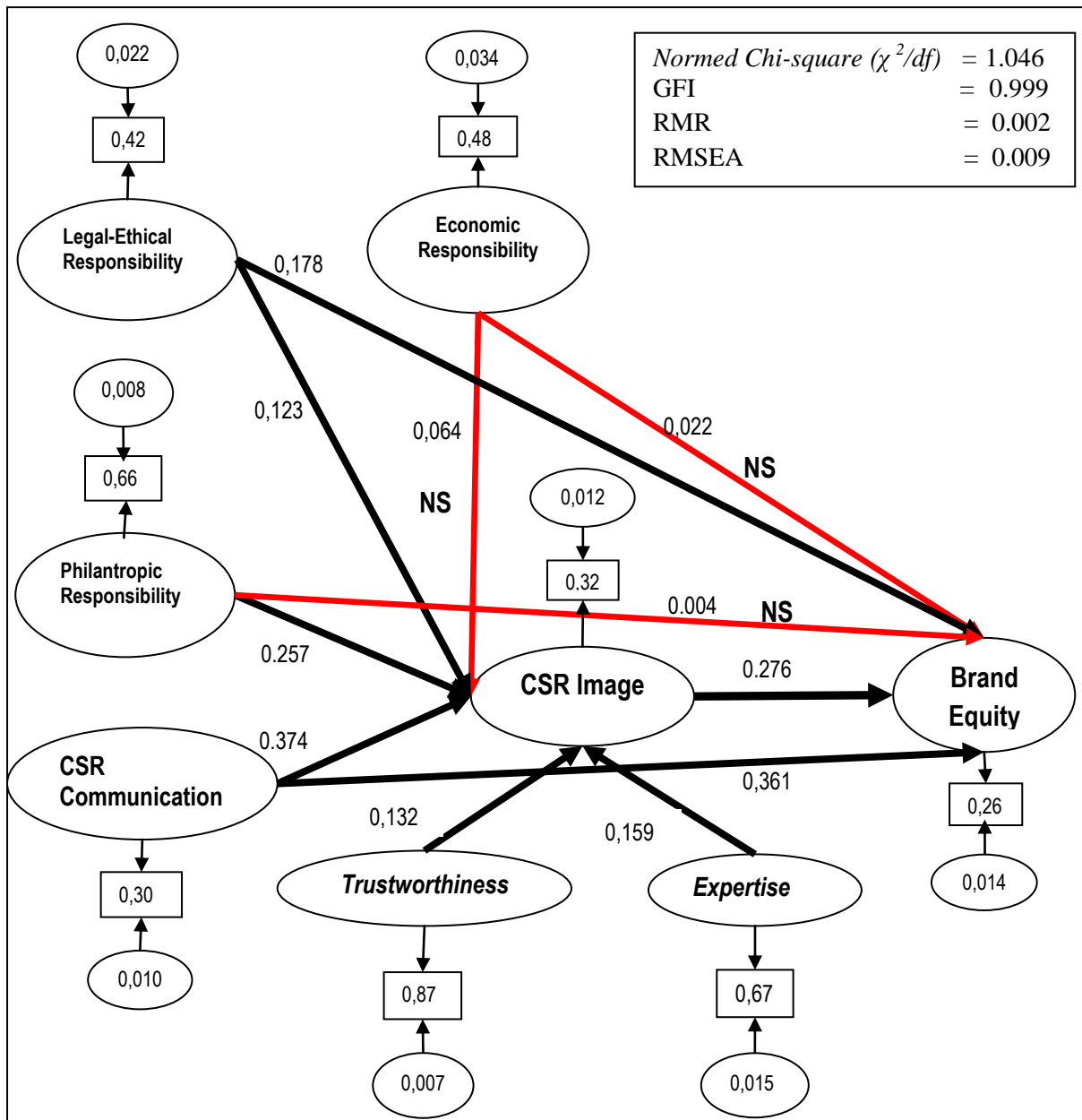
If the measurement of economic responsibility based on Jackson and Apostolakou (2010) and or Wibisono (2007) is applied, the result may be different because the economic responsibility practice reflects the needs of consumers and or investors and is consistent with the economic needs of stakeholders. The result of the respondent's response shows the distribution of philanthropic responsibility practice dominates (60.63%), compared to the economic responsibility practice delivers the lowest distribution (14.09%). This implies that the economic responsibility practice is not an effective measurement because only small portion of the activity can fulfill the needs of potential consumers. These conditions result in the insignificant economic responsibility effect on CSR image as well as on brand equity.

Based on attribution theory (Dean 2003; Schiffman and Kanuk, 2007, p. 258) and the stakeholder theory (Friedman, 1962 in Jamali, 2008), when the company considered to focus on profit as the main reason, the potential consumers' attitude to the CSR activity tend to create high skeptical thinking (Maignan, 2001; Becker - Olsen and Hill, 2006; Sen et al., 2006), hence the CSR image is negative and insignificant. This brings about insignificant effect on brand equity value. Conversely, when the company's motivation to implement the CSR activity is considered as a motive for the sake of purely social benefits, the potential consumer confidence in the company's CSR activities is increasingly positive (Becker -

Olsen et al., 2006; Sen et al., 2006), so that the positive CSR image is created, the legitimacy toward the company is more secure, and harmonious relationship between the potential consumers and companies is maintained, according to the stakeholder, legitimacy and social contract theory.

The positively significant effect of the ethical-legal responsibility on CSR image and brand equity demonstrate the mediating effect of CSR image (Table 1). The significant effect of the ethical-legal responsibility on CSR image supports the findings of Maignan (2001); Podnar and Golob (2007), and consistent with stakeholder, legitimacy and social contract theory. Maignan (2001) specifically supports the finding effect of the ethical-legal responsibility on brand equity. Attribution theory supports the mediating effect of CSR image whenever there is the effect of the ethical-legal responsibility on brand equity.

The positively significant effect of ethical-legal responsibility on CSR image occurs because the potential consumers perceive ethical-legal responsibility activity meets the legal requirements, compliance with the norms and ethical values that are developed by the potential customers. These conditions create a positive CSR image, in line with the stakeholder, legitimacy and social contract theory.



**Figure 1. The Research Model of CSR Image in Building Brand Equity, Based on SEM**  
 Note: NS = Not Significant;

Based on stakeholder theory, companies need to satisfy the needs of potential customers, corresponding to the moral and ethical values, such as offering and delivering the healthy and safe products. Then, if potential customers gain benefits from the ethical-legal responsibility activity, the potential consumers' support on CSR activity are created (legitimacy theory). Then, this condition brings about the commitment of the social contract between potential customers and the company who implements CSR in order to sustain each other (social contract theory), so as to constitute a positive CSR image. The social contract is created to get the balance and harmony in building natural and healthy environment.

The effect of philanthropic responsibility on CSR image results in a significant effect, but not on brand equity (Table 2). This finding reflects the mediating effect of CSR image in the effect of philanthropic responsibility on brand equity also is not significant. The significant

effect of philanthropic responsibility on CSR image supports the findings of Podnar and Golob (2007), Chen (2011), and consistent with stakeholder, legitimacy and social contract theory. This effect occurs because the corporate philanthropic activity is believed to create a natural and healthy environment that is very useful for customers and other stakeholders. This is very important especially in dealing with the issue of global warming that will destroy human life mainly related to the risky life, drought, pollution and natural disasters, and in the end believed to have an effect on poverty, hunger and death.

Based on stakeholder theory, the potential consumers feel the benefits of CSR activities in term of philanthropic donations strongly associated with the development of economic and social environment. This condition creates the gratitude and support on the company's CSR activity (legitimacy theory). Then, this carries on the commitment to develop a social contract between the customers and the company implementing CSR activity for mutual support and harmonious relationships by creating and maintaining a wonderful social environment (social contract theory), so as to constitute a positive CSR image.

The effect of philanthropic responsibility on brand equity is not positively significant because of skepticism issue, according to attribution theory. This finding supports the findings of Ricks Jr. (2005), Porter and Kramer (2004), Luo and Bhattacharya (2006). The potential customers perceive the philanthropic activity is a short-term activity (Brady, 2003); as a short incidental activity (Godfrey, 2005), as an ineffectively reactive activity to build brand value (Ricks Jr., 2005); as a sporadic activity (Porter and Kramer, 2002, 2006); as an artificial activity for empowering and improving quality of life and just focus on the social donation instantaneously and reactively (Frankental, 2001); and as an activity that tends to be isolated and not integrated with the company's business operations (Halme and Laurila, 2009).

The effect of CSR communication on CSR image and brand equity is positively significant. This finding shows there is a mediating role of CSR image. This finding supports the idea of Woodward et al. (2001); Hedberg and Malmborg (2003); Morsing and Schultz (2006); Branco and Rodrigues (2006); Birth et al. (2008); Pomeroy and Dolnicar (2009) and Arvidsson (2010), although some of them have different opinions specifically on the use of the effective media as a tool to eliminate skeptical thinking. The effect of CSR communication on brand equity also supports some findings of previous studies, such as Jeong (2004), Jones et al. (2005); Jahdi and Acikdilli (2009), Hsu (2012).

The effect of CSR communication on brand equity, either mediated or not by CSR image is also consistent with information processing theory (Miller, 1956) and attribution theory (Dean 2003; Schiffman and Kanuk, 2007, p. 258). Based on information processing theory, the potential customers are previously aware and give attention to the message content whether it is informative and right. Later, they will evaluate the right message content of the communication CSR. If the message content includes the right, informative, and pure information, not as a promotional tool, the logical expression and association toward CSR information and the company's brand are created.

The effect of the credibility of trustworthiness and expertise on CSR image is positively significant. This finding supports the findings of Bhattacharya and Sen (2004); Alcaniz et al. (2010); and consistent with attribution theory.

Based on attribution theory, when the potential consumer's perception and confidence is positive, caused by an emotional reaction to CSR activities, the positive CSR image is created. Emotional reactions attributes to the trustworthiness credibility due to the consumers' confidence over the credibility of trustworthiness is strongly related to CSR activity as a pure and honest activity for providing the social benefits. This enhances the confidence of the potential customers over the CSR activity into the establishment of a

positive image. On the other hand, the credibility of the company's expertise (Aqueveque and Encina, 2010), perceived bad or negative, if it is believed that CSR activity does not correspond to the credibility of the company's expertise, especially when the CSR activity is associated with the quality of products or services produced by the company that implements CSR.

The effect of the expertise credibility on CSR image is significantly positive caused by the potential consumers' attribution who believe the company's expertise credibility can be fundamentally influenced by the company ability in creating the functional value and products or services' innovation (Sen and Bhattacharya, 2001). Therefore, if it is believed the company's CSR activities corresponding to the company's expertise, the potential customers will lead to create the positive CSR image.

The positively significant effect of CSR image on brand equity supports the concept of Chahal and Sharma (2006). The positive CSR image is created as a result of the positive CSR activity attribution, then CSR image will have an impact on building strong brand equity, like the idea of Varadarajan and Menon (1988); Bronn and Vrionni (2001); Ogrizek (2002); Hoffler and Keller (2002); Blumenthal and Bergstrom (2003); Girod and Michael (2003), Yan (2003), Bhattacharya and Sen (2004), Klein and Dawar (2004), Jones (2005); Pirsch et al. (2007). This finding also supports the finding of Lai et al. (2010); Melo and Galan (2011). The significant effect of CSR image on brand equity occurs when the potential consumers believe CSR activities provide positive benefits to empower and improve the life quality, so the positive CSR image is created. According to attribution theory, the positive CSR image will turn to build positive brand equity.

Based on attribution theory, the cognitive process would enable the potential customers to perceive and believe in the positive benefits of CSR activities. Later, the potential customers through the process of information knowledge, assessment, and experience stored in memory creating the positive CSR image, would attribute a strongly positive brand equity value. This finding is in accordance with the idea of Schiffman and Kanuk (2007, p. 259) that the positive CSR image gives an incentive to strengthen brand equity value.

### **Conclusion, Limitation and Future Research**

Overall, it can be concluded that attribution theory has an important role in supporting the empirical testing of CSR dimension, company credibility, and CSR communication effect on CSR image in building brand equity. However, the stakeholder, legitimacy and social contract theory have a role especially for testing the effect of economic, ethical-legal, and philanthropic responsibility on CSR image.

The research finding mainly indicates CSR communication has the greatest role in creating the positive CSR image compared to the dimensions of CSR activity and corporate credibility.

CSR image performs as a mediating effect that provides the value of the estimated CSR communication effect on brand equity is greater than that of the estimated ethical-legal responsibility effect and company credibility. This illustrates that CSR communication as a strategic tool to eliminate skeptical thinking toward CSR activity that is manifested in creating the positive CSR image and in building strong brand equity value.

The expertise credibility is considered as a major factor in creating a positive CSR image, compared to the trustworthiness credibility because the potential customers' attribution toward the expertise credibility in CSR activity context is associated with the company's expertise in creating high quality of the products or services. In the meantime, the



trustworthiness credibility is very related to the implementation of CSR activities as pure and honest motives.

The model of this research contributes to the development of the CSR concept in marketing perspective, with a three-dimensional antecedent variable of Carroll's CSR (1979, 1991, 1999, 2006), the credibility of the company, and CSR communication in building brand equity. This model supports the idea of Maignan and Ferrell (2001), Sen and Bhattacharya (2001); Mohr et al. (2001); Balmer (2001); Maignan et al. (2002, 2005); Kotler and Lee (2005); Becker-Olsen and Hill (2006); Podnar and Golob (2007), Beckmann (2007), Wang and Juslin (2009); Marin et al. (2009); Castaldo et al. (2009), Moreno and Capriotti (2009); Trapero et al. (2010), and Tian et al. (2011).

Specifically, this research model supports the proposed model by Chahal and Sharma (2006); Hoeffler and Keller (2002). The research results also contribute to support the concept of CSR by Carroll (1979, 1991, 1999, 2006) by integrating three dimensions of CSR, so that the concept of CSR by Carroll can be a mainstream theory, appropriated with the Franklin statement (2008 in Vlachos et al., 2009).

This research model has several contributions to the management company, as follows 1) the effect model of CSR dimension, company credibility, and CSR communication on CSR image in building brand equity contributes as a marketing and business strategy to increase competitive advantage; 2) CSR communication is a key strategic tool to create CSR image and to strengthen brand equity of the company, so that the management needs to employ an intensive CSR communication through effective communication media; 3) the expertise credibility becomes a major factor in creating the company's CSR image, so the management of the company needs to improve the company's ability to produce good quality products or services and should have an expertise and experience in executing CSR activities in balancing the fulfillment of the potential customers' needs and business activities; 4) each dimensions of the CSR activities should be integrated when CSR activities are executed, not simply focusing on one dimension, as stated by Halme and Laurila (2009) that companies should create innovative and valuable CSR activities by executing the integrated CSR programs (a synergy program among the three dimensions of CSR).

On future research, the respondents can be expanded to apply the respondents who have ever bought incorporating with the behavior loyalty of the brand equity concept, as thought McConnell (1968), Jacoby and Kyner, (1973), Day (1969) ; Aaker (1991, 1992a, 1992b, 1996a, 1996b), Oliver et al. (1997) and Oliver (1999).

Next research also needs to examine the mediating role of credibility in the effect of CSR dimensions and CSR Communication on CSR image because CSR image when affected by the company's credibility (expertise and thrusworthiness) has a higher effect than when affected by the dimensions of CSR activities (especially by ethical-legal responsibility). This is supported by the idea of Hedberg and Malmborg (2003); Becker -Olsen and Hill (2006); Pirsch et al. (2007), Bae and Cameron (2006), Lafferty (2007); Vanhamme and Grobбен (2009). They state that the CSR activity has an important role in increasing the company credibility and potentially reinforcing the positive CSR image. Likewise, the effect of CSR communication is expected to increase the company credibility and has an impact on strengthening the brand equity value (Forman and Argenti, 2005; Capriotti and Moreno, 2007; Nachailit and Ussahawanitchakit, 2009).

Other future researches should re-examine the effect of CSR dimension, company credibility and CSR communication on CSR image in building brand equity with a focus on the users or buyers of the brand in the products or services category in a particular company. This test also needs to be redone because it requires to anticipate common method bias that often

appears as social desirability bias or motive consistency bias. Common method bias is compulsory to examine because the items in the research instrument do not specify the products or services category and specific brands of the company implementing CSR, in that the respondents probably know more than one brand of the products or services that has different attributes.

Another future research needs to analyze the effectiveness of CSR communication media for creating CSR image and strengthening the company's brand equity value. Effective CSR communication media needs to be considered as a marketing strategy to increase competitive advantage and can even be said to be the heart of the organization to establish the company credibility and brand equity (Forman and Argenti, 2005; Capriotti and Moreno, 2007; Nachailit and Ussahawanitchakit, 2009).

The use of other economic responsibility measurements reflecting the economic needs of stakeholders and market in the future research is necessary such as the measurement by Jackson and Apostolakou (2010), so the research results may show that the economic responsibility will have significant effect on CSR Image and Brand Equity.

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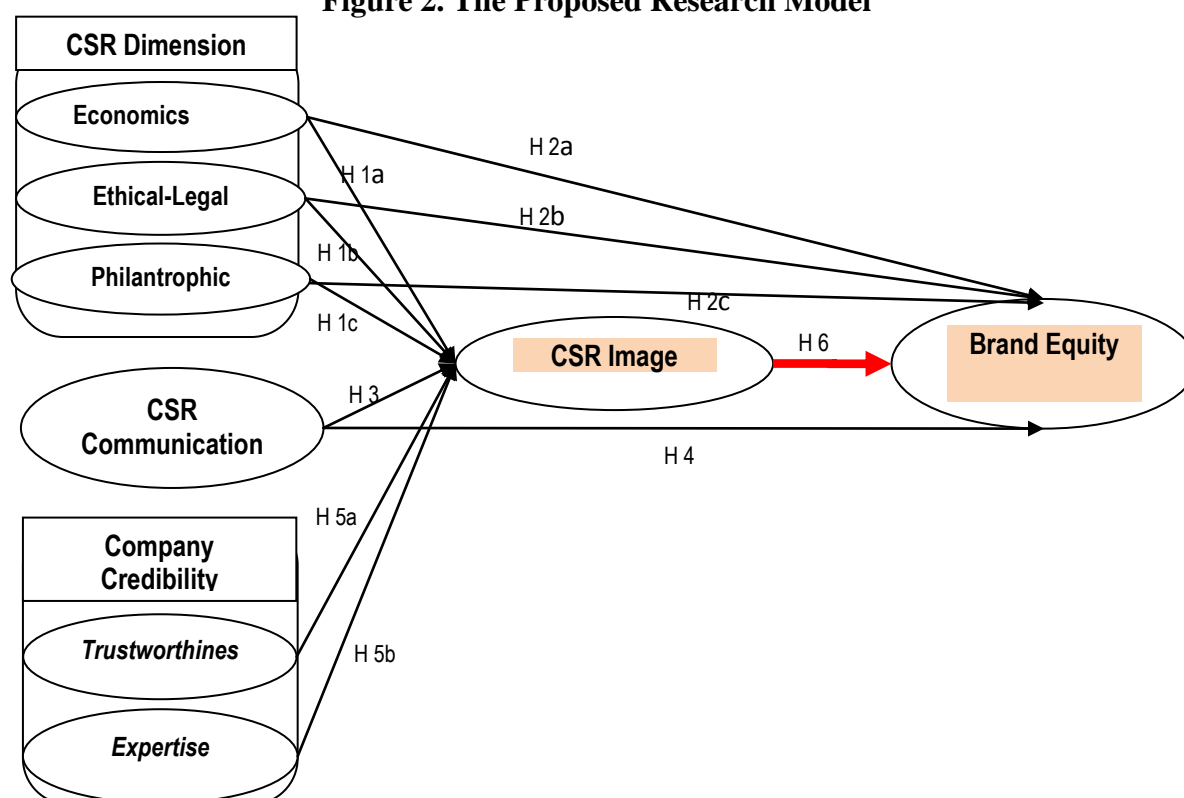
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**Appendixes:**

**Figure 2. The Proposed Research Model**



**Table 2. The Result of SEM Estimation and Hypothesis Testing**  
 Source: The Results of Data Analysis (2015), based on SEM.

<b>Proposed Hypothesis</b>	<b>Standardized Estimated Value</b>	<b>CR (Critical Ratio) = t</b>	<b>Direction</b>	<b>Hypothesis Decision</b>
H1a: Economic Responsibility has a positive effect on CSR Image	<b>0.064</b>	<b>1.623</b>	<b>consistent, Positive</b>	<b>Not Supported</b>
H1b: Ethical-legal Responsibility has a positive effect on CSR Image	0.123	2.742	<b>consistent, Positive</b>	<b>Supported</b>
H1c: Philanthropic Responsibility has a positive effect on CSR Image	0.257	6.590	<b>consistent, Positive</b>	<b>Supported</b>
H2a: Economic Responsibility has a positive effect on Brand Equity	<b>0.022</b>	<b>0.504</b>	<b>consistent, Positive</b>	<b>Not Supported</b>
H2b: Ethical-legal Responsibility has a positive effect on Brand Equity	0.178	3.597	<b>consistent, Positive</b>	<b>Supported</b>
H2c: Philanthropic Responsibility has a positive effect on Brand Equity	<b>0.004</b>	<b>0.078</b>	<b>consistent, Positive</b>	<b>Not Supported</b>
H3: CSR Communication has a positive effect on CSR Image	0.374	9.534	<b>consistent, Positive</b>	<b>Supported</b>
H4: CSR Communication has a positive effect on Brand Equity	0.361	7.208	<b>consistent, Positive</b>	<b>Supported</b>
H5a: <i>Trustworthiness</i> has a positive effect on CSR Image	0.132	3.154	<b>consistent, Positive</b>	<b>Supported</b>
H5b: <i>Expertise</i> has a positive effect on CSR Image	0.159	3.682	<b>consistent, Positive</b>	<b>Supported</b>
H6: CSR Image has a positive effect on Brand Equity	0.276	7.208	<b>consistent, Positive</b>	<b>Supported</b>

## THE INFLUENCE OF ISLAMIC ORGANIZATIONAL CULTURE ON ISLAMIC RURAL BANK PERFORMANCE

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### Abstract

In this research the implementation of Islamic organization culture and its effect toward the performances of Islamic rural bank. The qualitative approach was used during the examination. The data analysis was completed by employing in-depth interview, observation, and documentation of financial data performances of Islamic rural bank. The Sample of this research is Islamic rural bank in Bandar Lampung. The results show that the implementation of organization culture correlates with the performances improvement of Islamic rural bank in Indonesia. The enhancement is caused by the practice of Islamic leadership style, staffs empowerment, teamwork, innovation, and aggressiveness of the company based on Islamic values.

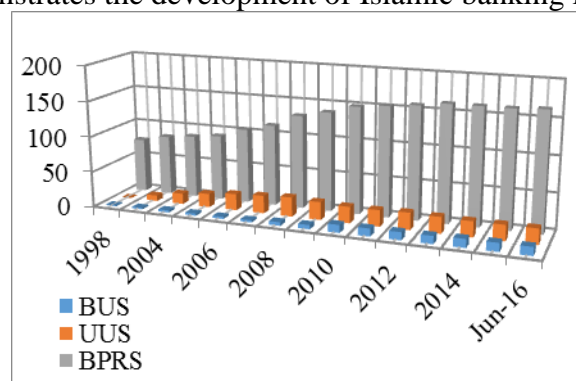
**Keywords:** *culture, organization, company performances, Islamic values.*

### Introduction

The globalization and economic recession at the end of 1990 have caused the companies radically changing their strategy and business operationalization. (Kuula, et.al, 2014). The advancement of technologies, markets, information system, global economy, social values, demography, workforce, and political environment has a significant effect toward the process of business, product, and service (Samuel, 2011).

Those changes experienced by the traditional banking institution that has converted into an Islamic bank. Islamic bank these days has developed numerously. In 1998, there are only one general Islamic bank and 76 Islamic rural banks. This figure increases significantly up to 12 general Islamic banks, 22 Islamic business units, and 165 Islamic rural banks.

The figure below demonstrates the development of Islamic banking in Indonesia:

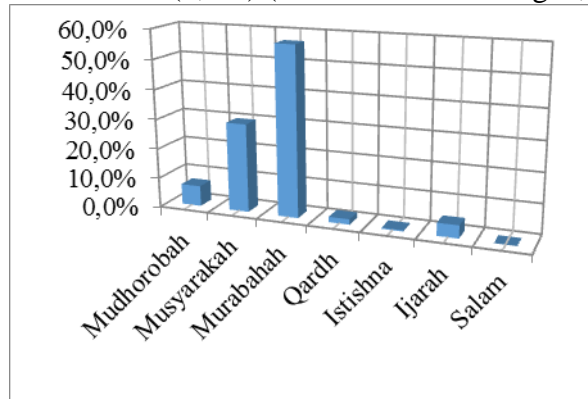


(Otoritas Jasa Keuangan, 2016).

Even though the development and the growth of Islamic bank are significantly high along with products and markets, today's practical banking is far different from its theoretical model that relies on the practice of profit and loss sharing (Iqbal and Mirakhor, 2007). It can be seen from the significant anomaly in the existing asset structure (Rusydi, 2016).

Based on the statistical data of Islamic banking, the distribution of funding is still dominated by *murabahah* credit as much as Rp. 126.179 billion (56,8%) followed by *Musyarakah* at Rp.

66.313 billion (29,8%), *Mudhorobah* funding with Rp. 15,298 billion (6,9%), *Ijarah* as much as Rp. 9,535 billion (4,3%), *Qardh* credit that is only Rp. 4,057 billion (1,8%) and *Istishna product* as much as Rp. 794 million (0,4%) (Otoritas Jasa Keuangan, 2016).



The distortion of Islamic banking practice is not only those that has been mentioned. The similar case has also been conducted by Bank Mega Syariah through domination of funding distribution of *Murabahah* credit funding as large as 99.38% in 2013, and as much as 97.8% in 2014 and 2015 (Bank Mega Syariah, 2015). In 2013, Bank Syariah Mandiri branch of Bogor had been found guilty due to fraud. It was involving three staffs of Bank Syariah Mandiri branch of Bogor that committed the fictitious credit as much as Rp 102 billion (Viva News, 2016).

Systematically, Bank Syariah Mandiri has the largest capitalization funding in Indonesia. It also obtained many successes in the financial sector. However, the fraud that has been committed by top management still exist.

Due to it problematic situation, it can be concluded that the growth of Islamic banking is solely caused by the market share of Muslim in Indonesia. Moreover, the systematic demand of Bank Indonesia in order to convert regular bank to be an Islamic Bank. Thus, the general bank of Islamic operated today is based on the standards of Otoritas Jasa Keuangan (OJK), Fatwa Dewan Syariah Nasional Majelis Ulama Indonesia (DSN-MUI), and Dewan Pengawas Syariah (DPS).

The growth and development are supposed to be implemented booth by a system that is previously explained and by culture. Through the practice of organization culture that fits with the Islamic principles, it is highly likely creating more justice and less fraud. According to research that has been conducted by Rijal (2016); and Husein, et.al (2016), the existing of organization culture has been proven affects the growth and the development of particular organization positively. If the company does not encourage the good innovation and culture of the organization, it will affect business negatively in the future.

According to that case, if Islamic bank does not make a fundamental change of organization culture, there will be simultaneous fails. The fail factors are; leadership transformation failure, external change disrespectfulness, and managerial failure in showing the involvement of the staffs (Song, 2008). The failure shows that traditional model does not solve the problem faced (Kikelly, 2014).

Thus, this research will discuss in more detail regarding the implementation of organization culture in Islamic rural bank.

## **Literature Review**

### **1. Organizational Culture**

Organization culture is a system of values, beliefs, and standards which governs the behaviors of people in the organization (Belak, 2016; Hitka, et.al, 2015). Guiso, et.al, (2015) states that organization can be formed as a result of creating integration between manager and staffs.

Organization culture includes mindset, feeling, and reaction that becomes a guidance for decision making and other activities of the organization members. The successful organization has a strong working culture, therefore, can attract, keep, and give feedback for those who fulfilled the obligation and reaching the target (Hakim, 2016).

Robbins (1996) in Uha (2015) states that seven characters of organizational cultures are innovation and courage to take a risk, attention to detail, goal orientation, people orientation, team orientation, aggressiveness, and stability.

The research regarding the change of organization culture is a contemporary issue that is developed massively. According to research that has been conducted by Gomez, et.al (2015); Alnasser et.al (2013); Naserinajafabady et.al (2013); Danish et.al (2012); Tojari, et.al (2012); Yilmaz and Ergun (2008); Denison (2007); and Kwantes and Boglarsky (2007) show that there are positive correlation and significances between organization culture and company effectiveness.

However, some researchers disagree with the statement of miscorrelation in some indexes variables of organization culture. The results of research conducted by Heris (2014) explains that although consistency and mission has a significant positive correlation, the involvement and abilities to adapt does not affect significantly toward the organization effectivity.

The finding of Amah (2012) shows that the degree of adaptation skill positively correlated with organization profitability, and market share. However, there is no a significant correlation toward the organization productivity the company mission, involvement, and consistency.

The research of Coffey (2003) shows that the adaptation skills, consistency, and mission has a significant correlation and with the organization effectivity, however, it has less correlation with the organization involvement.

According to Fey and Denison (2003), the adaptation skills becomes the major driver for the companies' effectivity mainly in Russia that struggled in economic transition. On the other hand, businesses in the United States rely more on a mission for their effectivity.

The research that has been conducted by Denison et.al (2003) concludes that there is a significant correlation among 12 indexes of organization culture toward companies' effectivity in general in North America, Europe, Middle East, and Africa. Those 12 indexes are empowerment, teamwork, skills development, core values, dealing, changing coordination, customer focus, organization development, strategic direction, aim, and vision. However, there is no strong correlation in the regions such as Asia. As the elaboration of the research, the discussion regarding the organization culture narrowed to those related to the approach of the ethical of organization culture. The research that has been conducted by Chadegani, et.al (2016); Semradova dan Hubackova (2015); Novelskaite (2014); Said, et.al (2013); Schwartz (2013); Jondle et.al (2013) emphasize the importance of organization culture.

With the creation of good organization culture, will effect in the enhancement of the staffs' quality (Krishna, et.al, 2016; Deem, et.al, 2015; Amah and Ahiauzu, 2013; Hakim, 2012),

organization performances (Laforet, 2016; Shihabeldeen, 2015) as well as the increment of customer satisfaction (Triznova, 2015; Altindag, 2015; dan Turro, 2014).

## **2. Islamic Organizational Culture**

The Islamic organization culture is a value, thinking, and symbol based on Islam that affect norm, attitude, Iman, and habit of people in life (Kusumawati, 2015). Hakim (2016) describes the values of Islamic organization based on Al-Qur'an and Hadiths. They are; firstly, working is the functional practice of human as *khalifah*. Secondly, working is a form of worship. Thirdly, working with principles of benefit and *maslahat*. Fourthly, working through the optimization of intelligence. Fifthly, working with full of desire and optimistic. Sixthly, the existing of *tawazun* attitude, finally, working with the consideration of halal and haram aspect.

Hoque, et.al (2013) offers the features of organizational culture in Islamic perspective. Some dimensions that are offered are justice; honesty; hard work; sacrifice; accountability; mutual respect; cooperation; trust in God; missionary spirit; and sincerity. However, the weakness of discussion conducted by Lukman Hakim and Haque, et.al are still simplistic, and not analyzed empirically.

In supporting the previous research, Hakim (2012) states that organizational culture has a positive relationship with the employee's performance. Research conducted by Hakim said that the leadership of the Islamic and Islamic organization cultural have influence over the Islamic working motivation and Employee Performance at PT Bank Muamalat Indonesia Central Java Tbk. The Islamic leadership variables used are *Sidiq; amanah; tablig; fathonah*. While the Organization of Islamic cultural variables that are used is: Smile; regards; brotherhood; honesty; help each other; and discipline.

The empirical research of Islamic organization culture conducted by Kusumawati (2015) states that culturally Islamic organizations have been associated with an increase in Islamic work behavior. The Behavioral indicators of Islamic work done by Kusumawati are Commitment; Professional; Truly; Amanah; and Loyalty. While indicators of Islamic organizational culture are still a simple, namely: Movement *thaharah*; prayers in congregation; and the Islamic dress

The weakness of research conducted both Kusumati (2015) and Judge (2012) is still focused on the influence of Islamic organizational culture toward the behavior of Islamic performance. It has not explored in depth related to the impact on profitability, productivity and market share obtained by the Company.

## **Research Methods**

This research is a qualitative research. With a case study approach. In this study, researchers explore the data from the field. In-depth research in conjunction with the Implementation of Organizational Culture Change in the Islamic Rural Credit Bank (BPRS) Bandar Lampung.

The source of data is done using primary data and secondary data. The primary data obtained through in-depth interviews with top managers, employees and customers to of SRB Bandar Lampung. Secondary data obtained through the financial statements, the data organization, institution profiles, brochures, and various media Sharia Rural Bank (BPRS) Bandar Lampung.

Purposive based sampling was employed in this research. The Sample used in this research is located in Islamic Rural Bank (BPRS) of Bandar Lampung. Regarding data collection, the authors apply observation, interview, and documentation on the financial statements of Islamic Rural Bank in Bandar Lampung.



The analysis used in this research is descriptive, in which the data obtained in the study was treated in data reduction, data presentation, and conclusion

## Results

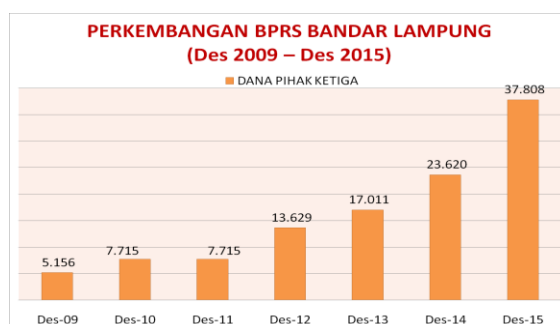
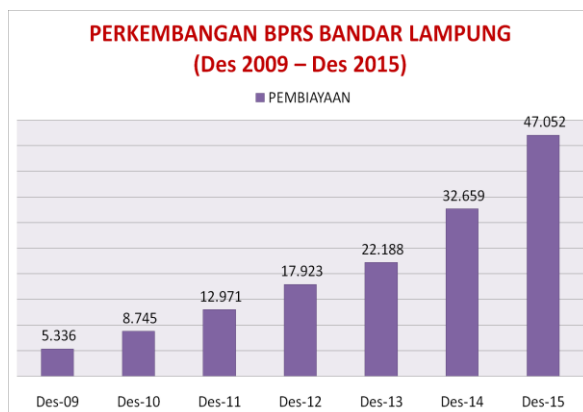
The Islamic culture of the organization was formed by the enactment of Islamic business standardization, as already offered by Veitzal et.al (2013). The standardizations of Islamic business are: First, doing business transactions in accordance with Sharia Corridor. Second, not conducting business in a way falsehood like: *maysir*, *gharar*, *riba*, *dzulm*. Third, the only purpose of a charitable act is not only focused on the profit (*Qimah Muhammadiyah*), the value of humanity (*Qimah Insaniyah*), moral values (*Qimah Khuluqiyah*), and the value ruhiyah (*Qimah ruhiyah*).

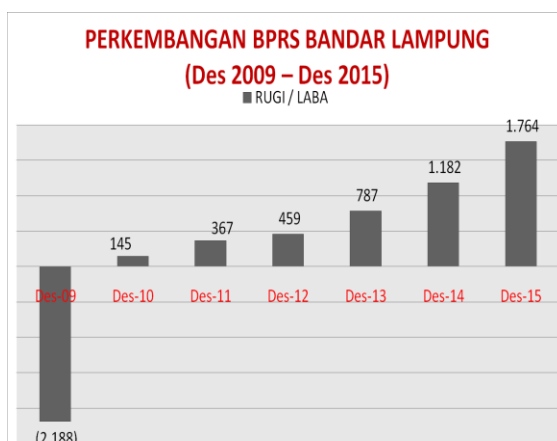
The implementation of Islamic business standardization will form the Organization of Islamic Culture characteristics. They are Innovations that are constantly evolving and enforcement for the results (profit and loss sharing); Attention to detail of appropriate sharia corridor; halal-result oriented, *maslahah* maximization, and the creation of the balance of advantages and Hereafter (Falah); Human orientation as caliph in the world; Sidiq based team orientation, trust, sermons, Fatonah and principles of friendship; aggressiveness which is not value-free, and pay attention to the social aspects (zakat, donation, charity, endowments); Stability in terms of the fulfillment of *maqasid* sharia, and the creation of a blessing.

The application of Islamic organizational culture in the Islamic Rural Bank credit Bandar Lampung is able to improve the company's performance significantly. It can be seen from the development of Sharia Rural Bank's performance as follows:

	2010	2011	2012	2013	2014	2015
Asset	11,123	16,182	22,220	28,893	40,102	61,225
Financing	8,745	12,971	17,923	28,893	32,659	47,052
DPK	3,045	5,156	7,715	22,188	23,620	37,808
Funding	1,960	3,637	6,285	17,011	9,587	13,998
Net Profit	145	367	459	7,755	1,182	1,764
CAR	884	1,566	2,023	787	5,713	8,119







The application of Islamic Cultural Organization on Financing Islamic Rural Bank in Bandar Lampung proves to improve the company performance. The table below demonstrates an authentic proof of the People's Bank Financing Sharia (SRB) Bandar Lampung in getting diverse national achievement:

Year	Category	Organizer
2016	The Best BUMD on Business Turn Around Category	Selindo
2015	The Best Sharia Finance Award 2015 kategori BPRS asset Rp. 25 Miliar to Rp. 50 Miliar	Info Bank Jakarta
2014	The Best Sharia Finance Award 2014 kategori BPRS asset Rp. 25 Miliar to Rp. 50 Miliar	Info Bank Jakarta
2012	The Best Sharia Finance Award 2012	Infobank Jakarta

	kategori BPRS asset Rp.10 Miliar to Rp.25 Miliar	
2012	The Best Islamic Rural Bank “BSM UMKM AWARD”	Head Office Bank Syariah Mandiri
2011	Third Finalis “BSM UMKM AWARD”	Head Office Bank Syariah Mandiri Jakarta

These results support the previous research conducted by Hakim (2012) and Kusumawati (2015). They emphasize that the culture of Islamic organizations has a significant role in improving performance. It was caused by the implementation of Islamic leadership style, employee empowerment, teamwork, encourage Innovation Company, as well as the aggressiveness of the company based on Islamic values.

Due to its simple approach and the test that involving only one sample, this research can further be improved through comparison of multiple Islamic Rural Bank (SRB) from various regions in Indonesia.

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## DEVELOPMENT OF JATROPHA BASED BIOFUEL TO CREATE SELF-SUSTAINED ENERGY VILLAGE

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### *Abstract*

This study aims to formulate development strategies of jatropha based biofuel industry. The basic method of this research is descriptive. Data used includes strengths, weaknesses, opportunities and threats of jatropha based biofuel development. Data analysis used IFE, EFE and SWOT matrix. The alternative development strategies of jatropha based biofuel as follow: Strengthening motivation and mentoring continuously to farmers to increase the capacity and quality of castor beans, strengthening the commitment and synergy of local government with farmers to redevelop the jatropha based biofuel, facilitating biofuel production technologies to increase the independence of production by farmers, regulating trade system of jatropha beans to increase income and motivation of farmers, determining advisability of escort company to maintain business continuity development of biofuels, developing network of partnerships to expand market share of biofuel and strengthening biofuels institutional to improve the bargaining position of farmers.

**Keyword:** *Biofuel, Jatropha, Development Strategy, Self-Sustained Energy Village*

### **Introduction**

The energy crisis that hit the world as a result of scarcity of fossil fuels has led to rising price of fuel oil (BBM). The domestic energy supply constrained due to the trend of production tends to be lower than the level of consumption. These conditions are accommodated by the government through the provision of energy in sufficient quantity and price should be affordable by the community. This has prompted the government to seek alternative energy from renewable materials which are biofuels.

Biofuels have been becoming prevalent rapidly because of constantly gaining economic value and concordantly having less negative effects on the environment. All plant and animal substances based on the carbohydrate compound as the main component is a source of biofuel. Wood, oilseed crops, plant carbohydrates, plant fiber, plant protein, and herbal waste is a biofuel plant resources (Aydogan et al, 2014). Biofuels are fuels derived from biomass. Biomass is organic material taken from plants and animals. Consisting of wood, agricultural crops, water plants, forestry products, waste and residues and animal wastes (Uriarte, 2010). One of the plants that have the potential as a source of biofuel is Jatropha (*Jatropha curcas* L). Jatropha is a plant shrubs, small trees and shrubs form large, irregular branching, height of 2 to 5 m, it can even reach 8 to 10 m on fertile soil conditions. Jatropha can grow well in places infertile or on marginal land barren and critical, making it easy to determine the place of growth (Mariam, 2006). Jatropha processing industry should be developed in order to support the General Plan of Regional Energy Development of Central Java Province targeting the energy mix in 2016 amounted to 68.9%, which met from several sources including energy from Renewable Energy (EBT) amounted to 23.343%.

This study aims to identify the factors of internal development of Jatropha based biofuel industry, identify the external factors the development of Jatropha based biofuel industry and formulate strategic development of Jatropha based biofuel industry.



## **Method**

### **1. Basic Research Methods**

The basic method used in this research is descriptive, the research focused on solving the existing problems by arranging the data that has been collected, after it was described and then analyzed.

### **2. Methods Siting and Respondents**

Based on the initial survey of the study sites in Grobogan obtained data from the Forest Village Community Institution "General Business of Perhutani KPH Purwodadi" there are six sub districts in Grobogan ever planted Jatropha that are Klambu Sub District, Brati, Grobogan, Tawangharjo, Wirosari and the Ngaringan. Based on the results of a survey among the six districts there are two districts that are still found Jatropha which are in Ngaringan and Brati sub district. Therefore, both locations purposively (intentionally) be used as a research location. Total respondents 24 people included 16 Jatropha farmers, 4 head of farmer groups, 2 Head (Subdistrict Ngaringan and Brati), 2 staff "General Business of Perhutani". Sampling technique using purposive techniques and data collection techniques done through indept interview, observation and recording.

### **3. Data analysis method**

Internal factors analysis of the development of Jatropha based biofuel industry is done by using a matrix of IFE (Internal Factor Evaluation). IFE matrix is used to determine the internal factors of the development of Jatropha based biofuel industry with regard to strengths and weaknesses that are considered important (Rangkuti, 2001). As for the internal factors that will be examined include the factors of production, human resources, financial, institutional and government.

Analysis of external factors developing Jatropha based biofuel industry is done using a matrix approach EFE (External Factor Evaluation). EFE matrix used to evaluate external factors the development of Jatropha based biofuel industry. External factors examined included the economic, social, cultural, demographic, environmental, political, legal, and technology. This is important because of external factors influence directly and indirectly to the development of the biofuels industry.

The formulation of strategic alternatives industrial development Jatropha based biofuel made using SWOT analysis (Strengths, Weakness, Opportunities, and Threats). SWOT analysis is an important support tool for decision-making, and is commonly used as a means to systematically analyze an organization's internal management capability and its external environment (Hui, 2008). SWOT analysis in this research approach was used to formulate the strategy of Jatropha based biofuel business development. SWOT matrix were conceived into four alternative strategy, the which were strategies of strengths-opportunities (SO strategies), strategies of weakness-opportunities (WO strategies) strategies of strengths-threats (ST strategies), and strategies of weakness-threats (WT strategies).

SO strategy implementation, the organization strives to make external opportunities by leveraging internal strength. The purpose of WO strategy is to help companies improve internal weaknesses by using external opportunity. ST strategy implementation, the company seeks to minimize threats in the external environment using the internal strength of the company. In WT strategy, the company took a defensive position so that they can minimize the threat of external environment by using the strength of the company (Jamshidi et al., 2012).

## Result and Discussion

### 1. The internal factors of development Jatropha based biofuel industry

DME program is implemented in some areas both based Jatropha and cassava face many obstacles and challenges that if not bear to face obstacles then the program will stop. It also occurs in the development of the biofuels industry in Grobogan where the industry is closed or no longer in operation. The development of Jatropha based biofuel industry in Grobogan is inseparable from internal factors such as the strengths and weaknesses.

### 2. Strength development of Jatropha based biofuel industry are as follows:

#### a) Jatropha has good prospects as a renewable energy source

Jatropha has good prospects for development. Castor bean produced from this plant is a raw material for biofuel. Innovation of energy needs as a solution to the depletion availability of renewable energy supply makes distances seed into commodity which has a strategic position. High economic value makes Jatropha feasible to develop.

#### b) Farmer's enthusiastic in developing the cultivation of Jatropha

DME program based Jatropha greeted very enthusiastically by farmers which the farmers who are in various locations to implement development programs Jatropha cultivation of Jatropha without coercion. Either independently farmers who have their own land, farmers in LMDH and farmers who use the land owned by "Perhutani", which are in the region to cultivate Jatropha development program. This is based on motivation and a strong desire improving the living conditions of farming jatropha.

#### c) The commitment of the parties in Grobogan in developing Jatropha industries

Grobogan chosen as a pilot project for the development of Jatropha DME Program for the commitment of the Central Government and Local Government to make the program successful development of alternative energy. In terms of policy-makers, along with the Provincial Government and Regional Technical Implementation Unit associated with the program is committed to developing a Jatropha based industries. Farmers / farmer groups / LMDH / "Perhutani" as implementers the lowest level in the program have the commitment in cultivating Jatropha.

#### d) The potency of marginal lands in Grobogan that suitable for the cultivation of Jatropha

Jatropha in its cultivation does not require arable land because if they are grown in the fertile soil result not compete with food crops. Grobogan have not agricultural land measuring 99 674 hectares of rice fields scattered throughout the districts consisting of moor / garden: 23 917 hectares of plantations: 87 hectares, the forest folk: 4,160 hectares and more: 71 510 hectares. The land area is a potential land that can be used for the cultivation of Jatropha including marginal land/ critical in it.

#### e) Quality of Jatropha biofuel produced was good

Jatropha biofuel products produced in Grobogan have good quality. This is because Grobogan has a natural potential support for the cultivation of Jatropha that castor bean produced is also of good quality. With the quality of the raw material Jatropha seed is well supported with good production technology has excellent potential for the development of biofuel Jatropha in Grobogan.

### 3. Weakness of Jatropha based biofuel development are as follows:

Besides having some strengths, the development of Jatropha based biofuel industry also has the following weakness:

**a) Farmers have limited resources**

Jatropha farmers in Grobogan district has limited resources in developing Jatropha biofuel industry. In terms of farming Jatropha, with a relatively narrow land ownership, farming limited capital and low mastery of post-harvest and farmers depend a lot on the partner company. Moreover, in terms of biofuel processing farmers also do not have the capacity, capital and production facilities so that when a partner company stopped production so farmers can't do their own processing. Farmers haven't been able to independently develop the biofuel industry.

**b) Management of Jatropha farming is still weak**

Jatropha farms run farmers still weak. There are no related innovations cultivation technology to improve the productivity of Jatropha. Even at the time of the study, Jatropha farming is not managed as a farm, but the Jatropha plant is left to grow wild without maintenance. This is because the three partner companies do not continue to cooperate in the production of biofuels so that Jatropha produced nothing accommodate or process.

**c) Mastery of biofuel production technology by farmers is weak**

Jatropha farmers in Grobogan not be able to process castor beans produced themselves. Poor access by farmers biofuel production technologies cause high dependency on the partner company. Farmers do not master the technology of production and are also able to access their own biofuel production technologies required due to capital constraints and facilitation from the government. Mastery of production technology become a requirement for farmers to be able to process biofuel independently.

**d) Dependency of farmers on the companies**

Jatropha farmers during this depends entirely on the company in terms of marketing partners castor beans. This is because farmers do not have sufficient information relevant market castor beans and biofuel production technologies. Even related to the selling price of castor seed is determined by the company escort. However, due to strong commitments from all three companies that had become partners to Jatropha farmers, the farmers lose the market and no longer able to sell the castor bean produced.

**e) Limitations of Jatropha biofuel market**

Biofuels as renewable energy products does not currently have a broad market even though in terms of market potential is great. Dissemination efforts are still needed concerning utilization of biofuel Jatropha as an energy product that can be used for household or industrial sector. Moreover, the world market potential is still untapped well so that the development of the biofuels industry still requires market penetration efforts.

**f) Promotion of jatropha biofuel is weak**

Efforts to promote biofuel Jatropha has not been made to the maximum, so there are many segments are not familiar with and interested in using biofuel Jatropha as an energy source. The market share is still narrow demands intensive promotional efforts both to local communities, industry and international markets regarding biofuel Jatropha.

**g) It is not yet enable to produce biofuel Jatropha independently**

Jatropha biofuel potential as new products have not been able to push the government or its own farmers to produce biofuels. Although in terms of market potential and raw materials is very supportive. The relation between farmers and three companies is not

a good experience before can be a motivation to develop Jatropha biofuel industry independently.

Early DME program was launched, socialization/ education/ training Jatropha cultivation intensively implemented either by the Department of Agriculture and the Technical Committee of the processing industry. However, after farmers cultivate Jatropha DME program is no supervision or assistance from the parties concerned. The local government and provincial particular Department of Energy and Minerals Resources, Department of Agriculture and “PT. Perhutani” not conduct intensive monitoring of third processing industry within the fence. If there is intensive monitoring, a better chance for these companies to be responsible for running the program DME.

Agriculture, Plantation and Forestry Grobogan not implement assistance programs of post-harvest Jatropha cultivation so that the problems faced by farmers is not quickly resolved. The company refused Jatropha seeds from farmers because it is considered of low quality. On the other hand, farmers feel Jatropha seeds produced in accordance with the quality standards set at the socialization of the program will run. This is causing the problem is not quickly resolved.

#### **4. External factors of Jatropha based biofuel**

Opportunities of Jatropha based Biofuel as follows:

a) **The need for renewable energy is increasing because of non-renewable sources of energy to fuel is declining**

Indonesia no doubt has the potential of large energy resources. However, looking at developments in the availability of natural energy is dwindling and one side of the energy needs, especially in Indonesia were bigger then, the energy diversification efforts through the creation of renewable energies become an urgent need to do. The energy needs of both the industrial sector and to the needs of society become a major opportunity for the development of the biofuel industry. The raw material of Jatropha seeds are relatively easy and continuously cultivated into a good potential for the development of the biofuels industry.

b) **Government regulation to combining biofuels with fossil fuels**

Innovation renewable energy become a necessity that should be expedited, including Jatropha based biofuel. However, efforts to develop Jatropha based biofuel would be more effective if supported by the strengthening of the policy of the central government. Government policies that can be done for example by combining biofuels with fossil fuels. With the policy through government regulation is expected to be a motivation for local governments, farmers and the company partners to jointly develop the biofuel industry in Grobogan.

c) **The price of fossil fuel is increasing**

Availability of fuel dwindling to rises in the prices higher and higher. This condition requires solutions which are innovative renewable energy and biofuels can be an alternative renewable energy. This requirement is an opportunity for the development of biofuel industry in Grobogan.

d) **The development of biofuel production technology**

Biofuels became one of the products of innovation that is expected to be a solution like a drop in the supply of energy in Indonesia. Biofuel production technology has been developed in an effort to encourage the creation of renewable energy with a variety of products based on a commodity that exist in each region. Likewise with

the production technology of Jatropha based biofuel developed to encourage development. Various machines or technology exists and is needed in the production process is an opportunity for the development of Jatropha biofuel industry in Grobogan.

### **5. DME program development contained in the General Plan of Regional Energy Development of Central Java Province**

**Vision** Department of Energy and Mineral Resources (ESDM) Central Java 2013-2018: Towards a Prosperous Through Strengthening Management of Energy and Mineral Resources and Energy Independence

**Mission:**

- 1) Improving the Management of Mining and Utilization of Groundwater through Optimization With Conservation Principles Consider
- 2) Improve the Management and Utilization of Electricity and Gas, To Ensure Availability of Energy Through Enhancing Infrastructure And Energy Diversification
- 3) Develop Potential New and Renewable Energy through Optimization Application of Appropriate Technology Independently
- 4) Increase the Risk of Natural Disaster Prevention Efforts Towards Geological Disaster Risk Aware
- 5) Improve the Performance of the Professional Public Service in the Field of Energy and Mineral Resources (Department of Energy and Mineral Resources of Central Java, 2015).
- 6) Central Java province that target energy mix in 2016 amounted to 68.9%, which met from several sources including energy from Renewable Energy (EBT) amounted to 23.343%.

### **6. Threats of Jatropha based biofuel development are as follows:**

a) Jatropha oil market uncertainty

As product innovation, Jatropha based biofuel is quite new to the market. Although biofuel Jatropha is a product with a promising market prospects, but efforts to introduce this product has not been done. Moreover, the existence of energy products preexisting also a threat to biofuel Jatropha. The market of biofuel Jatropha is still uncertain and the presence of competitors is a threat have to solve.

b) Trade system of jatropha beans is weak

The marketing of castor bean as a raw material for biofuel is still not strong. Dependence on the partner company as a single market castor bean produced by farmers made biofuels still weak bargaining power. It is becoming a threat to the development of Jatropha biofuel future. Jatropha based DME program launched by the Central Government is not accompanied by clear technical instructions on setting the marketing of Jatropha seeds. In this case the farmers have a weak bargaining position due to inability to sell or cultivate Jatropha seeds of Jatropha distance. Oil processing industry limited distance makes the industry as a determinant of price, quality and the marketing of Jatropha seeds. On the other hand, PT. Jatropha and PT. Waterland not have representation unit purchase raw materials at the level of farmers in purchasing seeds of Jatropha which facilitate farmers to sell seeds within the fence. Farmers directly sell Jatropha seeds to the processing industry even though the distance is very far. This resulted in an expensive transportation costs and may not be comparable to the amount of Jatropha seeds produced, so the cost be very expensive for a kilogram.

- c) Standard quality Jatropha oil is high  
To be competitive with existing energy product, the quality of biofuel Jatropha become an important factor that must be considered. As new products are being pioneered, the quality of biofuel produced still needs to be improved. While the energy products that have been there previously had a relatively good quality. Demand high product standards to be accepted into a threat to the biofuel market is still at the development stage.
- d) Competition from non Jatropha biofuel  
Renewable energy in Indonesia is being developed as a solution to the depletion of energy reserves. Jatropha based biofuel has good prospects for development. However, biofuel Jatropha also has many competitors including biofuels by feedstock palm oil, few seeds, coconut, and sunan candlenut. Development of various types of biofuel be a threat for biofuel Jatropha. If biofuel Jatropha is not able to maintain the production capacity and quality it can easily be defeated by a palm-based biofuel, few seeds, coconut, and sunan candlenut.
- e) The commitment of the partner companies  
Commitment is lower from the firm companion in developing biofuels industry. In the development of Jatropha based biofuel industry in Grobogan, farmers still rely on partner companies (private). However, the experience has been a partner company does not have a strong commitment to develop biofuels. In fact, farmers enthusiastic in cultivation of Jatropha as a biofuel feedstock. Create conditions for the development of biofuels to be difficult without the support of partner companies as producers of biofuels, farmers will find it hard to cultivate Jatropha seed produced into biofuel.

PT. Enhill, PT. Jatropha and PT. Waterland is a three company Jatropha based biofuel developers who failed to develop biofuels in Grobogan. Three companies are allegedly not actually operate and just take advantage of the DME program is a pilot project of national scale.

The three companies have made a cooperation contract / agreement with farmer groups / LMDH / "Perhutani", but throughout the cooperation contract / agreement are violated by the three companies. PT. Enhill before produce biofuel production has shut down the factory and all production equipment was moved to the outside of Grobogan. The factory been sold to other parties and has undergone several changes of ownership. In this case Jatropha farmers in Sub Ngarangan feel aggrieved because they have not had time to enjoy the fruits of production of Jatropha seeds to be sold to PT. Enhill.

PT. Jatropha and PT. Waterland operates only produce castor oil of approximately 2 years. The results of the study can't be known with certainty why these two companies to halt production. This should be communicated to the relevant parties, including farmers / farmer groups / LMDH and "Perhutani" directly involved in this program. The plant closure is implemented unilaterally by the company so that farmers who have produced Jatropha seeds can't sell their production. The other hand, farmers do not have the ability to cultivate these seeds into oil within the distance that is ready for use as fuel oil. This causes Jatropha farmers cut down and replace it with food crops.

Development strategies of Jatropha based biofuel based on the identification of factors of strengths, weaknesses, opportunities and threats are then formulated alternative biofuel industry development strategy in Grobogan. Alternative formulation of biofuel industry development strategy presented in the SWOT matrix as follows (Table 1)

As for the details, alternative strategies are formulated as an effort to develop Jatropha based biofuel is as follows:

1. Strategy S-O

- 1) Strengthening the motivation and continuous assistance to farmers in the cultivation of Jatropha to increase the capacity and quality of castor bean

Considering the business conditions of biofuels in Grobogan today, efforts are needed to motivate farmers to be more optimistic in the cultivation of Jatropha. Resource potential of land and suitable climate be a great asset for the development of Jatropha commodity which is the raw material for biofuel. Through socialization and mentoring intensive cultivation to farmers are expected to Jatropha production capacity will increase with the better quality. This is because the current cultivation of Jatropha has not been intensified and limited to only be used as garden plants without maintenance. This condition causes the quality of Jatropha produced slightly lower quality. Lethargy production of biofuels and biofuel uncertainties trade system makes farmers less optimistic run Jatropha cultivation.

2. Strategy W-O

- 1) Strengthening of local government commitment and synergy with farmers to redevelop Jatropha based biofuel

Biofuel industry conditions weakened in Grobogan very unfortunate because revenue opportunities and increased prosperity for farmers and the area lost. With the potential of natural and promising market opportunities, the development of the biofuels industry in Grobogan needs to be pursued. The good cooperation between the local government and farmers Jatropha is indispensable for mutual support biofuels development. The local government role in financing, expanding partnerships with stakeholders and increasing the capacity of farmers especially in Jatropha cultivation and post-harvest handling. While farmers as producers of Jatropha to make the cultivation of Jatropha so well that produced quality Jatropha as a biofuel feedstock. This is necessary because during this time, farmers felt the motivation and facilitation of local government is less than optimal.

- 2) Facilitation of biofuel production technologies to increase the independence of production by farmers

The weak development of the biofuels industry in Grobogan such as the dependence of biofuel production to the private sector as a partner. This is because farmers and farmer groups are not able to produce biofuels themselves for not having mastered the advanced electronic or biofuel production. Thus, when the private sector is a partner not to continue the cooperation, the farmers also stopped doing the cultivation of Jatropha because no one will cultivate crops. This condition is unfortunate given the strategic potential of biofuels as an alternative energy source. To that end, the good farmer does not only rely on the cooperation with private companies in the production of biofuels. Gradually required biofuels production technology introduction by local governments then managed jointly by farmer groups or clusters that are trusted with the full assistance of the local government. Thus, farmers have alternatives in marketing the castor bean.

3. Strategy S-T

- 1) Realignment of business administration castor beans to increase income and motivation of farmers

Trade system for Jatropha is actually very simple. Yields of Jatropha a seeds for farmers is collected and sent to the factory to be processed into biofuel. Short chain

markets makes revenue and profits high so farmers are very enthusiastic farmers cultivate *Jatropha*. However, the risk of this trading system is when a company becomes a partner does not have a strong commitment and responsibility towards the agreed cooperation. Moreover, if farmers are partnering with a company then the risk will be even greater. To that end, it is necessary realignment of the marketing of castor seed so that farmers do not face great risks in marketing the seeds away. Facilitation of local governments in the selection of companies who are partners of farmers is needed so the only company with commitment, transparency and responsibility in maintaining strong partnerships. In addition, the government's involvement in the supply chain castor beans are needed to evaluate and monitor the course of the partnership.

- 2) Standardize eligibility escort company to maintain business continuity development of biofuels

Some cases of fraud by private companies as partners in the development of biofuels should be an important consideration in determining factor counterparts. The feasibility of the company's partner in the production of biofuels is needed to minimize potential problems in partnership. Standardization and clear requirements for private companies will be partners in the development of biofuels need to set the tone da special team involving local government and a team of experts who intensively evaluate the course of the partnership.

#### 4. Strategy W-T

- 1) Development of a network of partnerships to expand market share *Jatropha* based biofuel

Biofuel is a renewable energy product has a promising market prospect. However, because all this for production activities and well as marketing of biofuels depend entirely on the partner company, the profit earned *Jatropha* farmers are still not optimal. In fact, farmers are not able to market seeds stopping distance when the partner company partnerships. For the development of the biofuel industry in the future of local government should be more pro-active in facilitating the expansion of market share for biofuels marketing. Partner companies as producers of biofuels should not just one so that no reliance in terms of marketing of castor seeds.

- 2) Institutional strengthening biofuels effort to improve the bargaining position of farmers

With this form of partnership that runs for this, farmers' bargaining position can be said to be low because farmers rely entirely on marketing seed distance to the partner company. This is because farmers do not have a comprehensive reference market for castor bean produced. To improve the bargaining position of farmers within the fence will require institutional strengthening. Needed clarity of roles and responsibilities in a partnership that exists. In addition, specific institutional needs on the part of the farmer which is a container and protector of *Jatropha* farmers as a bridge between farmers, enterprises and government partners. Thus, farmers will be better prepared and have a strong bargaining position in partnership to develop the biofuel industry.

## Conclusions and Recommendations

### 1. Conclusion

- a) Factors Internal Factors development of *Jatropha* based biofuel industry that is a factor of weakness and strength. Areas of weakness include: 1) Limitations of resource owned by farmers, 2) Management of farming *Jatropha* is still weak, 3) Mastery weak biofuel production technology by farmers, 4) Dependence on company resource companion, 5) Limitations *Jatropha* biofuel market, 6) Promotion of biofuel



Jatropha less than the maximum, 7) The absence of courage farmers and local authorities to produce biofuel Jatropha independently. While factors force development of the biofuels industry include: 1) Jatropha has good prospects as a renewable energy source, 2) Farmers enthusiastic in developing the cultivation of Jatropha, 3) The commitment of the parties in Grobogan in developing Jatropha industries, 4) The potential of marginal lands in Grobogan adequate and suitable for the cultivation of Jatropha, 5) Quality of Jatropha biofuel produced good.

- b) External factors development of Jatropha based biofuel industry factors include opportunities and threats. Areas of opportunity include: 1) The need for renewable energy is increasing because of non-renewable sources of energy to fuel the wane, 2) Regulation of government in combining biofuels with fossil fuels, 3) The price of fuel is increasing 4) The development of biofuel production technology and 5) Program DME development of Jatropha contained in the General Plan Regional Energy Development of Central Java Province. While the threat factors include: 1) Jatropha oil market uncertainty, 2) Weak trade system castor seeds, 3) Standard quality Jatropha oil is high, 4) Competition from non Jatropha biofuel and 5) The commitment of the partner company / companion.
- c) Alternative development strategies Jatropha based biofuel in Grobogan among others:
  - 1) Strengthening the motivation and continuous assistance to farmers in the cultivation of Jatropha to increase the capacity and quality of the castor beans, 2) Strengthening local government commitment and synergy with farmers to redevelop biofuels Jatropha based biofuel, 3) Facilitation of biofuel production technologies to increase the independence of production by farmers, 4) Realignment of business administration castor beans to increase income and motivation of farmers, 5) Standardize eligibility escort company to maintain business continuity development of biofuels, 6) The development of a network of partnerships to expand market share Jatropha based biofuel and 7) Institutional strengthening biofuels efforts to improve the bargaining position of farmers

## **2. Recommendation**

The development of Jatropha based biofuel industry in the DME program is a government program that should receive the support of all parties. The failure of the development of biofuel industry in the DME program is an important lesson that synergy between farmers - the biofuels industry - government - stakeholders are indispensable in this program. This synergy that seems sturdy yet built in the development of this DME program. Therefore, if the program will be developed in the next time then the foundation of this synergy needs to be built first.

The DME program before further developed the feasibility study should be carried out in advance so that the program can run or not depends on the results of the study. The feasibility study shows the potential of the market, the ability and readiness of farmers / farmer groups, the production capacity of the people, trade, land cultivation and technology are developed. If the results of the feasibility study results DME viable then the program can be implemented.

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**Table 1. Development Strategies of Jatropha Based Biofuel**

<p>Internal</p> <p>Eksternal</p>	<p><b>Strengths</b></p> <ol style="list-style-type: none"> <li>1. Jatropha has good prospects as a renewable energy source</li> <li>2. Farmer's enthusiastic in developing the cultivation of Jatropha</li> <li>3. The commitment of the parties in Grobogan in developing Jatropha industries</li> <li>4. The potency of marginal lands in Grobogan that suitable for the cultivation of Jatropha</li> <li>5. Quality of Jatropha biofuel produced was good</li> </ol>	<p><b>Weakness</b></p> <ol style="list-style-type: none"> <li>1. Farmers have limited resources</li> <li>2. Management of Jatropha farming is still weak</li> <li>3. Mastery of biofuel production technology by farmers is weak</li> <li>4. Dependency of farmers on the companies</li> <li>5. Limitation of Jatropha biofuel market</li> <li>6. Promotion of jatropha biofuel is weak</li> <li>7. It is not yet enable to produce biofuel Jatropha independently</li> </ol>
<p><b>Opportunities</b></p> <ol style="list-style-type: none"> <li>1. increasing because of non-renewable sources of energy to fuel is declining</li> <li>2. Government regulation to combining biofuels with fossil fuels</li> <li>3. The price of fossil fuel is increasing</li> <li>4. The development of biofuel production technology</li> <li>5. DME program development contained in the General Plan of Regional Energy Development of Central Java Province</li> </ol>	<p>Strengthening the motivation and continuous assistance to farmers in the cultivation of Jatropha to increase the capacity and quality of jatropha bean (S1, S2, S4, O1, O3)</p>	<ol style="list-style-type: none"> <li>1. Strengthening local government commitment and synergy with farmers to redevelop Jatropha based biofuel (W1,W4,W7,O1, O2)</li> <li>2. Facilitating biofuel production technologies to increase the independence of production by farmers (W1, W3, W4, W7, O1, O4)</li> </ol>
<p><b>Threats</b></p> <ol style="list-style-type: none"> <li>1. Jatropha oil market uncertainty</li> <li>2. The trade system of jatropha beans is weak</li> <li>3. Quality standard of Jatropha oil is high</li> <li>4. Competition from non Jatropha biofuel</li> <li>5. The commitment of the partner companies</li> </ol>	<ol style="list-style-type: none"> <li>1. Regulating trade system of jathropa beans to increase income and motivation of farmers (S1, S2, S5, T1, T2)</li> <li>2. Determining advisability of partner companies to maintain business continuity development of biofuels (S1,S2,T4, T5)</li> </ol>	<ol style="list-style-type: none"> <li>1. Developing network of partnerships to expand market share Jatropha based biofuel (W4,T1,T2,T4)</li> <li>2. Strengthening biofuels institutional to improve the bargaining position of farmers (T1, T2, T4)</li> </ol>

Source: Primary Data Analysis 2015

**RESEARCH OF WHILE BBV INFECTED AND DOSAGE OF RICE CHAFF ON THE INCREASING OF PATHOGEN STEM ROT RESILIENCE OF VANILLA (BBV) WHICH INDUCED OF RHIZOCTONIA BINUCLEATE (BNR) AND THE EFFECT ON THE INCREASING OF ORGANIC MATTERS AND SOIL PHOSPHORUS**

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**Abstract**

The using of healthy vanilla seedlings can increases productivity, quality, and plant's production life, however seeing the fact that inoculum *F. oxysporum* f.sp.*vanillae* (Stem Rot of Vanilla or BBV) scattered on the land then the utilization of microbial antagonism as a control agents which can decreasing level of the attacks. The effectivity of *Rhizoctonia* Binucleate (BNR) on plants affected by while BBV infected and dosage of chaff on plants. Before the treatment of every sample vanilla plants were inoculated with 15 grams of *Rhizoctonia* Binucleate and 9 grams of phosphorus. This research consisted of two treatment which first treatment is when inoculation of BBV with a level without inoculation of BBV, consists of (while doing planting, after fifteen days and after thirty days) or (H<sub>1</sub>, H<sub>2</sub>, H<sub>3</sub>), the second treatment is dosage of rice chaff consists of (0, 5, 10, 15) grams/plant or (S<sub>0</sub>, S<sub>1</sub>, S<sub>2</sub>, S<sub>3</sub>), soil type is Alfisol. With those variables on research units which organized around broad substantive research topics. Every research units consists of planted ten vanilla seeds in polybag which contain of 500 grams medium soil. Whereas sampling units consists of overall individual research units. The result of research shows that the interaction when inoculation of BBV and dosage of chaff truly different with the level of organic material, phosphorus and percentage of seedling death. Higher result of organic matter observation's parameter on the treatment H<sub>3</sub>S<sub>3</sub> was 4.10%, phosphorus on the treatment H<sub>3</sub>S<sub>3</sub> was 12.14%.

**Key words:** *Rhizoctonia binucleate, rice chaff, organic matter, phosphorus, vanilla*

**Introduction**

Vanilla plant (*Vanilla planifolia* Andrew) is one of industry plants which has economic values (Hadisutrisno, 2005). Vanilla can be augmented generatively with seeds and vegetative by cuttings. Because of augmentation with seeds takes time and blooming slower, then vanilla augmentation for commercial did by cuttings way. Farmer usually uses vanilla plants substance in the form of long cuttings (50-60 cm), at least consist of five joint as an augmentation substance. Vanilla seed or cutting needs every year around sixteen million of seeds, then needed a comprehensive main garden. Until now, adding seeds is still an obstacle factor in areas expansion, so need to think about adding cheap and efficient vanilla seeds from the best varieties (Sukarman, 2011). The main disease of vanilla plants in Indonesia is foul stem of vanilla (BBV), which caused by fungus *Fusarium oxysporum* f.sp. *vanilla*. This disease can causing a great damage which makes 50% to 100% plants death (Hadisutrisno, 2004). Every controlling effort of foul stem of vanilla which had been done, there are utilization of soil microorganism such as fungus rizosfer which profitable and has an antagonism characteristics on soil borne pathogen (Sukarman, 2011; Haryuni *et al.*, 2014a; Haryuni & Tyas, 2014b).

*Fusarium* is an uncontrollable fungi (Singh *et al.*, 1999), lives as saprofit in soil for two until four years, the infection is so fast by the sparks of soil water, water flow, insects, soil and plants cutting substance (Hadisutrisno, 2005). Fungus *Fusarium* spp in plants tissue creates polypeptide which has a role as a toxin and creat fusarat acid as pectolytic enzyme which is *pektinmetilesterase* (PME) and *depolimerase* (DP) which have roles to split the pectin in the cell wall of xylem and create colloidal mass as non-pectin which clogging the xylem until change into brown (Semangun, 2000; Semangun, 2001; Mukarlina *et al.*, 2010). Infection of fungus *F. oxysporum* through by lateral roots tip or the main of roots tip in parenchyma intercellularly and intracellularly, after that the infection is hamperring roots growth. This fungi survives in saprofit condition which shaped as chlamydospora on period of time up to five years (Sukanto & Tombe, 1995; Sudantha & Abadi, 2001).

The function of organic matter are to change nutrient uptake of soil to unravel, 90% lost very fast because decomposition process around 5% only which have a form as mineral. Those lost in the soil are affected by temperature, oxygen, and humidity, even with too much soil processing (Funderburg, 2001). Organic matter *Gliricidie sepium*, haulm and animal manure which are organic matter that worth to be used for farmer, it is because those have high quality, availability and high potential as well (Minardi *et al.*, 2011).

Phosphat is essential nutrition which as plants needs for its growth and progress. There are huge of phosphat in the soil, but around 95% to 99% phosphat which unavailable, so it can't be used by plants (Sanjotha, *et al.*, 2011). Efficiency of phosphorus fertilization usually around 15% to 20%, the last is lost because of abstersion and adsorbed by soil colloids (Moljono *cit* Soeminaboedy & Tejowulan, 2012).

BNR has a role as mikoryza (Haryuni, 2012), mikoryza fungi is fixing chemistry, physics and biology of soil characteristics because hyphae external of mikoryza fungi is able to penetrate the soil pore space, both micro or macro. Hyphae external and root existence is very important because it can absorbs and keep soil moisture (Dhillion & Friese, 1997; Nelson & Safir *cit*. Harahap, 2009). The existance of BNR and phosphorus before been inoculated with BBV is increasing plant resilience.

There is no final result of research about the effect of BNR and rice chaff on vanilla resiliences progress on pathogen of BBV, so we need to do testing, the aim of this research is to getting know while infection of BBV and rice chaff dosages happens, then increasing plant tissues resilience and its effect of the increasing of organic substance and soil phosphorus.

## Methods

Give 9 grams phosphorus/plants and 15 grams fungus *Rhizoctonia* binucleate in every treatment, first treatment is inoculated by BBV with a giving variation by inoculated when planting, inoculated on fifteen days after planting and the second treatment's parameter rice chaff with a dosage without rice chaff, 5 grams/plant, 10 grams/plant, 15 grams/plant which the soil type is Alfisol. With those variables above research units use organized around broad substantive research topics project. Every research units consist of ten vanilla seeds which been planted in polybag which contain of 500 grams medium soil. Whereas the sampling unit consist of the whole of individu in research units.

## Analysis

Soil analysis: example is soil that has been dried until the weight is constant, crushed or mashed, be strained with sieve size 2 mm, then put into plastic bowl. Soil characteristics that being observed in laboratory involve soil organic matter and phosphorus of soil with Bray II methods. Determination of organic material started with determination of C-organic

substances (COT) with Walkley and Black methods (1934). Soil C-organic substances which next is being synchronized with soil organic substances (BOT) with the formula  $BOT = 1.724 \times \% COT$  (Sabaruddin *et al.*, 2009).

Analysis of variance was conducted to test soil organic matter content and available soil phosphorus based on organized around broad substantive research topics project and continue with BNT test on the 5% of totally different standard.

## Result and Discussion

### 1. Soil Organic matter

Soil organic matter is one of material forming soil aggregates which has a role as adhesive material between the soil particles to unite into soil aggregates, so then organic matter is important in forming soil structure (Suntoro, 2003). Soil degradation and land happens because of the contamination of agrochemistry materials, erosion, and improper land management resulting decrease in the carrying capacity of the physical, chemical and biological soil. Organic matter is one of the most effective ways to control the occurrence of degradation of land.

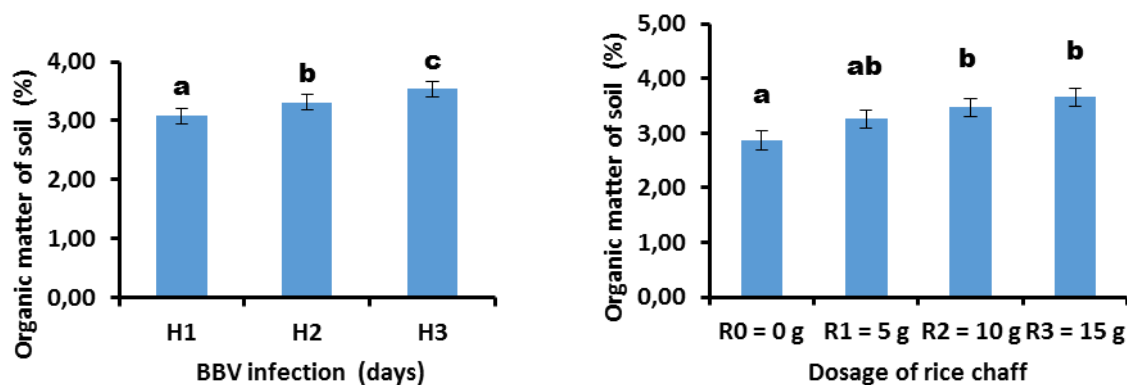
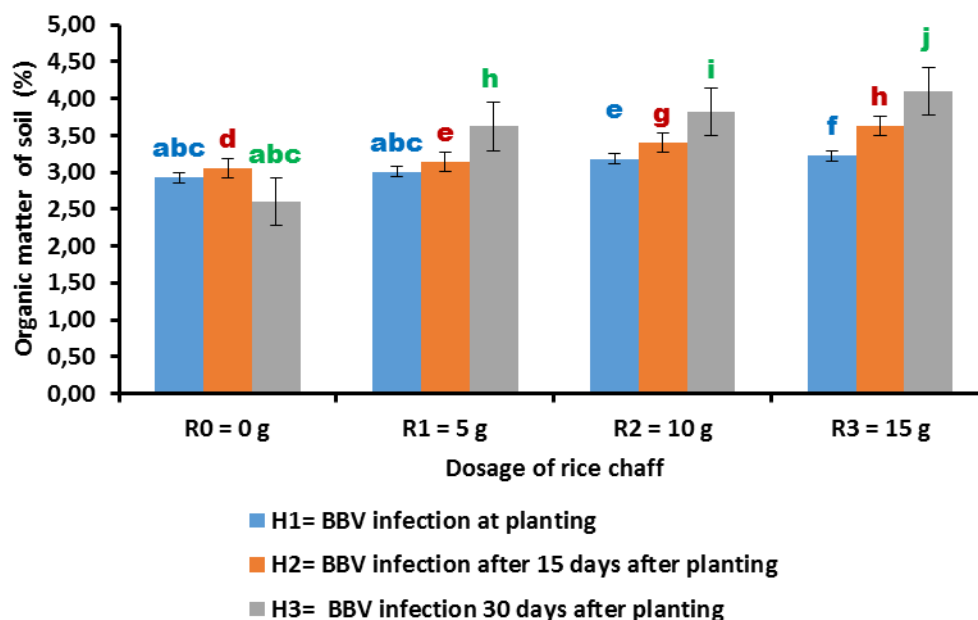


Figure 1. Soil of organic matter

Figure 1. shows that vanilla seeds which infected by BBV a month after planting ( $H_3$ ) shows truly different with seeds that has been infected by BBV while were planting ( $H_1$ ) whereas ( $H_1$ ) and ( $H_2$ ) was 3.09% and 3.31%. It caused by phosphorus (P) that has been given before planting could change P to available with hyphae help which formed from BNR, BNR existence has function as affected organic matter even by directly through mineralisation process or indirectly by helps the release of P which has been fixed (Suntoro, 2003). Soil organic matter serves as a reservoir of nutrients for crops, provides soil aggregation, increases nutrient exchange, retains moisture, reduces compaction, reduces surface crusting, and increases water infiltration into soil. Components vary in proportion and have many intermediate stages.

The treatment of giving dosage of 15 grams rice chaff is 3.65 grams shows truly different and tend to increase soil organic matter while the amount of ( $R_0$ ), ( $R_1$ ), and ( $R_2$ ) are 2.86%, 3.26%, and 3.47% (Picture 1). 15 grams of rice chaff together with BNR and P for a month give a room and time to decompose organic matter. Suwahyono (2011) thought that the content of humic acid on organic matter is an important substance from humus molecule which has a role to recondition soil as medium planting, help to loosen the soil, and help to uptake the nutrient, also increasing retention of water content, and spur the growth of microbes in the soil. Everyday humic acid is called humus and these compounds contribute to the physical and chemical quality of the soil. Support by Funderburg (2001) benefits of

organic matter are 1) nutrient supply, 2) water holding capacity, 3) soil structure aggregation, 4) erosion prevention.

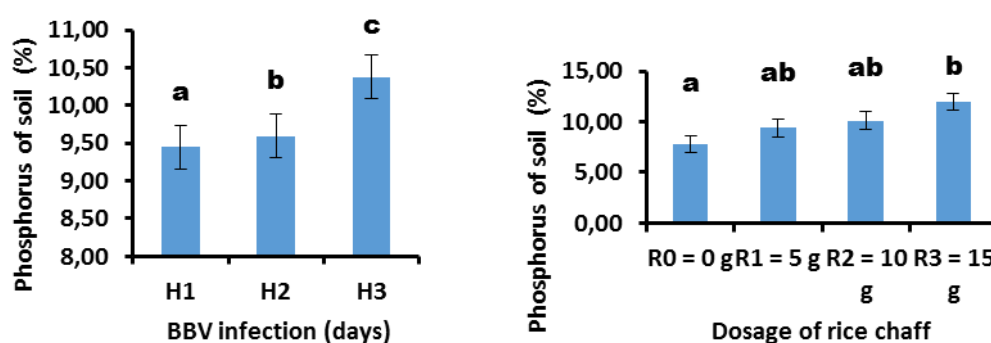


**Figure 2. Effect of interaction of variation of BBV infected and dosage of rice chaff to soil of organic matter**

Figure 2 shows that variant interaction while BBV infection and dosage of rice chaff effected it and tend to increase soil organic material content. The increasing of rice chaff and increasing while BBV infections on plants give real effect (Haryuni, 2012) by 4.1%. Whereas the lowest organic material content on treatment ( $R_0H_1$ ) is 2.93%. It is because of increasing of dosage of rice chaff from (0, 5, 10) grams to 15 grams causing in increasing organic material contents. Based on forming process, rice chaff doesn't bring microorganism pathogen because it was passing through burning process, then it is relative sterile. Its role in the soil increasing soil porosity then the soil becomes flabby also increasing soils ability to absorb water. The content of carbon is high, wherein the carbon element is indispensable in the composting process. Research result from Gawansyah *cit.* Tamtomo *et al.*, (2015) shows that rice chaff charcoal serves as the organic material can increase the productivity of soil and fertilizer efficiency as well as reducing the need for fertilizers. Organic matter is an energy source of macro and microbiology of soil so then increasing activity and microbiology population which has relation with decomposition activity and mineralisation of organic matter (Stevenson, 2007). Supported by result of analysis data Tamtomo *et al.*, (2015) that the content of rice chaffs charcoal are 0.2107% phosphorus, 0.3979% Calcium, 0.4758% Calcium, 0.0868% Magnesium and 3.2816% neutralization power. Rice chaff charcoal contains a lot of nutrient which have a role in increasing soil organic matter through decomposition process which give effect to the resistance and growth of plants. Sympatric microorganisms that influence microenvironment, such as water balance, nutrient content and substrate quality (Rasmussen *et al.*, 2015).

## 2. Soil Phosphorus

Nutrient which can be absorbed by plants with mycorrhizal fungi helps and roots are phosphorus, this element is required in relatively high amounts of plant (Marschner, 1986). Phosphorus which has been absorbed by hyphae external that resulting from BNR and modified root into polyphosphate compound. Hyphae is the important part of mycorrhizal fungi that are outside and inside the roots and serves to absorb the phosphorus in the soil (Dhillion & Friese, 1997; Brundrett, 2000; Krishna, 2005). Bolan (1991) thought that roots which been inoculated with mycorrhizal fungi, phosphorus levels higher than the roots do not bermikoriza. Supported by research of Haryuni (2012) dan Haryuni & Tyas (2015) BNR hyphae external increasing soil phosphorus levels. Support by Cameron *et al.*, (2007) *Goodyera repens* can obtain significant amounts of P from its mycorrhizal partner. These results provide further support for the view that mycorrhizal associations in some adult green orchids are mutualistic.



**Figure 3. Soil of phosphorus**

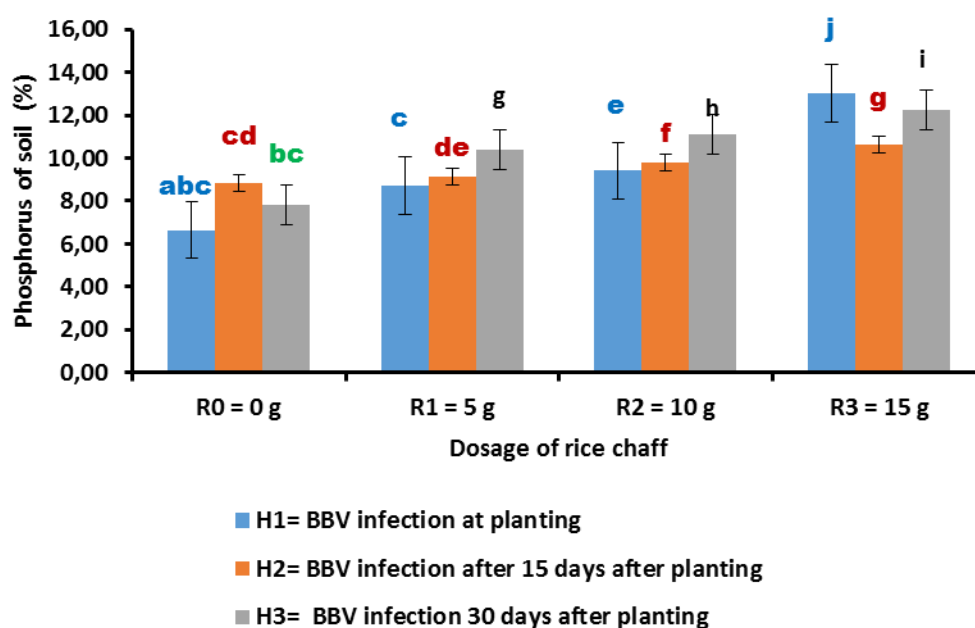
Time of BBV infected is truly different and increasing soil phosphorus levels, BBV infected while planting ( $H_1$ ) is 9.45% but ( $H_2$ ) and ( $H_3$ ) increased to 9.60% and 10.38% (Figure 3). That is because BNR which has been inoculated before planting forming threads hyphae, then issued a phosphatase enzymes and organic acids, especially oxalate can help liberate phosphorus (Bolan, 1991; Sasli, 2004). Research on sorghum were inoculated with mycorrhizal fungi showed that phosphorus levels higher than those without inoculated mycorrhizal fungi. Menurut Sasli (2004), thought, plants that have been with mycorrhizal fungi can grow better because can uptake nutrient such as N, P, dan K more than in the infected soil and root mycorrhizal fungi can increase the absorption of nutrients. BNR inoculation forms hyphae then helps the roots absorb and store water.

The increasing of husk dosage gives real effect and tend to increase soil phosphorus levels ( $R_3$ ) is 11.95% whereas on dosage ( $R_0$ ) ( $R_1$ ) and ( $R_2$ ) 7.77%, 9.41% and 10.1%. Increasing of phosphorus because husk contains of humic acid which is organic material components (Tamtomo *et al.*, 2015). Adding organic material can increase soil microorganism population even fungi or decomposers (Haryuni, 2012). The microorganisms that play a role here is BNR which grows forming threads hyphae thus improving nutrient absorption P. Supported by the research of Priyadharsini & Srane (2009) which states that rice husk ash improve the growth and yield of cowpea. BNR is microorganism which has ability to extract phosphate from insoluble form into a form available to plants through secretion of organic acids that



produced for the release of the complex P sorption (Hanafiah *et al.*, 2009; Haryuni, 2012). Inoculation can be increased available soil P concentrations, so that inoculated roots mobilize more P and plants may have up taken more P from soil. Arbuscular mycorrhizal fungi inoculation can be used as a component of integrated nutrient management strategies (Cozzolino *et al.*, 2013).

Figure 4 shows that variant interaction while infection BBV and rice chaff dosages gives different effect and tend to increasing soil phosphorus levels. On interaction (R<sub>3</sub>H<sub>1</sub>) the highest phosphorus levels is 13.03%, meanwhile (R<sub>3</sub>H<sub>2</sub>) and (R<sub>3</sub>H<sub>1</sub>3) are 10,61% and 12,22%. That was because of BNR and chaff contains of chitinase activity or microbial kitinolik, then hydrolyze chitin BBV compounds that has a role as organizer of cell walls, so BBV weakens even death (Fakamizo *et al.*, *cit.* Ferniah *et al.*, 20011; Semangun, 2001; Haryuni *et al.*, 2014a). BNR and chaff which degrade chitin BBV called as biopesticides and has a role as enzym producer and Plant Growth Promoting Fungi (PGPF) which produce metabolites growth regulators and provide nutrients for plants (Suryanto *et al.*, 2010; Bustaman *cit.* Khaeruni & Rahman, 2012; Haryuni *et al.*, 2014).



**Figure 4. Effect interaction of variation of BBV infected and dosage of rice chaff to soil of phosphorus**

BNR and rice chaff which degrades BBV has a role as microorganism that can release P bound so available shaped to plants. BNR as mycorrhizal can absorb P from mineral P sources which soluble because produce organic acids and phosphatase enzyme, with the mechanism of infection of the root system of the host plant, produces interwoven hyphae intensively then mycorrhizal roots can increase nutrient absorption capacity (Iskandar, 2001; Haryuni, 2014). Wherein P in soil substances is increasing, then P absorptions by plants will be increase as well (Mengel & Kirkby, 2007). Organic substances and mycorrhizal increase availability of P on corn crop (Sufardi *et al.*, 2013). The higher of population of mycorrhizal increase the absorption of water and nutrients needed by plants (Sastrahidayat, 2011; Subhi *et al.*, 2014). Microorganism existence is needed on P element because (1) the amount in soil

is little, (2) unavailability of the original P, and (3) P fixation occurs in soils derived from fertilization (Buckman dan Brady, 1980).

### Conclusion

Based on the analysis and the discussion above it can be concluded that while infection BBV, rice chaff dosages and its interaction really effecting on organic material levels and soil phosphorus and tend to increase. Infection BBV on the base of the trunk does not infect but degraded by BNR, contains of humic acid then decomposes into organic matter. Organic matter which has been formed is an energy source of BNR of hyphae external growth which has a role to absorb available P to plants.

### Acknowledgement

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## DOES INFORMATION SYSTEM TECHNOLOGY SUCCEED IN HELPING MANAGE DEBT?

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### Abstract

Using DeLone& McLean IS success model, we investigate succeed of Debt Management and Financial Analysis System (DMFAS) that used by Indonesia to manage around USD 57,2billion of government debt. We use 84 samples from 100 DMFAS user and multiple regression analysis was applied to evaluate the model. Except link from system quality to intention to use and user satisfaction to intention to use, the hypothesized relationships between the success variables are significantly or marginally supported. Moreover – based on direct and indirect effect of causal path – among three antecedents quality, information quality has strongest influence to net benefit while net benefit influenced stronger by intention to use than user satisfaction. The findings of this study can be used to assess DMFAS succeed that used in other country from user perspective.

**Keyword:** *DMFAS, Debt Management, IS success model, Mandatory System, G2G System*

### Introduction

As a developing country, Indonesia must maintain its economic growth. In order to maintain that economic growth, Indonesia has some fiscal policy. This fiscal policy has two main instrument, taxation and government expenditure. To make economic growth positively, the government must increase its expenditure to productive sector and that's why now Indonesia applied a deficit budgeting. This is inline with Wagner's Law that predicts that the development of an industrial economy will be accompanied by an increased share of public expenditure in gross national product. Indonesia's main financing source for that expenditure is taxation. Unfortunately, money from taxation is not enough for financing the government expenditure proven by low tax ratio at around 11% in 2015<sup>28</sup>. To cover that gap, Indonesia borrow money with two main instrument, state bonds and debt. Thus, borrowing money from creditur is unavoidable. Data per 30 September 2016, Indonesia's debt outstanding is USD 57,2 billion<sup>29</sup>. In order to make this debt usefull for economic instead of burden for economic, Indonesia must apply international best practices to manage its debt which is one of them is using information system technology in managing debt. The Direktorat General of Financing and Risk Management Ministry of Finance (DGFRM) and Central Bank are institutions that managing Indonesia's debt. Since 1989, those 2 institutions

use a system called Debt Management and Financial Analysis System (DMFAS) to manage the debt.

DMFAS is a G2G information system that has main role to managing government debt including manage general debt information, amortization schedule, debt service operations, data projection and debt analysis. Developed by DMFAS Programme – a program under United Nations Conference on Trade and Development – DMFAS has been used in 57 countries all around the world. Since its vital role for managing Indonesia's debt and fact that its one of world class information system, it is become important to measure DMFAS success in Indonesia.

DeLone and McLean (1992) did some comprehensive review with some measurement concept of information system success and propose 6 information system success factor as a taxonomy and framework to measure independent variable in information system success research. The model known as D&M IS success model. In 2003, DeLone and McLean (2003) did update to their model which is generally give a multidimensional relationship between 3 antecedent quality: information quality, system quality and service quality with 2 satisfaction construct: intention to use/use and user satisfaction and their ultimate link with net benefit.

Although D&M IS success model has been widely used by researcher to be a framework for their research, there are still few research on DMFAS success. One of them was conduct by Ariffudin (2014) that investigate about user acceptance toward DMFAS adoption with technology acceptance model as his framework. Inline with Wang and Liao (2008), measuring and evaluating eGovernment progress and success have become a priority for decision makers in all countries and they emphasized on the need for evaluation efforts that assess the effectiveness of the Government systems, this research aims to find out what factors affecting DMFAS success besides validating a multidimensional G2G and mandatory systems success model based on the DeLone and McLean (2003) IS success model.

This paper is structured as follows. Section 2 is literature review about D&M IS success model and DMFAS. Section 3 presents our research model and hypotheses. Section 4 presents research design and method. Section 5 presents the results. Section 6 presents a discussion of the results of the study. Section 7 presents a conclusion of the study.

## **Literature Review**

### *Information system success model*

The DeLone & McLean information success model (hereafter called D&M IS Success Model) was first introduced in 1992. The primary purpose of the original DeLone and McLean paper (DeLone and McLean, 1992) was to synthesize previous research involving IS success into a more coherent body of knowledge and to provide guidance to future researchers (DeLone and McLean, 2003). The model was based on communication research of Shannon and Weaver in 1949 and Mason in 1978 (Rai et al, 2014). As in Rai et al (2014), Shannon and Weaver divide 3 level of communications: (1) the technical level of communications as the accuracy and efficiency of the communication system that produces information, (2) the semantic level is the success of the information in conveying the intended meaning, and (3) the effectiveness level is the effect of the information on the receiver. In the D&M IS Success Model, "systems quality" measures technical success; "information quality" measures semantic success; and "use, user satisfaction, individual impacts," and "organizational impacts" measure effectiveness success.

As in Rai et al (2014), Mason (1978) adapted Shannon and Weaver's three levels of communication problems to an IS context. Mason interpreted the effectiveness level to include influence on users and defined the effectiveness-influence level in terms of events that

may influence users. The events include receipt of information, evaluation of information, and application of information. Evaluation and application of information may effect a change in the user's behavior.

Based on both process and causal considerations, these six dimensions of success are proposed to be interrelated rather than independent (As in figure 1) (Agrifoglio et al: 2015): (1) system quality, the measurement of the system itself; (2) information quality, the measurement of the IS output; (3) information use, recipient's consumption of the IS output; (4) user satisfaction, recipient's responses to the use of the IS output; (5) individual impact, the effect of the system on user behavior; and (6) organizational impact, the effect of the information on organizational performance.

This model makes two important contributions to the understanding of IS success. First, it provides a scheme for categorizing the multitude of IS success measures which have been used in the research literature. Second, it suggests a model of temporal and causal interdependencies between the categories (Seddon, 1997).

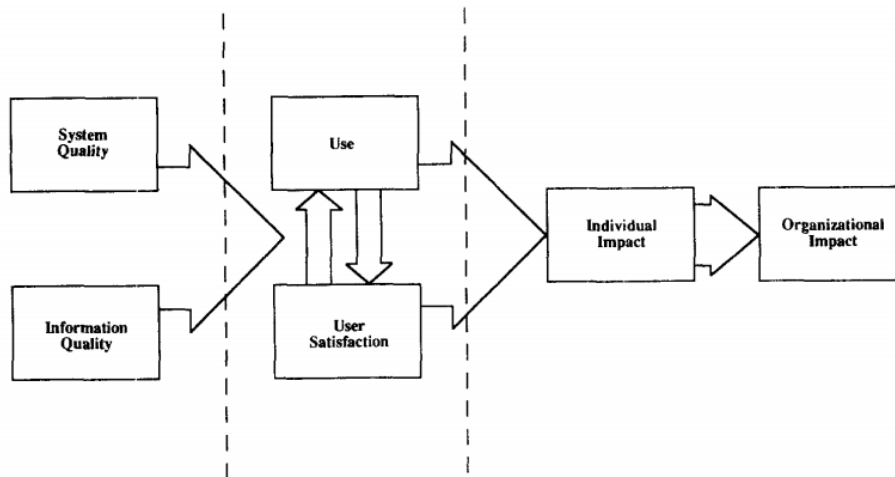
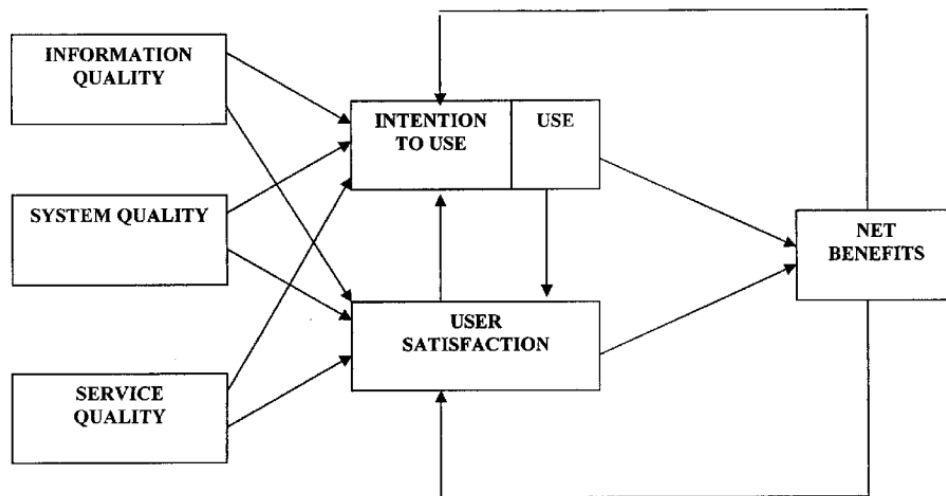


Figure 1. 1992 D&M IS success model (DeLone & McLean, 1992 p. 87)

The D&M IS Success Model, though published in 1992, was based on theoretical and empirical IS research conducted by a number of researchers in the 1970s and 1980s and the role of IS has changed and progressed during the last decade (DeLone and McLean, 2003). The explosive development of e-commerce was a major motivation for DeLone and McLean to update their IS success model in 2003 (Wang & Liao, 2008). Figure 2 shows the updated IS success model with changes: (a) the addition of service quality to reflect the importance of service and support in successful IS systems, (b) the addition of intention to use to measure user attitude and (c) the collapsing of individual impacts and organizational impacts into a more parsimonious net benefits construct (Dewi, 2010). Thus, the dimensions of IS success in the updated D&M IS Success Model are: information quality, system quality, service quality, intention to use/use, user satisfaction and net benefit.



**Figure 2. 2003 D&M IS success model (DeLone & McLean, 2003 p. 24)**

Number of study has been conduct to test and validation the model, some of them are focus on public sector informations system.

Seyal and Rahman (2015) conduct a pilot study undertakes and validates the Delone & McLean's (2003) instrument to measure users' success of Financial and Accounting Information System (FAIS) developed for Brunei Government under its e-Government initiative and found that success of the FAIS is measured by the net benefit which in turn is determined by users' satisfaction and system use.

Fadhilah et al (2016) investigates the role of management accountants in Indonesia by adopting the D&MIS success model (2003) and found that both management accounting information quality and management accounting service quality have significant relationship with user satisfaction.

Aditiawarman et al. (2014) using D&M IS success model investigate Sipendalih (Indonesia voter management system) effectiveness and found that information and system quality as well as system ease of use significantly influenced voter's intention to use Sipendalih.

Edrees and Mahmood (2014) conduct study that provides an empirical test of an adaptation of D&M IS success model in the context of G2C eGovernment and found that the model was valid and all of relationship between six success dimensions was significantly or marginally supported.

Kerta and Suryawan (2013) conduct study to measure success of information system in Binus University using D&M IS success model and measure its maturity level using COBIT. They conclude that the information system was good enough and the maturity level at repeatable but intuitive.

Hu & Wu (2016) conduct study that provides an empirical test of the D&M IS success model in G2B contexts for environment information system and found that the use of the information system corresponds to both information quality and the system quality, and the system quality provided the greater contribution when it comes to the system's application.

Xinli (2015) examine the effectiveness of Electronic Monitoring Systems (EMS) in reducing corruption in China using D&M IS success model and found that the application of EMS has a positive effect on reducing corruption. Information Technology (IT) thus has the potential to reduce corruption, but the institution and the people are more important.



Agrifoglio et al. (2015) conduct study for understanding the effectiveness of e-court applications in Italy using D&M IS success model and found the explanatory role of the model and the salient contribution of system and information quality variables on court staff's performance.

Leylan (2016) conduct study toward e-Police service Officers of Iran using D&M IS success model and found a sequence of factors that influence the success of the system: service quality, net benefits, user trust, use, system information and system quality.

Agbabbika and Ugaddan (2016) conduct study to investigate the salient factors that are significant in predicting the public value creation of Korean eGovernment from the citizen perspective using D&M IS Success Model and the public value approach. They found that information quality and system quality were significantly predict trust in eGovernment, while for citizen satisfaction, information quality and service quality were critical. Moreover, information quality, service quality and citizen satisfaction are significant in predicting net benefits.

Rai et al. (2014) conduct a research for empirically and theoretically assessing DeLone and McLean's (1992) and Seddon's (1997) models of information systems (IS) success in a quasi-voluntary IS use context and their results support DeLone and McLean's focus on integrated IS success models and their observation that IS success models need to be carefully specified in a given context.

Chen et al. (2015) examines citizens' propensity to use e-governmental website services through the lens of the IS Success Model in general with trust theory addition, and in the context of the Philippine online tax filing system. They found that trust in technology, trust in government, and prior experience directly affected the trust in e-government websites, which in turn directly influenced all three IS quality dimensions. Of these three dimensions, information quality was found to be the most consistently and significantly influence perceptions of usefulness and satisfaction, implying that this dimension is the most critical one beyond the service quality and system quality for taxpayers to use the system.

Manandhar et al. (2015) using D&M IS success model investigate the factors related to the successful implementation of online e-government service delivery mechanism in Kathmandu, Nepal and conclude that the successful implementation of online services depends on the system quality which functions as an integral part of all quality measures in the Nepalese perspective.

Stefanovic et al. (2016) investigates the success of e-government system in Serbia and found that system quality is the main component of measuring the success of an e-government system in a municipality.

Khayun & Ractham (2011) attempted to identify the e-Excise (the online excise tax payment) success factors by employing the IS success model and found that by increasing Trust in the e-Government website, Perceptions of Information Quality, Perceptions of System Quality, and Perceptions of Service Quality will influence System Usage and User Satisfaction, and will ultimately have consequences for the Perceived Net Benefits.

Awwad & Mohammad (2010) conduct a study that using DeLone and McLean's IS success model in the mandatory context of online registration system (ORS) in one Jordanian university and empirical examination of the model's hypotheses has indicated that students' "intention to use" ORS is dependent on system quality, service quality, user satisfaction and net benefits.

Floropoulos et al (2010) conduct an investigation the success of the Greek Taxation Information System (TAXIS) from the perspective of expert employees, who work in public taxation agencies. Their results provide evidence that there are strong connections

between the five success constructs. All hypothesized relationships are supported, except for the relationship between system quality and user satisfaction.

As a conclusion, we assume that the updated D&M IS Success Model can be adapted to measure DMFAS success from the user perspective. As the focus of this study is on the measurement of the success of DMFAS from the user perspective, the net benefit in this study refers to the user-perceived net benefit evaluation of DMFAS.

#### *Debt Management and Financial Analysis System (DMFAS)*

Based on DMFAS 6 Brochure, DMFAS is software designed to help countries manage their external and domestic public debt. DMFAS monitors debt obligations such as government, government-guaranteed and on-lending debts, as well as grants. It can also be used to monitor private non-guaranteed external debt.

DMFAS 6 is the sixth major release of the DMFAS Programme software since 1982. Based on state-of-the-art web technology, DMFAS 6 is accessible from commonly used web browsers, with a customizable user interface and enhanced security. It offers all the existing functions of the previous version (5.3) and many new features for all levels of users. DMFAS 6.0 was designed to meet needs for modern debt management office with separation of: front-office (issuance of debt securities), middle-office (analysis) and back-office (registration and management of operations) tasks.

Usually installed in the Central Bank and/or Ministry of Finance, it provides accurate and timely information for debt management. DMFAS enables debt officers to carry out the following operations:

- 1) Record all information concerning loans, grants and debt securities, including their possible relationship to projects and to different national budget accounts,
- 2) Create and update estimated disbursements automatically,
- 3) Calculate all amortization tables automatically,
- 4) Record real drawings, real subscriptions and debt service operations,
- 5) Identify loans where debt service is in arrears and calculate late interest,
- 6) Produce a wide range of standard and customized reports, including reports for validation, control and statistical bulletins,
- 7) Perform analysis of debt portfolio and build debt strategies

DMFAS has so far worked directly at the country level with 57 countries (list country that use DMFAS available in appendix 2).

As one of the developing countries, Indonesia has used DMFAS primarily to monitor government foreign debt and grants. In Indonesia there are four institutions that use DMFAS, (1) Directorate General of Financing and Risk Management MoF for managing foreign debt and grant, (2) Central Bank for managing foreign debt, (3) Directorate System of Investment Management MoF for managing subsidiary loan agreement – a forward lending loan from foreign to local government mediated by central government – and (4) Indonesia Investment Agency MoF for managing local government loan as investment. This study focuses on use DMFAS in managing foreign debt so the target institution of this study was DGFRM and Central Bank.

#### **Research Model and Hypotheses**

Using DeLone and McLean's original IS success model (1992), we consider system quality, information quality, service quality, intention to use, user satisfaction, and net benefit as key variables in assessing the success of DMFAS. The research model is shown in Figure 4. There are 2 main differences with original D&M IS success model, first we use intention to

use instead of use since DeLone and McLean suggest that for mandatory system intention to use is more proper than use. Since DMFAS is mandatory system, then we use intention to use. Second, we eliminate the link from net benefit to intention to use and user satisfaction to avoid model complexity.

#### *Information quality*

Information quality captures the system content issue. The content should be personalized, complete, relevant, easy to understand, and secure. (DeLone & McLean, 2003). In this context, information quality is about how well the information provided in DMFAS so that can help user in his or her daily task. Higher information quality will bring positive intention to use toward DMFAS. Thus, we hypothesize:

**H1. Information quality will positively affect intention to use.**

Moreover, if the information provided is complete, relevant, easy to understand, and secure, user will experience satisfaction in using the system, because such information helps them to do their daily task more accurate and faster. Thus, we hypothesize:

**H5. Information quality will positively affect user satisfaction.**

#### *System quality*

System quality is concerned with whether or not there are 'bugs' in the system, the consistency of the user interface, ease of use, quality of documentation, and sometimes, quality and maintainability of the program code (Seddon 1997). If DMFAS has a good system quality, then user will experience less error and bugs when using it. If user experience system better, it will lead to positive intention to use and higher user satisfaction. Thus, we hypothesize:

**H2. System quality will positively affect intention to use.**

**H6. System quality will positively affect user satisfaction.**

#### *Service quality*

Service quality is concerned with the quality of the support that system users received from the IS department and IT support personnel. For example, responsiveness, accuracy, reliability, technical competence, and empathy of the personnel staff (Pitt et al. 1995). Better service quality will make user feel comfortable and secure when using DMFAS – since they know that there is a good technical support from IT department – and then will lead to positive intention to use and higher user satisfaction. Thus we hypothesize:

**H3. Service quality will positively affect intention to use.**

**H7. Service quality will positively affect user satisfaction.**

#### *User satisfaction*

User satisfaction is recipient response to the use of the output of an information system (DeLone & McLean, 1992). User satisfaction towards system measure as an user psychological or affective state due to the cognitive appraisal of their experiences with system in question (Chen, 2015).

In this context, user satisfaction is belong to user of DMFAS that use DMFAS for its daily task or routine. As reported by DeLone & McLean (2003), increased "user satisfaction" will lead to increased "intention to use" and as a result of this "user satisfaction," certain "net benefits" will occur. Thus we hypothesize:

- H4. User satisfaction will positively affect intention to use**  
**H9. User satisfaction will positively affect perceived net benefit**

*Intention to use*

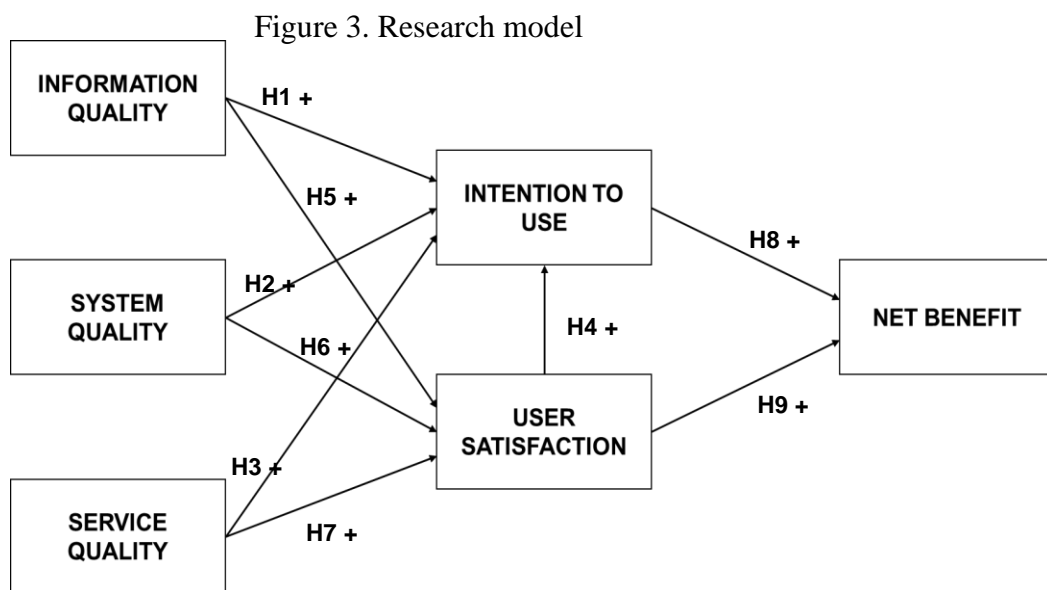
Reported by Wu and Wang (2006) in Awwad & Al-Mohammad (2010), intention to use is a measure of the likelihood a person will employ the application. It is a predictive variable for system use. DeLone and McLean (2003) contend that use and intention to use are alternatives in their model, and that intention to use may be a more acceptable variable in the context of mandatory usage (Wang and Liao, 2008).

The “intention to use” variable has not been widely addressed in empirical IS research, perhaps due to the voluntary nature of most examined systems (Awwad & Al-Mohammad, 2010). Since DMFAS is a mandatory system, intention to use was used instead of use. As reported by DeLone & McLean that the three quality antecedent – singularly or jointly – and user satisfaction will affect intention to use (we hypothesise it in H1, H2, H3 and H4) and as a result of this intention to use certain net benefits will occur. Thus, we hypothesise:

- H8. Intention to use will positively affect net benefit**

*Net benefit*

Net benefits is a comprehensive measure comparing past and expected benefits against past and expected costs attributed to the use of an information technology system (Seddon, 1997). In this context, net benefits is referred to as the user-perceived net benefit evaluation, most notably in terms of making the job easier, time savings, and achieving DMFAS goals.



**Research Design and Method**

*Measures of the construct*

In order to ensure the validity of the scales used in this research, items from previous study with Likert scale (1-4) ranging from “Strongly disagree” to “Strongly agree” was used:

**Table 1. Item used in study**

<b>Construct</b>	<b>Code</b>	<b>Indicator</b>	<b>References</b>
<b>Information Quality</b>	IQ 1	Precise	Doll &Torkzadeh's (1988)
	IQ 2	Sufficient	
	IQ 3	Up-to-date	
<b>System Quality</b>	SQ 1	User friendly	Doll &Torkzadeh's (1988)
	SQ 2	Easy to use	Hu & Wu (2016)
	SQ 3	Dependable	
<b>Service Quality</b>	SV 1	Sincere service	Y.-S. Wang & Liao (2008)
	SV 2	Safe transaction	
	SV 3	Individual attention	
<b>User Satisfaction</b>	US 1	Satisfaction	Doll &Torkzadeh(1988);
	US 2	Expectation	Palvia(1996);
	US 3	Perceived utility	Y.-S. Wang et al (2007)
<b>Intention to Use</b>	IN 1	Intention to use	Venkatesh et al. (2003)
	IN 2	Prediction to use	
	IN 3	Plan to use	
<b>Net Benefit</b>	NB 1	Making job easier	Etezadi-Amoli&
	NB 2	Saving time	Farhoomand's (1996)
	NB 3	Achieving the goal	Hu & Wu (2016)

*Data collection procedure*

The data used to test the research model were obtained from a population of users of DMFAS system in DGFRM and Central Bank. According to DMFAS active user list that given by DGFRM IT Department, there are 93 active user in DGFRM and 7 active user in Central Bank. The respondents were then instructed in the questionnaire to answer the questions for assessing the DMFAS system. For each question, respondents were asked to circle the response which best described their level of agreement. A total of 87 responses were obtained and 84 is usable.

**Results**

Demographic data (Table 2) shows that most of the respondents were male, at productive age, highly educated and experienced enough with DMFAS so that we can assume that they have enough insight to give an objective assessment about DMFAS.

**Table 2. Characteristics of the respondents**

	<b>Characteristic</b>	<b>Number</b>	<b>%</b>
<b>Gender</b>	Male	63	75
	Female	21	25
<b>Age</b>	< 25	1	1
	25 – 35	55	65
	36 – 45	23	27
	> 45	5	6
<b>Degree</b>	Diploma	14	17

	<b>Characteristic</b>	<b>Number</b>	<b>%</b>
	Undergraduate	52	62
	Graduate	18	21
<b>Experience</b>	< 1	4	5
	1 – 3	22	26
	3 – 5	17	20
	> 5	41	49

Validity and reliability test was applied to the research instrument. The result of validity test show that all of questionnaire items was valid since all of the r-statistics excess r-table (5%, 82) 0,2146. Each variables had Cronbach's alpha more than 0.8 which indicates a high level of internal reliability for our scale with this specific sample. The descriptive statistic of responses for each questionnaire item is shown in table 3.

**Table 3. Descriptive statistic of responses**

<b>Item</b>	<b>Mean</b>	<b>Med</b>	<b>Mode</b>	<b>Stdev</b>	<b>Min</b>	<b>Max</b>	<b>Frequency (n)</b>			
							<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Agree</b>	<b>Strongly Agree</b>
IQ1	3,29	3	3	0,50	2	4	0	2	56	26
IQ2	3,35	3	3	0,55	2	4	0	3	49	32
IQ3	3,26	3	3	0,56	2	4	0	5	52	27
SQ1	2,93	3	3	0,72	1	4	1	22	43	18
SQ2	2,92	3	3	0,70	1	4	2	18	49	15
SQ3	3,23	3	3	0,63	2	4	0	9	47	28
SV1	3,05	3	3	0,69	1	4	1	15	47	21
SV2	3,19	3	3	0,53	2	4	0	6	69	25
SV3	2,79	3	3	0,73	1	4	2	27	42	13
US1	3,10	3	3	0,59	2	4	0	11	54	19
US2	2,95	3	3	0,67	2	4	0	21	46	17
US3	3,08	3	3	0,66	2	4	0	15	47	22
IU1	3,21	3	3	0,52	2	4	0	4	58	22
IU2	3,15	3	3	0,57	1	4	1	5	58	20
IU3	3,20	3	3	0,49	2	4	0	3	61	20
NB1	3,24	3	3	0,55	2	4	0	5	54	25
NB2	3,19	3	3	0,59	2	4	0	8	52	24
NB3	3,12	3	3	0,52	2	4	0	7	60	17

Classic assumption tests was conduct as a requirement for multiple regression analysis. After eliminate 3 responses (87 responses gathered and 84 is used) the result reveal that there was no violation on classic assumptions.

In this research we use two types of statistical analysis, Pearson correlation was conducted to test the relationship between the variables and multiple regressions analysis was

conducted to test hypothesized causal path. Table 2 shows the result from Pearson correlation analysis, all relationship between variable were found statistically significant at  $p < 0,01$ . Moreover, except relationship between SQ – IU and US – IU, all correlation values exceed 0,5 which is considered as a strong relationship.

**Table 4. Pearson correlation results**

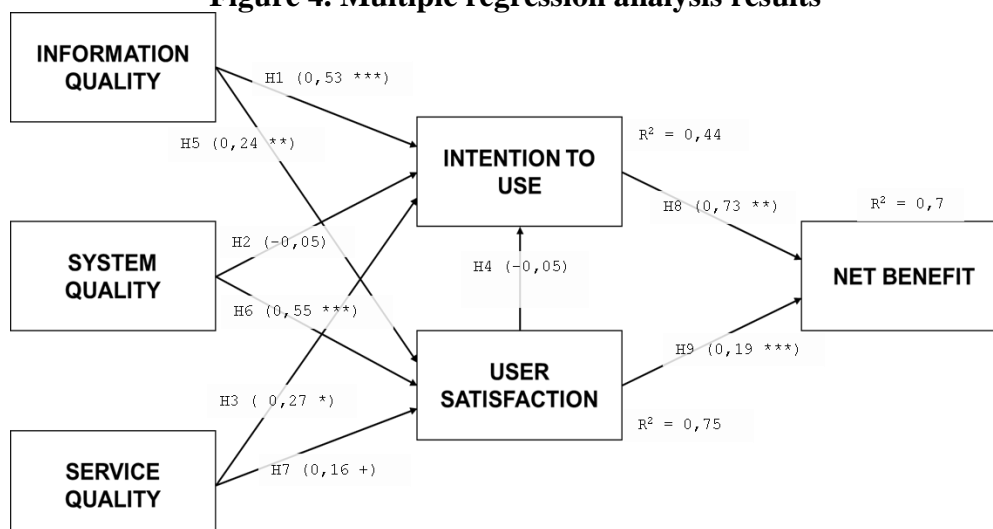
	IQ	SQ	SV	US	IU	NB
IQ	1					
SQ	.725**	1				
SV	.691**	.692**	1			
US	.744**	.832**	.702**	1		
IU	.640**	.476**	.563**	.489**	1	
NB	.771**	.751**	.674**	.817**	.544**	1

\*\* . Correlation is significant at the 0.01 level (2-tailed).

To examine hypothesized causal paths, multiple regressions analysis was conducted. Figure 4 shows standardized path coefficient, p-values, and r square value. Except link from system quality to intention to use and user satisfaction to intention to use, the hypothesized relationships between the six success variables are significantly or marginally supported. Thus, H1 ( $\beta=0,53$ ), H3 ( $\beta=0,27$ ), H5 ( $\beta=0,24$ ), and H6 ( $\beta=0,55$ ) were supported. The influences of service quality on user satisfaction were not significant at  $p < 0,05$ , but significant at  $p < 0,1$ . Thus, H7 were marginally supported ( $\beta=0,16$ ). As a consequence, among 3 antecedent quality, information quality was strongest influence for intention to use while strongest influence on user satisfaction was system quality. Both user satisfaction ( $\beta=0,19$ ) and intention to use (0,73) had a significant influence on net benefit thus H8 and H9 was supported.

In term of variance explained by the model, 70% of the variance in net benefit was explained by intention to use and user satisfaction with intention to use exerting a stronger direct effect than user satisfaction. Forty-four percent of the variance in intention to use was explained by information quality, system quality, service quality and user satisfaction while 75% of the variance in user satisfaction was explained by information quality, system quality and service quality.

**Figure 4. Multiple regression analysis results**



+  $p < 0,1$  ; \*  $p < 0,05$  ; \*\*  $p < 0,01$  ; \*\*\*  $p < 0,001$

Summarized in Table 5, the direct and total effect of user satisfaction on net benefit were 0,19 and 0,15, respectively. The direct and total effect of intention to use on net benefit was 0,73. Thus, intention to use exhibited stronger direct and total effect on net benefit than user satisfaction. Among 3 antecedent quality, information quality gained the strongest total effect on net benefit.

## Discussion

Among the three quality antecedent, information quality gained strongest influence on intention to use. This means the attitude of user about DMFAS was most influenced by information quality. Although DMFAS is a mandatory system, user intention, plan and predict to use DMFAS was depend on quality of information that provided by DMFAS.

**Table 5. Direct, indirect and total effect**

	DIRECT			INDIRECT			TOTAL EFFECT		
	IU	US	NB	IU	US	NB	IU	US	NB
<b>IQ</b>	0,53	0,24		-0,01		0,42	0,52	0,24	0,42
<b>SQ</b>	-0,05	0,54		-0,03		0,05	-0,08	0,54	0,05
<b>SV</b>	0,27	0,16		-0,01		0,22	0,26	0,16	0,22
<b>US</b>	-0,05		0,19			-0,04	-0,05		0,15
<b>IU</b>			0,73						0,73

The satisfaction, fulfill expectation and perceived utility of DMFAS was influenced most by system quality. DMFAS was build in web-based platform, one of its main advantage is its multiplatform, which means user can use any operating system that has web browser in it to access DMFAS. This advantage make user more flexible in accessing DMFAS. The disadvantage of using web-based platform is its loading speed. DMFAS takes a while for loading its user interface before user can use it. This disadvantage was complained by some of respondents beside the report issue and will be discussed on next pharagraph.

The closest construct to measure IS success is net benefit. This construct influenced most by intention to use. DMFAS is a mandatory system which means user must use DMFAS to do their jobs whether they like it or not. In this case, whether the user was satisfied or not, as long as the positive intention to use was exist, net benefit of the system will exist too. This finding is a base for DGFRM to take a policy about how to build user positive attitude about DMFAS. For example, conduct more training for user with DMFAS expert from UNCTAD as a trainer so there will be a good knowledge and experience transfer that can lead to positive attitude toward DMFAS.

In term of system quality, DMFAS was not success enough as the link between system quality and intention to use was not significant. This finding was supported by complain from some of DMFAS user that complaining about the loading speed of DMFAS and the flexibility of report producing. One of advantage having web-based system is its flexibility of access, user can access it using variety operating system. In other side, that advantage bring a consequence. Since all of system user interface is served by application server, it will take a while to operate the system. Some respondent still compare DMFAS 6.0 with DMFAS 5.3 which is in other means it is comparison between desktop-based system (DMFAS 5.3) and web-based system (DMFAS 6.0). Such kind of comparison is not apple-to-apple comparison regarding commonly desktop-based system load its user interface faster than web-based system. However, to overcome this constraint, the IT support team must



increase DMFAS server and network capacity so it will load with no time. About the report, DMFAS already has a modul to produce many style of report but if thats not enough, user can generate its own report with Query Builder. The query builder is not something that operated by just click it, user must type certain syntax to get their report. We suggest that the DGFRM and Central Bank must conduct intensive training on query builder so that every user can operate the query builder and if more complex report layout needed, they can build their own modul to produce report.

Another interesting finding was the link between user satisfaction and intention to use was not significant. This means the intention to use existance is not depend on whether user feel satisfied or not. This finding was supported by logic that in the mandatory environment, user must intent to use the system no matter they satisfied or not with the system.

Finally, we talk about the effect of 3 antecedent quality and 2 satisfaction construct to net benefit. Among 3 antecedent quality, information quality gained strongest total effect on net benefit and intention to use had stronger effect that user satisfaction on net benefit. Based on this finding, to gain maximum net benefit of DMFAS, DGFRM and Central Bank can start with maintain information quality that provided by DMFAS. Higher information quality will lead to higher intention to use and user satisfaction that at the end will bring maximum system net benefit.

### **Conclusion & Limitations**

This research paper examined the IS success of DMFAS from user perspective. A field survey was conducted in the DGFRM MoF and Central Bank of Indonesia to test the model. The empirical results verified the validity of the D&M IS success model. Except link from system quality to intention to use and user satisfaction to intention to use, the hypothesized relationships between the six success variables are significantly or marginally supported. Both intention to use and user satisfaction were significant in predicting net benefit with intention to use gained higher direct effect on net benefit. Moreover, compared with the other two antecedent quality, information quality had more vital role for the sucess of DMFAS.

This research has its limitation as we did not examine the feedback from net benefit to intention to use and user satisfaction. Future study should consider to take the feedback and investigate it to get better understand about IS success model. Another limitation is used of intention to use in mandatory system. Even DeLone and McLean (2003), however, were rather brief and ambiguous in their justification of such an introduction. They simply suggested that intention to use may be a worthwhile alternative measure in some contexts (Koh et al. 2010).

### **Recommendations & Implications**

We recommend future study should consider to take the feedback and investigate it to get better understand about IS success model. Moreover, there is an alternative of using "attitude" construct instead of "intention to use" (Koh et al. 2010) that can be investigate to validate which one is the best success dimension.

Since DMFAS was used widely in all around the world, we recommend to do a global research about DMFAS success for assessing DMFAS succeed from user perspective so that the UNCTAD's DMFAS Programme can obtain empiric evidence about DMFAS success that can be a base for improvement the system.

Findings of this study provides implications for the seniormanagement in DGFRM and Central Bank. First, a policy about information quality must be issued for maintain

current high level of information quality. Second, an upgrade and improvement in DMFAS access speed and if needed an easier tailored report modul.

**Appendix 1. Survey items used in this study**

<b>Question</b>	<b>Code</b>
<b>DMFAS provides the precise information you need.</b>	<b>IQ1</b>
<b>DMFAS provides sufficient information.</b>	<b>IQ2</b>
<b>DMFAS provides up-to-date information.</b>	<b>IQ3</b>
<b>DMFAS is user friendly.</b>	<b>SQ1</b>
<b>DMFAS is easy to use.</b>	<b>SQ2</b>
<b>Using DMFAS you can access the debt information every time you need</b>	<b>SQ3</b>
<b>When you have a problem, DMFAS service shows a sincere interest in solving it.</b>	<b>SV1</b>
<b>You feel safe in your transactions with DMFAS service.</b>	<b>SV2</b>
<b>When you have a problem, DMFAS service gives you individual attention.</b>	<b>SV3</b>
<b>. You are satisfied with DMFAS.</b>	<b>US1</b>
<b>. DMFAS has met your expectations.</b>	<b>US2</b>
<b>. Services of DMFAS are of high quality.</b>	<b>US3</b>
<b>. You intend to use DMFAS in the next 12 months.</b>	<b>IU1</b>
<b>. You predict you would use DMFAS in the next 12 months.</b>	<b>IU2</b>
<b>. You plan to use DMFAS in the next 12 months.</b>	<b>IU3</b>
<b>. DMFAS makes your job easier.</b>	<b>NB1</b>
<b>. DMFAS saves your time.</b>	<b>NB2</b>
<b>. DMFAS has achieved its intended goals.</b>	<b>NB3</b>

Appendix 2. List of country that use DMFAS  
(<http://unctad.org/divs/gds/dmfas/who/Pages/Our-clients.aspx>)

<b>Africa</b>	<b>Asia &amp; Middle East</b>	<b>Latin America &amp; the Caribbean</b>	<b>East Europe and CIS</b>
<b>Algeria</b>	Bangladesh	Argentina	Albania
<b>Angola</b>	Cambodia	Bolivia	Armenia
<b>Burkina Faso</b>	Indonesia	Chile	Georgia
<b>Burundi</b>	Iran (Islamic Rep. of)	Costa Rica	Republic of Moldova
<b>Central African Republic</b>	Iraq	Dominican Republic	Romania
<b>Chad</b>	Jordan	Ecuador	Uzbekistan
<b>Congo</b>	Lao People's Democratic Republic	El Salvador	
<b>Côte d'Ivoire</b>	Lebanon	Guatemala	
<b>Democratic Republic of the Congo</b>	Mongolia	Haiti	
<b>Djibouti</b>	Oman	Honduras	
<b>Egypt</b>	Pakistan	Nicaragua	
<b>Ethiopia</b>	Philippines	Panama	
<b>Gabon</b>	Syrian Arab Republic	Paraguay	
<b>Guinea Bissau</b>	Vietnam	Venezuela	
<b>Madagascar</b>	Yemen		
<b>Mauritania</b>			
<b>Rwanda</b>			
<b>Sudan</b>			
<b>Togo</b>			
<b>Uganda</b>			
<b>Zambia</b>			
<b>Zimbabwe</b>			

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**PROPOSED EFFECTIVE MARKETING STRATEGY FOR EXPAT HELPER  
INDONESIA (EHI)**

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**Abstract**

Expat Helper Indonesia which under PT. Manggala Daksa Raharja, is a service based company that established in March 2015 and focusing the business to provide various kind of services to assist expatriates during their repatriation. Expat Helper Indonesia identifies itself as Expatriate/Repatriation Consultant which also in-line with its tagline “Your Domestic Partner”. As a newly established company. Expat Helper Indonesia is facing several fundamental business issues particularly in Marketing aspect. In this paper, the Author who also have the role as Chief Executive Officer (CEO) of PT. Expat Helper Indonesia intend to conduct a deep research to formulate an appropriate marketing strategies for EHI. This marketing strategies are expected to be the company’s guideline to penetrate the current expatriate market and capturing future potential customers. In doing so, Author examines the internal and external situation of the company. For external analysis, this research exercise several analysis, such as PEST(EL) analysis, Porter’s Five Forces, and Competitor analysis. These analysis is to give comprehensive description of external factors related to the business. For internal analysis, this research exercise several analysis, such as Segmentation, Targeting, and Positioning (STP) analysis, Marketing Mix (7P) analysis, and VRIO. These internal analysis is to give clear description related to company’s internal situation. SWOT analysis utilized to summarize external and internal analysis results. In strategy formulation, Author conducted EFAS and IFAS analysis in order to examine and quantify the strategic factors from SWOT analysis results. After that, TOWS matrix is developed in order to create relevant alternative marketing strategies. Finally, Author summarized the proposed strategies into anew proposed Marketing Mix (7P) for Expat Helper Indonesia. As an output of the research, Author proposed a one year implementation plan as a guideline for the Expat Helper Indonesia in performing marketing activities. The implementation plan emphasized the company to educate the customers about the related repatriation issues and how the company eases the process.

**Keywords:** *Expat Helper Indonesia, Marketing Strategy, Consultant, EFAS IFAS, TOWS Matrix*

**Introduction**

Indonesia as the largest economy in Southeast Asia has performed impressive economic growth since the Asian financial crisis at 1997-1998. The crisis paralyzed the country with losing its currency value up to 80% against US dollar. Today, Indonesia is the world’s fourth most populous nation, the world’s 10<sup>th</sup> largest economy in terms of purchasing power parity, and a member of G-20 (World Bank, 2016).The data above has attracted many global business stakeholders to consider Indonesia as their business destination.

The country’s foreign policy, which is called “free-active”, also identifies Indonesia as a friendly country. Certain condition create a conducive environment for global citizen to live and do their business in Indonesia. Those global citizen, or refers to foreign workers usually called as expatriates. An expatriate (often shortened to expat) is defined as a person who has citizenship in at least one country, but who is living in the foreign country for a certain period

of time, and plan to return to their home country eventually although there are some who never return to their country or citizenship. Number of expatriates working in Indonesia in the past few years is figured in the following table.

Number of Expatriates Working in Indonesia					
#Expatriate	2011	2012	2013	2014	2015
	77.307	72.427	68.957	68.762	69.025

Seen from business perspective, expatriates create unique demand. At the time they move from the home country to the destination country, there are a lot of issues to be handled. This moving process often called “Repatriation”. Since EHI operates as a professional company in early 2015, it has served various companies and organizations, such as Phillip Morris, Ogilvy, Kaneka Food International, Gushcloud, British Petroleum, British Council, French Embassy, and Lebanese Embassy. The company also attracted many individual expatriates from various countries, such as USA, England, Korea, Vietnam, Turkey, and also Cameroon. In fact, not all the mentioned customers are turned into a business deal even EHI has established intense communication and also efforts to satisfy the customers. However, all those portfolios were obtained by limited marketing efforts and also limited resources available for the start-up company.

The problem is clearly reflected to the company’s financial performance, where during initial year, the company failed to achieve its financial target. The cash flow realization is still below the projection in 2015.

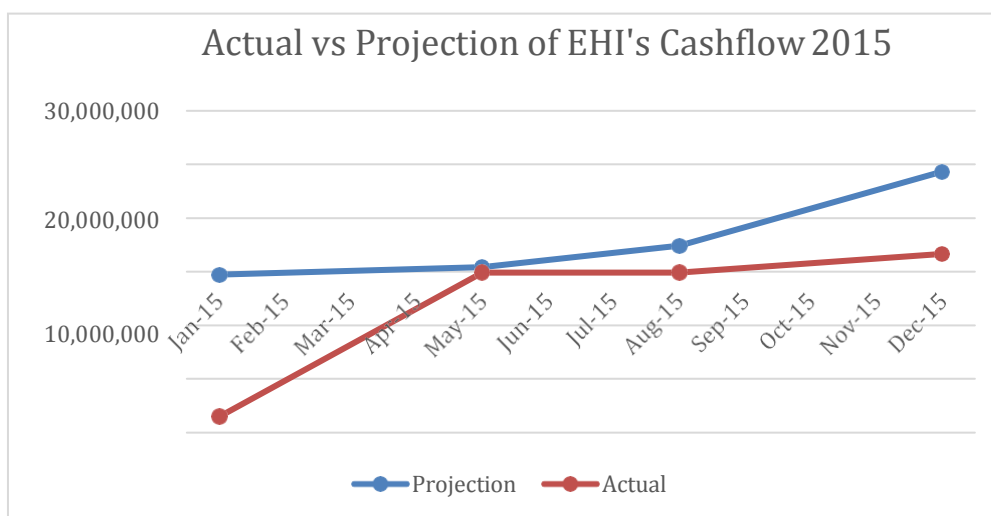
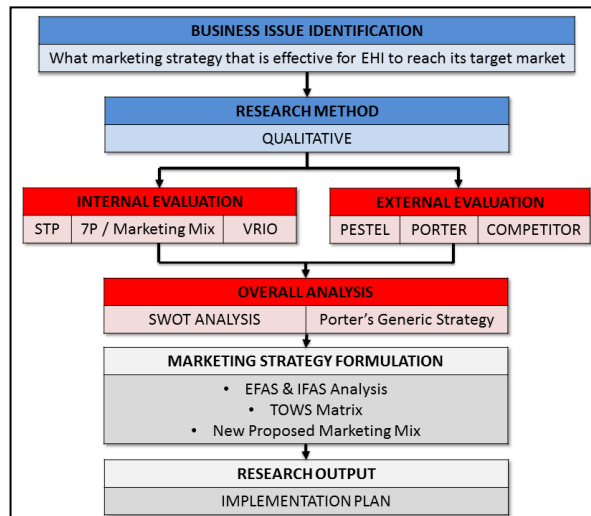


Figure 1 Expat Helper Indoensia Actual vs Projection Cashlow in 2015

**A. Business Issue Exploration**

In conducting the research, Author illustrate the flow of research using framework as follow:



To examine the external situation of the company, the Author performed PEST(EL) analysis, Porter’s Five Forces analysis, and Competitor analysis. These analysis describe comprehensive external situation that affect the company in doing business.

1. PEST(EL) analysis, examines several factors in the external environment such as Political-Legal, Economical, Socio Cultural, and Technology.
  - For Political-Legal aspect, there are two current issue that highly related to the flow of foreign workers in Indonesia. First, Indonesia government has signed ASEAN Free Trade Area (AFTA) agreement in 1992, which is effective in 2015. AFTA (ASEAN Free Trade Area) is an agreement among the ASEAN countries to impose a free trade area in Southeast Asia. This agreement become the legal standing of free movement of goods, services, investment, skilled labor, and capital. Indonesia, as one of the ASEAN founders was also one of the initiator of AFTA, responds the agreement through constitution amendment. The government has revised Ministry of Manpower Regulation Number 16 to 35 year 2015 about “The Employment Procedures of Foreign Workers”.
  - For Economical aspect, in the initial year of establishment, EHI faced the global economic slowdown, which led by slower economic growth in emerging market economies, such as China. The country is facing slowest economic growth in 25 years. This slowdown came when the advanced economies, such as Eurozone, Japan, and USA are having stagnancy and not enough to drive the global growth. China, as the leading economy in Asia region, is also triggered the Southeast Asia economy growth due to the close trade and investment links. The slowdown sentiment fears the Southeast Asia countries, including Indonesia.
  - For Socio-cultural aspect, there are several characteristic of Expatriate community that makes it a promising target market. First, Expatriates are highly segmented demographic and considered as an attractive niche market. Second, Expatriates have no existing loyalties. Third, Expatriates are tribal. Fourth, Expatriates community is dynamic (Reach Expats, 2013)
  - For technological aspect, the technology application is not only accessible for well- established companies, but also small businesses. Technology is now way much affordable for any business scales in every dimension of business. Not only to enhance the productivity, but also useful in marketing activities. For example, the use of internet, online



advertising, gadgets, and social media for promotional purposes.

2. In order to describe the industry environment where Expat Helper Indonesia run the business, Author performed Porter 5 forces analysis, which summarized in the following table:

**Table 1 Porter Five Forces Analysis of Expat Helper Indonesia**

Competitive Forces	High	Moderate	Low
Threat of new entrants	V		
Bargaining power of suppliers		V	
Bargaining power of customers			V
Threat of substitutes		V	
Competitive rivalry		V	

Source: Author Analysis, 2016

- a. **Threat of new entrants**  
 The EHI business model is considered to have low entry barrier for new entrants, which is high threats for new entrants to enter the market. As a service based business, this industry may not require high investment because there is low research and development budget.
- b. **Bargaining Power of Suppliers**  
 Since in this phase EHI is only establishing selection system, and there is no legal MoU to the vendors, the company has flexibility to select vendors for a project. Therefore it would be easy to switch from one supplier to another. Despite the flexibility, there is no guarantee that certain vendors would prioritize EHI as their partner because there is no official agreement in advance. For that reasons, it is assumed that the bargaining power of supplier in this type of business is moderate.
- c. **Bargaining Power of Customers**  
 Expat Helper Indonesia is currently still struggling in competing for market share and gaining brand awareness and create consistency in sales. Meanwhile, there are significant numbers of competitors and possible substitutes in other industry towards the company's each service lines. It is easy for customers to switch the service to another providers. Thus, the bargaining power of customers/buyers for EHI is considered high.
- d. **Threat of Substitutes**  
 EHI's varied service lines are actually available in some other industries. There is high possibility for customers to switch to other service providers while EHI is new and have received no brand loyalty and credibility. According to the data collected by authors, there are several firms that provides exactly the same service with EHI, even emphasizing in different target market. However, expatriates usually have little knowledge of the local service, unless they are provided assistance from the organization. The company's positioning as a particular one-stop solution platform for expatriate can highlight it from the substitutes. Thus, the threat of substitutes for EHI is considered moderate.
- e. **Competitive Rivalry**  
 There are only few companies that target expatriates as their target audience. This situation is normal, because the expatriate community itself is considered as a niche market in business

perspective. EHI has identified several competitors in the industry, both from small-medium local company to the big multinational company. EHI considers Santa Fe Relo and AJLB as its main competitors since both companies provide various services like EHI. Nevertheless, the three companies do not provide identical services. For example, none of the competitors provide Family Support like EHI. For that reasons, competitive rivalry among existing competitors is considered moderate.

3. To identify the existing competitors of EHI, the Author conducted Competitor analysis to Santa Fe Relo and Aneka Jasa Lima Benua (AJLB) as the closest competitors according to the similarity of services.

- Santa Fe is a multinational relocation service company that established since 1980. This company has branches in 6 continents, consist of Australia, Europe, Middle East, Africa, Asia, North and South America. Those global branches have made Santa Fe become the leading global mobility services company. In Indonesia, Santa Fe Relo ([www.santaferelo.com](http://www.santaferelo.com)), was established under PT. Santa Fe Indonusa, which located in Jl. Karanganyuda Raya No. 59, Gunung Putri, Bogor, Jawa Barat. Quoting its tagline “Global Relocation Service”, this company is actually specialized in relocation services and keeps innovation to provide various kind of services to follow its customers need.

- AJLB ([www.ajlb.co.id](http://www.ajlb.co.id)) is a local company, founded in 1999, claimed itself as General Management Services for expatriates. There are not much information related to this company. This company divides its services into two categories, which are Expatriates Strategic Partner and Manpower Consulting. The Expatriate Strategic Partner includes the relocation, formalities, and other general services for expatriates.

For Internal analysis, the Author performed STP (segmentation, Targeting and Positioning) analysis, Marketing Mix (7P) analysis, and VRIO analysis.

1. Segmentation, Targeting, and Positioning (STP) analysis.

- For segmentation, is an analysis to identify and categorize broad target market according to common customers’ characteristics. From this analysis, the Author segmented the EHI customers’ into 5 (five) possible segmentation, which are Top Level Management (TLS), Managerial Level Management (MLS), Staff Level Segment (SLS), Foreign Student Segment (FSS), and Unemployed/Job Seeker Segment (UJSS).

- For Targeting, the Author suggests the company to focus on the existing target market, which are the TLS, MLS, and SLS. EHI should be able to perform marketing efforts to capture the target market optimally.

- Based on short discussion with EHI’s CMO, the author may conclude that EHI is designed as an Expatriate Consultant / Repatriation Consultant company, which provides its target audience a “one-stop-solution” service for Expatriate needs and wants.

2. Marketing Mix (7P) analysis.

Marketing Mix (7P) analysis is used to describe the current marketing strategies of the company from seven aspects.

- First “P” is Product. EHI has 5 (five) service lines to be delivered to the customers, which claimed as the most fundamental needs of repatriation. Those service lines are property consulting, property maintenance, immigration assistance, domestic moving, and family support. In the first year establishment, the company only successfully sold 2 out of 5 services, which are property consultancy and maintenance.

- Second “P” is Price. Commonly, the service-based business will not provide the

customers exact pricing, because there are many factors that configure the prices, such as vendors' rate, HR wages, type of services, tool prices, etc. EHI requires its customers a project quotation before delivering the services.

Third "P" is Promotion. Since the company is not selling tangible products, it seems to focus the promotional activities to gain awareness and brand selling. The company has performed both online and offline promotional activities. For online activities, EHI has conducted social media marketing, online forum interaction, email blasting to potential customer, and website development. On the other hand, for offline activities, EHI has conducted engaging to expatriates community, contacting the founders' network, and launching referral program (Expat Angel).

Fourth "P" is Place. In the first year establishment, EHI used the virtual office service as its temporary headquarter to fulfill the legal requirement. In fact, most of the business activities were done in mobility, such as in restaurants, cafés, or even Founders' apartment.

Fifth "P" is People. Now, there are 9 team members that actively involve in EHI business. There are 3 founders, and the rest 6 members are the Co-founders.

Sixth "P" is Process. The figure below shows the current EHI's business process

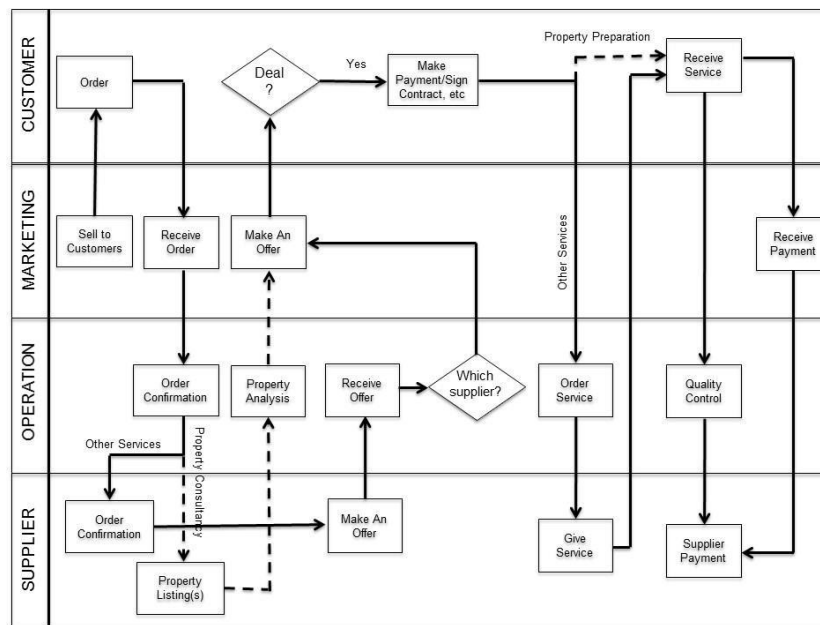


illustration.

**Figure 3 EHI Business Process Illustration**

Seventh "P" is Physical Evidence. As a service-based company, there are no tangible products to be seen to the customers. EHI delivers the evidence to its clients and outsiders

through Company Profile and Portfolio that usually presented in form of business contracts or photos. The company's official website is also accessible for anyone, which addressed at [www.expathelperindonesia.com](http://www.expathelperindonesia.com). Also, to help the team perform the business and interact with clients, there is well-designed business card provided by the company.

3. VRIO analysis.

VRIO framework helps company to evaluate whether it has sustainable competitive advantage or not, and helps company to identify its resources and capabilities whether they are valuable

or rare and that competitor cannot imitate. The VRIO analysis involved the customers' point of view in order to get objectivity of the analysis from their experience while using EHI's services.

**Table 2 VRIO analysis result of Expat Helper Indonesia**

<b>VRIO Criterion</b>				<b>Competitiveness</b>
<b>Valuable</b>	<b>Rare</b>	<b>Costly</b>	<b>to Organize</b>	
No	No	No	No	Competitive Disadvantages
Yes	No	No	No	Competitive Parity
Yes	Yes	No	No	<b>Temporary Competitive</b>
Yes	Yes	Yes	No	Competitive Advantage
Yes	Yes	Yes	Yes	Sustainable Competitive

Source: Author Analysis, 2016

The results of external and internal analysis is summarized in the SWOT analysis. Author summarizes external and internal environment analysis into SWOT analysis that will be further develop as the input for strategy formulation. Table below shows the SWOT analysis for EHI.

**Table 3 SWOT Analysis Summary of Expat Helper Indonesia**

<p><b><u>STRENGTHS</u></b></p> <ul style="list-style-type: none"> <li>Unique Brand Identity</li> <li>One-Stop-Service concept for expatriates</li> <li>Qualified HR to communicate, negotiate and building network with foreigners</li> <li>Good digital presence (website &amp; ...)</li> </ul>	<p><b><u>WEAKNESSES</u></b></p> <ul style="list-style-type: none"> <li>Limited capital to invest more in the business</li> <li>Inconsistency of performing marketing activities</li> <li>Providing most of its service lines from vendors</li> <li>Using virtual office instead of real</li> </ul>
<p><b><u>OPPORTUNITIES</u></b></p> <ul style="list-style-type: none"> <li>Stable, yet potentially increasing flow of the foreign workers to Indonesia</li> <li>Expatriates' behavior that makes them demand for assistance</li> <li>ASEAN Economy Community 2016 that leads to AFTA and CAFTA</li> <li>Technology advancement that ease the company in reaching and serving</li> </ul>	<p><b><u>THREATS</u></b></p> <ul style="list-style-type: none"> <li>New and tighter regulation for foreign workers employment</li> <li>Global economic slowdown that leads to decreasing flow of expatriates</li> <li>Competition with Multinational and local service companies</li> </ul>

Source: Author Analysis, 2016

Before getting into marketing strategy formulation, the Author consider to define what general strategy should be applied by the company. According to Porter (1980), a company tends to target cost leadership, differentiation, or focus in selected target market. The Porter's Generic Strategies analysis is an analytical tool to describe how company pursues competitive advantage across its chosen target market. The illustration of each strategies are explained as follows:

- If a company targets broad customer segments of an industry by offering lowest

- price to the market, it applies the cost leadership strategy.
- If a company targets broad customer segments of an industry by offering different type of product or service (commonly followed by higher pricing), it applies the differentiation strategy.
  - If a company target specific target markets, it applies a focus strategy. This role could be cost focus (if the company offers lower cost to specific segments) and differentiation focus (if the company offers different product/service to specific segments).

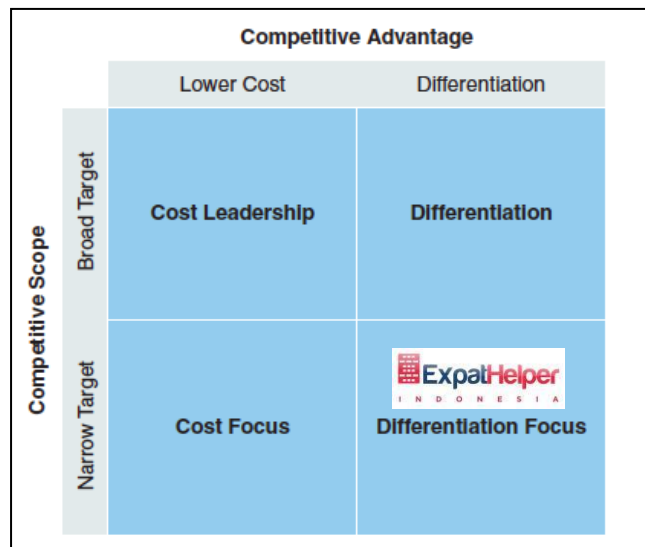
If a company applies more than one strategy, it would have “stuck in the middle” position as stated in Competitive Strategy by Porters (1980). Porters suggested a company should apply one out of three

generic strategies to be more efficient to use the company’s resources. The chosen strategy would also reflect to the marketing strategies that the company delivers to approach its target market. There are several consideration should be take into account to define the general strategy of EHI, which are:

- The target market of EHI is Indonesia Expatriates community, which is a segmented market that relatively has low number of population.
- EHI innovates the business from current competitors by designing set of service lines that fits to the current issues and customers demand.
- The industry has not led to the price war situation since there are not many player in the business.

Therefore, the Author suggested EHI to apply the Differentiation Focus strategy.

Figure 2.17. Porter’s Generic Strategies



Source: Strategic Management and Business Policies, Wheelen and Hunger (2012)

**B. Strategy Formulation**

Based on the SWOT analysis, strategy formulation will be conducted with EFAS and IFAS and TOWS Matrix. TOWS Matrix developed by matching external opportunities and strengths with Internal Strengths and Weaknesses that already stated in SWOT analysis.

Table 4 TOWS Matrix Result of EHI

Internal Factors	Internal Strengths (S)	Internal Weaknesses
External Factors	[S1] Unique brand identity (Expatriate Helper, Expatriate Consultant)	[W1] Limited capital to invest more in the business
	[S2] One-Stop-Service concept for expatriates	[W2] Inconsistency in performing marketing activities, caused the low brand awareness
	[S3] Qualified HR to communicate, negotiate and building network with foreigners	[W4] Providing most of its service lines from vendors
	[S4] Good digital presence (website and emailing system)	[W5] Using virtual office instead of real operational office
	[S5] Relatively cheaper price than competitor	
External Opportunities (O)	SO Strategy	WO Strategy
[O1] Stable, yet potentially increasing flow of the foreign workers to Indonesia	[SO-1] EHI to deliver the concept of "Helper", "Expatriate/Repatriation Consultant" and "One-Stop-Service" keywords to every promotional activities (O1-S1-S2-S3-S4)	[WO-1] EHI to invest more in performing effective marketing strategies (O1-W1-W2)
[O2] Expatriates' behaviour and characteristics that makes them demand for assistance	[SO-2] EHI to engage with local expatriate communities and follow the dynamic environment of their lifestyle (O2-S1-S2-S3- S4)	

[O3] ASEAN Economy Community 2016 that leads to AFTA and CAFTA	[SO-3] EHI to prepare specific promotional tools to attract the ASEAN expatriates (O3-S1-S2-S3-S4-S5)	
[O4] Technology advancement that ease the company in reaching and serving customers	[SO-4] EHI to focus on the digital advertising, including more advanced website development and any payable advertising media (such as SEO, Google Ads, Google AdWords, etc) (O4-S1-S2-S4)	[WO-2] Activation of online marketing activities consistently (O4-W2)
<b>External Threats (T)</b>	<b>ST Strategy</b>	<b>WT Strategy</b>
[T1] New and tighter regulation for foreign workers employment	[ST-1] Socialization of new regulation through promotional tools (T1-S2-S3-S4)	
[T2] Global economic slowdown that leads to decreasing flow of expatriates	[ST-2] EHI to seek for overseas cooperation or promotion channel to expand business coverage, and reach customers from their home country (T2-S1-S2-S3-S4-S5)	
[T3] Competition with multinational and local	[ST-3] EHI to claim the company to give better	[WT-1] Develop marketing implementation

Source: Author Analysis, 2016

Based on alternative strategies developed TOWS matrix above, there are 10 marketing strategies developed for EHI:

1. [ST-1] Socialization of the new regulation through promotional tools. (T1-S2-S3-S4)
2. [ST-2] EHI to seek for overseas cooperation to expand business coverage, and reach customers from their home country. (T2-S1-S2-S3-S4-S5)
3. [SO-1] EHI to deliver the concept of “Helper”, “Expatriate Consultant” and “One Stop Service” keywords to every promotional activities. (O1-S1-S2-S3-S4)
4. [WO-1] EHI to invest more in performing effective marketing strategies. In order to run every marketing activities. (O1-W1-W2)
5. [SO-3] EHI to prepare specific promotional tools to target the ASEAN expatriates, especially to capture the foreign job seekers. (O3-S1-S2-S3-S4-S5)
6. [SO-2] EHI to engage with local expatriate communities and follow the dynamic environment of their lifestyle. (O2-S1-S2-S3-S4)
7. [SO-4] EHI to focus on the digital advertising, including more advanced website

development and any payable advertising media. (O4-S1-S2-S4)

8. [WT-1] Develop Marketing Implementation plan to ensure consistency of marketing efforts. (T3-W2)
9. [WO-2] Activation of online marketing activities consistently. (O4-W2)
10. [ST-3] EHI to claim the company to give better price rather than competitor. (T3-S5)

Those strategies above later will be broken down into several promotional activities which form a new Marketing Mix. The table below shows how the marketing mix aspects adapt to the new proposed strategies, especially the Promotion aspect.

**Table 5 Marketing Mix Related to Proposed Strategies**

Marketing Mix (7P)	Related Proposed Strategies
Product	None
Price	None
Promotion	<b>All the Strategies</b>
Place	[ST-1], [SO-3], [SO-2], [ST-3]
People	[SO-4]
Process	None
Physical Evidence	[ST-1], [SO-1], [SO-3], [SO-2],

Source: Author Analysis, 2016

### **C. Implementation Plan**

As the output of the research, the Author developed implementation plan from the proposed marketing strategies. The detailed implementation plan also followed by suggested timeline as captured in the table below.



Table 6 Implementation Plan of Marketing Strategies

NO	STRATEGIES	KPI	TIMELINE 2016					TIMELINE 2017					
			Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17
1	[ST-1] Socialization of new regulation through promotional tools (T1-S2-S3-S4)												
a	Publication official respond related to new regulation to potential customers through email blasting	Distributed the publication at least to 100 multinational organization											
b	Seminar / road show to companies and community gathering	Holding seminars at least once in 3 months (allocate at least IDR 2 mio/seminars)											
2	[SO-1] EHI to deliver the concept of "Helper". "Expatriate/Repatriation Consultant" and "One-Stop-Service" keywords to every promotional activities (O1-S1-S2-S3-S4)												
a	Delivering brochures in public spots	Print out and distribute at least 200 per months (@IDR 3000/pcs)											
b	Creating souvenirs (such as pins, pens, notebooks, stickers)	Allocate budget for IDR 5 mio to create and distribute souvenirs											

c	Printing out the Company Profile to be distributed	Print out for at least 100 pcs																		
3	[ST-2] EHI to seek for overseas cooperation or promotion channel to expand business coverage, and reach customers from their home country (T2-S1-S2-S3-S4-S5)																			
a	Survey through internet and initiate cooperation	Initiate at least 5 cooperation proposal																		
4	[WO-1] EHI to invest more in performing effective marketing strategies (O1-W1-W2)																			
a	Marketing budget formulation	Marketing budget documents																		
b	Funding to marketing activities	All the marketing activities are done																		
5	[SO-3] EHI to prepare spesific promotional tools to attract the ASEAN expatriates (O3-S1-S2-S3-S4-S5)																			
a	Seminars / roadshow to ASEAN Institution (such as ASEAN Secretariat)	Hold the seminars together with strategy 1a.																		
b	Promoting the ASEAN Economic Community through online promotional tools	Update the website content and bring the issue to the seminars																		
6	[SO-2] EHI to engage with local expatriate communities and follow the dynamic environment of their lifestyle (O2-S1-S2-S3-S4)																			

a	Attending the international.org gathering	Once per 2 months	2																		
b	Delivering brochures in public spots	(same with poin 2a)																			
7 [SO-4] EHI to focus on the digital advertising, including more advanced website development and any payable advertising media (such as SEO, Google Ads, Google AdWords, etc) (O4-S1-S2-S4)																					
a	Hire IT support	Expected salary @3 mio per month																			
b	SEO/Google Ads activation	Allocate budget for IDR 1 mio/month																			
8 [WT-1] Develop marketing implementation plan to ensure consistency of marketing efforts (T3-W2)																					
a	Marketing implementation plan																				
9 [WO-2] Activation of online marketing activities consistently (O4-W2)																					
a	Training for HR in online marketing management	Allocate IDR 5 mio for training																			
10 [ST-3] EHI to claim the company to give better price rather than competitors (T3-S5)																					
a	Delivering brochures in public spots	(same with poin 2a)																			

Source: Author Analysis, 2016

Furthermore, the Author also estimated the budget to do all the proposed marketing strategies to ease the company prioritize and ensure the feasibility of the strategies according to the current company's resources. The budget estimation is presented in the table below.

Table 7 Proposed Budget for Marketing Strategies

NO	STRATEGIES	KPI	COST ESTIMATION
1	[ST-1] Socialization of new regulation through promotional tools (T1-S2-S3-S4)		
a	Publication official respond related to new regulation to potential customers through email blasting	Distributed the publication at least to 100 multinational organization	1,000,000
b	Seminar / road show to companies and community gathering	Holding seminars at least once in 3 months (allocate at least IDR 3 mio/seminars)	12,000,000
2	[SO-1] EHI to deliver the concept of "Helper". "Expatriate/Repatriation Consultant" and "One-Stop-Service" keywords to every promotional activities (O1-S1-S2-S3-S4)		
a	Delivering brochures in public spots	Print out and distribute at least 200 per months (@IDR 3000/pcs)	7,200,000
b	Creating souvenirs (such as pins, pens, notebooks, stickers)	Allocate budget for IDR 5 mio to create and distribute souvenirs	5,000,000
c	Printing out the Company Profile to be distributed	Print out for at least 100 pcs (@ 50.000)	5,000,000
3	[ST-2] EHI to seek for overseas cooperation or promotion channel to expand business coverage, and reach customers from their home country (T2-S1-S2-S3-S4-S5)		
a	Survey through internet and initiate cooperation	Initiate at least cooperation proposal	52,000,000

4	[WO-1] EHI to invest more in performing effective marketing strategies (O1-W1-W2)		
a	Marketing budget formulation	Marketing budget documents	1,000,000
b	Funding to marketing activities	All the marketing-activities are done	
5	[SO-3] EHI to prepare spesific promotional tools to attract the ASEAN expatriates (O3-S1-S2-S3-S4-S5)		
a	Seminars / roadshow to ASEAN Institution (such as ASEAN Secretariat)	Hold the seminars together with strategy 1a.	(same allocation with 1b)
b	Promoting the ASEAN Economic Community through online promotional tools	Update the website content and bring the issue to the seminars	(same allocation with 1b)
6	[SO-2] EHI to engage with local expatriate communities and follow the dynamic environment of their lifestyle (O2-S1-S2-S3-S4)		
a	Attending the internation.org expat gathering	Once per 2 months (@400000)	2,800,000
b	Delivering brochures in public spots	(same with poin 2a)	(same allocation with 2a)
7	[SO-4] EHI to focus on the digital advertising, including more advanced website development and any payable advertising media (such as SEO, Google Ads, Google AdWords, etc) (O4-S1-S2-S4)		
a	Hire IT support	Expected salary @24,000,000 mio per month	
b	SEO/Google Ads activation	Allocate budget for IDR 1 mio/month	12,000,000
8	[WT-1] Develop marketing implementation plan to ensure consistency of marketing efforts (T3-W2)		

a	Marketing implementation plan development		-
9	[WO-2] Activation of online marketing activities consistently (O4-W2)		
a	Training for HR in online marketing management	Allocate IDR 3 mio for training	3,000,000
10	[ST-3] EHI to claim the company to give better price rather than competitors (T3-S5)		
a	Delivering brochures in public spots	(same with poin 2a)	(same allocation with 2a)
<b>TOTAL MARKETING INVESTMENT</b>			<b>75,000,000</b>

Source: Author Analysis, 2016

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## MANAGEMENT CONTROL SYSTEM IN LOCAL WATER SUPPLY UTILITY INFLUENCE OF JAVANESE LOCAL WISDOM (EVIDENCE FROM INDONESIA)

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### Abstract

While previous research has identified determinants of conflict, little is known about its mechanism through cultural values. Based on wide range survey of different cultural clusters and socioeconomics background with vast majority between lower-income on Klaten and Surakarta city, the current study aims to examine the influence of cultural values on conflict. The results of survey and conflict analysis show that in particular cultural values and management control system influence preference for the conflict. Our study contributes to a more comprehensive understanding on the role of culture and management control system in conflict.

**Key words** : *Local Water Supply Utility, Local Wisdom, Javanese Culture, Management Control System*

### Introduction

For years of conceptual and empirical studies, the management control system (MCS) research are now addressed since the integration of sustainability and environmental aspects into management. The mechanism through which environmental activities translates into conflicts is proposed several factors. For instance, the commonly classified environmental strategy employed may affect related parties' abilities to gain both financial and social benefits from the activity.

Currently, water needs quantity and quality is degraded in the response of population growth (Famiglietti, et al., 2011), development, climate change, and the number of people turning to groundwater sources to meet their demand (Philpot, Hipel, & Johnson, 2016). A strategic analysis of the ongoing conflicts between Klaten and Surakarta over water allocation at Cokrotulung spring in Klaten, deep well water treatment in Surakarta, and water treatment plant in Bengawan Solo Surakarta is carried out in order to investigate factors causing the conflicts and how to resolve this dispute. Groundwater resource is out of sight and parties that use the water do not realize that they use the same water source until scarcity brings them to conflict. Of the three water sources, Cokrotulung spring in Klaten is the largest contributor in groundwater needs. Surakarta used to take its water source from the spring in Klaten since the late 1940s and lately conflicts start to arise between Klaten and Surakarta government. The conflict has become wider when government in Klaten threaten to shut down the water flow from the spring to Surakarta. Conflict between two government in Klaten and Surakarta in order to determine who has the rights to use more water affect the water received by the two cities. In the end, MCS is considered failed to resolve the problems.

Recently, MCS topic in environmental or sustainability management gain its momentum (Guenther, Endrikat, & Guenther, 2016). We argue that the environmental MCS provides a promising integration approach concerning the internal or external drivers that

leads to environmental conflicts. Conflicts is endemic to all social life, it refers more than just behaviour (Bercovitch). It is inevitable part of living when scarcity of resource start to take its part in human needs and leaves many uncertainty about how to best cope with it.

If people consider the problems of conflict and understand that conflict stem from scarce resources, they might readily aware of conflict management and the need to find a solution. In this case, water is a unique resource that is essential for human life and one that is often not well understood nor protected compared to other natural resources. Water shows its uniqueness and its importance in the world's ecosystem and all life on this planet. It challenge the whole society, for individuals who do not have access to drinking water, for companies that depend on the groundwater, and for designers of public policies that seek to develop a regulatory approach to solve the dispute.

In Indonesia, each city has the authority to regulate the water resources within its boundaries. Problems occurred due to limited source of groundwater, Hurlbert, et al. (2009), overcome the challenge of climate change adaptation in water management institution. This research explores the potential to examines the roots of the conflict.

## **Literature review**

### *Stakeholder Theory*

The traditional definition of stakeholders is any group or individuals who can affect or is affected by the achievement of the organization's objectives (Freeman, 1984). Managers of a company is thought to fulfill its stakeholder management for the benefit of its stakeholder in order to ensure their right in the company. The manager also manage the corporation to ensure the survival of the company by safeguarding the long terms of each groups' stake. A common way to differentiate kinds of stakeholders is to consider groups of people who classified as organization related (Fontaine, Haarman, & Schmid, 2006).

The main focus in stakeholder theory it is the stakeholders consisted of many parties. Stakeholders are the group or individual who can affect or is affected by the achievements and goals of the company (Freeman, 1984). At first the concept of the stakeholders mentioned that without the support of the stakeholders in the Organization of the existence of these organizations would be useless (Zsolnai, 2006). More Gray, Dey, Owen, Evans, Zadek (1997) mention that the stakeholders is "someone with a right to the account".

#### **a. Javanese Culture**

Local wisdom stems from the culture of people living in certain region. It is applied in various aspects of life in the society and seep deeply in to the life of them, considered as the values and norms in the interaction between people, toward God, and nature. Every region possess local wisdom which create unique and different characteristics.

This research is taken place in one region in Indonesia. Suryadinata et al. (2003) explained that Indonesia is consisted of many ethnic groups spread in all over the country. More than 1.000 ethnic groups are spread in Indonesia (Efferin and Hartono 2015). Those ethnic groups possess different local wisdom and culture. Among 1.000 different ethnic groups in Indonesia, the country is dominated by Javanese ethnic which reach 41,71 percent of the population (Suryadinata et al. 2003).

Javanese ethnic group has special culture which commonly known as *Javanese culture*. Javanese<sup>30</sup> are often conducting certain rituals<sup>31</sup> to maintain the harmony between

<sup>30</sup> Javanese are often called by "Wong Jowo"



humans, God, and nature. They believe in “One and Only God”<sup>32</sup> which motivates them to always being nice, compassionate, and encourage strong work ethics. Most of Javanese are Moslem (Beatty 1999), and Islam is acculturated with *kejawen*<sup>33</sup>. Therefore, Javanese are known as people with high tolerance.

According to Efferin and Hopper (2007), javanese culture contains a set of righteous beahaviour as well as rigid rules. However, Efferin and Hopper (2007) also pointed out that Javanese culture possess social harmony (*rukun*) and spiritualism. On the other hand, Geertz (1961) explained that there are two principles in the interaction of Javanese society, consisting of the principle of social harmony and the principle of dignity. The two principles aim to preserve the harmony in the society. Harmony and dignity could be viewed as being in the state of harmony, composure, and peace, without conflicts and opposition, and united in cooperation (Mulder 1977). The principles are essential in decision making during the meeting for reaching the same conclusion (*Musyawah*) and cooperating to one another (*Gotong royong*) (Efferin and Hartono 2015). Harmony and dignity ate parts of local wisdom which hold may noble values that applicable to solve conflicts. Apart from the two principle, Javanese culture is also rich of other local wisdom, such as social relationship, norm, traditional knowledge, social leadership, trust, reciprocity, loyalty and togetherness, social responsibility, and participation.

#### **b. Management Control System**

MCS in general can be defined as the process by which managers assure the resources are obtained and used effectively and efficiently in the accomplishment of the organizations’ objective (Guenther, Endrikat, & Guenther, 2016). MCS have also been described as processes for influencing behavior and provider of means in gaining cooperation among individuals or organization who may share either same or partially objectives (Smith, 1997). Overtime, this definition has been extended to accommodate a more comprehensive understanding of MCS in solving a conflict.

Environmental management system (EMS) proposed by (Guenther, Endrikat, & Guenther, 2016) is considered as subsystem of general management system that specifically focuses on environmental issues. This subsystem is part of organization used to develop and implement its environmental policy in order either to manage its environmental aspects or to resolve environmental conflict.

In resolving conflicts, controls have been categorized in many ways such as formal and informal controls (Smith, 1997). Formal controls include rules, standard operation procedure, and budgeting system while informal control are not designed, more like unwritten policies of the organization. This controls are the main factors causing the conflicts in Klaten and Surakarta. Formally there is rules encompassing the groundwater allocation for both cities, but Javanese culture that applied as informal control is found as distraction in reality.

#### **c. Water Source Management in Indonesia**

In Indonesia, based on Law Number 25 Article 4 Year 1999, natural resource managed in a specified area where the resource is originally come from is considered revenue

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<sup>31</sup> There are many rituals conducted by “Wong Jowo” to maintain the harmony between human, God, and nature. The examples of those rituals are meditation, *ngrowot* fasting, and *bersih desa* (the cleaning of the village). Every ritual conducted by “Wong Jowo” always possess certain meaning and goodness.

<sup>32</sup> “One and Only God” is described as “*Tuhan Yang Maha Esa*”.

<sup>33</sup> A traditional Javanese spiritualism

for the government owning the area. Groundwater problems are divided into quantity, quality, continuity and distribution problems. All public decisions in those problems should be based on all stakeholder participation so the policy will be accepted by the public.

Management of water resource leave only one side to make the best use of the water, not to forget that behind every advantage there is a loss. Three aspects in water resource management are utilization, preservation, control(Samidjo 2014):

### **Method**

#### **a. Participants and data**

This study participants range from community leader, labor, farmer, and trader. They come from a wide range of socioeconomics background with vast majority between lower-income Klaten and Surakarta Citizen (labor and farmer). We also considering the working environment and documents stored in various agency involved.

We considered several reasons to establish the research setting, especially in conflict area In Klaten and Surakarta. Frequent conflicts over natural resources and environment such as conflict in utilizing water resources among district or province and among communities and local government, conflict in utilizing natural resource (land and water resource) among company, local government, and province, and faded local wisdom that plays important role in maintaining harmony and balance as our main reasons when choosing the research setting.

#### **b. Selection of Outcomes**

From this qualitative data, we identified problems that the respondents reported. With these in mind, within the academic literature we conduct an extensive search to identify corresponding construct and study goals. Through this process we ensured that our selection of construct was supported by the conflict management literature.

#### **c. Construct and Measures**

Below we describe the measurement selected, reasons for its selection, and the instrument development process. All measures generated use open question with no range answer. Following (Caldas, Broaddus, & Winch, 2016), our use of conflict management refers to a range of reactions to conflict, behaviors and intention during conflict situation.

#### **d. Data Collection**

We worked intensively with a view to observe and explore a wide range of community activities around the forest or edges of reservoirs. Primary data were collected through survey, direct observation, in depth interview and Focus Group Discussion (FGD). We conducted one rounds of survey. Surveys contained open questions are given to respondents, we asked them to write their name (respondents are freed to write their name or not for their convenience and privacy), age, job, and gender at the first page of the questionnaires. We encouraged participants to ask for assistance if there were any items or questions that they did not understand. We ensure that there were no items or questions that the participants have difficulties to comprehend. We ask participants about the key facts of an event as well as their opinion about the event. We also conduct FGD with the goal to find the meaning of an event based on the participants' understanding about the theme.

For quantitative data, we conduct survey with different participants from the first participants in qualitative data collection. We include employee, local government official,

non-profit organization, and communities. We obtain and analyze data from the participants in the form of records, books, meeting report, agenda, and ledger.

e. Data Analysis

This study use mix method because of its ability. This type of research will be able to capture a wide range of qualitative information with meticulous descriptions and full of nuances, which is more valuable than just a statement of the amount or frequency in the form of numbers (Sutopo, 2002). Qualitative data to provide complex textual description of how issues is experienced by people (International). It provides information that is contradictory in behavior, about the ‘human’ side of an issue that is intangible. When used along with quantitative data, qualitative study can help to interpret the complex reality of a given situation that quantitative study cannot reach. Some issues are not readily apparent, especially intangible issues such as gender roles, ethnicity, religion, norms, or status.

In depth interview is conducted for collecting data on individual’s perspective by generating notes and audio recording. The flexibility of interview allow greater adaptation of interaction between the researchers and study participants. Participants have the opportunity to respond in greater detail and the researchers have the opportunity to respond immediately to what information the participants have provided.

According to Bogdan and Biklen (1982) special character of qualitative research is to have a natural setting as a source of data, the researcher is seen as a key instrument, descriptive, more concerned with process than results alone, data analysis tends to be inductive, and the meaning is the essential problem in the design of qualitative research.

In analyzing quantitative data, we first conduct experiment by dividing the participants into three groups, the first group is treated using conflict cases, the second is treated using local values knowledge approach, and the third group is left untreated. We use mechanical footage called purposive sampling described as criterion-based selection. We choose this mechanism since we based solely in our judgment based on theoretical concepts used, our curiosity, and empirical characteristics in research area. After each round of data collection we examined the response and the data. We test for errors and inconsistencies, we examine correlation of error values, and comparing means.

f. Validity of the Data

With the variety of data sources, we use triangulation techniques to ensure the study fulfils validity of data. We prove that what is observed is in accordance with what is happening in reality. To ensure and develop the validity, we seek information from other sources by using different techniques and extending the research to reduce data distortion. In addition, we also select who will be interviewed and where will be observed (Nasution, 1988).

Participants:

Subject	Subject's Status	Hours	Session
Mr. T (Warga sumber mata air Cokro Tulung, Klaten)	Community leader	2,5	2
Mrs. S (Warga sumber mata air Cokro Tulung, Klaten)	Community leader	2,5	2
Mr. G (Warga sumber mata air Umbul Gedong, Klaten)	Community leader	3	2
Mr. S (Warga sumber mata air Umbul	Community leader	3	2

Ponggok, Klaten)				
Mr. A (Warga sumber mata air Cokro Tulung, Klaten)	Community leader	2	1	
Mr. P (Warga sumber mata air Cokro Tulung, Klaten)	Community leader	2	1	
Mr. Pur (Warga Kota Surakarta)	Supervisor in PDAM Surakarta	2	1	
Mr. Sb (Warga Kota Surakarta)	Supervisor in PDAM Surakarta	2	1	

### Results and discussion

Water resource is an essential source of life. Its fundamental usefulness include agriculture, industrial household, recreational and environmental activities(Kumar, Singh, Sharma, 2005). Water preservation needs to be maintained(Hill, 2010)since many factors such as human population growth (Haglund, 2014) cause decrease in quantity and quality. Human population growth leads to conflict of interest. Cultural values, as a symbol of community's identity, have its importance as a reference of people's behavior with other different culture. In response with environmental conflict in Klaten and Surakarta, this cultural value is a form of response. As a tradition and folklore, this value translates into the views of life. By taking the values, society can understand how the elder look and live their live far before.

Javanese cultural values cannot be separated when the companies manage their business. Several values adapted from Javanese and it is expected not to cause conflicts. All participants in this research used to carry out the values and we summarized those as:

1. *Luwih Becik Pager Mangkok, Tinimbang Pager Tembok*
2. *Sing Guyub Rukun*
3. *Gotong Royong*
4. *Mendhemo Pari Sing Jero*
5. *Rukun Agawe Santoso*
6. *Gemah Ripah Loh Jinawi, Tata Tentrem Kerta Raharjo*
7. *SayukRukun Saiyeg Saeka Praya*

#### 1. *Luwih Becik Pager Mangkok, Tinimbang Pager Tembok*

Better to have fence rather than a wall. A paradigm of security used by companies so they do not clash with the society around their workplace. In Javanese culture, a wall is a form of dis-respect toward other by limiting other people interactions through a high wall.

Fence in Javanese is a spirit of sharing and concern for people. Between neighbors, even though do not blood related, are considered as the closest family. The fence usually called 'bowl', because on certain days, when a family has a cooking event, the family give the food to their neighbors in a bowl. With mutual food delivering in neighbors, between neighbors got to know that each family have a taste of sharing and concern. 'Bowl' fence is a term used by Javanese which serves beauty of sharing and not to limit interactions from each other.

In the context of company, this fence will determine the company's presence in the community. The company implement the Java philosophy of sharing and taking care of each

other by providing assistance to their neighbors. Making sure that no boundaries such as disrespect-full toward other.

## 2. Sing Guyub Rukun

'Guyub' means feeling volunteered to join or participate in social activity to achieve social cohesiveness. Guyub also a form of social capital characterized by exchange of kindness among individuals between groups. The pattern of exchange is not reciprocally as in the process of buying and selling, but a combination of short-term and long-term altruism.

Guyub is aligned with Javanese living orientation, which is to live as humanist in harmony. Various aspects in this cultural values aim to achieve self balance and harmony with God, natural environment, and social environment. The company applies the cultural values by participating celebration or ritual held by local community. By involving in those activities, the company will be assisted by the community as long as they get the guyub.

Guyub rukun is a social capital, Mr. G and Mrs. S, our participant in this research, reveals that social capital is very important in their life. Here are the summary of the interview:

*"Honesty is a form of social capital used by our village to resolve conflict. We used it to develop our village and we preserved it"*

-Mr. G-

*"We consider social capital as a product of human relationship, whenever a conflict arises, we used the capital as a solution. It grows by itself and it help the community"*

-Mrs. S-

The philosophy means that a company or individual is willing to help without expecting any return. Maintaining harmony with local community involved in company's activity is very important. In today's modern era, this cultural values is reflected in village's celebration and rituals in a certain great day.

*"We used to clean the village in our great day, it teach us how to tolerate, help, trust, and guyub with other. In our spring, we upheld the culture and we make sure that our children get used with this culture since their young age"*

-Mrs. S-

## 3. Gotong Royong

'Gotong royong' means the spirit of cooperation and mutual help in Java. In the village, each neighbors will voluntarily help each other. Even for some activities they used to help each other, not by money, but more like a hand to help simple things. Harmony and respect are important in reach an ([Efferin dan Hartono, 2015](#)). From our survey, we found that in facing the water conflict, our participants reveals that this gotong royong have an important aspect:

*"We think gotong royong is a form of helping each other. We help each other in our spring. We make sure that our spring is well managed and our culture remain exist"*

-Mrs S-

In this modern era, the company use gotong royong to provide assistance to community around the company. The company will join in almost every celebration, ritual, and even death ceremony. Assuming that the company will get increase in both financial and social aspects by gotong royong, the company is voluntarily join every activities in the village.

But we find negative side of this gotong royong from our survey, some people are helping each other in negative things such as taking the water from the spring for their own. Saying that this is a kind of greed to get the water without caring other that also need the water.

#### 4. *Mendhemo Pari Sing Jero*

Javanese philosophy give a lot of inspiration for government, companies, and communities. Javanese people always avoid conflict, the type of people that do not like conflict and do not drain their energy to lose their communities. ‘Mendhemo paring sing jero’ means giving good things to others in hope that someday God will return the kindness either in living or afterlife. For the company, they used to help children of their employee for taking their education, the company will make sure that everyone in the company do not lose their education. Based on Javanese expression we found in survey, the company began to provide assistance for things that is charitable, things that the company can easily provide.

#### 5. *Rukun Agawe Santoso*

‘Rukun’ means a feeling of unity between people living in the same region. Javanese people tend to maintain its peace by promoting equality. Rukun is almost the same with guyub, but rukun is more like living in peace and thus there is guyub rukun. Guyub rukun means together in unity in maintain peace.

While ‘santoso’ means strong, there is a term ‘rukun agawe santoso’ which means that people are unity in maintain the peace so that the people will strengthen in both social and economic life. The company implement this Java expressions to foster relationship with social institution existing near the company. Various activities are used by the company to strengthen the programs of the institution.

#### 6. *Gemah Ripah Loh Jinawi, Tata Tentrem Kerta Raharjo*

‘Gemah ripah loh jinawi’ is a mindset that brings together the embodiment of gratitude to God for all Thy mercy. Natural beauty and soil fertility in Java is example of this gratitude that Javanese people gratefully accept as God’s grace. Embodiment of this gratitude are applied in everyday life. There is a concept called ‘tata tentrem kerta raharjo’ which means that the community will maintain their life in accordance with state’s rule. It aims for a synergy between elements in society and elements in states, making sure that harmony is achieved ranged from the household to the level of state.

‘Tentrem’ means that everyone feel save and comfortable in the community. This condition can be achieved if the concept of good governance is achieved. While ‘raharjo’ means a prosperous country because of a lot of ingratitude towards God. This concept become the foundation for realizing a fair and prosperous state in the mercy of God.

Gemah ripah loh jinawi has become one of the company’s source of inspiration for maintaining harmony with company’s internal and external environment. At internal level, management always seek a working conditions that will make them comfortable in working by providing health facilities for example. While at external level, the companies provides

many assistance facilities to citizens around the company by funding rituals or celebration around the company.

#### 7. *SayukRukun Saiyeg Saeka Praya*

‘Sayuk rukun saiyeg sakata’ means united to achieve a target. ‘Sayuk’ is a feelings between individuals or between communities in accomplishing a work together. The point of this joint work is its spirit to work together without any pressure. ‘Saiyeg saeka praya’ means a spirit of solidarity to build social capital. This conception is reflected in company’s recruitment. The company hire its employee from surrounding communities, igoring the facts that some of the employee might be lack in skill. But the company believes that this lack of skill can be overcome using a lot of training programs.

In the perspective of empowerment, the company participate in each programs necessary to create a condusive atmosphere both in the company and the community. If company develops it employee, which is part of community’s people, the company’s believe that the conception has been achieved.

#### **Conclusion**

Javanese culture as conflict resolver has two different sides and contradictory in maintaining water conflicts. The first is Javanese culture as the MCS that produces positive benefits in maintaining water conflict, and the second cultural value as MCS which had a negative impact. This means that the positive can resolve conflicts or reduce the conflict, while having the negative will aggravate the situation and cannot be used in conflict resolution.

In the today's modern era, Javanese culture can be translated into a corporate social responsibility (CSR) that the companies give to the surrounding environment. Corporate social responsibility is an activity of many kinds eg philanthropy or other charitable activities (Roberts, 1992). CSR is done routinely and sustainable will maintain harmony with the surrounding environment. Stakeholder theory is a representation of maintaining good relations Stakeholder theory reveals that a company must have a good relationship to its stakeholders will increasingly long life of the company (going concern) and also profitability increased (Roberts, 1992)

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## DOES STUDENTS' RELIGIOSITY MODERATING WORD OF MOUTH IN ISLAMIC PRIVATE HIGHER EDUCATION?

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### Abstract

Marketing communications by Word of Mouth or WOM universally important role in business success and is one of the marketing communication strategy, a strong impact on the performance of marketing, as well as playing an important role in influencing the purchasing decision back. WOM can be an alternative marketing communications for a private university based Islamic religion that have had difficulty in promoting the institution.

The research aims to analyze the influence of service quality on WOM marketing communications. Another research aim is to analyze the role of satisfaction as a mediator, and the role of religiosity as moderator effect of service quality on WOM marketing communications. Respondents are students of University of Muhammadiyah Malang and University of Islam Malang who had conducted WOM. Data collected by questionnaire and analyzed using SEM PLS.

The analysis showed that the service quality has no direct effect on WOM marketing communications. Service quality has direct effect on satisfaction, and satisfaction has direct effect on WOM. The important result is religiosity did not moderate the influence of satisfaction on WOM.

**Keywords:** *Service Quality, Satisfaction, Word of Mouth.*

### Introduction

Word of Mouth or WOM is universally seen as an important factor of business success and over 50 years of informal communication between the customers has been used as a research topic (Oetting, 2009). Marketing researchers and practitioners believe that WOM is one of the marketing communication strategy that had a strong impact on marketing performance (Oetting & Jacob, 2007), and played an important role in influencing the re-purchasing decision (Money, Gilly & Graham, 1998; Gremler, Gwinner & Brown, 2001).

WOM can be done through online and offline (face to face) with a number of differences. First, offline WOM is the process of sharing information between two or more parties are mutually interested and it is voluntary, whereas the online WOM is a two-way communication that has a very wide range of opinions and experiences to share with others (Dellarocas, 2003). Second, WOM offline message's sender is closer and familiar with the receiver, so that the credibility of the sender and the message content can be easily understood by the receiver. While the nature of WOM online is to eliminate the ability of the receiver to assess the credibility of the sender and the message contents (Steffes & Burgee, 2009). Third, offline WOM is more persuasive than the online one (Herr, Kardess, & Kim, 1991). Differences in these characteristics indicate that the relative offline WOM is more credible and more persuasive than WOM online in influencing consumer purchasing decisions (Herr *et al.*, 1991). WOM online also has its disadvantages outweigh the negative assessments offline WOM may spread rapidly and expanded in a short time, and have a negative impact on consumer attitudes (Chevalier & Mayzlin, 2003; Lee, Park, & Han,

2006). Therefore, the research is focused on offline WOM marketing communication (face to face).

WOM sender's behavior was motivated by a variety of antecedents, such as quality of service (Herman, 2007; Bruce & Edgington, 2008; de Matos & Rossi, 2008; Cahniotakis & Lymperopoulos 2009), satisfaction (Molinari *et al.*, 2008; Casalo *et al.* 2008), loyalty (Wangenheim and Bayon, 2004; Podhosen, 2006), commitment (Harrison-Walker, 2001; de Matos & Rossi, 2008), and trust (Gremler *et al.*, 2001; de Matos & Rossi, 2008). The diversity of the antecedents of WOM caused by different objects and basic theoretical research. WOM research objects include goods and services, but service research object is dominant rather than goods (Mangold & Miller, 1999). In terms of the theoretical foundation, a variety of theory was used to explain the phenomenon of WOM, such as cultural theory (Money *et al.*, 1998; Podoshen, 2006), the attribution theory (Swanson & Kelley, 2001; Laczniak *et al.*, 2001), the theory of satisfaction (Babin *et al.*, 2005; Casalo *et al.*, 2008; De Matos & Rossi, 2008; Chaniotakis & Lymperopoulos, 2009), and the theory of personal relationships (Bansal and Voyer, 2000; Ennew *et al.*, 2000; Gremler *et al.* 2001; Dellarocas, 2002; Lang *et al.*, 2006).

The object of WOM research differences has an implication for the diversity of variables in the model, it was resulted research model in a partial science expansion. Consequently, the research model has not ability to generalize. The diversity of the basic theory suggests that WOM activity can be viewed from various aspects. The results of WOM research that has been studied did not find based on the theory of causal attribution. Therefore, it is used as the theoretical basis of this research to develop a new alternative WOM models. Causal Attribution theory states that success is due to the internal and external factors. Attribution in marketing research is understood as an explanation of causality of events and consumer behavior (Folkes, 1988). In this study, Causal Attribution Theory is expected to explain the reasons for the success of WOM marketing of consumer communication, especially the success caused by internal factors. Empirically Babin *et al.* (2005), Bruce and Edgington (2008), Casalo *et al.* (2008), and Chaniotakis and Lymperopoulos (2009) indicate that customer satisfaction affects the WOM marketing communications. Several other studies indicate that WOM marketing communications not directly related to satisfaction (Wirtz and Chew, 2002; and Brown *et al.*, 2005). While the study of Li (2013) and Naik, Anand, and Bashir (2013) indicate there are no satisfaction impact on WOM marketing communications.

The study results indicate there are three groups of previous research results. The first group is indicating the existence of a direct influence of satisfaction on WOM. The second group is indicating an indirect effect of satisfaction on WOM, and third group is indicating a direct effect that satisfaction has no effect on WOM. Those are demonstrates controversies in terms of the effect of satisfaction on WOM marketing communications and need to be reanalyzed. The relationship between satisfaction and WOM are expected to generate an alternative model of behavior WOM marketing communications. In the context of indirect relationships, the researchers added consumer religiosity variable as a moderator variable that is expected to strengthen the influence of satisfaction on WOM.

The object of the research is private higher education with Islamic religion background. The unit analysis of the research is student at University of Muhammadiyah University and University of Islamic Malang. Both private universities owned by the two organizations in Indonesia's largest Islamic community, namely Muhammadiyah and Nahdlatul Ulama (NU). Those are chosen because has uniqueness in communication patterns. The communication

pattern in NU well known as primordial or patron-client communication where elements of Kyai or the descendants of Kyai were in institutions and the community became a central figure, whereas in Muhammadiyah uphold collegial communication links. Both the communication pattern has been a tradition among Muhammadiyah and NU (Tafsir, 2009). Differences in patterns of communication is an interesting phenomenon to be studied from the perspective of WOM marketing communications, especially to determine whether religiosity that exists within every student is capable of moving them to do WOM marketing communications.

### **Literature Review**

This study based on the theory of causal attribution as a basis for explaining the motivation of individual consumers to spread the information to others through word of mouth voluntarily. Attribution theory was first introduced by Fritz Heider in 1958. He suggests that if observing social behavior, the first thing you should do is determine in advance what caused it, ie, situational factors or personal. The assumption is that people try to understand their environment and explain the causes of internal and external to an event encountered. Attribution theory is also commonly called the external and internal causality (Jones & Nisbett, 1972).

Weiner (2000) states that there are three elements that underlie the causal properties that have cross situational generality, that is the locus, stability, and control. First, the cause of success or failure can be caused by internal or external factors. Second, the cause of success or failure can be either stable or unstable. Third, the cause of success or failure can be either controlled or uncontrolled. Controllable factor is one of the factors that are believed to be able to change a person if he wants to do. The uncontrollable factors explain if someone does not believe him then dai can easily turn. Thus, attribution theory explains that human behavior cannot be separated from the state within the individual and the environment.

Weiner attribution theory is the most influential contemporary implications on consumer behavior. Attribution theory interpreted on the success or failure of the business and the consumer tendency to do the same behavior in the future. Weiner attribution theory more widely adopted than other attribution theory by researchers in consumer behavior (Burnkrant, 1975; Wang, 2008). Therefore, Weiner's attribution theory was used as the theoretical basis of this research.

### **Effect of Service Quality on WOM**

Athanassopoulos et al. (2001) indicate that consumers' assessment of service quality is positively related to WOM. Chen and Xie (2008) found that good quality services allowing consumers to recommend through the information by word of mouth (WOM). Next, Padma et al. (2009) in his research indicates that consumers who are glad to be able to share information voluntarily and invite family and their friends to visit the same service provider. In the perspective of college, Hermawan (2001) indicates the quality aspects of education have a significant effect on the willingness of students recommend their campus. Meanwhile, Abdullah (2006) indicated that service quality is positively related to WOM.

The hypothesis is the service quality of higher education has a positive effect on WOM.

### **Effect of Service Quality Satisfaction**

Duggirala, Rajendran, and Anantharaman (2008) indicated a positive relationship between the dimensions of service quality and satisfaction. Likewise, Bansal and Taylor (2000), Cronin, Brady, Brand, Hightower, and Shemwell (2000) study indicates the existence of a high correlation between the service quality and satisfaction. In the perspective of higher education, student satisfaction is influenced by the service quality of the college (Danjuma & Rasli, 2012). The quality of higher education have a significant effect on student satisfaction (Hermawan, 2001). Keong (2006) indicates the quality of functional service has a significant effect on student satisfaction.

The hypothesis is the service quality of higher education has a positive effect on student satisfaction.

### **The Influence of Satisfaction on WOM Marketing Communications**

Athanassopoulos *et al.* (2001) indicate that high customer satisfaction is positively related to WOM communication. Studies Babin *et al.* (2005), Bruce and Edgington (2008), and Chaniotakis and Lymperopoulos (2009) also indicate that customer satisfaction has positive effect on WOM marketing communications. Hermawan (2001) indicate that significant influence satisfaction on WOM recommendations. Ahmad *et al.* (2012) stated that the intention to encourage students doing positive WOM then universities should have a reputation for excellence and develop relationships with students is satisfactory. Bruce and Edgington (2008) stated that student satisfaction with quality of services college campus to encourage them to recommend to other prospective students voluntarily.

The hypothesis is that student satisfaction effect on WOM.

### **Religiosity Moderating Influence of Satisfaction on WOM**

Bloodgood (2008) indictates that the higher religiosity student decreases their cheating behavior. La Barbera *et al.* (1997) suggested that higher religiosity consumers looked quantity and luxury products purchased did not make them satisfied. Ariffin *et al.* (2012) states that the level of consumers religiosity can weaken the influence of American popular culture on conspicuous consumption. The more religious of satisfied customers will do WOM more.

The hypothesis is the student religiosity will strengthen the influence of satisfaction on WOM.

## **RESEARCH METHODS**

This research was conducted at the University of Muhammadiyah Malang (UMM) is located at Jalan Tlogomas 246, and the University of Islamic Malang (UNISMA) in Jalan MT. Haryono 193 Malang. This study was designed to build a model of word of mouth (WOM) marketing communication in the perspective of a private-higher education Islamic religion. Research type is a survey with students as an analysis unit. The study population is an registered undergraduate students at UNISMA and UMM who have ever convey information about the college to others through WOM face to face and voluntary.

Statistically, the number of students at UMM and UNISMA can be known, but the number of students who actually meet the criteria of population is not known. Therefore, the method of determining the sample follows the assumption that the Structural Equation Modeling to produce a good analysis of the size of the sample is determined at least 5 times

the number of indicators used variables (Ferdinand, 2006; Hair, 2004). The samples technique was conducted using a non-probability sampling using judgment method.

Primary data was used in this study, including service quality, satisfaction, religiosity, and WOM. Questionnaire method was used to data collection. Data that has been declared valid and reliable then analyzed using Smart PLS 2.0 version.

## RESULTS

### 1. SEM PLS Analysis Results

#### a. Model Specification

##### 1) Outer Model

Outer model is a relationship specification between latent variables and the indicator that describes the characteristics of latent variables with the indicator. Outer loading value shows the value of each indicator as a measure of a variable based on the reflective value. Outer loading results shown in Table 4.1.

**Table 4.1. Outer Loading – Convergent Validity**

Indicators	<i>Original sample</i>	Validity
X101 <- SQ	0.5884	Valid
X102 <- SQ	0.5096	Valid
X103 <- SQ	0.5296	Valid
X104 <- SQ	0.6237	Valid
X105 <- SQ	0.6853	Valid
X106 <- SQ	0.660	Valid
X107 <- SQ	0.7122	Valid
X108 <- SQ	0.7233	Valid
X109 <- SQ	0.736	Valid
X110 <- SQ	0.5721	Valid
X111 <- SQ	0.6681	Valid
X112 <- SQ	0.6858	Valid
X113 <- SQ	0.6936	Valid
X114 <- SQ	0.6792	Valid
X115 <- SQ	0.6366	Valid
X116 <- SQ	0.6876	Valid
X117 <- SQ	0.5177	Valid
X118 <- SQ	0.6708	Valid
X119 <- SQ	0.5753	Valid
X120 <- SQ	0.6834	Valid
X201 <- SAT	0.7618	Valid
X202 <- SAT	0.7586	Valid
X203 <- SAT	0.6622	Valid
X204 <- SAT	0.7201	Valid
X205 <- SAT	0.6879	Valid
X401 <- WOM	0.7108	Valid
X402 <- WOM	0.740	Valid
X403 <- WOM	0.7664	Valid
X404 <- WOM	0.7926	Valid

X405 <- WOM	0.8277	Valid
X406 <- WOM	0.8481	Valid
X407 <- WOM	0.8243	Valid

Source: SmartPLS Algorithm, 2016.

Outer loading value of all indicators of the service quality are above 0.50 with the highest loading indicator X109 (certainty of time service) of 0.736. For satisfaction variable, the highest loading value was indicators X201 (student satisfied with their chosen), with a score of 0.764. The highest outer value on WOM is an indicator X30 (recommend to acquaintance) by a score of 0.848. The highest outer loading value indicates that the indicator has stronger reflect the latent variables compared with other indicators.

2) Inner model

Inner model is a relationship specification between latent variable (exogenous and endogenous) based on the theoretical foundation. Relationship between latent variable of service quality, satisfaction, and WOM was shown in Table 4.2.

**Table 4.2. Path Coefficient**

<i>Path</i>	<i>Original Sample (O)</i>	<i>Sample Mean (M)</i>	<i>Standard Error (STERR)</i>
SAT -> WOM	0.2673	0.1992	0.0942
SAT * REL -> WOM	0.2511	0.1693	0.329
SQ -> SAT	0.4281	0.4577	0.0874
SQ -> WOM	0.1866	0.1661	0.0945
REL -> WOM	0.22	0.237	0.0765

Source: SmartPLS *Bootstrapping*, 2016.

b. Path Diagram of SEM

Path diagram of SEM is basically a diagram that connects the structural model with the measurement model. Structural model is a model whose function is to look at the relationship between latent variables, whereas the measurement model has a function to see the connection indicator of the latent variables. Path diagram in this study connects the latent variables of service quality, satisfaction, WOM, and religiosity moderator variables and indicators of latent variables respectively as in Figure 4.1 and 4.2.

Figure 4.1 is the result of algorithm analysis PLS SEM that shows the outer and inner loading and also path coefficient values. It used to construct the outer and inner models. Whereas in Figure 4.2 is the result of bootstrapping analysis of PLS SEM showing the outer and inner significance of the model, the path model coefficients, as well as the coefficient of determination or R<sup>2</sup>.

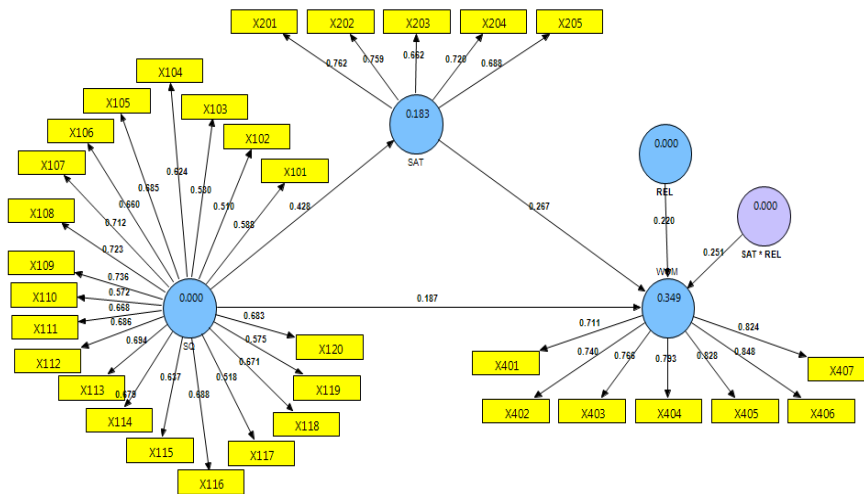


Figure 4.1. Diagram of Algorithm Structural Model

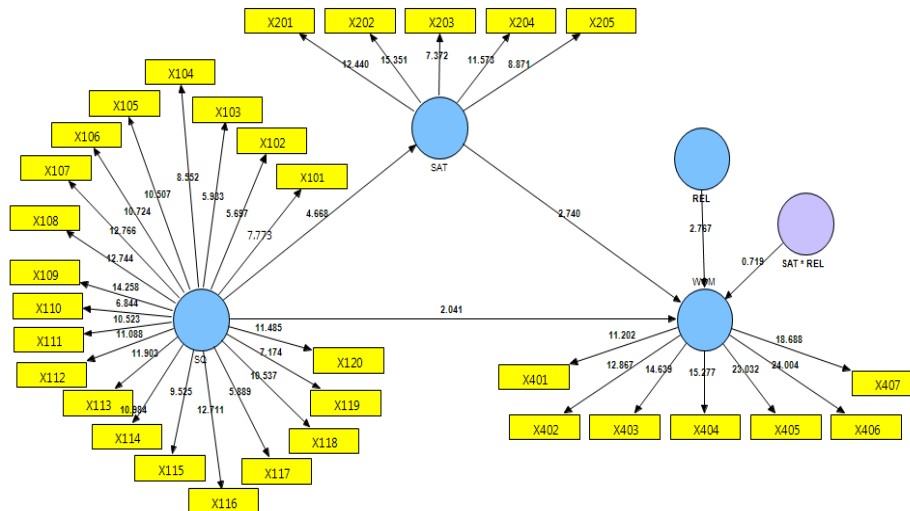


Figure 4.2. Diagram of *Bootstrapping* Structural Model

c. Path Diagram Conversion to Equation

1) Structural Equation (Inner Model)

$$\begin{aligned} \text{WOM} (\eta_2) &= 0.301\text{SQ} + 0.086 \\ \text{SAT} (\eta_1) &= 0.428\text{SQ} + 0.087 \\ \text{WOM} (\eta_2) &= 0.267\text{SAT} + 0.094 \\ \text{WOMmodSAT} (\eta_2) &= 0.251 + 0.267\text{SAT} + 0.329 \end{aligned}$$

2) Measurement Equation (Outer Model)

2.1) Service Quality

$$\begin{aligned} \text{SQ} = & 0.588\text{SQ}_{01} + 0.510\text{SQ}_{02} + 0.530\text{SQ}_{03} + 0.624\text{SQ}_{04} + 0.685\text{SQ}_{05} + \\ & 0.660\text{SQ}_{06} + 0.712\text{SQ}_{07} + 0.723\text{SQ}_{08} + 0.736\text{SQ}_{09} + 0.572\text{SQ}_{10} + \\ & 0.668\text{SQ}_{11} + 0.686\text{SQ}_{12} + 0.694\text{SQ}_{13} + 0.769\text{SQ}_{14} + 0.637\text{SQ}_{15} + \\ & 0.688\text{SQ}_{16} + 0.518\text{SQ}_{17} + 0.671\text{SQ}_{18} + 0.575\text{SQ}_{19} + 0.683\text{SQ}_{20} \end{aligned}$$

2.2) Satisfaction

$$\text{SAT} = 0,762\text{X}_{201} + 0,759\text{X}_{202} + 0,662\text{X}_{203} + 0,720\text{X}_{204} + 0,688\text{X}_{205}$$

2.3) Word of Mouth

$$\text{WOM} = 0,711X_{401} + 0,740X_{402} + 0,766X_{403} + 0,793X_{404} + 0,828X_{405} + 0,848X_{406} + 0,824X_{407}$$

d. Evaluation of Goodness of Fit Criteria

1) Evaluation of Measurement Model (outer Model)

1.1) Convergent Validity

The results of convergent validity analysis as in Table 4.1 show that all indicators of latent variables have a correlation coefficient more than 0.50. it's means that all indicators of latent variables is valid as a tool to get information from respondents. Therefore, all the indicators of each latent variable statistically meets the requirements of convergent validity and valid for measuring service quality, satisfaction and WOM.

1.2) *Discriminant validity*

Discriminant validity is to measure that each indicator is a good comparator for latent variable. Indicators regarded as a good comparator if the value of cross loading greater than 0:50. Discriminant validity analysis results as in Table 4.5 show that all indicators of service quality, satisfaction, and WOM has cross loading greater than 0.50. Statistically all indicators considered valid, so the indicators of three latent variables are a good comparator.

**Table 4.5. Cross Loading**

Indicators	SQ	SAT	WOM	Validity
X101	0.5884			Valid
X102	0.5096			Valid
X103	0.5296			Valid
X104	0.6237			Valid
X105	0.6853			Valid
X106	0.6600			Valid
X107	0.7122			Valid
X108	0.7233			Valid
X109	0.7360			Valid
X110	0.5721			Valid
X111	0.6681			Valid
X112	0.6858			Valid
X113	0.6936			Valid
X114	0.6792			Valid
X115	0.6366			Valid
X116	0.6876			Valid
X117	0.5177			Valid
X118	0.6708			Valid
X119	0.5753			Valid
X120	0.6834			Valid
X201		0.7618		Valid
X202		0.7586		Valid
X203		0.6622		Valid
X204		0.7201		Valid



X205	0.6879	Valid
X401	0.7108	Valid
X402	0.7400	Valid
X403	0.7664	Valid
X404	0.7926	Valid
X405	0.8277	Valid
X406	0.8481	Valid
X407	0.8243	Valid

Source: SmartPLS *Bootstrapping*, 2016.

Discriminant validity can also be measured by the value of the root AVE. The results of the root of AVE analysis can be seen in Table 4.6. Indicators considered valid if the root AVE value greater than 0.50. The value of root AVE service quality, satisfaction and WOM is greater than 0.50, which means all the latent variables meet the criteria of discriminant validity. This may imply that the measurement variable has a low correlation with variables that predicted nothing to do.

**Table 4.6. Average Variance Extracted (AVE)**

Latents	AVE	Root AVE	Cut off	Validity
SQ	0.6795	0.6454	0.50	Valid
SAT	0.5172	0.7192	0.50	Valid
WOM	0.6218	0.7885	0.50	Valid

Sumber: Hasil analisis SmartPLS Algoritma, 2016.

### 1.3) Composite reliability

Composite reliability function is to test the reliability of composite indicator which is reflection of latent variables in the model. Composite reliability analysis results can be seen in Table 4.7.

**Table 4.7. Composite Reliability**

Latents	Composite Reliability	Cut off	Reliability
SQ	0.8423	0.70	Reliable
SAT	0.9127	0.70	Reliable
WOM	0.9339	0.70	Reliable

Source: SmartPLS *Bootstrapping*, 2016.

Latent variables stated reliable if the reliability value of the composite more than 0.60. The analysis showed that the composite value of each latent variable is more than 0.70. This means that each has fulfilled the criteria latent variable composite reliability and highly reliable.

## 2) Evaluation of Structural Model (Inner Model)

GOF evaluation structural model of the inner model using R square whose function is to see the significance of latent variables. As for seeing the relevance of the predictions of endogenous latent variables and indicators reflection by looking at Q square value, where the endogenous variables are said to have a good relevance if the Q square value greater than 0. R square value generated through bootstrapping SmartPLS analysis and the results can be seen in Table 4.8.

**Table 4.8. R Square**

<i>Path</i>	<i>R Square</i>	<i>Original Sample (O)/ Koefisien Parameter</i>	<i>T Statistics ( O/STERR )</i>
SQ --> WOM	0	0.1866	3.5021
SQ --> SAT	0.1833	0.4281	4.9006
SAT --> WOM	0.349	0.2673	2.837

Source: SmartPLS Bootstrapping, 2016.

R square is the coefficient of determination, that is the ability of a construct to explain the model. R-square for satisfaction is 0.232, it demonstrates the ability of service quality to explain the satisfaction as for 23.2% and 76.8% remaining is explained by other variables never analyzed in this model. The R square WOM for 0.296 shows the ability of satisfaction in explaining WOM as for 29.6%, while 70.4% is influenced by other variables never analyzed in the model. Using R square value of satisfaction and WOM, then the resulting Q square value of 0.4683. The Q square value is greater than zero, so that the structural model has predictive relevance which is able to measure both the value of the observation models and parameter estimation.

## 2. Hypothesis Testing

### a. Effect of Service Quality and Satisfaction on WOM

To test the significance of the effect of exogenous variables on the endogenous variables seen from the inner coefficient models. Said inner coefficient models significantly if the t statistic or t-test every latent variable is greater than t-table value (1.96) at 0:05 alpha. T value on the structural model or the path diagram modeling results lies in the direction of the arrows connecting the exogenous variables of service quality with satisfaction endogenous latent variables, latent variable exogenous latent variable service quality with WOM endogenous and exogenous latent variable of satisfaction with endogenous latent variable WOM.

Inner models show the meaningfulness of the relationship between the latent variables are used to test the research hypothesis. The study hypothesis was tested by comparing the value of the t statistic with a value of t table with the criteria if the value of the t statistic is greater than t table then the hypothesis is supported, and otherwise the hypothesis is not supported. Summary results of the analysis of the inner workings of the model shown by the path coefficients as set forth in Table 4.9.

**Table 4.9. Path Coefficient**

Path	Original Sample (O)	T Statistics ( O/STERR )	Significance
SQ -> WOM	0.1866	3.5021	Sig
SQ -> SAT	0.4281	4.9006	Sig
SAT -> WOM	0.2673	2.837	Sig

Source: SmartPLS Bootstrapping, 2016.

The results of the analysis of inner models generate path coefficient is used to test the hypothesis of influence between exogenous and endogenous. To test the hypothesis service quality effect on WOM views of the coefficient paths service quality on WOM. The path coefficient was 0.1866, and significant at alpha 0.05 because the value of t statistics 3.5021 is greater than t table 1.96. This indicates the

services quality has a significant positive effect on WOM. Thus the hypothesis which states that service quality effect on WOM supported.

Testing the hypothesis affect service quality on satisfaction is determined by the path coefficients and significance. Magnitude coefficient the path is significant at alpha 0.4281 and 0.05 for the value of t statistics 4.9006 greater than t table value of 1.96. This indicates that services quality has a significant positive effect on satisfaction. Thus the hypothesis that stated affects service quality on satisfaction is supported.

Testing the hypothesis effect satisfaction on WOM is determined by the path coefficients and significance. The path coefficient is 0.2673 and significant at alpha 0.05 for the value of t statistics of 2.837 is greater than t table 1.96. This indicates that satisfaction has a significant effect on WOM. Thus the hypothesis that satisfaction has an effect on WOM is supported.

b. Moderating Effect

To examine the moderating of religiosity in the influence of satisfaction on WOM it is necessary to test the relationships between constructs. It is intended to obtain path coefficients between latent constructs. The result of the relationship between service quality and WOM can be seen from the estimated path coefficient and levels of significance as in Table 4.10.

**Table 4.10. Path Coefficient**

Path	Original Sample (O)	T Statistics ( O/STERR )	Significance
SQ -> WOM	0.1866	1.9747	Sig
SQ -> SAT	0.4281	4.9006	Sig
SAT -> WOM	0.2673	2.837	Sig
SAT * REL -> WOM	0.2511	0.7631	No Sig

Source: SmartPLS Bootstrapping, 2016.

The first analysis was done without involving the moderator variables of religiosity in relationship path between latent variables. Analysis results showed that the path coefficient linking service quality and WOM is 0.1866 and significant, since the value of the t statistic is 1.9747 greater than t table 1.96 at the 0.05 error level. That is, the quality of services and significant positive effect on WOM. Thus the hypothesis which stated that service quality effect on WOM supported.

Coefficient path which is connecting service quality and satisfaction is 0.4281 and significant, since the value of the t statistic 4.9006 is greater than t table value at 1.96 with 0.05 error level. That is, services quality has a positive and significant effect on satisfaction. Thus the hypothesis that stated service quality has an effect on satisfaction is supported.

Coefficient path which is connecting satisfaction and WOM is 0.2673 and significant, since the t statistic value of 2,837 greater than t table value at 1.96 with 0.05 error level. That is, the customer satisfaction and significant positive effect on WOM. Thus the hypothesis stated satisfaction has a direct effect on WOM supported.

The second analysis is to examine religiosity as a moderator variable on the relationship between satisfaction and WOM. The analysis resulted path coefficient of 0.2511 and t statistics value of 0763 is smaller than 1.96 or insignificant. That is, religiosity did not significantly moderate the influence of satisfaction on WOM. Thus

the hypothesis that religiosity moderates the effect of satisfaction on WOM is not supported.

### **Results And Discussion**

Analyzing of the first hypotheses indicated service quality at UMM and UNISMA has a positive effect on students done marketing communication through WOM. It means better service quality at UMM and UNISMA will more motivated students to inform a positive thing about the college to others. Improvements of service quality to the students will be able to encourage students to recommend or induce others to study at UMM and UNISMA.

The results support the findings of Babin et al. (2005), which indicated that service quality has a positive effect on WOM. The results also supported other studies, such as Bruce and Edgington (2008), De Matos and Rossi (2008), and Ferguson *et al.* (2010) were indicated that service quality has a positive effect on word of mouth. In the college perspective, the results support the findings of Herman (2001), conch (2006), and Abdullah (2006) that the higher education quality has a significant effect on the students' willingness to recommend others through WOM and the superior service quality positively increasing the word of mouth feedback.

Some reasons underlying the service quality has a significant and positive effect on WOM is derived from most respondent's responses that service quality at UMM and UNISMA meet their expectations. Most respondents considered that UMM and UNISMA had modern equipment for lecturing, luxuries campus buildings, lectures have good performance appearance, and campus facilities reflect the superior service.

In terms of reliability dimension, most responded UMM and UNISMA lecturers are always kept their promises, their science are qualified, always provided timely service, and able to deal with the problem of students' academic accurately. In terms of the dimensions of responsiveness, the majority of respondents consider that the lecturers of UMM and UNISMA always gave assurance of time service, provide faster service, concern to help students deal with academic problems and always ready to answer students' questions.

In terms of assurance dimension, most respondents considered that lecturers of UMM and UNISMA always trustworthy, always gives a sense of security, always consistent in being polite, and knowledgeable in answering questions. In terms of dimension of empathy, most respondents stated that UMM lecturers and UNISMA always give personal attention to students, always concerned with the difficulties experienced by students in the learning process, and always gives a honest concern on students.

The second hypothesis test results show that service quality has a significant and positive effect on student satisfaction. It's indicated that service quality has been satisfying UMM and UNISMA students. In other words, the more service quality of UMM and UNISMA the more student satisfaction. So, the key to building a sense of satisfaction students is UMM and UNISMA should continuously and sincerely to improve superior service quality from time to time.

The results of this study support the research Cronin *et al.* (2000), Hermawan (2001), Keong (2006), as well as Danjuma and Rasli (2016), which indicated the quality of higher education, has a significant effect on student satisfaction. Meanwhile, this study do not support the results of research conducted by Gill and White (2009), Wu (2011), Markovic and Jankovic (2013), as well as Fatima and Razzaque (2014). Their results indicated that not all quality dimensions have a significant effect on satisfaction and quality of service as an exogenous variable was not able to provide customer satisfaction in several different research objects.

Some of the reasons underlying a significant effect service quality on satisfaction is derived from a variety of respondents. Most of the respondents were satisfied with the decision in choosing UMM and UNISMA and satisfied with good service. Students are also satisfied with academic program, as well as students settle into UMM and UNISMA.

The third hypothesis stated that satisfaction effect on WOM is supported. The analysis showed that satisfaction has a significant and positive effect on WOM. It's indicate that students satisfaction motivate them for communicating the institutions to others through WOM voluntarily. Thus, students who feel satisfied during their study at UMM and UNISMA will be compelled to say good things and recommend and persuade other people to choose UMM and UNISMA.

The results support research conducted by Babin *et al.* (2005), Bruce & Edgington (2008), Casalo *et al.* (2008), Chaniotakis & Lymperopoulos (2009), there are a direct relationship between satisfaction and WOM intention. But the results of this study do not support Wirtz and Chew (2002), Brown *et al.* (2005), Li (2013), Naik, Anand, and Bashir (2013) were indicated a positive relationship between consumer satisfaction and WOM. Thus, in terms of UMM and UNISMA, students who satisfied with their decision will be motivated to voluntarily told others about good things of UMM and UNISMA.

Path analysis showed that religiosity does not significantly moderate the influence of satisfaction on WOM. It means that religiosity does not moderate the influence of satisfaction on WOM. In other words, students' religiosity did not able to strengthen WOM marketing communications even though they have been satisfied with service quality at UMM and UNISMA.

The results of this study do not support a finding Budiman (2012) that religiosity moderating the intention of buying a pirated bag, as well as the findings Vitell and Paolillo (2003), and Kurpis *et al.* (2008) which indicated person religiosity can push a positive effect on ethical behavior. Religiosity that exists in students at private colleges Islamic religious background is not capable reinforce the students to do voluntary WOM marketing communications. Thus, both the higher education institutions in motivating students to perform WOM marketing communications simply by making the students feel satisfied with excellence service quality. In other words, in a private college environment based on Islamic religion did not necessary to use a religiosity variable to leverage students' WOM marketing communications.

## **Conclusion**

The service quality indicated has a positive effect on student's satisfaction and WOM marketing communications. The more service quality the more students satisfied and motivated to do voluntary WOM marketing communications. This indicates strongly that to encourage marketing communications through WOM by a student, the student must be given a more superior service in fulfill their expectations.

Study also indicated that UMM and UNISMA's service quality had a direct impact to the students to do WOM marketing communication voluntarily. Student satisfaction has a direct positive effect on WOM marketing communications. The direct effect between latent variables indicated that students' satisfaction mediates the relationship between service quality and WOM marketing communications. Therefore, for future studies proposed to analyze the role of satisfaction as a mediator variable in the relationship between service quality and WOM marketing communications.

Students' religiosity at UMM and UNISMA did not able to strengthen WOM marketing communications although they were satisfied. This result indicated that even in the college

environment based on Islamic religion, religious variables does not guarantee to bring automated students action to tell good things of institution. The important result in this study is students' religiosity cannot be played as a moderator variable to strengthen the spirit of UMM and UNISMA students to do WOM for the institution.

In the neighborhood-based private colleges Islam, indicated that elements of religiosity cannot strengthen and are not able to contribute in improving the WOM marketing communications. Thus, religiosity cannot be played to strengthen the WOM marketing communications at UMM and UNISMA. For future research could examine the moderating role of religiosity in the relationship between service quality and WOM marketing communications at the college environment based on non-Islamic religion.

Inability religiosity of as moderating variable WOM marketing communications in Islamic higher education carried out a logical consequence that the variables such derived from religion are not necessarily able to support voluntarily activities. Thus the theoretical implications of this research are marketing through WOM communication can still be done without strengthening the non-material variable or variables derived from religion.

In practical terms, the management UMM and UNISMA can support their students who are satisfied to promote the campus to the community through WOM marketing communications. Service quality is the key factor of student satisfaction and encourages students doing marketing communication through WOM voluntarily. UMM management and UNISMA should be more concerned to regularly improving service quality to make student satisfaction increase and then they are more motivated to do WOM voluntarily.

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## EFFECT OF INTELLECTUAL CAPITAL ON FINANCIAL PERFORMANCE OF INSURANCE COMPANY

Avianti Zulaicha  
Riyanti

### Abstract

**Purpose** – The purpose of the paper is to assess and analyze the effect of intellectual capital on the financial performance of general insurance companies. The Intellectual capital measured by VAIC<sup>TM</sup>, which consists of two components, namely intellectual capital efficiency (ICE), capital employed efficiency (CEE). Financial performance quantified by ROA and RBC.

**Design/methodology/approach** - The research used descriptive and associative methods. The seven sample insurance companies obtained by purposive sampling method. The study uses secondary data from company financial reports, and analyzed with SEM Partial Least Square (PLS – SEM).

**Findings** - The results showed that the intellectual capital (VAIC<sup>TM</sup>) significantly affects financial performance. Indicators ICE and the CEE contributed significantly to the intellectual capital. Indicators ROA and RBC contributed significantly to the company's financial performance.

**Practical implication** - The results of this study can be used as a reference for general insurance companies to invest in the human capital, as part of intellectual capital, which needs to be synergized with organizational capital. Intellectual capital (IC) can be used as a “promotional tool” since IC referred as business performance indicator. So far, the general insurance companies used RBC as a promotional tool.

**Originality / value** - Most research on intellectual capital as measured by VAIC<sup>TM</sup> in Indonesia have focused on three components, namely Value Added Capital Employed (same term as CEE), VAHU (same term as HCE) and STVA (same term as SCE). While this research focused on two coefficients of efficiency, i.e. CEE and ICE. ICE consisted of structural/organizational capital efficiency (SCE) and human capital efficiency (HCE), due to the role of human capital and organizational capital need to be synergized to generate added value for the company.

**Keywords** - *Intellectual capital, VAIC<sup>TM</sup>, ICE, CEE, ROA and RBC*

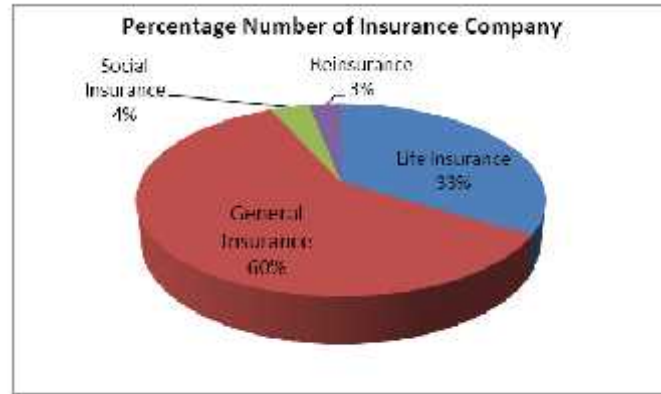
### Introduction

The challenge in this era of globalization, knowledge-based economy, and the evolution of technology, has prompted businesses to seek new ways of maintaining its competitive advantage. In response, in general it can be said that the success of the company depends on the existence of competent human resources. Individuals with high competence, in turn, will be a valuable asset for company and is reflected in the framework of its human capital.

Human capital expansively covers the meaning of 'man as creator' who has knowledge, skills, competencies, and experiences come from their relationship with 'self' and 'environment' continuously (Kwon, 2009). According to Dess, Lumpkin and Eisner (2007:127) human capital is the main pillar in the intellectual capital.

Intellectual capital plays an important role for an insurance company as an industry based on intellectuality to innovate in products and services. According to research carried out by

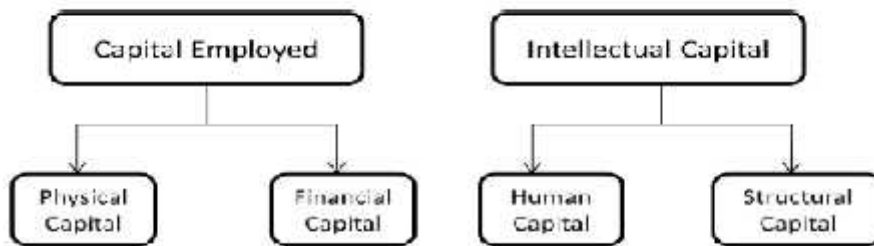
Rahim,H.(2013) the current intellectual capital / human capital and organizational assets in the insurance company have not been used optimally yet. General insurance companies in Indonesia have a good business opportunity. The number of general insurance companies is quite significant compared to other types of insurance (Financial Services Authority/FSA per June 2013).



Source: [www.ojk.go.id/asuransi](http://www.ojk.go.id/asuransi)

**Figure 1. Percentage number of general insurance company in Indonesia per June 2013**

Intellectual capital cannot be measured directly, but through value -added indicator of efficiency. Among others is VAIC<sup>TM</sup> method or value-added intellectual coefficient, introduced by Pulic (1997) to measure the added value of the enterprise resource of intellectual capital, and physical and financial capital. Intellectual capital is comprised of two components, namely human capital and structural capital as seen in Figure 2.



Source: Andriessen (2004)

**Figure 2. Two Keys Resources Creating Added Value in the Company**

Results of previous studies on the effect of intellectual capital to the company's financial performance had not been consistent. Most research used three components of VAIC<sup>TM</sup> i.e., value added capital employed (VACA or CEE), value added human capital (VAHU or HCE) and structural capital value added (STVA or SCE). In order to generate added value for the company, the role of organizational and human capital need to work together. Therefore, unify SCE and HCE into ICE deemed to be better. This study aims to assess and analyze the effect of intellectual capital as measured by VAIC<sup>TM</sup> with its indicators ICE and CEE on the financial performance of general insurance companies. The discussion focused on the perspective of human resource management.

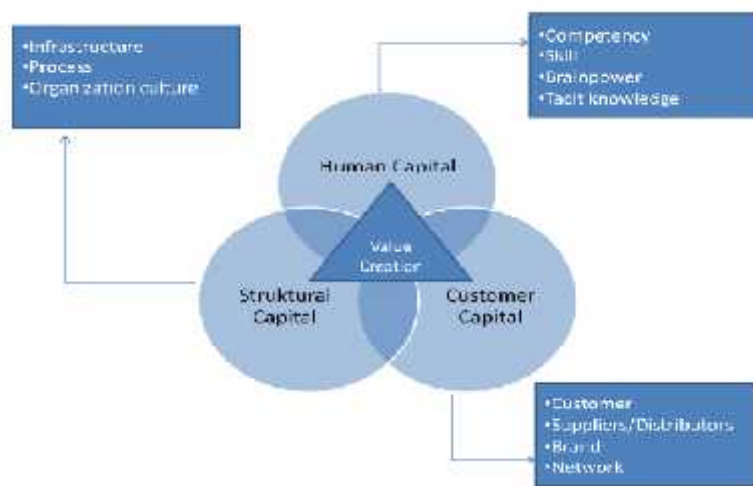
## Literature review

### 1. Definition of Intellectual Capital

Intellectual capital (IC) is one of the approaches used to measure intangible assets of an enterprise. IC has been a concern of many fields, such as management, information technology, sociology and accounting (Petty and Guthrie, 2000 in Nawawi, 2012: 185).

According to Dess, Lumpkin and Eisner (2007: 125), IC is defined by many authors as the difference between market value and book value of a company which is a measurement of the value of intangible assets of the company. This broad definition involves assets such as reputation, loyalty and employee commitment, customer relations, corporate values, brand and the experience and skills of employees

Conceptually, until now, there are various definitions of IC. Almost all definitions reveal that IC is considered as the source of the company's long-term value creation. Value creation models of IC by Tom Stewart (2001 in Nawawi, 2012: 185) is one model that is fairly well known, presented in Figure 3



**Figure 3. Value Creation in Intellectual Capital Model Source: Tom Stewart, 2001 in Nawawi 2012: 185**

The model illustrates that IC consists of three components, namely human capital, structural capital and customer capital that jointly will be able to create value for the company.

According to Pulic (1998, 2000), IC is one of the important resources for the success of the company's performance in the knowledge-based economy. The question arises is how companies create value in an intensive knowledge-based economy? According to Dess and Lumpkin (2003: 118), in general, is by attracting and controlling the human capital through mechanisms that create the value of products and services continuously. There are three basic concepts related to IC, i.e. the first, human capital is the ability of individuals, the knowledge, the skills of employees and company managers. Second, social capital can be defined as a network of relationships of the individual in the organization and also outside the scope of the organization that includes the relationship between the company and its suppliers, customers and partners. Third capital is related to the concept of 'knowledge' which consisted of two forms. The explicit knowledge that can be codified, documented, reproduced and disseminated, for example, engineering drawings, patents, sales collateral, etc. On the other side is tacit knowledge. This is knowledge that exists in the minds of the employees and based on the experience and background, can be shared through individual permits and participation.

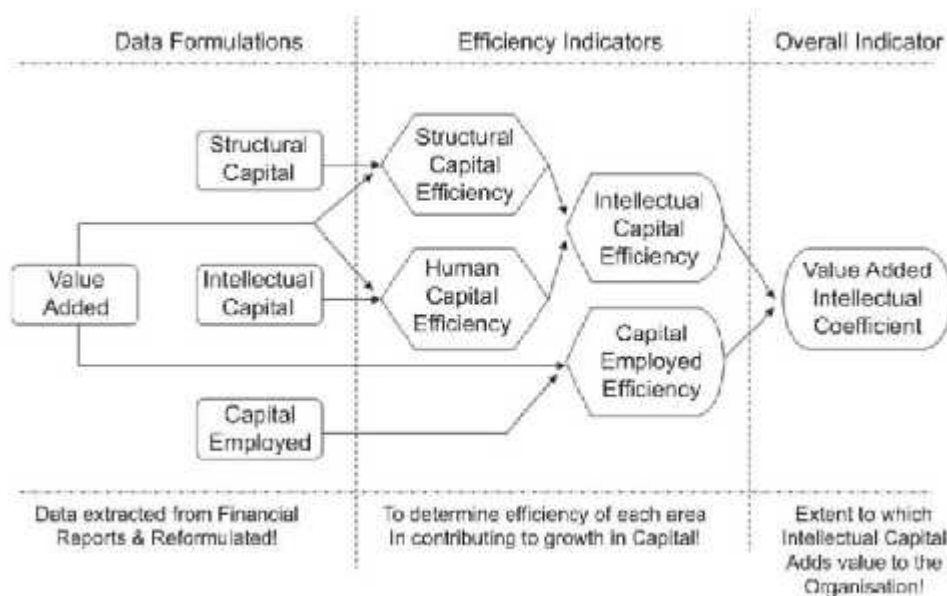
While Bejinaru, R and S. Iordache (2011) argue that intellectual capital is the knowledge of various shapes, whether tangible or intangible, this can be used to generate a profit/ financial or other benefits for the organization. Intellectual capital is a dynamic component that can be continuously designed related to the quantity, quality, value, usefulness or intensity use and this is the essence implied from the learning organization that is the constant adaptation, continuous learning, continuous use of resources and opportunities.

Noting these linkages, the company is not able to create value by itself, without the initiative of the individuals involved in the organizational processes. Therefore, human capital is crucial for the survival of the company, because human capital is an amalgamation of intangible resources inherent in the organization's members. Likewise, individuals will not be able to contribute meaningfully to the company if not supported by conducive management so that employees are able to provide ideas, thought, innovation and creativity for the company.

## 2. Intellectual Capital Measurement - Value Added Intellectual Coefficient (VAICTM)

Measuring intellectual capital is not easy. However, according Ulum (2014) gauge IC with VAICTM method developed by Pulic in 1997 is an approach that is relatively easy and possible to implement, because the necessary data derived from the company's financial statements / balance sheets, statements of income.

VAICTM stands for Value Added Intellectual Coefficient, is designed to provide a means to measure the efficiency of the three types of inputs: physical and financial capital, human capital and structural capital. VAICTM is a most popular method for measuring the efficiency of the value added intellectual capital of the company. Figure 4 provides an overview of how VAICTM is formed from 3 added value input, which is then divided into two types of efficiency, i.e. intellectual capital efficiency (ICE) which consists of human capital and structural / organizational capital, and non-intellectual efficiency, consisting of physical and financial capital called capital employed efficiency (CEE).



Source: Laing, Dunn and Hughes-Lucas (2010:276)

Figure 4. Overview Value Added Intellectual Coefficient (VAICTM)

VAICTM Model begins by looking at a company's ability to create value added. The added value is formed from the use of capital in the company, where VA is calculated as the difference between output and input. The output (OUT) represents the revenue and covers all

products and services sold in the market. Input (IN) covers the entire load used to earn income. Things to consider in this model is personnel expenses are not included in the IN for its active role in the value creation process, it is not considered as a cost, but labor is treated as an investment and as an entity of value creation (Pulic, 1998, 2000 and Ulum, 2014: 108) Considering the difference in value added generated by non-intellectual capital and intellectual capital, the value added generated by non-intellectual capital is measured by the efficiency of the use of physical and financial capital used by the company are reflected in the financial statements . The added value is referred to as Capital Employed (CE). CE is the value added that occurs in the company calculated from the difference between output and input, divided by total assets other than intangible assets. CE efficiency indicator which is a plus for the CE notated CEE (Capital Employed Efficiency) which indicates if one unit CE in a company producing more profit than any other company then the company is better at using its CE. Thus, much better use of the CE becomes to be a part of the IC companies (Pulic, 2000, 2004).

Furthermore, the IC has two components, namely human capital and structural capital (Pulic, 2000, 2004). The added value resulting from the efficient use of human capital the company referred to as Human Capital Efficiency (HCE). Efficiency is measured by dividing the company's value added with expenses incurred for employees. HCE indicators showed the employee contributions to the increase in value-added enterprises.

The added value comes from structural capital component associated with organizational capital called Structural Capital Efficiency (SCE) or the efficiency of structural capital.

Intellectual capital efficiency (ICE) obtained by adding the partial efficiency of structural and human capita VAIC<sup>TM</sup> is calculated as follows:

$$VAIC^{TM} = ICE + CEE$$

Where ICE = intellectual capital efficiency (HCE + SCE),

CEE = efficiency of physical and financial capital

With this composite indicator makes it possible to understand the overall efficiency of the company and show their intellectual ability. High coefficient values indicate a higher value creation from the use of company resources, including its IC.

### 3. Company Financial Performance

The financial performance is the result of all management decisions made on an ongoing basis. To assess the performance of the company then those decisions need to be associated with cumulative financial performance and economics. The financial performance analysis is based on published financial data, as reflected in the financial statements prepared in accordance with accounting principles that are commonly used (Helfert, 2000: 52).

According to Brigham and Houston (2009: 95) the company's financial performance can be measured using ratios contained in the financial statements issued periodically. According to Fahmi (2014: 104), the condition of the company's performance can be seen from three of the most dominant financial ratios referenced to investors, that are the liquidity ratio, solvency, and profitability ratios.

Return on assets (ROA) is the ratio of net income to total assets, to measure the rate of return on total assets after interest expense and taxes. The larger the value, the better the company's financial performance (Brigham & Houston, 2009: 109). Thus, ROA can serve as formative indicators for financial performance. 8

Noting that the IC is the difference between the market value and the book value of the company, companies that can generate high levels of income from intangible assets, such as reputation, customer relations, employee loyalty, the values of the company, brand, etc., in

general have a higher market value than its book value. This is indicated by ROA. Thus ROA could be a benchmark of good and /or bad an intangible asset of a company or its IC.

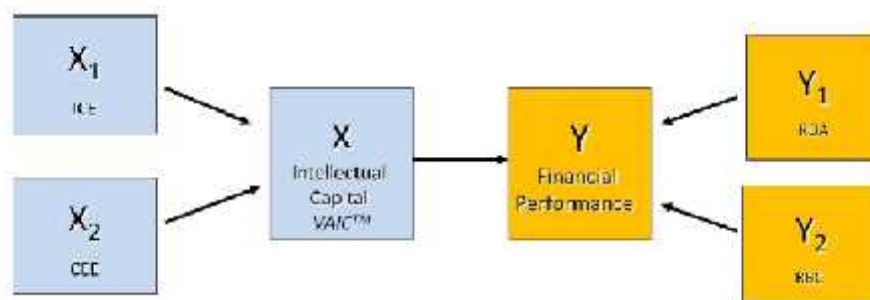
Risk Based Capital (RBC) is a measurement to inform level of financial security or financial health of an insurance company. The greater of the RBC value, the more healthy financial condition of the insurance company.

Based on the financial minister regulation of No. 53 / PMK.010 / 2012, insurance companies and reinsurance companies shall meet the solvency level of at least 120%.

Considering the important of the size of RBC for indication of financial healthiness of insurance companies, it is often used as a promotional tool company to build the brand image well as improving the acquisition premium. Having regard to the RBC function, it can be said that reliability of intellectual capital and human capital will generate high RBC.

#### 4. Conceptual Framework

In theory, as already explained, there is a relationship between intellectual capital and financial performance of the company. Intellectual capital can be measured by the value added intellectual coefficient (VAIC<sup>TM</sup>) method developed by Pulic in 1997. VAIC<sup>TM</sup> describes the information about the efficiency of value creation of intangible assets and tangible assets owned by the company, which consists of three components: HCE (human capital efficiency), SCE (structural capital efficiency), and CEE (capital employed efficiency). Components HCE and SCE forms coefficients for Intellectual Capital Efficiency (ICE). Thus VAIC<sup>TM</sup> will be formed from ICE and CEE. While financial performance is a variable formative formed from indicators ROA and RBC, as refer to Figure 5.



**Figure 5.**  
**Research Conceptual Framework**

#### Data

The data collection was a literature study to get the insurance company's financial statements in Capital Market Information Center. The financial statements and financial ratios derived from the site (website) Indonesia Stock Exchange, [www.idx.co.id](http://www.idx.co.id). In addition, the literature studies also done by studying reference books and relevant journals.

Analyzing the initial data was done by examine the descriptive statistics of each variable and its correlation with other variables, to check their compatibility with the predictions and ensure no data outliers.

The research population is all general insurance companies listed on the Indonesian Stock Exchange in Year 2009 - 2013. The purposive sampling technique was used, with the following criteria:

- General insurance companies listed on the Indonesia Stock Exchange for five consecutive years (2009 - 2013)
- Have no negative ROA value.
- Have all the necessary data.

Based on the criteria, the number of samples in this study is 7 companies, as presented in Table 1.

**Table 1. List of Research Sample**

No	Name of Company	Code
1	Asuransi Bina Dana Arta Tbk	ABDA
2	Asuransi Harta Aman Pratama Tbk	AHAP
3	Asuransi Multi Artha Guna Tbk	AMAG
4	Asuransi Dayin Mitra Tbk	ASDM
5	Asuransi Jasa Tania Tbk	ASJT
6	Asuransi Ramayana Tbk	ASRM
7	Lippo General Insurance Tbk	LPGI

## Results and Analysis

### 1. Data Description

#### A. Value Added Intellectual Coefficient (VAIC<sup>TM</sup>)

Referring to Table 2, the best VAIC<sup>TM</sup> value over five years from 2009 to 2013 of the general insurance company is Asuransi Multi Artha Guna Tbk (AMAG), then the second best is Lippo General Insurance (LPGI), and the third is Asuransi Bina Dana Arta (ABDA) with the average value in that order is 4.44, 3.40 and 3.30. 10

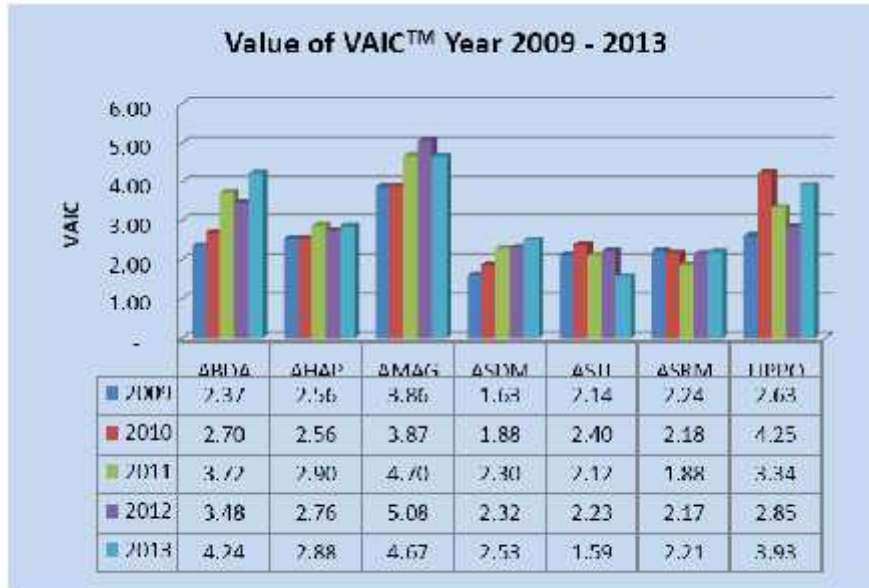
**Table 2. Value of VAIC<sup>TM</sup> Year 2009 - 2013**

No.	Name and Company Code	Year					Average
		2009	2010	2011	2012	2013	
1.	Asuransi Bina Dana Arta (ABDA)	2.37	2.70	3.72	3.48	4.24	3.30
2.	Asuransi Harta Aman Pratama (AHAP)	2.56	2.56	2.90	2.76	2.88	2.73
3.	Asuransi Multi Artha Guna (AMAG)	3.86	3.87	4.70	5.08	4.67	4.44
4.	Asuransi Dayin Mitra (ASDM)	1.63	1.88	2.30	2.32	2.53	2.13
5.	Asuransi Jasa Tania (ASJT)	2.14	2.40	2.12	2.23	1.59	2.10
6.	Asuransi Ramayana (ASRM)	2.24	2.18	1.88	2.17	2.21	2.14
7.	Lippo General Insurance (LPGI)	2.63	4.25	3.34	2.85	3.93	3.40

VAIC<sup>TM</sup> not measure IC directly but measuring its impact of the IC management (Ulum, Ghozali, & Chairi, 2008). The assumption is if a company has a good IC, and also manage it well, it will be good to the company. VAIC<sup>TM</sup> value indicates the efficiency of the value added intellectual capital of a company. Therefore, VAIC<sup>TM</sup> more appropriately referred to as ICP or intellectual capital performance, which by Mavridis (2004), Kamath (2007) and Ulum (2009a) in Ulum (2014) referred to as business performance indicator (BPI), and categorized into 4 categories as follows



- a. *Top performer* – VAIC™ score above 3.
- b. *Good performer* – VAIC™ score between 2.0 and 2.99
- c. *Common performer* – VAIC™ score between 1.5 and 1.99
- d. *Bad performer* – VAIC™ score below 1.5



**Figure 6. Value of VAIC™ Year 2009 – 2013**

Referring to Figure 6, Asuransi Multi Artha Guna Tbk (AMAG) in the category of top performers. While 5 other companies, namely Asuransi Bina Dana Arta (ABDA), Asuransi Harta Aman Pratama (AHAP), Asuransi Jasa Tania (ASJT), Asuransi Ramayana (ASRM) and Lippo General Insurance (LPGI) in the category of good performers, and one company in the category of common performer namely Asuransi Dayin Mitra (ASDM).

In 2010, the value VAIC™ LPGI insurance company rose from 2.63 to 4.25, so LPGI be the company with the highest VAIC™ value as well as being a top performance together with AMAG. While other companies still remain as a category in the previous year.

In 2011 the insurance company ABDA its VAIC™ value rose from 2.70 to 3.72, in the category a top performance together with AMAG, and LPGI which remain in this position since in 2010. In the year 2012 the value of LPGI dropped from 3.34 to 2.85, so that the category good performance. However, in the Year 2013 VAIC™ LPGI rose again to 3.93 so the category back into top performance.

There are three companies that entered the category of top performance in the Year 2013 that is ABDA, AMAG, and LPGI. ASJT company that for 4 years in a row in the category of good performance down to common performance with its value of 1.59.

#### Financial Performance

ROA describes the ability of management companies to gain profits from its assets management. The company with higher ROA value, the better of the company's assets management to obtain the added value. Referring to Table 3, the average value of the highest ROA is an insurance company AMAG is 9.77%, then AHAP 7.07%, ABDA 5.86%, ASJT% 5.13, LPGI 4.37%, ASRM 4.10, and ASDM% 2.82%. 12

**Table 3. Return on Asset (ROA) Year 2009 – 2013 (in %)**

N	Name and Code of Company	Year					Average
		2009	2010	2011	2012	2013	
1	Asuransi Bina Dana Arta (ABDA)	5.03	5.36	6.14	5.74	7.03	5.86
2	Asuransi Harta Aman Pratama (AHAP)	7.21	7.44	6.86	6.56	7.27	7.07
3	Asuransi Multi Artha Guna (AMAG)	9.72	9.07	8.83	10.90	10.33	9.77
4	Asuransi Dayin Mitra (ASDM)	2.92	2.60	2.70	2.90	3.00	2.82
5	Asuransi Jasa Tania (ASJI)	5.16	6.58	4.54	6.59	2.80	5.13
6	Asuransi Ramayana (ASRM)	6.06	5.33	3.17	3.05	2.89	4.10
7	Lippo General Insurance (LPGI)	3.75	6.12	4.39	2.94	4.62	4.37

In Figure 7 can be seen more on ROA data visualization of each general insurance company listed on the Stock Exchange in Year 2009 - 2013. Referring to Figure 7, the three companies with the best ROA value during 5 years are AMAG, AHAP and ABDA correspondently.

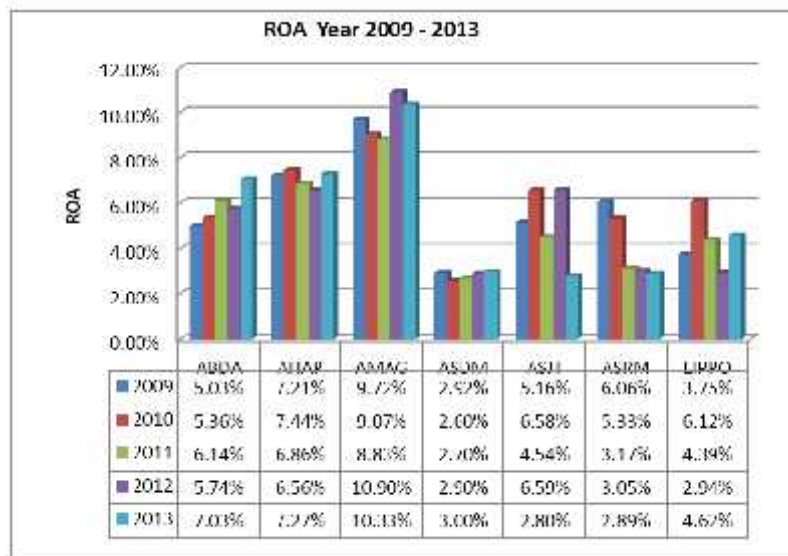


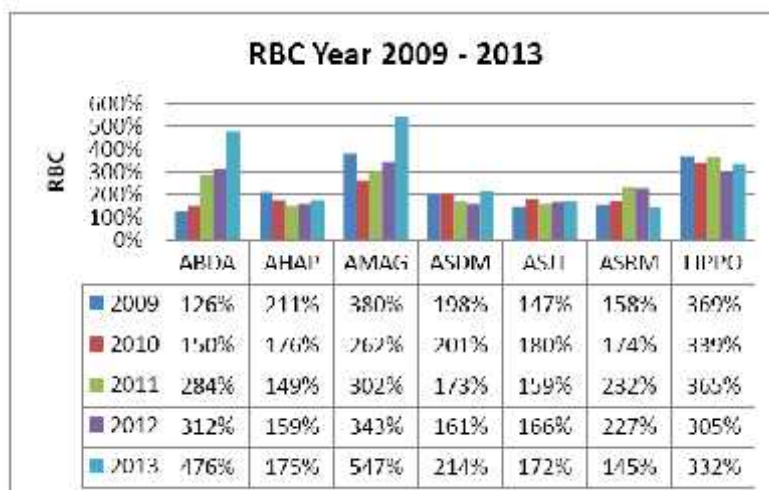
Figure 7. ROA Year 2009 – 2013

RBC indicates the financial healthiness/security of an insurance company. Referring to Table 4, the RBC of seven general insurance companies showed that all companies can meet the minimum standards set by the government is 120%. The average value for 5 years, 2009-2013, the highest is the insurance company AMAG then LPGI and ABDA, amounted to 371%, 342%, and 248% respectively. Five other companies have RBC values above 120%

but below 200%. This shows that in the case at any time any claims from policyholders simultaneously, the company is able to handle it.

**Table 4. RBC Year 2009 – 2013 (in %)**

No.	Name and Company Code	Year					Average
		2009	2010	2011	2012	2013	
1	Asuransi Bina Dana Arta(ABDA)	126	150	284	312	368	248
2	Asuransi Harta Aman Pratama (AHAP)	211	176	149	159	175	174
3	Asuransi Multi Artha Guna (AMAG)	380	282	302	343	547	371
4	Asuransi Dayin Mitra (ASDM)	198	201	173	161	214	189
5	Asuransi Jasa Tania	147	180	159	166	172	165

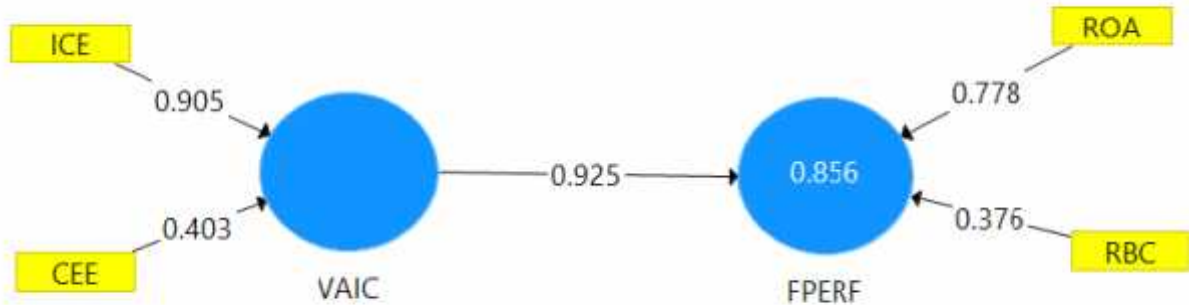


**Figure 8. RBC Year 2009 – 2013**

## 2. Requirements Analysis Test

PLS is defined by two equations, inner and outer models. The inner model in this study is between intellectual capital and financial performance. The outer model is between the variables outer intellectual capital with its indicators, namely ICE and CEE. Besides, it is also between financial performance variable with its indicators, ROA and RBC. This research uses a model of formative relationships. PLS algorithm result is presented in Figure 9.

**A. Path Coefficient**



**Figure 9. Result of PLS Algorithm**

Referring to Figure 9 the estimated value of the path coefficient is 0.925, shows the strong influence of exogenous latent variables VAIC<sup>TM</sup> against endogenous latent variables, financial performance. In Table 5, the significance test indicates that the value of t-statistic of 57.211, is greater than t table is 1,693 (one tail test,  $\alpha = 0.05$  df =33). It can be explained that the effect of exogenous latent variables VAIC<sup>TM</sup> against endogenous latent variables financial performance is strong and significant.

**Table 5. Path Coefficients (Mean, STDEV, T Statistics)**

Path Coefficients					
	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O /STDEV)	P Values
VAIC -> FPERF	0.925	0.937	0.016	57.211	0.000

**B. Indicator Reliability Test**

Indicator reliability test is an analysis to show the contribution indicator to the latent variables in the outer model. For this purpose value outer loading was used. An indicator is considered reliable when outer loading value > 0.5 and ideally the value outer loading > 0.7 (<http://www.statsdata.my.id>). According to Sarwono and Narimawati (2015: 70), reliable indicator has outer loading value > 0.7.

Referring to Table 6 and 7, the indicators of ICE, ROA and RBC is reliable to its variable. The outer loading value greater than 0.7 in that order of 0.915, 0.941 and 0.713. The t-statistics of the indicators are 19.06 18 621 and 6156 respectively, which means significant. While the CEE indicator almost reliable to the latent variable VAIC<sup>TM</sup>, with a value of 0.426, but significant with t statistic of 2.740.

**Table 6. Outer Loading Value**

**Outer Loadings**

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O /STDEV)	P Values
CEE -> VAIC	0.426	0.438	0.155	2.740	0.010
ICE -> VAIC	0.915	0.896	0.048	19.061	0.000
RBC -> FPERF	0.713	0.691	0.116	6.156	0.000
ROA -> FPERF	0.941	0.943	0.051	18.621	0.000

**C. Indicator Discriminant Validity Test**

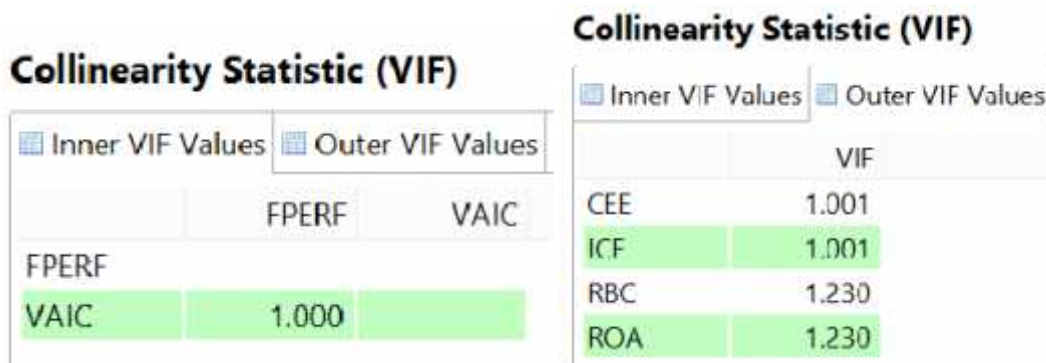
Indicator validity test result showed that all the indicators are valid, because all the indicators have a higher correlation with its owned latent variables compare with other latent variables (Sarwono and Narimawati, 2015) as shown in Table 8.

**Table 8. Cross Loading Discriminant Validity**

	FPERF	VAIC
CEE	0.394	0.426
ICE	0.847	0.915
RBC	0.713	0.660
ROA	0.941	0.870

**D. Multicollinearity Test**

The result showed no collinearity between variables and indicators, both the inner and the outer models, since no VIF is more than 10 (Sarwono and Narimawati, 2015: 23), as shown in Figure 10



**Figure 10. Multicollinearity Test**

**E. Suitability of Structural Model**

**1. R Square (R2)**

Referring to Table 9, the R Square (R2) is 0.856. Meaning that the ability of exogenous variables VAIC<sup>TM</sup> in explaining endogenous variable financial performance is 85.6%, and the rest is explained by other factors beyond the study. Relationships between variables VAIC<sup>TM</sup> and financial performance is substantial, since R2 is 0.856 > 0.67 (Chin, 1988 in Sarwono and Narimawati, 2015: 23), and significant with t-statistic of 28.362.

**Table 4.13. R Square (Mean, STDEV and T Statistics)**

R Square					
	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
FPERF	0.856	0.877	0.030	28.362	0.000

**2. f Square**

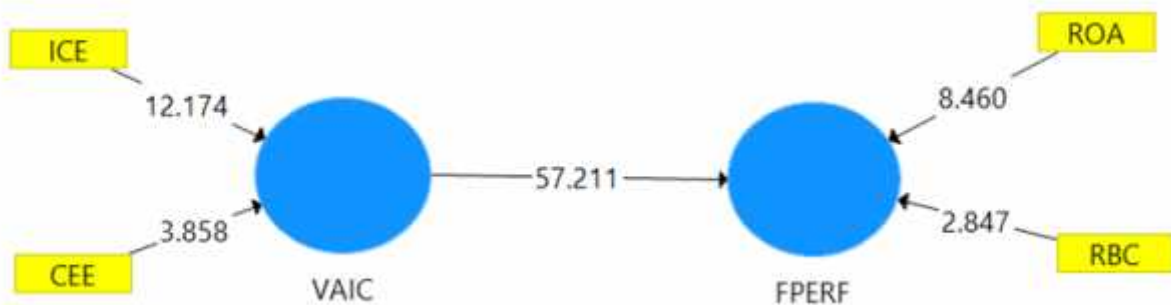
Value f square (f<sup>2</sup>) in this study is 5.956, as shown in Table 10, which means the effect of latent variables predictor (VAIC<sup>TM</sup>) against endogenous variable financial performance considered strong at the level of structural theoretically, because the value greater than 0.35 (Sarwono and Narimawati, 2015: 24) and statistically significant with t-statistic of 2.815.

**Table 10. f Square (Mean, STDEV and T Statistics)**

f Square					
	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
VAIC -> FPERF	5.956	7.659	2.116	2.815	0.008

**3. Hypothesis Test**

Testing the hypothesis includes hypothesis test for the inner and outer models. Bootstrapping calculation results to calculate the t statistic is presented in Figure 11.



**Figure 11. Bootstrapping**

**A. Hypothesis test Inner Model**

Referring to Table 11, the result of t statistics 57.211 shows that VAIC<sup>TM</sup> with its indicators significantly affect the latent variable financial performance with its indicators at a significance level of 95% ( $\alpha = 0.05$ ).

**Table 11. Total Effects (Mean, STDEV, T Statistics)**

Total Effects					
	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
VAIC -> FPERF	0.925	0.937	0.016	57.211	0.000

### B. Hypothesis test Outer Model

Results of hypothesis testing the outer models consist of four indicators, namely ICE, CEE, ROA and RBC presented in Table 12.

**Table 12. Outer Weights (Mean, STDEV, T Statistics)**

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
CEE -> VAIC	0.403	0.432	0.104	3.858	0.000
KCF -> VAIC	0.905	0.892	0.074	12.174	0.000
RBC -> FPERF	0.376	0.338	0.132	2.847	0.007
ROA -> FPERF	0.778	0.798	0.092	8.460	0.000

Referring to Table 12, shows that indicators ICE and CEE contribute to the latent variable VAIC<sup>TM</sup> significantly, with the t statistic 12.174 and 3.858 respectively. Likewise, the indicators ROA and RBC contribute to latent variables financial performance significantly, with the t statistic 8.460 and 2.847 respectively.

## 4. Discussion

### A. Inner Model

Referring to the result, the path coefficient value of 0.925 with t statistic 57.211, meaning that the intellectual capital (VAIC<sup>TM</sup>) influences to financial performance positively and significantly. R squared value of 0.856 indicates that the intellectual capital (VAIC<sup>TM</sup>) is able to explain the impact on the financial performance of 85.6%, while the remaining 14.4% is explained by other factors outside of the study. This can be explained that the general insurance companies listed on the Indonesia Stock Exchange Year 2009 - 2013 has been using its intellectual capital efficiently so as to create value for the company as indicated by good financial performance. These results concur with those of Subhan and Citraningrum (2010), Gozali and Hatane (2014) and Aji and Kurniasih (2015).

Intellectual capital, as indicated by many experts, is the difference between the market value and the book value of the company (Dess, Lumpkin and Eisner, 2007: 125). According to Pulic (2000a), the research conducted at the stock exchange showed that there is a relationship between the efficiency of value creation of and market value of the company. In this study, a significant effect of intellectual capital on the financial performance of general insurance companies showed that companies are able to manage knowledge, skills and experience of employees, supported by the organizational structure, systems and procedures and corporate culture that is conducive to such management, and is able to manage loyalty customers, commitment to shareholders and maintain its reputation, resulting in value creation, that is the increase in the market value and the company's financial performance was good with its indicators ROA and RBC.

### B. Outer Model - Exogenous Variable of VAIC<sup>TM</sup>

### 1. Intellectual capital efficiency (ICE)

Hypothesis test result of outer model for exogenous variable of VAIC<sup>TM</sup> indicates that intellectual capital efficiency indicators or ICE in this research significantly contributed to VAIC<sup>TM</sup>, with t statistic of 12.174. This can be explained from the view of Pulic (2000a) that the main goal of modern business is value creation. While the main purpose of the creation of value is to improve the ability of the company in the long term, which can be achieved by investing in intellectual resources (especially human capital, which is a key factor in the 19 value creation in modern business) and increased mobilization of internal company's potentials, starting from intangible potential. The existence of significant ICE influence to VAIC<sup>TM</sup> indicates that the general insurance companies listed in the Indonesia Stock Exchange Year 2009 - 2013 has used its organization and human capital efficiently.

Key success of value creation, according to Pulic (2000a), is in creating a causal relationship between these two forms (tangible and intangible) of the value creation. One major challenge for management is to create conditions to enable creating intangible value such as knowledge, services, experience, benefits, quality, image) and transform it into a tangible form such as revenue, profits, value added, stocks, market value. Management of systematic value creation is based on the principle that this concept is deeply embedded in the company as an ultimate goal. It is important that it is "live" at all levels of the daily business activities, stimulated, rewarded, measured and communicated.

Synergy between human capital and organizational capital to intellectual capital also can be explained from the view of Dess and Lumpkin (2003), that the intellectual capital consists of reputation, loyalty, commitment, brand, experience and skills. Referring to this opinion, reputation, loyalty, commitment and experience besides belong to individual is also the company's reputation, loyalty and commitment to its customers and shareholders. Likewise experience, in addition to an individual property is also the experience of the company. While skills are exclusively individual, brands are exclusive the property of the company. In general insurance companies, these elements are synergizing each other to produce an innovation of new ideas to be applied to improve company's products and services, to create value.

Moreover, synergy of organization and human capital can be explained from the theory of human resources management that according to Dess and Lumpkin (2003: 120) consisted of three activities, i.e. attracting, developing and retaining of human capital, where the relation depicted in Figure 12.

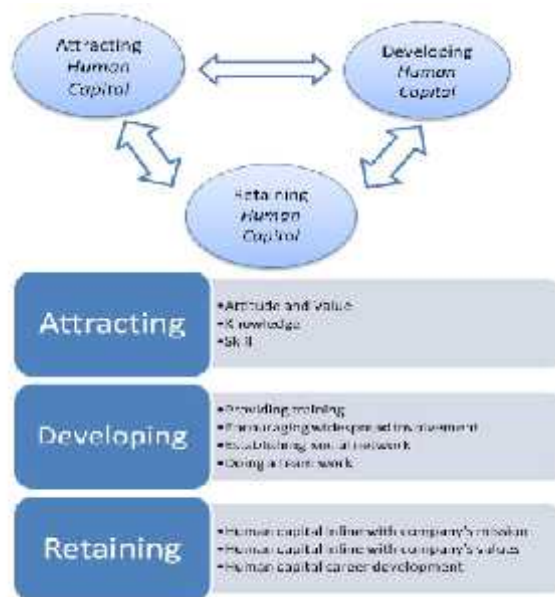


Figure 12. Tree Activities Human Capital Management



**Source: Dess and Lumpkin (2003: 120-128)**

Referring to Figure 12 can be explained that attracting human capital (HC), in recruiting focuses on general knowledge, experience, social skills, values and beliefs, as well as the attitude of the employees, as the first step in investing HC. At the time of developing HC conducted with various activities such as training, spread the spirit of engagement, forming a social network, and cooperation within the team. Furthermore, investment in HC continued with efforts to maintain HC in line with company's mission, HC corresponding company's value and career advancement. Such activities are carried out in a conducive situation of structures, systems and operations as well as the company's organizational culture resulting in a synergy between human capital and organizational capital. In such circumstances, the HC will be able to contribute optimally in the innovation process to produce insurance products and services which in turn contributes to value creation.

An innovation made by the insurance company to create value by synergizing and human capital enterprise organizations can be seen in the insurance company Lippo General Insurance (LIPPO).

LIPPO sustain the growth through increased value. The company maintains the quality in the back office and the interaction with customers simultaneously. Understanding customer needs and offer solutions to do with the approach not as a provider with customers but more towards relations consultant with the customer, in accordance with the theme energizing value creations, transforming organization. The company also understands the needs of information quickly and accurately as well as the increasingly high mobility of society, the company launched e-Benefit is an internet portal for customers' special Medicare, and services on line to facilitate registrars and pay the premiums, using a credit card and internet banking (Annual Report LIPPO Insurance, 2014).

## **2. Capital Employed Efficiency /CEE**

Hypothesis test result outer model of exogenous variable VAIC<sup>TM</sup> showed that indicators of physical and financial capital efficiency or Capital Employed Efficiency (CEE) in this research significantly contributed to VAIC<sup>TM</sup>, with t-statistics 3.858. This is in line with the theory of value-added VAIC<sup>TM</sup> (Pulic, 2000a), that the intellectual capital cannot create their own value. To obtain a clear picture of the value creation efficiency of resources, it is necessary to incorporate physical and financial capital in the calculation. Despite losing its dominant position in the new economy, its relevance cannot be ignored.

Physical and financial capital in general insurance companies related to insurance premiums earned from customers, which are then developed by the company in various ways in order to earn profits for the company. With the results of this study can be explained that the insurance companies listed on the Indonesia Stock Exchange Year 2009 - 2013 has been managing the physical and financial capital so well that results in financial performance was good as well. These result concurs with those of Aji and Kurniasih (2015) which indicates that the physical and financial capital efficiency (term as VACE) contributed significantly to VAIC<sup>TM</sup> on Islamic insurance company listed on the Indonesia Stock Exchange Year 2009-2013.

## **C. Outer Model of endogenous variable Financial Performance**

### **1. Contributions indicator ROA on an endogenous variable Financial Performance.**

The result of hypothesis testing outer model endogenous variable of financial performance, shows that ROA indicator contributed positively and significantly to the financial performance of endogenous variable with t statistic value of 8.460 (> 1.693). This study

confirms the theory that the greater the value of ROA, the better the company's financial performance (Brigham & Houston, 2009: 109), so ROA can serve as formative indicator of financial performance in general insurance listed on the Stock Exchange Year 2009-2013. The result concurs with those of Aji and Kurniasih (2015) that the ROA contribute positively and significantly to the endogenous variables on the financial performance of Islamic insurance company listed on the Stock Exchange in the year 2009-2013.

## **2. RBC Indicator contribution towards endogenous variable Financial Performance.**

The result of hypothesis testing outer model of endogenous variable of financial performance, shows that RBC indicator contributed positively and significantly to the endogenous variable financial performance of general insurance companies listed on the Stock Exchange Year 2009-2013, with t statistics value of 2.847 ( $> 1.693$ ). The result in line with result of Aji and Kurniasih (2015) that RBC contributed positively and significantly to the endogenous variables on the financial performance of Islamic insurance company listed on the Stock Exchange in the year 2009-2013.

## **Conclusion**

The followings are the research conclusions:

1. Intellectual capital measured by the VAIC<sup>TM</sup> with its indicators ICE and CEE significantly effect on the financial performance with its formative indicators of ROA and RBC, on general insurance companies listed on the Indonesia Stock Exchange Year 2009-2013. Path coefficient estimated for 0.925 with t-statistic of 57.211. Variable VAIC<sup>TM</sup> able to explain its effect on the financial performance of the company amounted to 85.6%, which is indicated by the R2 value of 0.856. The remaining 14.4% is explained by other factors that do not included in this research model.
2. Formative indicators of intellectual capital efficiency (ICE), and capital employed efficiency (CEE) significantly affects VAIC<sup>TM</sup> latent variables, with t-statistic 12.174 and 3.858 respectively.
3. Formative indicators of ROA and RBC contribute significantly to the company's financial performance with t-statistic of 8.460 and 2.847 accordingly.

## **6. Suggestions**

Based on the research findings in, it is suggested the following:

1. For the government/the Financial Services Authority (FSA)

The most valuable asset of a company in the 20th century was its production equipment. The most valuable asset of the company in the 21st century is knowledge workers and their productivity (Drucker, P., 1999, in Pulic, 2000). This study confirms the opinion for the general insurance company. Therefore, it is suggested to the FSA as a policy maker, to consider and incorporate elements of performance in terms of its intellectual capital, especially organizational and human capital, not only in terms of physical and financial only.

2. For the general insurance company.

The result of this study indicates that the synergy between human capital and organizational capital as 2 components of intellectual capital significantly positive effect on the financial performance of the company. Therefore, the findings could possibly be used as the model for managers of companies in investing and managing human capital, which proved if managed in synergy with organizational capital in the context of intellectual capital, will contribute to the company's financial performance.

3. For the future research, it is advisable to:

- Continuing or complement this study, using primary data / interview in order to get a comprehensive overview of the intellectual capital management, so that the results can be more applicable directly.
- Conduct research with comparison method, considering many methods available for measuring intellectual capital.
- Conduct comparative studies for go public listed on the Indonesia Stock Exchange and not go public of general insurance companies.
- Conduct a research that able to provide input to the government on how to prepare the regulations related to the intellectual capital management.

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**THE EFFECT OF ACCOUNTING INFORMATION QUALITY AND  
MANAGEMENT ACCOUNTANT QUALITY TO SUCCESSFUL  
IMPLEMENTATION OF DECISION SUPPORT SYSTEM  
(STUDY ON GOVERNMENT-OWNED BANK IN INDONESIA)**

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**Abstract**

Recent development in Information Technology, lead to the improvement of decision-making process in organization by utilizing the Decision Support System. Banking industries which one of the most intensive use of IT in the operation and financial reporting process. Therefore, the quality of accounting information and management accountant quality are important in the implementation of DSS.

This research uses descriptive analytic research method and using double linear regression and simple regression. Research Data is collected from questionnaire distributed and returned from the employees of Accounting Department and Information technology Department on Government-owned Bank as research's respondent.

The results indicate that there is a positive and significance effect between accounting information quality and management accountant quality to successful implementation Decision Support System simultaneously and a positive influence of accounting information quality and management accountant quality to successful implementation Decision Support System partially.

**Keywords:** *accounting information quality, management accountant quality, Decision Support System, implementation Decision Support System, Government-Owned Bank.*

**Introduction**

The recent development in Information Technology improving business process and the decision making process at the organization (Maharsi, 2000)(Kamel, Lakhder, & Ammar, 2012). Decision Support System concept developed in 1970s by Michael S Scott Morton, and itexpanding into creating a model to solve unstructured problems (Sprauge, 1980).

In Indonesia, Telkom e-service by PT.Telkom tbk, is an example of successful DSS implementation by analyzing complaint and suggestion from its customers (Kurniawan, 2014).Beside its successful implementation, the failure of DSS implementation because of the lack of ability from the DSS's user in a pre-qualification procurement phase(Suprpto & Wulandari, 2006).

DSS Implementation will be success when it is provided by a complete and high quality information(Suprpto & Wulandari, 2006)(Nurniah, 2005)(Baridwan & Hanum, 2007). One of research about the relation between accounting information quality and decision quality is the decision making case on the listed company at Indonesia Stock Exchange (IDX) (Harma & Wibowo, 2012).DSS implementation also depend on management accountant, as an information provider and DSS facilitator ( Murphy C. , Currie, Fahy, & Golden , 1995).

The implementation case of PT. Telkom Indonesia, show that the quality of management accountant have an effect of DSS's implementation(Hermawan, 2009)(Ardinata, 2002). DSS also used by an environmental organization to mitigate the impact of earthquake and tsunami in Indonesia. In Banking Industry, DSS also widely implemented in a form of Internet Banking, Phone Banking, and ATM Banking (Bhatia, 2011)and also middle management requirement to decision making process.

Indonesian government owned bank (Bank BUMN) has a significant asset in Indonesian banking industry; all of them are included in top ten biggest assets bank, with two out of four banks is in the top (Djumena, 2015). As one of the most intensive user of Information Technology in their operation, Bank BUMN has been implementing and developing DSS since 2010 and 2011. Each bank discloses their DSS and information system implementation in their annual report(Annual Report BNI, 2010)(Annual Report BRI, 2010)(Annual Report BTN, 2010)(Annual Report Mandiri, 2011). In Bank BNI, DSS implemented to help management in loan decision, cash inflow prediction, customer data integration, and customer relationship management (Annual Report BNI, 2010)

Decision Support System is an information system that facilitates decision-making by providing information access, analytical model, and supporting tool (Alter 1977; Keen and Scott Morton 1978). Four domains can be used to measure the successful DSS implementation, those domain are effectiveness, efficiency, usefulness, and user satisfaction(Maynard & Arnott, 1995). On other hand, Hung et al (2005) describes the regret avoidance as a measure of DSS Success.

Management accountant influence in DSS implementation effected by education level (Morris & Venkatesh, 2000), they abilities in produce the information for DSS (Murphy C. , Currie, Fahy, & Golden, 1995), and work experience using the DSS software(Cascio, 1995).

### **Literature Review**

Decision Support System has been developing since 1970s, and it was named Management Decision System. Academician and corporation develop DSS with computer based information system characteristic (Sprague, 1980). Decision Support System is a personal system that assist management and must be based on a very detailed understanding of how managers makes decision (Keen, 1980), one of many alternative solution based on a computerize information system(Tripathi, 2002). DSS also used to aid users in judgment and choice activities interactively(Druzdzel & Flynn, 2002), by structuring of a decision, facilitate the use of analytical tools, and facilitate use of manipulation, retrieval and display of data(Eierman, Niederman, & Adams, 1995)(Moscato & Moscato, 2004).

DSS composed of three components(Druzdzel & Flynn, 2002): Database Management System, Model Base Management System (MBMS), Dialog Generation and Management System. Decision produced with the facility of DSS only focused to help top management and executive decision makers, DSS also should have flexibility, adaptable and fast respond, and support personal decision making of manage (Sprague, 1980). DSS has model orientation in a form of text and graphic, and could do complex analysis using software(Tripathi, 2002).

As an abstraction of reality (Turban, 1998), model is an essential requirement of DSS; easy to use and understandable models are determinant factors for a useful DSS. Decision-making could be performed effectively through understandable model, especially graphical model(Sauter & Free, 2005).

In order to measure the successful DSS implementation, there are four successful criteria of domain: effectiveness, efficiency, usefulness, and user satisfaction(Maynard & Arnott, 1995). First domain is Effectiveness of DSS, this domain is measured by accuracy of information(Roy, 1999)(Ong & Lai, 2004); adequacy of information provided (Lilrank, 2003); completeness of information (Roy, 1999)(Ong & Lai, 2004); and quality of decision making process (Arnott, 2004)(Bruggen, 1998).

Secondly, Efficiency of DSS is measured by performance level with the criteria: user productivity (Djamasbi, 2007)(Schalk, 1988); reliability of system (Djamasbi, 2007)(Sprague, 1980); time taken for task accomplishment (Djamasbi, 2007)(Roy, 1999)(Al-Jadeiah, 2010). Third domain is user satisfaction and measured by adaptiveness (Sprague, 1980); critical question answering (Moscato & Moscato, 2004)(Boulesnane & Bouzidi,

2013)and perceived information quality ( Murphy C. , Currie, Fahy, & Golden , 1995). Fourth domain is usefulness, and being measured by ease of use(Maynard & Arnott, 1995)(Kim, 1987); frequency of use (Druzdzal & Flynn, 2002)(Kumar, 1999)(Berner, 2009); and widespread of use (Maynard & Arnott, 1995).

Enterprise Resource Planning, as “de facto” software in a Banking industry, has a limitation in creating decision alternatives (Stanek, Sroka, & Twardowski, 2004).Therefore the successful information system implementation would combine the DSS with the information system that already installed in the organization, to create hybrid system of DSS and other Information system (Turban, 2005)(Chamoni & Gluchowski, 1999).

Four government-owned bank in Indonesia has implemented Decision Support System, those bank are Bank Rakyat Indonesia, Bank Mandiri, Bank Tabungan Negara, and Bank Negara Indonesia(Annual Report BNI, 2010)(Annual Report BRI, 2010)(Annual Report BTN, 2010)(Annual Report Mandiri, 2011). DSS support the management in cash prediction report, performance management, data integration, CRM, Risk management, credit evaluation, loan growth measurement, and risk analysis (Annual Report BNI, 2010)(Annual Report BRI, 2010)(Annual Report BTN, 2010)(Annual Report Mandiri, 2011).

Management accountant is a business partner of a corporation, because main focus of management accountant is to increase company’s performance and profitability by providing relevant information (Balvinsdottir, Burns, Norreklit, & Scapens, 2009). Therefore it is a pressure to management accountant to provide information in a limited time (Murphy C. , Currie, Fahy, & Golden, 1995). By using DSS, management accountant could produce information and provide performance analysis for the corporation both financial and non-financial information(Murphy C. , Currie, Fahy, & Golden, 1995). Management accountant also has a role as the facilitator in DSS implementation, to assist manager in decision-making processes based on alternatives provided by DSS ( Murphy C. , Currie, Fahy, & Golden , 1995).

Management accountant has become important business partners in the corporation because its role as information provider(Johnson, Walker, & Fleischman, 2012)(Mosley, Pietri, & Megginson, 1996). Hence, management accountant should posses a reliable quality for the corporation(Johnson, Walker, & Fleischman, 2012). In consequences, corporation has a requirement to measure the quality of management accountant. The quality measurements are: Education, Work Experience, and the ability in producing information(Cascio, 1995)(Murphy C. , Currie, Fahy, & Golden, 1995).

Accounting information will give benefit in Decision Support System if it has high quality, and it can be measured by a variable measurement (Forslund, 2007). The quality of information can be used to measure the output and content quality of information system (Jogiyanto, 2005)(Ong & Lai, 2004). The variables used to measure quality of information are: in time, Accurate, Convenient to access, and reliable (Forslund, 2007).

### **Methodology**

The research objects are the quality of accounting information, management accountant quality and decision support system implementation. This study is use single country studies and explanatory research. Research instrument used in this study by using questionnaire consisted three instruments. **Accounting information quality** has four indicators, **Management Accountant Quality** by three indicators, and **Successful of DSS Implementation** by four indicator. The questions use Likert scale with a measurement score 1-5.

The research subjects are DSS user from accounting department and Information Technology department of four Government-owned bank in Indonesia. From each bank, 30 respondents would fill the questionnaire with a total 120 questionnaire.



The hypothesis test used by the author is multiple regression analysis (Sugiyono, 2012)(Nazir, 1988), The data was tested for classical assumption test; normality test, multicollinearity test, heteroscedasticity test and autocorrelation test. (Supranto, 2008). Analysis of hypothesis testing, the stages through partial regression coefficient test(t-test), simultaneous significance test(test statistic F), and the coefficient of determination. The statistical tool that was used in this research is SPSS 22.

## Results and Discussion

### 1. Classical Assumption Test

#### A. Normality test

**Table 1. Normality test result**

One- sample Kolgomorov Smirnov test		
		Unstandardized Residual
N		120
Normal Parameter <sup>a,b</sup>	Mean	0.000000
	Standar Deviation	6.43162651
Most Extreme Differences	Absolute	.053
	Positive	.053
	Negative	-.040
Kolgomorov-Smirnov Z		0.053
Asymp.Sig (2-tailed)		0.200

- a. Test Distribution is normal
- b. Calculated from data

Based on the results of normality test in this research using Kolgomorov- Smirnov test, it is found that the data are normally distributed with a statistic Z value of 0.053, it is greater than 0.05. So it can be concluded that the data in this study had normal distribution, and it indicates that one of the criteria for the classical assumption test has been met. In figure 1 data distribution histogram show that it form normal curve.

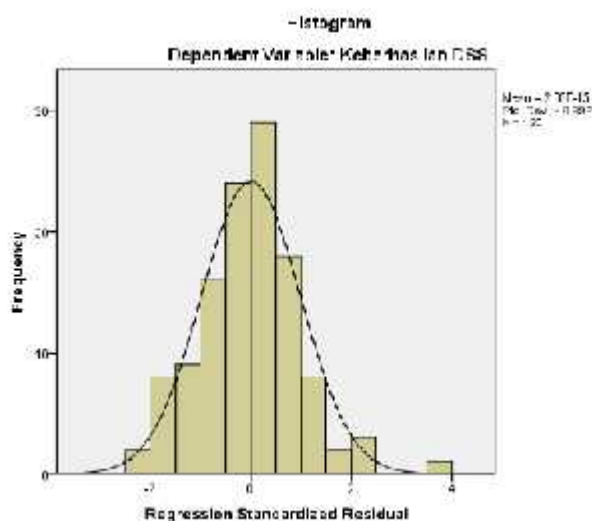


Figure 1. Normality test result

**B. Multicollinearity test**

**Table 2. Multicollinearity**

		Unstandardized Coefficients		Standardized Coefficients	t	Sig	Collinearity Statistic	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	14.491	4.947		3.020	.002		
	<b>X<sub>1</sub> (Accounting Information Quality)</b>	.863	.153	.450	5.646	.000	.802	1.247
	<b>X<sub>2</sub> (Management Accountant Quality)</b>	.387	.106	.290	3.638	.000	.802	1.247

Based on the table above, the value of tolerance for X<sub>1</sub> Variable (Accounting Information Quality) and X<sub>2</sub> variable (Management Accountant Quality) is 0.802 and then test result > 0.10. On other hand VIF value for X<sub>1</sub> Variable and X<sub>2</sub> variable are 1.247 and the result < 10.00. It can be concluded that multicollinearity is not an issue in our tests.

**C. Heteroscedasticity test**

**Table 3. Heteroscedasticity**

		Unstandardized Coefficients		Standardized Coefficients	t	Sig
		B	Std. Error	Beta		
1	(Constant)	8.510	3.096		2.749	.007
	<b>X<sub>1</sub> (Accounting Information Quality)</b>	-.041	.096	-.044	-.428	.669
	<b>X<sub>2</sub> (Management Accountant Quality)</b>	-.051	.067	-.079	-.771	.442

Based on the table 3 result, the value of significance from X<sub>1</sub> Variable and X<sub>2</sub> variable is 0.669 and 0.442. Both test value more than 0.05, It can be concluded that the heteroscedasticity is not the case in this regression model.

**D. Autocorrelation test**

**Table 4. Autocorrelation**

Model	R	R square	Adjusted R Square	Std. Error of the estimate	Durbin Watson
1	0.635	0.403	0.393	6.48630	1.530

To detect the present of autocorrelation the Durbin-Watson (DW) statistic test is used. This testing is done by comparing the value of DW statistics obtained from the results of regression models with DW-table value. From the table 4, DW test result is 1.530 and near two. It can be concluded that autocorrelation is not the case in this study. Based on the test above, it can be concluded that all classical assumption in this study are eligible to do research with multiple regression model.

**2. Hypothesis Testing result**

**A. F-stat testing.**

The Research Hypothesis of this study are:

H<sub>0</sub>: There are no positive and significant effect of Accounting Information quality and Management Accountant Quality to the successful of DSS Implementation.

H<sub>1</sub>: There are positive and significant effect of Accounting Information quality and Management Accountant Quality to the successful of DSS Implementation.

**Table 5. . F-Test Statistic Result**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig
1	Regression	3325.163	2	1662.582	39.517	0.000
	Residual	4922.440	117	42.072		
	Total	8247.603	119			

Based on the result show on table 5, the result of F-test statistic are Fstat = 39.517 with sig. = .000. Fstat = 39.517 > 3.92 (with  $\alpha = 0.05$  df1 = k-1 = 3 – 1 = 2 and df2 = n – k = 120 – 3 = 117) or *p-value* = 0.000 <  $\alpha = 0.05$ ; significant. Ho rejected, therefore the accounting information quality and management accountant quality have positive and significant effect to successful of DSS Implementation.

**B. T-stat testing.**

**Table 6. T-Test statistic result for X<sub>1</sub> Variable**

Model		Coefficients <sup>a</sup>				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		$\beta$	Std.Error	$\beta$		
1	(Constant)	25.349	4.239		5.979	0.000
	Accounting Information Quality	1.111	0.144	0.59	7.722	0.000

a. Dependent variable: the successful implementation of Decision Support System

Based on the result show on table 6, the result of t-test statistic are Accounting Information Quality  $t_1 = 7.722$  with error chance:  $p\text{-value} = \text{sig.} = 0.000$ .  $t_1 = 7.722 > t_{\text{table}} = 1.65787$  (with  $\alpha = 0.05$  and degree of freedom =  $n - 2 = 120 - 2 = 118$ ) or  $p\text{-value} = 0.000 < \alpha = 0.05$ : Significant. Therefore the Accounting Information quality has a positive and significant effect to successful DSS Implementation.

**Table 7. T-Test statistic result for X<sub>2</sub> Variable**

Model		Coefficients <sup>a</sup>				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		$\beta$	Std. Error	$\beta$		
1	(Constant)	25.936	4.918		5.680	0.000
	Management Accountant Quality	0.654	0.107	0.490	6.114	0.000

a. Dependent variable: the successful implementation of Decision Support System

Meanwhile Management Accountant quality has  $t_2 = 6.114$  with error chance:  $p\text{-value} = \text{sig.} = 0.000$ .  $t_2 = 6.114 > t_{\text{table}} = 1.65787$  (with  $\alpha = 0.05$  and degree of freedom =  $n - 2 = 120 - 2 = 118$ ) or  $p\text{-value} = 0.000 < \alpha = 0.05$ : significant. It can be concluded that Management accountant quality has positive and significant effect to successful DSS Implementation.

**C. The coefficient of determination (R<sup>2</sup>)**

**Table 8. The Coefficient Determination of X<sub>1</sub> and X<sub>2</sub> to Y**

Model Summary <sup>b</sup>				
Model	R	R square	Adjusted R Square	Std. Error of the estimate
1	0.635 <sup>a</sup>	0.403	0.393	6.48630

a. Predictor: (constant)

b. Dependent variable

Based on the result of regression estimation in table 8, it can be assessed that the value of R<sup>2</sup> is 0.403. It illustrates that the value of both independent variables in the model able to explain the dependent variable for 40.3 %, while the remaining 59.7% is explained by other variables outside the model.

**Table 9. The Coefficient Determination of X<sub>1</sub> to Y**

Model	R	R square	Adjusted R Square	Std. Error of the estimate
1	0.579	0.336	0.330	6.81420

Based on the result of regression estimation of table 9, it can be assessed that the value of R<sup>2</sup> is 0.336. It illustrates that the value Accounting information Quality in the model able to explain the dependent variable for 33.6 %, while the remaining 66.4 % is explained by other variables outside the model.

**Table 10. The Coefficient Determination of X<sub>2</sub> to Y**

Model	R	R square	Adjusted	Std. Error
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			R Square	of the estimate
1	0.490	0.241	0.234	7.28569

Based on the result of regression estimation of table 10, it can be assessed that the value of  $R^2$  is 0.241. It illustrates that the value Management Accountant Quality in the model able to explain the successful DSS Implementation for 24.1 %, while the remaining 74.9 % is explained by other variables outside the model.

## Discussion

### A. The Effect of Accounting Information Quality to successful DSS Implementation.

The value of coefficient determination of effect of accounting information quality to DSS implementation is 33.6%, therefore 33.6% successful DSS implementation is influence by accounting information quality. Meanwhile 66.4% influence by another variable such as data mining technique, supporting technology, and complexity of business environment (Rupnik, Kukar, & Krisper, 2007). Accounting information also has positive and significant effect to successful DSS Implementation. Therefore the respondent at Government-owned bank also have a perceived that the development of information system has a goal to produce high quality accounting information.

### B. The Effect of Management Accountant Quality to successful DSS Implementation.

Management accountant quality has an effect to successful DSS Implementation with a coefficient determination value 24.1%, and 74.9% determined by another variable with a possibilities of management commitment in DSS implementation (Alhunaishel, 2001), and the effect of technology to management accounting (Maharsi, 2000). Management accountant has a positive and significant effect to successful DSS Implementation, in accordance with previous research from (Bhatia, 2011).(Tsay, 1992),and (Murphy C. , Currie, Fahy, & Golden , 1995). This result also in accordance with (Kim, 1987), because DSS user is knowledge workers and professional level and they are essential part of DSS environment (Kim, 1987).

### C. The effect of Accounting Information Quality and Management Accountant Quality to Successful DSS Implementation.

Simultaneously, accounting information quality and management accountant quality has effect to successful DSS Implementation with a coefficient determination value 40.3%, and 59.7% determined by another variables, with the possibilities are management commitment to DSS implementation, Information Technology effect(Alhunaishel, 2001), Technology effect to management accounting (Maharsi, 2000). Both variables have positive and significant effect to successful DSS implementation.

## Conclusion

Based on the research result it can be concluded that in a government-owned bank in Indonesia:

1. Accounting information quality has positive and significant effect to successful DSS Implementation.
2. Management Accountant Quality has positive and significant effect to successful DSS Implementation.

- Accounting information quality and management accountant quality has a positive and significant effect to successful DSS implementation simultaneously.

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**BUSINESS PERFORMANCE MODEL OF SMALL AND MEDIUM ENTERPRISES  
(SMEs): Case in Fermented Cassava Small Industries**

Alwan Sri Kustono  
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Reswanda T. Ade

**Abstract**

SME sector showed a dominant contribution to the gross domestic product. SMEs have been able to demonstrate the contribution and the identity as the main pillar to supporting the national economy to drive economic recovery process in Indonesia. The research examines influence of entrepreneurial orientation on organizational learning and sustainable competitiveness against changes in business performance. Population in this research is fermented cassava SMEs in Bondowoso. The data collected consists of primary data. Respondents are owner or manager. The analysis technique used Partial Least Square (PLS) to test eight the hypothesis. The research found an association between the sustainable competitiveness and business performance. Competitiveness is an antecedent of the business performance in tape industrial. The higher competitiveness will increase higher business performance.

**Keywords:** *business performance, competitiveness, organizational learning, entrepreneurial orientation*

**Introduction**

SME sector data showed a dominant contribution to the economy. SMEs able to demonstrate the contribution to nation's economy and play an important role in the economic recovery of Indonesia. Data from the Badan Pusat Statistik ((BPS-Statistics Indonesia)) showed evidence of at least three important roles of SMEs in Indonesia. Total population of SMEs in 2008 reached 99.99% of the total business of the business unit in Indonesia, the number of employees they reach 97.04% of the total workforce in Indonesia. Employment, which reached 99.4% of the total labor force works. 55.56% of the Gross Domestic Product (GDP) was contributed by the SME sector. This fact shows the importance of SMEs to create economic stability through employment creation and income distribution.

SMEs must focus on developing internal capabilities that are superior so that it can compete in a sustainable and resilient to recession pressures. SME business performance is also influenced by the organization' learning. Organizational learning is the process of interaction with the environment and the organization. Such interactions involve individuals in it to seek and obtain information, interpret and distribute the information to solve problems.

Sustainable competitiveness and organizational learning is the formation of entrepreneurial skills for creative and innovative thinking. Results of creativity and innovation will lead to new ideas, methods and ways and produce products and services that are unique and produce or develop value-added products / services.

Cassava many processed into refined products. Tape is one of food products processed cassava-growing verygood in the regency. The existence of the tape is maintained by the community and foster the efforts of tape processing are quite crowded so the regency has a nickname as the city of tape. This research focuses on the performance of SMEs fermented cassava, so that by understanding the determinants can be used for development strategy of fermented cassava industry in the regency towards improving the welfare of society.

### Problem Formulation

1. Is the business performance of fermented cassava SMEs influence organizational learning and entrepreneurial orientation?
2. Is a sustainable competitive advantage in fermented cassava SMEs influence by organizational learning and entrepreneurial orientation?
3. Is organizational learning fermented cassava SMEs influence by entrepreneurial orientation?

### Literature Review and Hypothesis

Small and Medium Enterprise business performance is very promising views of the SME sector's contribution to national GDP. Data growth contribution of micro, small and medium enterprises in GDP showed an increase from year to year. In 2010, the contribution of SMEs to GDP increased by 0.59% from 56.53% in 2009 to 57.12% in 2010. In 2011, increased again by 0.83% to 57.94% and in 2012 by becoming increasing 1.14% to 59.08%. This case shows the continuous growth of SMEs in Indonesia.

Performance is the results achieved from what has been done by entrepreneurs in running the business. Performance measured and multidimensional which is the result of crimes of an organization. Improved business performance is done by maximizing the utilization of strategic asset demonstrate the specificity of entrepreneurship and a competitive advantage that inhibits competitors (Amit and Schoemaker, 1993). Some indicators of the success of entrepreneurship is reflected on product excellence and superiority of market control. Measures of performance that is commonly used is the sales growth, employment growth, the growth of income and growth in market share (Kim and Choi, 1994; Lee and Miller, 1996; Luo, 1999; Miles *et al*, 2000; Hadjimanolis, 2000)

Empirical support has been shown by many researchers in the use of performance indicators small firms (Olson and Bokor, 1995; Hadjimonolis, 2000; Hadjimonolis and Dickson, 2000) used sales growth rate, employment growth, return on assets (ROA), market share profitability, and *size* as an indicator in measuring the company's performance.

Competitive advantage is the ability of a business to achieve better profit in the competitive industry by adding value to each process. When excellence is able to withstand the changes of competition, it can be said to have a sustainable competitive advantage (Barney, 1991).

Owned resources play an important role in the success of the entity. Good management of resources will lead to higher efficiency, cost reduction, quality improvement and market share and achieve higher profitability (Collis, 1994). Competitive advantage can be gained from the strategic resources of the organization (Dierickx and Coll, 1989; Barney, 1991; Peteraf, 1993; and Teece *et al.*, 1997) allowing the company to obtain superior performance in a certain time period (Pitts and Lei, 2003: 7), Competency of a fundamentally different entities because it has a set of resources (Grant, 2002: 139; Fleisher and Bensoussan, 2003: 187). The achievement of competitive advantage of the most effective is to use the company's competitiveness or capability (Wernerfelt, 1984; Barney, 1986a; Rumelt, 1991; Evans, 1991; Peteraf, 1993; Amit and Schoemaker, 1993; Prahalad and Hamel, 1989).

Wang and Lo (2003) found that organizational learning positive effect on the company's core competencies. Build and develop competitiveness can only be done through organizational learning. Learning will bring the process of acquisition, integration and application of new knowledge and unique to be implemented internally through experimentation, improvement efforts, and innovation.

Slater and Narver (1995) revealed that the success of a business is affected where appropriate entrepreneurial orientation. Entrepreneurial orientation is a major attribute to achieve a high performance company. Drucker (1994) stated that the entrepreneurial orientation as to the nature, character or characteristics that are attached to a person who has willpower to realize

innovative ideas into real business world and can develop it tough. Orientation entrepreneurship is the ability to create something new and different.

Glancey *et al* (1998) found a relationship one's motivation in entrepreneurship, with the success of the business. Orientation entrepreneurs determine business performance. Lumpkin and Dess (1996) and Wiklund and Shepherd (2005) stated that the entrepreneurial orientation is closely related to the process of formulating a strategy that will provide a basis for decision-making and implementation of the organization's business. Entrepreneurial orientation plays an important role in improving business performance (Kehet *al.*, 2007). Orientasi entrepreneurship refers to the processes, practices, and decision making that lead to new input and has three aspects of entrepreneurship, risk-taking, act proactively and always innovative (Lumpkin and Dess, 1996).

The research proposed hypothesis in processing SMEs of cassava: (1) Business performance influence sustainable competitive advantage; (2) Business performance influence organizational learning; (3) Business performance influence entrepreneurial orientation; (4) Competitiveness influence organizational learning; (5) Competitiveness influence the entrepreneurial orientation; (6) Organizational learning influence orientation entrepreneurship.

### Research Methods

This research is qualitative research conducted for construct a theory of the data. 71 tape industry into the sample number. This research measures the perceptions of employers towards entrepreneurial orientation, organizational learning, sustainable competitiveness and business performance. Data were collected using a questionnaire consisting of questions about the characteristics of respondents and questions about the variables studied.

### Results and Discussion

#### 1. Entrepreneurial Orientation and Organizational Learning

Results of this research found an effect and a significant positive relationship between entrepreneurial orientation with organizational learning. Hypothesis 1 stated the entrepreneurial orientation significantly influence organizational learning tape industry is acceptable. Learning will increase if entrepreneurial organization have high entrepreneurial orientation. Learning organization is the result of the entrepreneurial orientation.

**Table 1. Result of Hypothesis Testing**

Variabel	Koefisien Jalur	CR	Prob.
Enterpreneurial orientation → Organization learning	0,828	4,033	0,000**
Enterpreneurial orientation → Sustainable competitiveness	0,463	2,614	0,029*
Organization learning → Sustainable competitiveness	0,220	1,312	0,049*
Enterpreneurial orientation → Business performance	-0,139	-1,507	0,094
Organization learning → Business performance	0,092	1,647	0,058
Sustainable competitiveness → Business performance	0,661	4,392	0,000**

Entrepreneurial orientation has long been recognized as the key to organizational learning activities. Dynamic competitive environment requires that the employer integrate the resources and overcome the threat of bankruptcy. An entrepreneurial orientation processes, practices and decision-making activities, won the competition and gain (Atuahene-Gima and

Ko, 2001; Zhou et al, 2005). An entrepreneurial orientation processes, practices, values and decision-making activities of entrepreneurs to innovate (Li et al., 2009).

A company that developed entrepreneurial spirit is always evolving and developing new engineering technologies that are able to survive in a competitive environment (Kropp and Zolin, 2005). Entrepreneurial orientation serves as a key mechanism in the process of organizational learning. Entrepreneurial orientation emphasizes the spirit of creating new things, change and rejuvenate the old ways that are less productive. Frishammar and Horte (2007) found that entrepreneurial orientation encourages the creation of new products. Li et al. (2008) found that based on the company with a greater entrepreneurial orientation will emphasize the use of technology. Company with an entrepreneurial orientation capture new market opportunities and proactively compete with their competitors.

Entrepreneurs who have the ability to learn are more likely to have decision-making capabilities more quickly and successfully in response to market changes or new information (Krauss et al., 2005). Entrepreneur will have the ability to absorb and receive information from outside the organization. This case is similar to that presented Morris et al. (2007) stated that companies with more learning orientation has a chance to enter new markets as successfully synthesize information, implementation and strategies, and influencing the market.

## **2. Orientation Entrepreneurship and Competitiveness.**

Testing results show the effect of entrepreneurial orientation in Bondowoso tape businessmen affect the sustainable competitive advantage of having a significant positive path coefficients. Hypothesis 2 of the research stated that the entrepreneurial orientation significantly influence organizational learning proven tape industry. Zainol and Ayadurai (2011) found that there are significant entrepreneurial orientation with the company's performance. McCarthy (2003) shows that entrepreneurial orientation will be followed by the formation of product strategy, market scale and a higher competitive element. Entrepreneurial would tend to push to sell goods or services with better (Neshamba, 2003). Grinstein (2008) concluded that the company's performance will be better if the entrepreneurial orientation of innovation and entrepreneurial orientation. This orientation substantially affect the company's performance. If the entrepreneur has an entrepreneurial orientation, innovation and the market simultaneously, the performance will be better than a company that has only one orientation. Lava (2012) examined the Influence Strategy *Resource-Based* and Entrepreneurship Orientation Against Competitive Advantage In Business By-By Food Typical Kota Probolinggo. Findings indicate that entrepreneurial orientation and direct a significant effect on improving the competitiveness of businesses. While Supranoto (2009) found that the entrepreneurial orientation of the positive and significant impact on competitive advantage and positive effect competitive advantage of marketing performance.

These results differ from Djodjobo and Alum (2014). They found that entrepreneurial orientation is not to competitiveness. theystated due to the application of the elements of entrepreneurial orientation that has not been done completely or thoroughly by the manager of the business because of the existence of these efforts are mostly still traditional.

Entrepreneurial orientation is a key driver of the improvement. This improvement may be related to value addition or creation of new products. The research of Sange (2005); Grinstein (2008), and Xin Sheng and Yicui (2007) shows that entrepreneurial orientation have a significant impact on the competitiveness and performance. The third indicator (innovative, proactive and risk-taking) contribute to shaping the orientation of the capture market opportunities and serve customers.

### **3. Organizational Learning and Competitiveness**

The results show the influence of organizational learning for sustainable competitive advantage has significant coefficients. Hypothesis 3 state organizational learning influence the sustainable competitive advantage can be accepted. Entrepreneurs who put up with innovation and able to learn from his experiences tended to be more successful than organizations that do not do it (Wheelen and Hunger, 2002: 9). Valid (2010) stated that entrepreneurs are able to obtain, integrate and apply new and unique knowledge through experimentation, improvement and innovation in the internal activities of the organization. Wang *and* Lo (2003) stated that organizational learning positive effect on the company's core competencies. The learning process will be implemented through experimentation, improvement efforts, and innovation. Entrepreneurial always learn so that the company's operational processes work effectively and efficiently.

### **4. Entrepreneurship Orientation and Business Performance**

Based on test results directly influence the path coefficients are presented in Table 2, showing that the effect of entrepreneurial orientation on business performance tape industry has no significant coefficient. Hypothesis 4 stated entrepreneurial orientation influence business performance has not been accepted. The relationship between the entrepreneurial orientation on performance is insignificant. These results are consistent with the findings Bhaumik and Estrin (2012) which found that the concept of entrepreneurial orientation, did not significantly affect the company's performance in emerging markets.

In contrast to the research (Risnawati and Noermijati, 2011), Li (2008), Yick (2006), Liu *et.al* (2009), Hassimet.*al* (2011), Bhaumiket.*al* (2012), and Mahmood and Hanafi ( 2013) which state that there is a positive relationship between the orientation of Entrepreneurship and Business Performance. That the higher entrepreneurial orientation of the company's performance will also be higher.

Entrepreneurial orientation immediate positive effect on the performance (Risnawati and Noermijati, 2011). Research results indicate that entrepreneurial orientation have direct influence on the performance. These results are in line with Li (2008) which found that there is a positive relationship between entrepreneurial orientation and performance of the company, as well as Giri and Yick (2006) who found that there is a positive correlation between entrepreneurial orientation and strategy form. Li (2008) stated that the entrepreneurial orientation is a desire to improve the organization. Flexibility and risk considerations, which emphasizes entrepreneurial orientation to always innovate, take risks, autonomy, become more proactive and progressive than the competitor.

### **5. Organizational Learning and Business Performance**

Results show influence of organizational learning on business performance tape industry has a significant coefficients. Hypothesis 5 stated organizational learning influence business performance industrial tape's is accepted. Learning organization is considered to bring positive changes in the way people act and they looked at the internal and external environment (cognitive changes). These changes are expected to have a positive impact on organizational performance (Thompson and Kahnweiler, 2002; Egan et al, 2004; Kandemir and Hult, 2005).

Hernaus, and Dimovski (2012) found evidence empirical correlation positive between organizational learning and organizational performance. Organizations that develop learning to improve their performance. The research also revealed, and confirmed some previous findings, that financial performance is not a good predictor for the performance of the organization. Zhao, Li et al, (2009); Michna (2009); Park and Lee, (2010) showed findings the positive influence of organizational learning on the performance of SMEs.

## 6. Competitiveness and Business Performance

Based on test results, showing that the effect of the sustainable competitiveness of the industry business performance tape have significant coefficients. Hypothesis 6 stated that the level of competitiveness sustained significant effect on business performance industrial tape's proved. The results of this research examined the following, that the competitiveness is a collection of factors that differentiate a company from its competitors and provide a unique position in the market is crucial to success of the company.

Supranoto (2009), Sismanto (2006) and Djodjobo & Alum (2014) find a competitive advantage in partial positive and significant impact on the performance of your marketing efforts. The uniqueness of the product attributes and quality assured product taste and the price still held in accordance with the ability of consumers to make consumers want to visit, purchases that bring profit to the business. Istanto (2010) stated that a competitive advantage can be expected to produce superior market performance and financial performance. Analysis of competitive advantage shows the differences and uniqueness among the competitors. A source of competitive advantage is the skills, resources and superior control. Prasetiawan et al., (2015) found that competitiveness can affect economic performance. This may indicate that the areas which are in first quadrant is the area that has the high economic performance and competitiveness.

## Conclusion and Limitations

Results shows the influence of entrepreneurial orientation on organizational learning have a significant positive coefficients, entrepreneurial orientation significantly influence organizational learning of tape industry is acceptable, entrepreneurial orientation have an effect and a significant relationship between with organizational learning, the entrepreneurial orientation affect competitiveness having a significant positive coefficients, the influence of organizational learning for competitiveness has significant coefficients, entrepreneurial orientation has no significant coefficient on business performance of tape industry, the influence of organizational learning on business performance tape industry has a significant coefficients, and competitiveness effect business performance.

Limited ability to understand the perception of respondents accurately, due to the possibility that not all the questionnaires are answered directly by the president / owner of the business because there may be delegated to employees in giving perception. Limitations of the research can also be caused by the relatively low level of education of respondents indicated by the data level of education that most of the lower middle-level education, so the effect on the quality perception.

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## IS THERE A POLITICIZATION OF THE BUDGET EXPENDITURE BY INCUMBENT?

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### Abstract

This research aims to know the fairness level of significance increase on expenditure items in incumbent election area compare with nonincumbent election area, and non-election area. This research use secondary data getting from Directorate General of Financial Balance. Data analyze method use comparative description method which describe the result from our data observation that will be compared with one observation subject and other observation subject. The result shows that all of expenditure items not used as politicization object by incumbent. It's because of increasing expenditure items trend not only occur on incumbent area, but also on some nonincumbent area and some non-election area. So that the significance increase on incumbent area can not conclude as politicization of budget and expenditure area by incumbent to preserve their power.

**Keywords:** *incumbent, election area, budget and expenditure, regent*

### Introduction

The implementation of decentralization in Indonesia looks at the several autonomous regions and the transfer a part of central power and authority to local governments to set and implement their own household (UU Nomor 32 Tahun 2004). To support the implementation of local autonomy through the provision of financial sources based on decentralization, deconcentration, and assistance tasks, need a set of financial balancing between central and local government in the financial system. The financial system is used to fund the decentralization program implementation that implemented in a region commonly referred to the local government budget revenues and expenditure.

Budget is a periodical financial plan compiled based on approved program and a written plan concerning the organization activities which expressed quantitatively and are generally expressed in monetary units for a certain period. Also in the government, decentralization activities doing by local governments also need a budget as a authorization's function, planning function, monitoring function, allocation function, and distribution function. Therefore, the local government should make budget on each fiscal year as a written plan concerning the decentralization activities that will be done. All local revenues and expenditure concerned in the budget year should be included in the local government budget revenues and expenditure.

One of the decentralization activities is the implementation of direct election in each region. Based on data from the Indonesian Power of Democracy and the Konrad Adenauer Stiftung in 2009, Indonesia has been implementing the Regional Head Election directly since 2005 in each district/city. The election activities under the authority and responsibility of local governments in spite of the central government which only served as a supervisory function. UU No. 12 Thn 2003 states that the law gives special powers to the Regional Election Commission to organize the regional head and deputy regional head in each province and/or district/city.

Ritonga & Alam (2010) stated that since the first performed until now, the effectiveness and efficiency of this election has never been evaluated both by the central government and the House of Representatives. Implementation of this election is only supervised by the Election

Supervisory Committee provincial and district/city. Some have argued that the implementation of this election is a burden for local governments because of the cost. It is also disclosed by Prasojo (2009) which states that the high cost of election implementation in Indonesia because it is a grand feast and be financed in particular, ranging from registration, procurement of goods and services used during the election, until the cost of the campaign for prospective head region.

Allegations of potential irregularities of Local Government Budget Revenues and Expenditure (APBD) will increase when the regent that ended his tenure in the period and then move forward again as a candidate incumbent was at the time as a crucial point, since they have to compete again so as not shifted the reins of power (Ritonga & Alam, 2010). As regional head candidate at the election, incumbent has a huge opportunity using the certain expenditure items in the budget period that still He led for saking his candidacy. As has been stated in the legislation, that the budget includes expenditures that have been established and approved by the Regent and the Regional Representatives Council, so that it triggers the alleged politicization of the budget. From the results of FITRA's monitoring (Indonesian Forum for Budget Transparency) that in the region there is a tendency incumbent to hold the budget in order to perpetuate its power in the election (Republika.co.id, Jakarta).

The election budget using through the local government budget revenues and expenditure vulnerable of politicization of budget by the ruling party and also potential for local corruption. That's because there is a gap in the budget allocated for playing money politics through specific spending items in the budget. This is reinforced by all the conducted costs of the election that is financed by the budget, including in terms of campaign financing. This situation is certainly an opportunity for the incumbent to politicize the budget.

### **Literature Review**

According to Abdullah and Asmara (2006) and Freeman and Shoulders (2003: 94) in Ritonga & Alam (2010) says that the budget establishment can be viewed as a contract between the legislative and executive performance. Rubin (2000: 4) states that the public budget is a reflection of the relative strength of the various budget actors who have different interests or preferences on budget outcomes. Limitations of funds owned by the government led to the mechanism of budgeting becomes important for the allocation of its resources. Budget is an instrument of the government's responsibility for the funds management obtained from the public to fund their activities.

According to Mardiasmo (2009: 62), budgeting in the public sector organizations is a stage that is quite complex and contains a high political nuances. In the administration world, budgeting is a political process that is processed through the thick political red tape. In this process, the decision-making mechanism includes lobbying, negotiation, adu-argument (reinforcement), until get the conflict related to the interests that must be incorporated into the resulting political.

In accordance with that stated in the agency theory, that the principal and the agent has each interest, so that the conflict of interest over this has the potential to occur at any time. The agent capable to further highlight its importance because it has more information than the principal due to their more control of the pitch. In terms of governance, budgeting can be seen as a form of contract transactions mandate given to agents at different levels.

While Garamfalvi (1997) states that politicians use influence and power to determine the resources allocation would then benefit them individually or in groups. More politicians in this case is the regent can take advantage of their position to obtain rents or profits in particular economic advantage by manipulating politics over public policy that led to the resources allocation in the budget are not effective and efficient.

### **The Issues of Politicization of budget**

In the implementation of the previous election in 2011 in Banten Regional Government, has proven that social assistance funds channeled to families and supporting organizations incumbent regional head candidate. In addition, the elections in South Sumatra in 2012, the Constitutional Court asked a repeat election because the incumbent regional head candidate proven using social assistance funds and grants to affect the community to choose him in distribution of goods and services way.

Meanwhile, the results of research conducted by the Indonesia Corruption Watch (ICW) in cooperation with Murdoch University (Kompas 14/4 2009) found an increased allocation of grants and social spending in the budget at the time of the 2008 election in Tabanan (Bali), City Bau-Bau (Southeast Sulawesi), and Bandung (West Java), followed by the winning of incumbent candidates.

Indonesia Budget Center (IBC) research states that the amount of the grant in the city budget in 2012 increased eight-fold compared with the previous five-year allocation. 215 percent increase reached two years ahead of the elections. Based on data collected by IBC, the amount of grants from the budget in 2008 is to Rp 177 billion. In 2009, grants increased to Rp 339 billion. Then a year then back up to Rp 883 billion. (Tempo.Co, Jakarta 20/05 2012).

### **Accomplished Studies**

Previously, Ritonga & Alam (2010) has conducted research related to the politicization of the budget in the area of election incumbent and nonincumbent. In his research, component studied only includes budgeting grants and social aid expenditure. Both are components in the budget with the same characteristics, namely expenditure component that can attract the hearts of the people who read it. This is because the grant expenditure and social aid spending is spending that is not definite in tune with the current period. Because of the uncertainty related to the amount of these two components include as components that can be made the object of the budget utilization.

In this study showed that the proportion of grant expenditure and social aid expenditures incumbent election area larger than the nonincumbent election area. The proportion of grant expenditure and social aid at the time of the election in incumbent area are larger than before the election. From these results, it can be concluded that there are indications incumbent utilize the budget for his nomination as regent.

It is also disclosed by Indarti (2011) in his research entitled "Ratio Expenditure Allocation Analysis between Regions Incumbent and Regional Non-Incumbent Before and At the Time of Election" that the budget allocation of grants and financial aid district/city Incumbent following the election more greater than the district/city its incumbent not following the election.

Syafrizal and Fachruzzaman (2013) in his study states that there is a difference ratio of grants expenditure allocation where the grant expenditure incumbent upon the election of Java is greater than before. There is a difference ratio of social aid expenditure allocation where social aid spending Incumbent Java at the time the election is greater than before.

From these studies, the authors intend to conduct research related to the politicization of the budget in the election in the incumbent and nonincumbent with doing an observation on certain expenditure items contained in the budget. The posts included are subsidies expenditure, grants expenditure, social aid expenditure, Results expenditure for the Province/District/City and Village Government, financial aid expenditure to Province/Regency/City and Village Government, goods and services expenditure, modal expenditure, and unexpected expenditures. The study was conducted by analyzing the trend chart between the increase in expenditure component before the election and at the time of

the election. Presentation doing with descriptive method by comparing the comparative significance of irregularities increase in the value of existing expenditure in the budget.

### **Research Method**

The data used in this research is secondary data, is data obtained, collected, and processed first by the other person. The type and source of this research is the Regional Budget Year 2011-2015 incumbent area and nonincumbent that followed the election in December 2015 obtained from the official website of the Directorate General of Domestic Fiscal Balance. The nature of the data is quantitative data that is data such as numbers and objective.

Secondary data used in this study were taken researchers by collecting data related to the budget and the election budget 2015. Data obtained from data taken from the website of the Interior Director General of Fiscal Balance (<http://www.djpk.kemenkeu.go.id> /). The data includes the election area and the election of regional head candidate status data obtained from the Commission's website Indonesia.

Data analysis method used is descriptive comparative method which describe research findings derived from data collected through the observation process on the object of research which will then be compared between the study subjects with other subjects research. Results of comparative analysis between the incumbent budget and nonincumbent budget then will be interpreted in narrative argumentative as a result of the analysis description to show a general overview related to the budget politicization made by the head of the prospective incumbent.

### **Results and Discussion Research**

The local government budget revenues and expenditure preparation process in each region is a political process which involves multiple parties, from the mayor/regent, Parliament, NGOs and all levels of bureaucracy that is in local government circles. Each side has different interests both hidden and overt. In the interaction in the local government budget revenues and expenditure preparation process is not uncommon that related parties are in conflict. The politicization of the public budget can be traced from the amount budget received and the parties who benefited or harmed.

The alleged politicization on some spending items in the budget and many cases related to the budget politicization made by the incumbent candidate in the election of 2010 should be used as a reference in the budget politicization research in the incumbent and nonincumbent election area 2015. Budget politicization not only necessarily such as grant expenditure, social aid expenditure, and financial aid expenditure. However other posts expenditure also needs to be examined further relevant indication of the budget politicization.

### **Total Budget in the Conducting and Not Conducting Election Area.**

From the table B.1.1, obtained an average total spending in areas that conducting the election has increased every year. However, the percentage increase in the total budget each year looks volatile. The increasing percentage in 2011 to 2012 is 16%. In the next year the increasing percentage decreased 3% to 13%. In 2013 towards 2014 the increasing percentage is increased of 4% to 17%. In the implementation of the 2015 election the increasing percentage is increased 2% to 19%.

From this analysis it can be concluded that in areas that conducting election the increasing expenditure are same in each year. In addition, researchers also process data of local governments that do not conducting simultaneous election in 2015. The results show that the trend of total budget expenditure of local governments that do not conducting the election also increased every year since 2013. The increase was also seen regularly every year.

However there are some areas that have the increasing percentage in total expenditure in this election year increased sharply compared with the previous year.

From the table B.1.2 shows that in 2011 to 2012 the average of increasing percentage in the area that does not conducting the election is 35%. In 2012 to 2013 total budget in areas that do not conducting the election also increased. However, the increasing percentage is decreased compared to the previous year to 16%. In 2013 to 2014 total budget in areas that do not carry back election has increased. However, as in previous years that the increasing percentage is decreased to 15%. In 2015, although these areas do not hold the election but the average of increasing percentage in the total budget of the previous year also increased to 20%.

If both are compared, then the area that carry the election and areas that do not conducting the election have the same pattern, which has increased the total budget each year. But in terms of the increasing percentage, both increases and decreases fluctuating. It can be concluded that from the analysis of the total budget, which is carrying out the election area does not politicize the budget because the budget patterns in areas that conducting the election looks the same as the area does not conducting the election.

### **Total Budget in the Election Incumbent and Nonincumbent Area.**

From tables B.1.3, we know that the total average budget has increased every year in the election incumbent area since 2011-2015. Each area has increased every year. From the year 2011 to 2012 the average total budget increased by 15%. In the next year, expenditure also increased but the increasing percentage was less than the previous year on 13%. In 2013 to 2014 the increasing percentage of expenditure in the incumbent area increased 5% to 18%. In the implementation of the 2015 election, the average expenditure in the incumbent has increased. The increasing percentage was also seen greater than 5% from the previous year to 20%.

From increasing percentage table B.1.4, the average expenditure of nonincumbent also shows that there is an increasing on average total expenditure but the increasing percentage is volatile. From 2011 to 2012 the increasing percentage is 20%. In the next year percentage increase is decreased to 15%. on increasing towards 2014 and 2015 the percentage of the increase amounted to 16%.

From this analysis, there is little difference between the pattern of incumbent regional election and nonincumbent in the implementation of the election. This is evidenced by the increasing percentage increase in the incumbent while the increasing percentage in the nonincumbent area unchanged. The differences of pattern on regional incumbent is further compared with the patterns in areas that do not conducting the election. Judging from the data table area which does not conducting the election, incumbent local patterns have a similar thing that increasing percentage increase in the 2015 election year.

It concluded that although there are differences between the patterns of regional incumbent and nonincumbent, this can not be called the politicization of the local government budget revenues and expenditure due to the comparison used in the area that do not conducting the election also have a similar pattern with the incumbent. So it is said as a reasonable increase.

### **Profit Sharing Expenditure to Prov/district/city and Village Government on Conducting and Not Conducting Election Area.**

From the table B.1.5 of the increasing percentage expenditure, the result in the election areas can be seen that the average percentage increase in 2011 to 2012 is 226%. The percentage decrease in 2012 to 2013 become 43%. In 2013 to 2014 increasing percentage of profit

sharing expenditures decrease 5% become 38%. In the implementation of election in 2015 the increasing percentage is increased significantly 84% become 122%.

From the table B.1.6 in the increasing percentage of profit sharing expenditure in nonelection area can be seen that the budget for this expenditure did not appear in each year and each region. In 2011 to 2012 the increasing percentage average is high 1563%. This is because in 2011 some areas raises no budget in this post and bring this budget in 2012. In 2012 to 2013 average decreased by 3%. This is because some areas erase the value in 2013. In the next year, in 2014 the increasing percentage average in an increase of 8%. In the implementation of the election in 2015 the percentage increased to 1745%.

In contrast to the election area, the increase occurring in nonelection area has increased very significantly. This shows that the profit sharing expenditure indicated not made for object utilization of the local government budget revenues and expenditure by the local head candidates to perpetuate his power in the 2015 election.

### **Profit Sharing Expenditure to Prov/district/city and Village Government on Incumbent and Nonincumbent Election Area.**

From tables B.1.7 can be seen that the profit sharing budget expenditure in incumbent for the election is very volatile annually. As explained earlier, that this happens because this expenditure do not always show up in the fiscal year and did not always appear in every area. Based on the table below it can be seen that in 2011 there are four areas that do not raise this budget. They are Ngawi, Situbondo, Sumenep, and Mojokerto. In 2012 the Ngawi begun to raise this budget. The increasing percentage between 2011 to 2012 is 266%. This increase is quite significant. Although it is quite significant, but there are areas that have a decrease in this expenditure, Kab. Blitar. In 2012 to 2013 despite increased, but the increasing percentage is lower than the previous year by 56%. In 2013 to 2014 the percentage decreased to 30%. After a three-year budget period the increasing percentage decreased, in the election year 2015 the percentage of this expenditure increased to 96% in the election of incumbent candidates. This increasing percentage is quite significant. But there are two areas that have a decrease in the increasing percentage, they are Kab. Mojokerto and Kab. Trenggalek.

From table B.1.8 can be seen that the increasing percentage pattern in each nonincumbent region is different. Kab. Jember have the same pattern every year. Kab. Tuban have a reasonable increase every year. A significant increasing percentage occurred in Kab. Gresik and Kab. Kediri. An increasing in Kab. Gresik looks very significant. This can be seen of the stems in 2015 which is very high compared with four years earlier who has the same level stems. In Kab. Kediri different patterns seen in the last two years of the fiscal year, 2014 and 2015. Three years earlier, in 2011 until 2013 the increasing between years is not much different. However, in 2014 the increase is starting look significant. Budget of this expenditure increase again in 2015.

From the analysis above, if it is compared, the increasing percentage significance in nonincumbent area is higher than incumbent area. Although in incumbent area have an increasing percentage of this budget expenditure, but it also occurs in the nonincumbent area. It concluded that both of them have the same pattern that fluctuates each year, but tended to increase in some regions in the implementation of the election in the incumbent and nonincumbent.

Similarly, when compared with the areas that do not conducting the election, the budget expenditure pattern has the same pattern that is not always present in some areas and not always appear each year. The increasing budget of this expenditure involves some areas that conducting the election, the incumbent and nonincumbent areas, and the area that do not conducting the election.

Therefore, it can be concluded that the budget of this expenditure are not made as utilization object by incumbent candidates to perpetuate their power. Some areas in East Java who conducting the election and also which not conducting election increase the sharing profit budget expenditure to particular interests in certain years.

### **Social Aid Budget Expenditure in the Conducting and Not Conducting Local Election**

From the table B.1.9 can be seen that the average of social aid expenditure in areas that conducting the election have increased and decreased fluctuative annually. The value of the social aid budget expenditure in 2011 to 2012 decreased -24%. In the next year the value of the social aid budget expenditure has increased become 7%. In 2013 to 2014 the increasing percentage has increased significantly to 92%. But instead in the implementation of the election 2015 budget value of social aid expenditure decreased -3%. This is very clear that social aid expenditure is no longer become a target object in the implementation of the election budget utilization as found in previous research.

In areas that do not conducting the elections, in 2011 to 2012 the social aid budget expenditure decreased in 14%. But in the next year budget value began increase very significantly on 145%. In 2014 the social aid budget expenditure in areas that do not conducting the election have increased but the increasing percentage is decreased to 42%. In the implementation of election 2015 the social aid budget expenditure has increased the increasing percentage to 61%.

This shows that social aid budget expenditure do not use as the object of budget utilization in implementation of the election. This is proved by the lower value and the increasing percentage of social aid budget expenditure in areas that conducting the election compared to areas that do not conducting the election.

### **Social Aid Budget Expenditure in the Incumbent and Nonincumbent Regional Election**

From tables B.1.10 that have been made can be seen that social aid expenditure has decreased and increased fluctuatively in each region annually. In 2011 to 2012 budget value of incumbent in the election area decreased 25%. There are only five areas that have increased the value, they are Kab. Blitar, Kab. Lamongan, Kab. Malang, Kab. Mojokerto, and Kab. Sidoarjo. From the fifth area, Kab. Mojokerto which increased 185% from the previous year. In 2013 the average value increased by 2%. However, when look at each region, there are only six regions has increased. Region that have a significant increase was Kab. Ngawi and Mojokerto. In 2014 the value of the social aid budget expenditure in the incumbent increased significantly to 114%. Significant increases occurred in the city of Malang that is equal to 1502%. On 2015 the value of the social aid budget increased, but the increasing percentage is actually lower than the previous year to 16%. Significant increase occurred in the Kab. Sumenep, reaching 322% of the previous year.

From the increasing percentage table B.1.16 in nonincumbent area appears that the average value of the social aid budget expenditure in 2012 decreased by -23%. In 2013 the average increased by 27%. A significant increase in 2013 occurred in Kab. Tuban. In 2014 all regions have an increase in value. The increasing percentage also increased in three regions, except Kab. Tuban that increases in value, but the percentage is smaller than the previous year become 19%. On 2015 the value of the social aid budget expenditure in nonincumbent area decreased by -21%.

When compared with the incumbent local, social aid expenditure patterns from 2011 to 2013 suffered equation. However, on 2015 the average value of the budget has increased although the increasing percentage value decreased become 16%. When compared with areas that do

not conducting the election, things like this are still fairly reasonable because in some areas that do not conducting the election, the social aid expenditure also rise highly with an increasing average of 61%. There are only two incumbent regions which have an above-average percentage, they are Kab. Sumenep amounted to 322% and Kab. Trenggalek amounted to 100%. It can be concluded that social aid expenditure not use as object utilization of the budget by the incumbent candidate because a significance level rise also occurred in areas that do not conducting the election so that the increase is still practically so fair.

#### **Unexpected Budget Expenditure in Conducting and Not Conducting Local Election.**

The increasing percentage average of unexpected expenditure in areas conducting the election in 2012 from the previous year was 70%. The increasing percentage was decreased in 2013 amounted to 33%. In 2014 the increase in percentage in unexpected expenditure fell back to 12%. After two consecutive years the increasing percentage is declining, in the implementation of election 2015 the increasing percentage is increased to 27%. The area that have a significant increase in its value is Kab. Blitar.

The increasing percentage of unexpected expenditure in 2012 amounted to 278%. In 2013 the increasing percentage is decreased to 78%. The increasing percentage of the budget had increased in 2014 amounted to 165%. By 2015, the increasing percentage is decreased to 65%.

When compared with areas that conducting the election, the increasing percentage in area which does not conducting the election is greater than the area that conducting the election. However, the percentage is quite high and significant in areas that do not conducting in the prior election year 2015. This may be caused at the time these areas conducting the election in each region.

When comparing the percentage in 2015, there are six areas that have an increasing value in areas that conducting the election, they are Kab. Blitar 200%, Kab. Kediri by 71%, Kab. Lamongan by 51%, Kab. Malang by 100%, Kab. Trenggalek by 48%, and Kab. Mojokerto by 84%. While in the Kab. Bojonegoro which is an area that does not conducting the election would occur a very significant increase in the amount of 968% over the previous year.

So from this analysis cannot be concluded that the utilization of the budget is only carried out in areas that are conducting the election. Areas that do not conducting the election 2015 need further scrutiny due to the utilization of the unexpected budget.

#### **Unexpected Budget Expenditure in Incumbent and Nonincumbent Local Election**

In 2012 the increasing percentage average of unexpected expenditure in the incumbent is 46%. This value has decreased significantly in 2013 amounted to 7%. In 2014 the increasing percentage is increase of 3% to become 10%. In the implementation of the election in 2015 the increasing percentage average of unexpected expenditure increased to 33%.

There are five areas that have an increasing value in the 2015. They are Kab. Blitar 200%, Kab. Lamongan by 51%, Kab. Malang by 100%, Kab. Trenggalek by 48%, and Kab. Mojokerto by 84%.

When compared with nonincumbent election area, in general the increasing percentage in the incumbent regions are higher. The increasing percentage average of nonincumbent regional election in 2012 is 16%. This value decreased in 2013 amounted to 7% and continued to decline in 2014 amounted to 2%. In the implementation of the election 2015 the increasing percentage average is 6%. Despite the increase in the percentage increase in 2015, but there is only one area that have an increasing value, it is Kab. Kediri by 71% compared to the previous year. Three other regions have a declining value.



From the analysis, it is concluded that the unexpected budget expenditure is not made as the object of utilization budget by the incumbent candidate because of a significant increase also occurred in the area of nonincumbent election and in areas that do not conducting the election. So the increase is still quite reasonable because in areas that do not conducting the election were used as a comparison also had a significant increase.

## Conclusions and Limitations

### 1. Conclusion

The results of this study concluded that all the expenditure is not used as objects utilization of the budget by the incumbent candidate. This is due to the significant upward trend of expenditure not only occur in the incumbent election, but also occurs in the nonincumbent areas and in areas that do not conducting the election. The significance of increasing budget expenditure in the incumbent cannot be said as an incumbent candidate politicization of budget to maintain its power in the region because nonincumbent and areas that do not conducting also have a significance expenditure increasing.

### 2. Limitation

Researchers only use data on the districts/cities in East Java province, this cause the research results cannot be generalized to all provinces in Indonesia. Therefore, the researchers recommend to use more than one province in future studies, in order to compare one province to another province and the results can be generalized to all provinces in Indonesia. It is advisable to pay attention to other factors affecting the increasing budget expenditure. In addition, researchers also suggested that further research conduct qualitative ethnography methods following the budget-making process to know whether there is any utilization of budget or not.

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**APPENDIX**

(in million rupiah)

No	City/District	2011	2012	% increase	2012	2013	% increase	2013	2014	% increase	2014	2015	% increase
1	Kab. Banyuwangi	1.393.229	1.736.095	25%	1.736.095	1.884.252	9%	1.884.252	2.221.945	18%	2.221.945	2.572.287	16%
2	Kab. Blitar	1.157.481	1.366.851	18%	1.366.851	1.493.178	9%	1.493.178	1.794.968	20%	1.794.968	2.065.949	15%
3	Kab. Gresik	1.227.695	1.474.708	20%	1.474.708	1.810.426	23%	1.810.426	2.200.520	22%	2.200.520	2.565.135	17%
4	Kab. Jember	1.813.845	2.115.511	17%	2.115.511	2.401.429	14%	2.401.429	2.760.337	15%	2.760.337	3.129.288	13%
5	Kab. Kediri	1.276.111	1.552.078	22%	1.552.078	1.699.769	10%	1.699.769	2.002.837	18%	2.002.837	2.357.483	18%
6	Kab. Lamongan	1.213.856	1.432.606	18%	1.432.606	1.550.103	8%	1.550.103	1.768.378	14%	1.768.378	2.196.879	24%
7	Kab. Malang	1.821.834	2.157.429	18%	2.157.429	2.385.081	11%	2.385.081	2.834.457	19%	2.834.457	3.302.969	17%
8	Kab. Mojokerto	941.352	1.165.492	24%	1.165.492	1.326.988	14%	1.326.988	1.762.334	33%	1.762.334	2.225.694	26%
9	Kab. Ngawi	1.041.016	1.112.731	7%	1.112.731	1.298.105	17%	1.298.105	1.479.305	14%	1.479.305	1.765.878	19%
10	Kab. Sidoarjo	1.823.870	2.189.901	20%	2.189.901	2.581.880	18%	2.581.880	2.897.821	12%	2.897.821	3.690.881	27%
11	Kab. Situbondo	866.162	983.044	13%	983.044	1.136.683	16%	1.136.683	1.381.318	22%	1.381.318	1.549.389	12%
12	Kab. Sumenep	1.092.435	1.308.070	20%	1.308.070	1.518.730	16%	1.518.730	1.683.522	11%	1.683.522	2.012.685	20%
13	Kab. Trenggalek	931.337	1.039.168	12%	1.039.168	1.043.299	0%	1.043.299	1.189.303	14%	1.189.303	1.618.457	36%
14	Kab. Tuban	1.102.329	1.342.317	22%	1.342.317	1.517.459	13%	1.517.459	1.692.246	12%	1.692.246	1.935.787	14%
15	Kota Malang	1.010.799	1.261.071	25%	1.261.071	1.543.987	22%	1.543.987	1.683.670	9%	1.683.670	1.803.147	7%
16	Kota Mojokerto	426.346	487.642	14%	487.642	571.109	17%	571.109	648.104	13%	648.104	815.212	26%
17	Kota Pasuruan	453.029	462.241	2%	462.241	529.985	15%	529.985	702.748	33%	702.748	840.772	20%
18	Kota Surabaya	5.195.102	5.167.057	-1%	5.167.057	5.720.099	11%	5.720.099	6.636.187	16%	6.636.187	7.269.443	10%
<b>Average</b>				16%			13%			17%			19%

Source: Data Budget Revenues and Expenditure FY 2011-2015 Director General of Fiscal Balance, processed

**B.1.2 The Increasing Percentage Table of Total Budget Expenditure In Not Conducting Election Area**

*(in million rupiah)*

No	City/District	2011	2012	% increased	2012	2013	% increased	2013	2014	% increased	2014	2015	% increased
1	Kab. Bangkalan	753.953	1.207.475	60%	1.207.475	1.370.899	14%	1.370.899	1.575.467	15%	1.575.467	1.771.841	12%
2	Kab. Bojonegoro	982.750	1.679.631	71%	1.679.631	2.145.136	28%	2.145.136	2.418.394	13%	2.418.394	2.985.670	23%
3	Kab. Bondowoso	1.414.171	985.851	-30%	985.851	1.160.729	18%	1.160.729	1.390.182	20%	1.390.182	1.609.754	16%
4	Kab. Jombang	1.107.693	1.273.933	15%	1.273.933	1.444.127	13%	1.444.127	1.821.852	26%	1.821.852	2.097.689	15%
5	Kab. Lumajang	1.049.331	1.165.502	11%	1.165.502	1.445.311	24%	1.445.311	1.561.608	8%	1.561.608	1.893.959	21%
6	Kab. Madiun	749.437	1.029.393	37%	1.029.393	1.165.411	13%	1.165.411	1.309.108	12%	1.309.108	1.521.303	16%
7	Kab. Magetan	1.065.530	1.036.619	-3%	1.036.619	1.190.679	15%	1.190.679	1.403.497	18%	1.403.497	1.591.866	13%
8	Kab. Nganjuk	450.197	1.207.703	168%	1.207.703	1.621.852	34%	1.621.852	1.625.317	0%	1.625.317	2.113.410	30%
9	Kab. Pacitan	688.501	898.281	30%	898.281	974.152	8%	974.152	1.110.749	14%	1.110.749	1.269.623	14%
10	Kab. Pamekasan	492.142	1.112.615	126%	1.112.615	1.262.203	13%	1.262.203	1.454.660	15%	1.454.660	1.803.972	24%
11	Kab. Pasuruan	579.909	1.581.766	173%	1.581.766	1.894.773	20%	1.894.773	2.190.622	16%	2.190.622	2.473.274	13%
12	Kab. Ponorogo	450.502	1.240.263	175%	1.240.263	1.366.718	10%	1.366.718	1.646.647	20%	1.646.647	1.890.939	15%
13	Kab. Probolinggo	1.276.111	1.276.919	0%	1.276.919	1.355.852	6%	1.355.852	1.588.223	17%	1.588.223	1.912.891	20%
14	Kab. Sampang	938.110	1.024.721	9%	1.024.721	1.181.911	15%	1.181.911	1.211.114	2%	1.211.114	1.474.017	22%
15	Kab. Tulungagung	1.049.331	1.354.884	29%	1.354.884	1.408.195	4%	1.408.195	1.583.425	12%	1.583.425	2.213.020	40%
16	Kota Blitar	450.502	503.070	12%	503.070	579.383	15%	579.383	634.078	9%	634.078	782.717	23%
17	Kota Kediri	1.276.111	837.602	-34%	837.602	953.260	14%	953.260	1.153.826	21%	1.153.826	1.521.303	32%
18	Kota Madiun	938.110	602.343	-36%	602.343	744.119	24%	744.119	831.055	12%	831.055	989.474	19%
19	Kota Probolinggo	1.049.331	597.984	-43%	597.984	672.445	12%	672.445	783.247	16%	783.247	894.026	14%
20	Kota Batu	450.502	482.785	7%	482.785	565.765	17%	565.765	761.572	35%	761.572	914.834	20%
<b>Average</b>				39%			16%			15%			20%

Source: Data Budget Revenues and Expenditure FY 2011-2015 Director General of Fiscal Balance, processed

**B.1.3 The Increasing Percentage Table of Total Budget Expenditure In Incumbent Election Area**

(in million rupiah)

No	Uraian	2011	2012	% increased	2012	2013	% increased	2013	2014	% increased	2014	2015	% increased
1	Kab. Banyuwangi	1.393.229	1.736.095	25%	1.736.095	1.884.252	9%	1.884.252	2.221.945	18%	2.221.945	2.572.287	16%
2	Kab. Blitar	1.157.481	1.366.851	18%	1.366.851	1.493.178	9%	1.493.178	1.794.968	20%	1.794.968	2.065.949	15%
3	Kab. Lamongan	1.213.856	1.432.606	18%	1.432.606	1.550.103	8%	1.550.103	1.768.378	14%	1.768.378	2.196.879	24%
4	Kab. Malang	1.821.834	2.157.429	18%	2.157.429	2.385.081	11%	2.385.081	2.834.457	19%	2.834.457	3.302.969	17%
5	Kab. Mojokerto	941.352	1.165.492	24%	1.165.492	1.326.988	14%	1.326.988	1.762.334	33%	1.762.334	2.225.694	26%
6	Kab. Ngawi	1.041.016	1.112.731	7%	1.112.731	1.298.105	17%	1.298.105	1.479.305	14%	1.479.305	1.765.878	19%
7	Kab. Sidoarjo	1.823.870	2.189.901	20%	2.189.901	2.581.880	18%	2.581.880	2.897.821	12%	2.897.821	3.690.881	27%
8	Kab. Situbondo	866.162	983.044	13%	983.044	1.136.683	16%	1.136.683	1.381.318	22%	1.381.318	1.549.389	12%
9	Kab. Sumenep	1.092.435	1.308.070	20%	1.308.070	1.518.730	16%	1.518.730	1.683.522	11%	1.683.522	2.012.685	20%
10	Kab. Trenggalek	931.337	1.039.168	12%	1.039.168	1.043.299	0%	1.043.299	1.189.303	14%	1.189.303	1.618.457	36%
11	Kota Malang	1.010.799	1.261.071	25%	1.261.071	1.543.987	22%	1.543.987	1.683.670	9%	1.683.670	1.803.147	7%
12	Kota Mojokerto	426.346	487.642	14%	487.642	571.109	17%	571.109	648.104	13%	648.104	815.212	26%
13	Kota Pasuruan	453.029	462.241	2%	462.241	529.985	15%	529.985	702.748	33%	702.748	840.772	20%
14	Kota Surabaya	5.195.102	5.167.057	-1%	5.167.057	5.720.099	11%	5.720.099	6.636.187	16%	6.636.187	7.269.443	10%
<b>Average</b>				15%			13%			18%			20%

Source: Data Budget Revenues and Expenditure FY 2011-2015 Director General of Fiscal Balance, processed

**B.1.4 The Increasing Percentage Table of Total Budget Expenditure In Nonincumbent Election Area**

(in million rupiah)

No	Uraian	2011	2012	% increased	2012	2013	% increased	2013	2014	% increased	2014	2015	% increased
1	Kab. Gresik	1.227.695	1.474.708	20%	1.474.708	1.810.426	23%	1.810.426	2.200.520	22%	2.200.520	2.565.135	17%
2	Kab. Jember	1.813.845	2.115.511	17%	2.115.511	2.401.429	14%	2.401.429	2.760.337	15%	2.760.337	3.129.288	13%
3	Kab. Kediri	1.276.111	1.552.078	22%	1.552.078	1.699.769	10%	1.699.769	2.002.837	18%	2.002.837	2.357.483	18%
4	Kab. Tuban	1.102.329	1.342.317	22%	1.342.317	1.517.459	13%	1.517.459	1.692.246	12%	1.692.246	1.935.787	14%
<b>Average</b>				20%			15%			16%			16%

Source: Data Budget Revenues and Expenditure FY 2011-2015 Director General of Fiscal Balance, processed

**B.1.5 The Increasing Percentage Table of Sharing Profit Expenditure Budget In Conducting Election Area**

(in million rupiah)

No	City/District	2011	2012	% increased	2012	2013	% increased	2013	2014	% increased	2014	2015	% increased
1	Kab. Banyuwangi	120	1.934	1511%	1.934	1.000	-48%	1.000	3.168	217%	3.168	3.168	0%
2	Kab. Blitar	2.427	1.151	-53%	1.151	8.643	651%	8.643	8.947	4%	8.947	9.711	9%
3	Kab. Gresik	279	279	0%	279	-	-100%	-	4.541	100%	4.541	41.541	815%
4	Kab. Jember	700	820	17%	820	820	0%	820	887	8%	887	887	0%
5	Kab. Kediri	6.186	5.705	-8%	5.705	6.284	10%	6.284	15.424	145%	15.424	16.186	5%
6	Kab. Lamongan	2.376	2.635	11%	2.635	2.874	9%	2.874	2.985	4%	2.985	3.393	14%
7	Kab. Malang	13.348	15.240	14%	15.240	15.095	-1%	15.095	15.385	2%	15.385	31.922	107%
8	Kab. Mojokerto	4.485	9.470	111%	9.470	7.672	-19%	7.672	20.611	169%	20.611	33.014	60%
9	Kab. Ngawi	-	658	100%	658	578	-12%	578	578	0%	578	5.092	781%
10	Kab. Sidoarjo	24.831	42.899	73%	42.899	43.879	2%	43.879	57.306	31%	57.306	82.987	45%
11	Kab. Situbondo	-	-	100%	-	-	0%	-	-	0%	-	2.160	100%
12	Kab. Sumenep	-	-	100%	-	-	0%	-	-	0%	-	2.840	100%
13	Kab. Trenggalek	2.283	2.503	10%	2.503	2.982	19%	2.982	4.977	67%	4.977	6.317	27%
14	Kab. Tuban	4.429	5.616	27%	5.616	9.664	72%	9.664	10.976	14%	10.976	14.236	30%
15	Kota Malang	100	100	0%	100	100	0%	100	100	0%	100	100	0%
16	Kota Mojokerto	-	-	100%	-	-	0%	-	-	0%	-	-	0%
17	Kota Pasuruan	138	2.917	2010%	2.917	-	-100%	-	-	0%	-	13.645	100%
18	Kota Surabaya	3.190	1.200	-62%	1.200	4.673	289%	4.673	1.200	-74%	1.200	1.200	0%
<b>Average</b>				226%			43%			38%			122%

Source: Data Budget Revenues and Expenditure FY 2011-2015 Director General of Fiscal Balance, processed

**B.1.6 The Increasing Percentage Table of Sharing Profit Expenditure Budget In Not Conducting Election Area**

*(in million rupiah)*

No	City/District	2011	2012	% increased	2012	2013	% increased	2013	2014	% increased	2014	2015	% increased
1	Kab. Bangkalan	-	-	0%	-	-	0%	-	-	0%	-	2.000	100%
2	Kab. Bojonegoro	908	1.152	27%	1.152	1.224	6%	1.224	1.346	10%	1.346	10.529	682%
3	Kab. Bondowoso	-	-	0%	-	-	0%	-	-	0%	-	-	0%
4	Kab. Jombang	1.116	63.774	5612%	63.774	-	-100%	-	76.196	100%	76.196	-	-100%
5	Kab. Lumajang	3.119	-	-100%	-	423	100%	423	-	-100%	-	609	100%
6	Kab. Madiun	2.288	1.193	-48%	1.193	970	-19%	970	724	-25%	724	3.479	380%
7	Kab. Magetan	23.870	-	-100%	-	-	0%	-	-	0%	-	-	0%
8	Kab. Nganjuk	2.089	1.452	-30%	1.452	1.452	0%	1.452	1.778	22%	1.778	7.028	295%
9	Kab. Pacitan	110	3.032	2656%	3.032	2.830	-7%	2.830	2.928	3%	2.928	3.574	22%
10	Kab. Pamekasan	10	2.288	22669%	2.288	2.288	0%	2.288	2.288	0%	2.288	2.179	-5%
11	Kab. Pasuruan	5.095	29.593	481%	29.593	43.458	47%	43.458	53.440	23%	53.440	108.241	103%
12	Kab. Ponorogo	-	2.320	100%	2.320	2.320	0%	2.320	1.620	-30%	1.620	5.531	241%
13	Kab. Probolinggo	640	-	-100%	-	-	0%	-	-	0%	-	4.642	100%
14	Kab. Sampang	-	331	100%	331	10	-97%	10	10	0%	10	3.321	32945%
15	Kab. Tulungagung	-	5.593	100%	5.593	6.034	8%	6.034	9.281	54%	9.281	12.507	35%
16	Kota Blitar	-	-	0%	-	-	0%	-	-	0%	-	-	0%
17	Kota Kediri	640	-	-100%	-	-	0%	-	-	0%	-	3.479	100%
18	Kota Madiun	-	-	0%	-	-	0%	-	-	0%	-	-	0%
19	Kota Probolinggo	-	-	0%	-	-	0%	-	626	100%	626	-	-100%
20	Kota Batu	-	-	0%	-	-	0%	-	-	0%	-	-	0%
<b>Average</b>				1563%			-3%			8%			1745%

Source: Data Budget Revenues and Expenditure FY 2011-2015 Director General of Fiscal Balance, processed

**B.1.7 The Increasing Percentage Table of Sharing Profit Expenditure Budget In Incumbent Election Area**

*(in million rupiah)*

No	Uraian	2011	2012	% increased	2012	2013	% increased	2013	2014	% increased	2014	2015	% increased
1	Kab. Banyuwangi	120	1.934	1511%	1.934	1.000	-48%	1.000	3.168	217%	3.168	3.168	0%
2	Kab. Blitar	2.427	1.151	-53%	1.151	8.643	651%	8.643	8.947	4%	8.947	9.711	9%
3	Kab. Lamongan	2.376	2.635	11%	2.635	2.874	9%	2.874	2.985	4%	2.985	3.393	14%
4	Kab. Malang	13.348	15.240	14%	15.240	15.095	-1%	15.095	15.385	2%	15.385	31.922	107%
5	Kab. Mojokerto	4.485	9.470	111%	9.470	7.672	-19%	7.672	20.611	169%	20.611	33.014	60%
6	Kab. Ngawi	-	658	100%	658	578	-12%	578	578	0%	578	5.092	781%
7	Kab. Sidoarjo	24.831	42.899	73%	42.899	43.879	2%	43.879	57.306	31%	57.306	82.987	45%
8	Kab. Situbondo	-	-	0%	-	-	0%	-	-	0%	-	2.160	100%
9	Kab. Sumenep	-	-	0%	-	-	0%	-	-	0%	-	2.840	100%
10	Kab. Trenggalek	2.283	2.503	10%	2.503	2.982	19%	2.982	4.977	67%	4.977	6.317	27%
11	Kota Malang	100	100	0%	100	100	0%	100	100	0%	100	100	0%
12	Kota Mojokerto	-	-	0%	-	-	0%	-	-	0%	-	-	0%
13	Kota Pasuruan	138	2.917	2010%	2.917	-	-100%	-	-	0%	-	13.645	100%
14	Kota Surabaya	3.190	1.200	-62%	1.200	4.673	289%	4.673	1.200	-74%	1.200	1.200	0%
<b>Average</b>				266%			56%			30%			96%

Source: Data Budget Revenues and Expenditure FY 2011-2015 Director General of Fiscal Balance, processed



**B.1.8 The Increasing Percentage Table of Sharing Profit Expenditure Budget In Nonincumbent Election Area**

*(in million rupiah)*

No	Uraian	2011	2012	% increased	2012	2013	% increased	2013	2014	% increased	2014	2015	% increased
1	Kab. Gresik	279	279	0%	279	-	-100%	-	4.541	100%	4.541	41.541	815%
2	Kab. Jember	700	820	17%	820	820	0%	820	887	8%	887	887	0%
3	Kab. Kediri	6.186	5.705	-8%	5.705	6.284	10%	6.284	15.424	145%	15.424	16.186	5%
4	Kab. Tuban	4.429	5.616	27%	5.616	9.664	72%	9.664	10.976	14%	10.976	14.236	30%
<b>Average</b>				9%			-4%			67%			212%

Source: Data Budget Revenues and Expenditure FY 2011-2015 Director General of Fiscal Balance, processed

**B.1.9 The Increasing Percentage Table of Social Aid Expenditure Budget In Conducting Election Area**

*(in million rupiah)*

No	City/District	2011	2012	% increased	2012	2013	% increased	2013	2014	% increased	2014	2015	% increased
1	Kab. Banyuwangi	78.412	23.271	-70%	23.271	10.428	-55%	10.428	11.224	8%	11.224	12.694	13%
2	Kab. Blitar	9.924	10.523	6%	10.523	3.130	-70%	3.130	4.848	55%	4.848	2.675	-45%
3	Kab. Gresik	71.733	38.088	-47%	38.088	17.906	-53%	17.906	32.177	100%	32.177	21.855	-32%
4	Kab. Jember	40.120	52.944	32%	52.944	46.627	-12%	46.627	50.171	8%	50.171	46.278	-8%
5	Kab. Kediri	24.102	17.719	-26%	17.719	22.124	25%	22.124	29.636	34%	29.636	15.246	-49%
6	Kab. Lamongan	21.177	26.164	24%	26.164	23.625	-10%	23.625	10.992	-53%	10.992	11.993	9%
7	Kab. Malang	48.017	62.160	29%	62.160	64.923	4%	64.923	12.579	-81%	12.579	17.586	40%
8	Kab. Mojokerto	8.950	25.500	185%	25.500	16.283	-36%	16.283	11.284	-31%	11.284	8.724	-23%
9	Kab. Ngawi	6.399	1.021	-84%	1.021	2.373	132%	2.373	5.390	127%	5.390	2.565	-52%
10	Kab. Sidoarjo	134.021	143.788	7%	143.788	65.261	-55%	65.261	60.807	-7%	60.807	55.337	-9%
11	Kab. Situbondo	17.042	5.633	-67%	5.633	9.144	62%	9.144	6.041	0%	6.041	9.442	100%
12	Kab. Sumenep	16.923	14.535	-14%	14.535	3.589	-75%	3.589	4.465	0%	4.465	18.857	100%

13	Kab. Trenggalek	10.048	6.143	-39%	6.143	3.220	-48%	3.220	2.282	-29%	2.282	4.555	100%
14	Kab. Tuban	10.806	5.425	-50%	5.425	13.398	147%	13.398	15.927	19%	15.927	16.664	5%
15	Kota Malang	9.078	4.178	-54%	4.178	500	-88%	500	8.011	1502%	8.011	435	-95%
16	Kota Mojokerto	24.101	718	-97%	718	1.797	150%	1.797	2.407	0%	2.407	2.746	0%
17	Kota Pasuruan	24.419	7.191	-71%	7.191	7.962	11%	7.962	14.138	0%	14.138	-	-100%
18	Kota Surabaya	4.600	-	-100%	-	1.651	100%	1.651	1.651	0%	1.651	1.651	0%
<b>Average</b>				-24%			7%			92%			-3%

Source: Data Budget Revenues and Expenditure FY 2011-2015 Director General of Fiscal Balance, processed

**B.1.10 The Increasing Percentage Table of Social Aid Expenditure Budget In Incumbent Election Area**

(in million rupiah)

No	Uraian	2011	2012	% increased	2012	2013	% increased	2013	2014	% increased	2014	2015	% increased
1	Kab. Banyuwangi	78.412	23.271	-70%	23.271	10.428	-55%	10.428	11.224	8%	11.224	12.694	13%
2	Kab. Blitar	9.924	10.523	6%	10.523	3.130	-70%	3.130	4.848	55%	4.848	2.675	-45%
3	Kab. Lamongan	21.177	26.164	24%	26.164	23.625	-10%	23.625	10.992	-53%	10.992	11.993	9%
4	Kab. Malang	48.017	62.160	29%	62.160	64.923	4%	64.923	12.579	-81%	12.579	17.586	40%
5	Kab. Mojokerto	8.950	25.500	185%	25.500	16.283	-36%	16.283	11.284	-31%	11.284	8.724	-23%
6	Kab. Ngawi	6.399	1.021	-84%	1.021	2.373	132%	2.373	5.390	127%	5.390	2.565	-52%
7	Kab. Sidoarjo	134.021	143.788	7%	143.788	65.261	-55%	65.261	60.807	-7%	60.807	55.337	-9%
8	Kab. Situbondo	17.042	5.633	-67%	5.633	9.144	62%	9.144	6.041	-34%	6.041	9.442	56%
9	Kab. Sumenep	16.923	14.535	-14%	14.535	3.589	-75%	3.589	4.465	24%	4.465	18.857	322%
10	Kab. Trenggalek	10.048	6.143	-39%	6.143	3.220	-48%	3.220	2.282	-29%	2.282	4.555	100%
11	Kota Malang	9.078	4.178	-54%	4.178	500	-88%	500	8.011	1502%	8.011	435	-95%
12	Kota Mojokerto	24.101	718	-97%	718	1.797	150%	1.797	2.407	34%	2.407	2.746	14%
13	Kota Pasuruan	24.419	7.191	-71%	7.191	7.962	11%	7.962	14.138	78%	14.138	-	-100%
14	Kota Surabaya	4.600	-	-100%	-	1.651	100%	1.651	1.651	0%	1.651	1.651	0%
<b>Average</b>				-25%			2%			114%			16%

Source: Data Budget Revenues and Expenditure FY 2011-2015 Director General of Fiscal Balance, processed

# ANALYSIS ON IMPLEMENTATION OF CORPORATE SOCIAL RESPONSIBILITY (CSR) ACTUATOR TO THE COMPANY EXISTENCE THROUGH THE BENEFITS OBTAINED BY COMMUNITY (A STUDY AT PT. PJB UP GRESIK)

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## Abstract

*Corporate Social Responsibility (CSR)* becomes commitment of companies or business sector to contribute in developing the sustainable economy by viewing social responsibility as materialization of the company's care to its surrounding environment. This research is intended to know the *direct and indirect influence* of Corporate Social Responsibility (CSR) Program to the Company Existence and to the Benefits obtained by community at the surrounding. This research is carried out in Regency of Gresik. The samples of research consist of 75 respondents receiving the CSR program from the Limited Liability Company PT. Pembangkit Jawa Bali Unit Pelaksana Gresik, or commonly abbreviated to 'PT. PJB UP Gresik'. This research applies the *PLS – Partial Least Square Analysis* using the PLS Smart Software. Output of this research indicates that the program of Corporate Social Responsibility (CSR) does not influence the Company existence, but it gives influence to the Benefits received by community and such benefit influences the existence of the Company. The testing on the influence of mediation by using the *Sobel formula* proves that the program of Corporate Social Responsibility has the indirect influence to the existence of the Company through mediator of benefits obtained by community at the company surrounding.

**Keywords:** *Corporate Social Responsibility, Existence of the Company, Benefit Obtained by Community.*

## Introduction

*Corporate Social Responsibility (CSR)* constitutes a future investment for the company to gain the profit. The obtained profit is not merely the financial one but more, namely the trust of the surrounding community and the *stakeholders* based on the voluntary and partnership principles. Stakeholders are not only community in a narrow sense, namely the ones living at surrounding of the company's site, but the community in a large sense, such as the government, investors, political elites, and the like. The form of cooperation established between the company and the *stakeholders* should be the cooperation mutually able to give opportunities to jointly make progress and develop together. The CSR programs established for the welfare of community in the end will turn its direction back, namely giving the profit again to the company. It is expected that the company together with the whole *stakeholders* can jointly develop the sustainable CSR, so that either the economic (financial) or the social and environmental profits can be materialized. *Corporate Social Responsibility (CSR)* is the commitment of companies or business sector to contribute in developing the sustainable economy by taking care of the social responsibility. In Indonesia, the obligation of a company to hold the *Corporate Social Responsibility (CSR)* has been launched by the socializing the Law No. 40 the year 2007 on the Limited liability Company. The company needs to be committed to try to give the biggest benefit to the community.

## Theoretical Review

### 1. Corporate Social Responsibility:

*Corporate Social Responsibility (CSR)* as a concept getting more and more popular recently, has not yet got a single definition able to be applied at a company in general, but there are several definitions able to be used as references. The meaning of *Corporate Social Responsibility* according to some experts is as follows: *The World Business Council for Sustainable Development* (Wibisono, 2007:7) defines Corporate Social Responsibility (CSR) as “*a continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large*”. Kotler and Lee (2005) in (Solihin 2009) formulates, “*Corporate Social Responsibility is a commitment to improve community well being through discretionary business practices and contribution of corporate resources.*” In this definition, Kotler and Lee give emphasis on the word ‘*discretionary*’ meaning that the CSR activity is merely the company’s commitment voluntarily to participate in improving the welfare of community and is not a business activity obliged by the law just like the obligation to pay taxes and the adherence of company to the employment / manpower law. The word ‘*discretionary*’ also gives a nuance that the company conducting the CSR activity shall be the company that has already been adhering the law in doing its business operation (Solihin 2009:5). Definition according to ISO 26000 in (Prastowo and Huda 2011:101) is as follows, “*Responsibility of organization for the impacts of its decisions and activities on society and the environment, through transparent and ethical behaviour that contribute to sustainable development, including health and welfare of society; takes into account the expectations of stakeholders; is in compliance with applicable law and consistent with international norms of behaviour; and is integrated throughout the organization and practiced in its relationship.*”

## **2. Model of Corporate Social Responsibility Implementation**

Model of CSR Implementation varies. There are at least four models of CSR implementation commonly applied in Indonesia. Those four models are as follows:

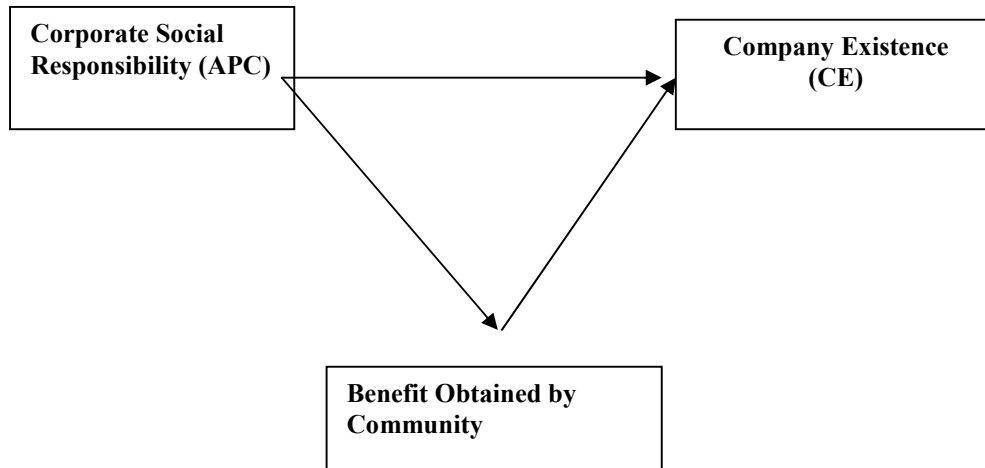
1. *Direct Involvement.* In carrying out the CSR program, the company performs it itself without any intermediary or other party.
2. *Through the Foundation or the Company’s Social Organization.* The company establishes its foundation under the company or its group.
3. *Making partnership with other party.* In running the CSR, the company makes a cooperation with other parties, such as non-government social institution, government institution, mass media and other organization.
4. *Supporting or joining a consortium.* The company has some reasons in carrying out the CSR Program, among others are: Social Reason, Economic Reason and Legal Reason.

## **3. Benefit of Corporate Social Responsibility**

Gurvy Kavei in (Kartini, 2009: 124-125) confirms that each company implementing CSR in its business activities will get 5 (five) primary benefits as follows: (1) Increasing the profitability and stronger financial performance, for example through the environmental efficiency. (2) Increasing the accountability, assessment and investment community. (3) Motivating the employees’ commitment, because they are taken care of and appreciated. (4) Decreasing the vulnerable turmoil with the community, and (5) Increasing reputation and the corporate branding.

## **4. Conceptual Framework**

Conceptual framework set up in this research is as the one presented at the drawing below:



**Figure 1. Conceptual Framework**

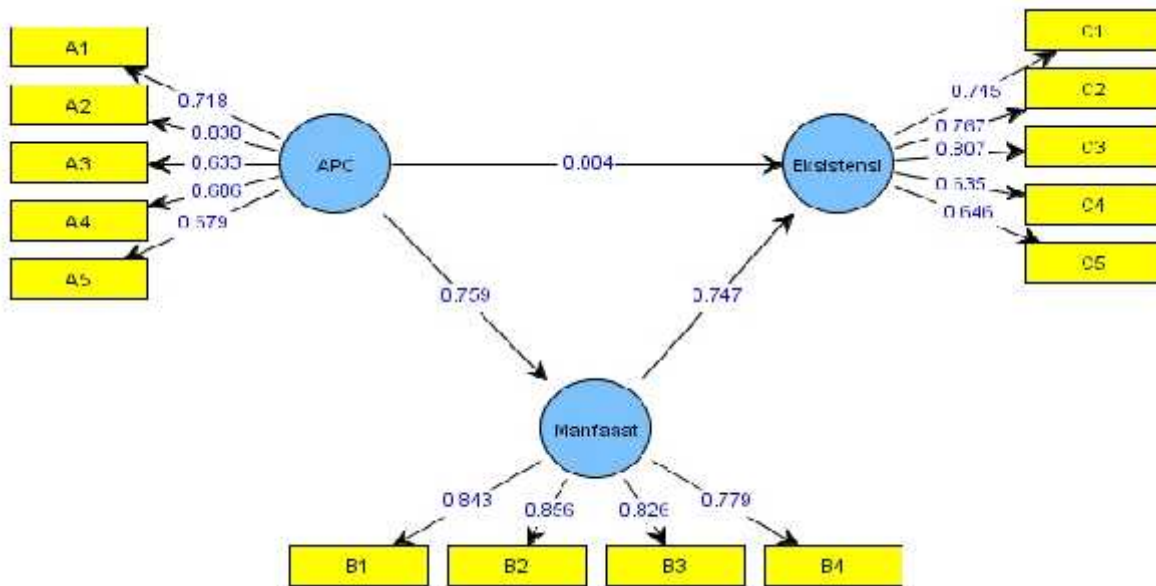
### **Research Method**

Population in this research are the community obtaining the assistance of CSR program from the Limited Liability Company, *PT. Pembangkit Jawa Bali Unit Pelaksana Gresik* for the year 2014. In this research, 75 respondents are taken as the samples. Meanwhile the sample taking is carried out by using the *non-probability sampling* and accidental sampling techniques. The data applied in this research are collected through the questionnaire while the method of data analysis in this research uses the *PLS – Partial Least Square* approach. PLS is an equation model of *SEM – Structural Equation Modeling* with the component or variant basis.

### **Outputs of Research**

#### **1. Outer Model**

*Convergent Validity* of measurement model by reflective indicator evaluated based on correlation between the item score and component score estimated by using the *PLS Software*. The individual reflective size is said to be valid according to Chin, 1998 (in Ghozali, 2006) for the early stage of research from development of loading factor measuring scale of 0.5 till 0.6 is deemed sufficient and valid. In this research, limit of the loading factor applied will be at the amount of 0.60.



Drawing-2: Outer Model.

The processing output using PLS Smart Software indicates the loading value of variable connection and all indicators statistically have been significant and valid in measuring the respective sub-indicator with the loading factor at the amount of  $\geq 0.6$  and t-statistic is  $> 1.96$  at the significant stage of  $\alpha = 0.1$  or 10%. It means all indicators are statistically significant and valid in measuring their respective indicators.

*Validity and Reliability criteria* can also be observed from the reliability value of a construct and the *Average Variance Extracted (AVE)* value of each construct. Construct is said to have a high reliability if its value is 0.70 and its AVE is above 0.50. Table-1 presents the values of Composite Reliability, and the AVE for the whole variables have the value of  $AVE > 0.5$  and  $CR > 0.7$ ; then it can be concluded that the indicators applied at the said variables are very good and able to measure its construct.

**Table-1: Composite Reliability & AVE**

	Average Variant	Composite	Remarks
	Extracted (AVE)	Reliability	
APC	0.510	0.838	Reliable
Existence	0.523	0.845	Reliable
Benefit	0.683	0.896	Reliable

Source: PLS Smart 's Data Processing.

## 2. Inner Model:

**Table-2: Inner Model**

Causality Relation	Line Parameter Coefficient	Sub-sample Average (Bootstrap)	Standard Error (Bootstrap)	t-Statistic
APC>Existence	0.004	-0.013	0.163	0.028
APAC> Benefit	0.7590.	0.752	0,057	13.209
Benefit >Existence	0.747	0.795	0.112	6.701

Source: PLS Smart's Data Processing.

*Outputs of the First Hypothetical Testing* shows that the variable relation between CSR Program Actuator (APC) and the Company Existence (Existence) indicates the line coefficient value at the amount of 0.04 with the t-value of  $0.028 < t\text{-table} (1.960)$ . This result

means that there is no influence of the variable of CSR Program Actuator to that of the Company Existence. *Thus, the First Hypothesis is rejected.*

*Outputs of the Second Hypothetical Testing* indicates that the variable connection between CSR Program Actuator (APC) and the Benefit obtained by community shows the line coefficient value at the amount of 0.759 with the t-value of 13.209 > t-table (1.960). This result means that there is a significant influence of the variable of CSR Program Actuator to that of the Benefit received by community. *So, the Second Hypothesis is accepted.*

*The Third Hypothetical Testing* shows that the variable connection between Benefit obtained by community and the Company Existence indicates the line coefficient value at the amount of 0.747 with the t-value of 6.707 > t-table (1.960). This result means that there is a significant influence of the variable of Benefit received by community and that of the Company Existence. *In this way, the Third Hypothesis is accepted.*

*The Fourth Hypothetical Testing* namely testing the Indirect Influence of the variable between CSR Program Actuator and the Company Existence through Benefit obtained by Community at the Company surrounding. The testing is conducted by using the *Sobel Formula*. The amount of indirect coefficient of APC variable to the Company Existence is the multiplication of the influence of APC Variable to the Benefit Variable and also the Benefit Variable to the Existence Variable, so that the following values are obtained:  $P_{12} = P_1 \cdot P_2 = 0.566973$ . The value of indirect standard error of APC variable to the Existence variable is the multiplication of APC influence to Benefit and the Benefit to Existence, so that the equation is obtained as follows:  $S_{el2} = 0.0956$  and the value of t-test = 5.94. Since the t-value is at the amount of 5.94 > 1,96 it means that the said mediation parameter is significant. Thus, model of Indirect Influence of CSR Program Actuator variable to Company Existence through mediator of Benefit obtained by community at the company surrounding can be accepted. Thus, *the Fourth Hypothesis is acceptable.*

### **Discussion:**

The CSR Program gives emphasis on positive contribution to community and its surrounding. If the CSR program is not implemented pursuant to the benefit received by community, the CSR program will not give impact to the company existence. This output is in conformity with the CSR concept of the World Bank stating, *“The commitment for business to contribute to sustainable economic development working with employees and their representatives the local community and society at large to improve quality of life, in ways that are both good for business and good for development (Wibisono, 2007:7).*

The implementation of CSR Program by PT BJB UP Gresik is pursuant the needs of community and gives impact, namely the community feel getting the benefit due to the implementation of CSR programs, consisting of: the assistance programs in the scopes of education, health, social economy, community order and security, and assistance in environmental facilities. The CSR concept shows that the company cares to the community and its environment. The company gives contribution for the establishment of a better community and cleaner environment. This is pursuant to the CSR Formulation from the Commission for European Community in the Green Paper, namely, *“Essentially a concept whereby companies decide voluntarily to contribute to better society and a cleaner environment” (Kartini, 2009:3).*

The CSR Program of PT BJB UP Gresik is useful, since it is able to improve the image of the Company, to strengthen the Company's Brand and able to distinguish the company and its competitors. The Company will be known more by community as a company which always carries out good activities for community and always accommodates the interest of community in Gresik. The activities performed by this Company are frequently called as *“Corporate Citizenship”* intended to develop the people's welfare, the so-called

“*Community Development*” (Kartini, 2009:16). The implementation of CSR Program is expected to be able to improve the life quality for the coming generation pursuant to the *Concept of Sustainable Development*. The company’s contribution is not only on the aspect of company’s business profit increase, but also positive contribution for community and environment in the scheme of people welfare. This output is in conformity with Wibisono (2007; 7) declaring that the company’s contribution is not only on the aspect of company’s business profit increase, but also positive contribution for community and environment in the scheme of increasing the people welfare.

### **Conclusion**

The CSR program gives emphasis on positive contribution to community and its surrounding. If the CSR program is only for the interest of Company business and not paying attention to the interests of people, the said CSR program will not give any impact to the Company Existence.

The CSR Program implemented by PT BJB UP Gresik is pursuant the needs of community, namely in the fields of education, health, social economy, community order and security, and assistance in environmental facilities. The CSR concept shows that the company cares to the community and its environment. The company gives contribution for the establishment of a better community and cleaner environment. The CSR program already been conducted by PT PJB Gresik is able to raise the company image, to strengthen the company brand and able to distinguish the company to its competitors. Implementation of CSR Program is expected to be able to improve quality of life for the coming generation in conformity with the concept of *sustainable development*.

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# THE EFFECT OF PROFIT LOSS SHARING RATIO TO MUDHARABAH FINANCING IN ISLAMIC RURAL BANK (BPRS) IN INDONESIA, 2010-2014

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## Abstract

The objective of this study is to analyze the influence of the profit loss sharing ratio to mudharabah financing. This study uses a *Vector Error Correction Model* (VECM) to see the long term effect and response to shock that occur in the studied variables. The result shows that in the short run NPF has negative and significant effect, in the long run ratio of profit loss sharing, and BOPO has negative and significant effect, FDR and deposit of mudharabah has positive significant to mudharabah financing. Shock to deposit of mudharabah, FDR, and ROA are positively responded by mudharabah financing and stable in 8th, 10th, and 9th. Shock to profit loss sharing ratio, BOPO, NPF are negatively responded by mudharabah financing and stable in 6th, 9th, and 5th month.

Keywords: *ratio of profit loss sharing, mudharabah financing, VECM.*

## Introduction

Bank is a financial institution whose main activity is to receive savings and reallocate them to the third sides, and also to provide services in the traffic of payment ( Soemitra 2009). In the article 5 of Law number 7/1972, according to its type, bank is catagorized into general bank and rural bank (including islamic rural bank). General bank is a kind of bank which can provide services in the traffic of payment, meanwhile rural bank is a bank which can receive savings in the form term deposit, savings, and other services. Islamic rural bank (BPRS) is a conventional bank yet the operation is based on the islamic principles.

Statistical data of islamic banking state that in 2013 there were 163 islamic rural banks. The increase of this islamic bank is very significant since in 2004, there were only 89 banks. This improvement of the islamic bank is quite good if it is based on the total third party capital (DPK), number of asset, and the total of financing fund. The statistical data of islamic bank state that in December 2013, the total asset of all islamic rural bank (BPRS) in Indonesia reached 4.46 trillion rupiahs. In the period of 2010 until 2014, the improvement of total DPK taken by BPRS in average increased 31% each year, and the total of financing fund provided by BPRS also increased as many as 29% each year (Statistic of Islamic Banking).

The strong point of BPRS compared to other banking institutions is the ability in providing the wider range of service to society especially UMKM (the Outlook of Islamic Banking in 2013). BPRS, which function to intermediate, is showed by the ability of BPRS in collecting and allocating the DPK. The distribution of DPK by BPRS is by financing. The statistical data of islamic banking in 2013 states that almost all of the DPK in BPRS in Indonesia is distributed in the financing side with the percentage of 77.68%, meanwhile the rest is deposited in other banks as much as 22.32%.

BPRS has several contracts or agreement such as wadiah, mudharabah, murabahah, istishna, salam, qardh, ijarah, musyarakah, and multiservice. According to the basic principles of product, islamic banking including BPRS have main product which is financing in the system of profit loss sharing; one of them is developed in the term of

mudharabah financing (Nihar and Subramanyan 2011). Mudharabah is a contract of cooperation between two parties, where the first party acts as the fund owner (shahibul maal), and the second one acts as the fund organizer (mudharib) to organize an economical activity with a commitment of profit loss sharing system, meanwhile the fund owner takes all the risk of the loss as long as mudharid does not cheat or commit unfair action (Umam 2013)

The statistical data of islamic banking states that among all the alternatives contract existing in BPRS, the composition of mudharabah financing only gets 2.43% each year. It can be seen in Table 1 that even though the mudharabah financing composition improves each year, the amount of mudharabah contract is still lower than the amount of murabaha which reaches 69.55% each year.

**Tabel 1 The Composition of Islamic Rural Bank Financing in Indonesia 2010-2014**

No	Jenis Akad	Tahun				
		2010	2011	2012	2013	2014
		Juta Rupiah (persen)				
1.	Mudharabah	65 471 (3.71)	75 807 (2.83)	99 361 (2.79)	106 851 (2.41)	122 467 (2.45)
2.	Musyarakah	217 954 (10.58)	246 796 (9.22)	321 131 (9.03)	426 528 (9.62)	567 658 (11.34)
3.	Murabahah	1 621 526 (78.69)	2 154 494 (80.51)	2 854 646 (80.33)	3 546 361 (79.99)	3 965 543 (79.23)
4.	Salam	45 (0.002)	20 (0.0007)	197 (0.005)	26 (0.0005)	16 (0.0003)
5.	Istishna	27 598 (1.34)	23 673 (0.88)	20 751 (0.58)	17 614 (0.39)	12 881 (0.25)
6.	Ijarah	13 499 (0.65)	13 815 (0.51)	13 522 (0.38)	8 318 (0.18)	5 179 (0.10)
7.	Qardh	63 000 (3.06)	72 095 (2.69)	81 666 (2.29)	93 325 (2.10)	97 709 (1.95)
8.	Multijasa	51 344 (2.49)	89 230 (3.33)	162 245 (4.56)	234 469 (5.28)	233 456 (4.66)

**Source:** Islamic Banking Statistic 2010-2014

According to Wahab (2011) the low mudharabah financing is caused by several factors which are among others the perception factor of people and the organizer of islamic banking. The fact that the number of mudharabah financing is still low shows that islamic banking, including BPRS, still has not reflected the real core business. Instead, the mudharabah financing is very potential in improving the real sector (Andraeny 2011). According to Antonio (2001), the reason why the mudharabah financing is still low is that mudharabah financing is categorized as natural uncertain contract, where mudharib cannot feel sure about the income, both about the amount and the time. This makes bank to become hesitant to allocate mudharabah financing. It also has high risks, such as the inappropriate use of the money by the customer stated in the contract, intended mistake, and the hiding of profit by dishonest customer.

Based on the data in Table 1, it is seen that the composition of mudharabah contract is still low. In fact, mudharabah contract which is the main product of BPRS is supposed to dominate all kinds of contracts existing in BPRS (Wulandari and Kiswanto 2013). The reason is that mudharabah financing is the right financing skim to accelerate the development of the people's economic wealth (Hadi 2011)

If we observe from the internal side of BPRS, the offer of mudharabah financing is affected by the profit sharing, mudharabah deposit, and financial ratio such as Non Performing Financing (NPF), Financing to Deposits Ratio (FDR), BOPO, and Return to Asset (ROA). The financing with is described with NPF, the high NPF will lower the bank ability in distributing the financing (Andraeny 2011). According to Maryanah (2006), the number of offer of mudharabah financing is affected by profit factor. Adzimatunur research (2014) shows that the level of FDR has positive effect toward financing, meanwhile BOPO has no significant effect toward financing. The Gianini research (2012) concerning the factors influencing mudharabah financing at Islamic bank in Indonesia shows that the degree of profit sharing, ROA has significant positive effects toward Mudharabah financing, while NPF gives the opposite effect.

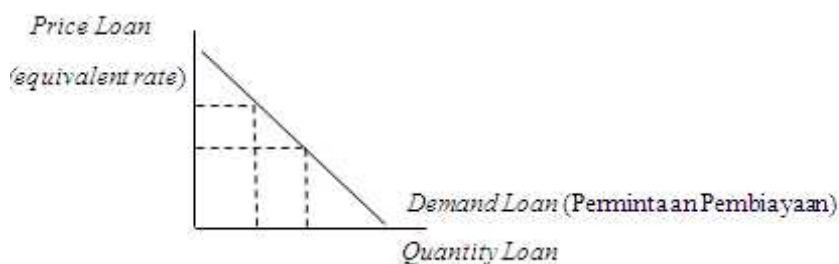
Due to this fact, the purposes of the research are among others :

1. To analyze the effect of profit sharing variables toward mudharabah financing at BPRS in Indonesia in the short term as well as in the long term.
2. To analyze the effect of mudharabah deposit and the variables of financial ratio toward mudharabah financing at BPRS in Indonesia in the short term as well as in the long term.
3. To analyze the response of mudharabah financing at BPRS in Indonesia toward the shock that occurred to the profit share, mudharabah deposit, and financial ratio variables.

The scope of research is restricted to the mudharabah financing, by viewing the effect of the ratio of profit loss sharing toward mudharabah financing at BPRS in Indonesia and paying attention to other factors that effect, such as mudharabah deposit and BPRS financial ratio. The variable of ratio profit loss sharing used in the research is an equivalent rate of mudharabah financing which is subjected to the customers. Due to the insufficient data toward islamic banking, the research only uses monthly data in the period of January 2010 until December 2014.

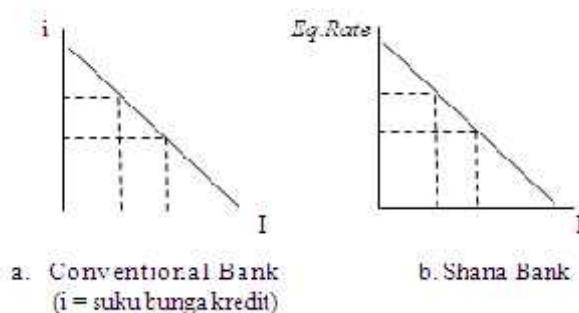
### Theoretical Base

The ratio of profit loss sharing used in the research is represented with equivalent rate of mudharabah financing, which is the ratio of profit loss sharing subjected to the customers that carry out the financing (Beik and Apriyanti 2006). According to Maryamah (2006), the number of offer of mudharabah and musyarakah financing is affected by profit factor (ratio of profit loss sharing). Equivalent rate is one consideration for someone to do the financing. The higher the equivalent rate is, the higher the profit loss sharing that must be paid by the customers to BPRS. Consequently, the people's interest or ability toward the financing becomes lower, and it causes the demand toward the financing becomes lower too. Picture 1 shows that the increase of equivalent rate will lower the demand of mudharabah financing, which can affect of decreasing supply of mudharabah financing.



**Picture 1 Relation of equivalent rate and demand loan**

In conventional bank, there is a term the interest rate of credit, which is interest that is given by the bank to loaner or the price that must be paid by customers to the bank, in the context of the customers who receive the loan ( Kasmir 2004). The interest rate becomes the indicator of the capital returning over the risk taken by fund owner. The higher the bank determine the interest rate of credit, the lower the people's interest for credit, because they must pay the loan and the high interest and vice versa (Anandita 2011). Picture 2a shows that the rise of interest rate at conventional bank causes the the decline of investment. The reason is that the interest rate is the loan for funding the projects of investment so that the rise of interest rate will lower the investment (Mankiw 2007). In the same analogy, picture 2b shows that the equivalent rate of the financing at islamic bank has negative relation with the investment.



**Picture 2 Relation of interest rate and investment in conventional bank, relation of equivalent rate and investment in sharia bank**

Warjiyo (2004) states that besides fund from third party (DPK), the offer of banking credit is also affected by the bank perception toward the business prospect of the debtor and the condition of the banking itself, like the number of unpaid credit (NPL), and Loan to Deposit Ratio (LDR). Suseno and Pieter A (2003) state that the rentability factors or the profit level shown in Return on assets (ROA) also has the effect to banking credit.

Factors which can effect the mudharabah financing based on the theory above are the ratio of profit loss sharing, mudharabah deposit, NPF, FDR, and ROA. BOPO which is the ratio between operational cost and operational revenue also becomes the research variable since it is one of the the measuring ratio of bank rentability.

Mudharabah deposit is one of DPK collected by BPRS, and the withdrawl can be carried out in the certain period of time. The deposit which can be collected by BPRS is allocated into the mudharabah financing. Based on Pramono's research, mudharabah deposit effects positively toward mudharabah financing. The higher the collected deposit is, then the higher fund that BPRS can allocate in the form of mudharabah financing.

Non Performing Financing (NPF) is the ratio describing the number of risky financing toward total financing. According to Andraeny (2011), the increase of NPF will effect to the increase of the amount of PPAP, and this will lower the bank capital so that it will effect the bank ability in distributing the financing. Based on Pratama's research, Non Performing Loan (NPL) gives negative effects significantly toward the allocation of banking credit. Thus, NPF effects negatively and significantly to mudharabah financing. The higher NPF is, the lower the bank interest to distribute the fund through financing.

FDR is ratio between all the credit given by the bank and that received by the bank (Dendawijaya 2005). Thus, FDR gives positive effects to mudharabah financing since the higher the FDR is, the higher the financing distributed by the bank from the third party which will be received.

Dendawijaya (2005) states that ROA is used to measure the ability of bank management in getting profit in a whole. The bigger the ROA of the bank is, the the higher profit that the bank can get, and the better position the bank will receive in the aspect of asset using. According to Gianini research, ROA positively effects the mudharabah financing since the higher ROA is, the bigger profit the bank can get so that the higher fund which can be distributed is.

BOPO is ratio between operational cost and operational revenue. BOPO is used to measure the level of efficiency and the ability of a bank in running the operational activity (Dendawijaya 2005). The lower BOPO confirms that bank operational cost is lowr than the operational revenue so that bank can increase the financing. Thus, BOPO gives negative effect significantly to mudharabah financing.

## **Method Of Research**

### *1. Type and Source of Data*

The type of data used in the research is secondary data in the form of time series. The time series includes monthly data from January 2010 until December 2014. The data source is from Islamic banking statistic and library as well as from internet.

### *2. Analytical Method*

The method of data analysis used in the research is quantitative method, and analysis tool is method of econometric through Vector Autoregression (VAR) if the data are stationary and not intercointegrated. Then, it is continued by using VECM if the data are stationary and cointegrated. In this research, the dependent variable Y is defined as mudharabah financing, while the defining variable is the ratio of profit loss sharing, ROA, CAR, FDR, NPF, Mudharabah deposit, and BOPO. Juanda and Junaidi (2012) state that most econometrical models of time series are constructed based on existed economical theory. The theory of economy becomes the foundation in developing the relation in the models, yet the theory often finds difficulty in finding the right specification for the models due to the complex economical phenomena. The model of VAR can be used to overcome all the problems in the time series data.

There are several models of VAR. One of them is Vector Error Correction Model (VECM). VECM is restricted VAR which is used for non stationary variables but having potential to cointegrated. In VECM, additional restriction must be given due to the existence of data form which are not stationary in certain level, but cointegrated (Firdaus 2011). To analyze VAR and VECM requires several tests such as stationery test, stability test, optimal interval test cointgration test, VECM, Technique of IRF, and FEVD test.

The data stationery test is carried out to meet the requirement of time series model, where the data used in thest are stationary. The test uses Augmented Dickey Fuller Test in the level and the first difference. The data are said stationary when the result of calculation is smaller than T-critical MacKinmon in the real level of 5%. The optimal interval test is to minimize the autocorrelation. In VAR stability test, if the module value is less than 1, then the VAR model is considered stable (Firdaus 2011). The VAR stability test is carried out to make IRF and FEVD become valid.

Cointegrated test is carried out when the data are not stationary in the level, but it is in the first difference. If there is no cointegration, the VAR in the first difference will be used. If vice versa, VECM will be used. IN VECM model, there is a correction through short-term adjusment toward deviation from long run equilibirum (Juanda and Juandi 2012). The IRF test is to observe the response of endogen variable toward the shock. The FEVD test can describe the contribution of each variable toward the shock to the main endogen variable that has been observed (Firdaus 2011).

### 3. VECM Model

The VECM model used in the research is:

$$\begin{bmatrix} \Delta \ln PM \\ \Delta Nisbah \\ \Delta ROA \\ \Delta FDR \\ \Delta NPF \\ \Delta \ln Depo Mudha \\ \Delta BOPO \end{bmatrix} = \begin{bmatrix} \alpha_{10} \\ \vdots \\ \alpha_{70} \end{bmatrix} + \begin{bmatrix} \alpha_{11} & \dots & \alpha_{17} \\ \vdots & \ddots & \vdots \\ \alpha_{71} & \dots & \alpha_{77} \end{bmatrix} \begin{bmatrix} \Delta \ln PM_{t-1} \\ \Delta Nisbah_{t-1} \\ \Delta ROA_{t-1} \\ \Delta FDR_{t-1} \\ \Delta NPF_{t-1} \\ \Delta \ln Depo Mudha_{t-1} \\ \Delta BOPO_{t-1} \end{bmatrix} + \begin{bmatrix} e_{1t} \\ \vdots \\ e_{7t} \end{bmatrix}$$

Note:

- $\ln PM_t$  = Mudharabah Financing
- $Nisbah_t$  = Equivalent Rate
- $ROA_t$  = Return On Asset
- $FDR_t$  = Financing to Deposit Ratio
- $NPF_t$  = Non Performing Financing
- $\ln Depo Mudha_t$  = Mudharabah Deposit
- $BOPO_t$  = Ratio between operational cost and operational revenue.

## Finding and Discussion

### 1. Result of Model Estimation

VECM estimation can show the effect from observed factors in the short term and long term. The real level used in the research is 5%.

Table 2 shows the result of VECM estimation which has short term and long term effect. The existence of long term cointegration is showed with the value of contEq1 valued negative and significant, while the numbers in bold show significant variables. In the short term, only NPF variable does influence significantly, and the variables of mudharabah deposits, BOPO, ratio of profit loss sharing, NPF, and FDR give effect in the long term, while ROA has no significant effect in the long term or in the short term toward mudharabah financing.

The ratio of profit loss sharing represented in equivalent rate of financing effects significantly in the long term and has negative relation. The result of VECM estimation shows that when there is a 1% rise in ratio of profit loss sharing, it will lower the mudharabah financing as many as 0.01369%. The hypothesis stating that the ratio of profit loss sharing has negative effect toward mudharabah financing is acceptable. The equivalent rate of mudharabah financing is ratio of profit loss sharing from the financing subjected to customers by BPRS. The higher the equivalent rate is, the bigger the ratio of profit loss sharing that must be paid is, and it tends to lower the customer's interest in financing, which will give impacts to the declining of mudharabah financing. The same case happens to conventional bank showed in Anindita research (2011) stating that the interest rate effects negatively to the distribution of UMKM, due to the fact that the interest rate is one of the considerations in credit demand to the bank. If the interest rate rises, then the demand will decrease and vice versa.

Mudharabah deposit effects positively in the long term toward mudharabah financing. The estimation result shows when mudharabah deposit increases as many as 1%, then the mudharabah financing will increase 0.318754%. The hypothesis stating that mudharabah deposit gives positive effect to mudharabah financing is acceptable. Mudharabah deposit is one of fund source of DPK so that the higher mudharabah deposit is, then BPRS can distribute bigger fund in mudharabah financing. Wulandari and Kiswanto (2014) state that the mudharabah deposit collected by the bank becomes one of the sources used in the distribution of profit-loss-sharing-based financing. The result of the research is suitable with Pramono research (2013) which discusses concerning the optimalization of profit-loss-

sharing-based financing in islamic bank in Indonesia. Pramono defines that mudharabah deposit has positive effects to mudharabah financing. It is also suitable with the research result carried out by Makiyan (2001), stating that the bigger fund we the bank can collect, the bigger fund the bank can distribute.

NPF has negative and significant relation in the short term. The estimation result shows that when NPF increases as many as 1%, then mudharabah financing will decrease 0.035325%. The hypothesis stating that NPF has negative effect to mudharabah financing is acceptable. NPF is the ratio of unpaid financing toward total of given financing. The high NPF shows the high unpaid financing so that the risk level is high too. Thus, the higher NPF is, then the higher the back up financing cost that must be possessed by BPRS is. The high level of NPF will cause BPRS has less interest in distributing the mudharabah financing (Dendawijaya 2005). According to Andraeny (2011), the increase of NPF will affect the increase of PPAP. This will lower the bank capital so that it will effect tha bank ability in distributing the financing. This is suitable with Pratama research (2010) which discusses concerning the factors effecting the policy of distribution of bank credit. Pratama (2010) states that NPL has negative and significant effect to the distribution of banking credit.

FDR has positive and significant relation in the long term. This shows that when FDR increase about 1%, then mudharabah financing will increase 0.010744%. The hypothesis stating that FDR has positive effects to mudharabah financing is acceptable. FDR is the ratio between all the credit given by the bank and the fund received by the bank. The higher FDR is, then the higher the mudharabah financing that must be distributed by BPRS is. This research is suitable with Prasasti research (2014) which discusses concerning the effect of FDR, NPF, spread of profit loss sharing, and the level of profit loss sharing to the financing. Prasasti states that FDR has positive effect to the financing of profit loss sharing (mudharabah financing). This research is also suitable with the research of (Aal et al 2013) stating that if the FDR is higher, then it will improve the activity of financing by the bank. Aal et al 2013 states that this condition occurs since islamic bank can keep the needs of fund collected from the third party very well so that bank has fund flow which can be used to do the financing.

BOPO has negative and significant relation in the long term. The estimation result shows that when BOPO increase 1%, then mudharabah financing will decrease 0.012199%. The hypothesis stating that BOPO has negative effect to mudharabah financing is acceptable. BOPO is ratio between operational cost with operational revenue. The high BOPO shows that operational cost is higher than operational revenue. Thus, the higher BOPO is, then BPRS tends to lower the the distribution of mudharabah financing.

ROA is a ratio of bank's profit. ROA has no significant relation neither in the long term nor in the short term to mudharabah financing. The hypothesis stating that ROA has positive effect to mudharabah financing is denied. This is based on the Adzmatinur research (2014) stating that the profit received by the bank is not allocated to the financing, since bank only distributes the fund from the third party. In this case, the fund source of BPRS distributed to mudharabah financing is from mudharabah deposit.

**Tabel 2 The estimation result of VECM model.**

<b>Jangka Pendek</b>		
<b>Variabel</b>	<b>Koefisien</b>	<b>Tstat</b>
CointEq1	-0.437293	-3.29737
LN MUDHA	-0.358813	2.39465
DEPOMUDHA	0.273695	0.89251
BOPO	-0.001817	0.64539

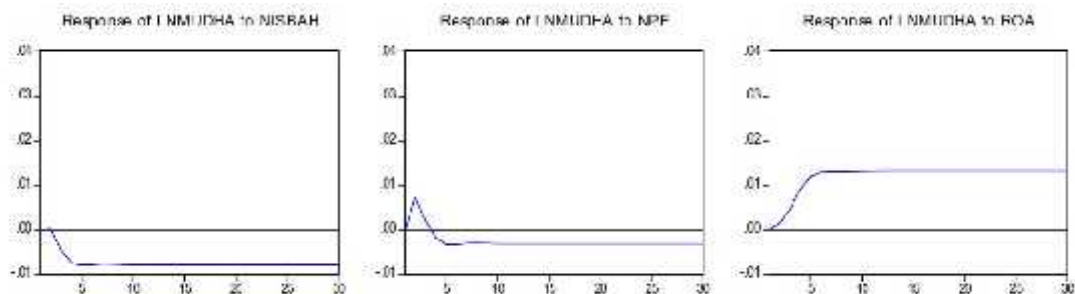


NISBAH	-0.006311	1.79788
NPF	-0.035325	<b>2.93220</b>
ROA	0.005302	-0.23194
FDR	0.000313	-0.13428
<b>Jangka Panjang</b>		
<b>Variabel</b>	<b>Koefisien</b>	<b>Tstat</b>
DEPOMUDHA	0.318754	<b>-2.23844</b>
BOPO	-0.012199	<b>3.99088</b>
NISBAH	-0.013696	<b>4.40335</b>
NPF	-0.022984	1.57027
ROA	0.014401	-0.74799
FDR	0.010744	<b>-9.96012</b>

## 2. The Response of Mudharabah Financing to The Shock Occurring In Each Variable.

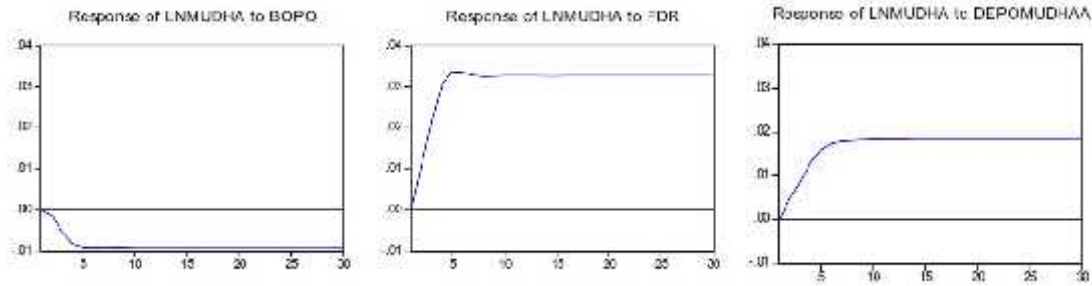
In the analysis of IRF, it will be defined about the response of mudharabah financing if there is a shock in other variables, which are among others ratio of profit loss sharing (represented with equivalent rate), mudharabah deposit, NPF, BOPO, and FDR. This research observes the effects of shock during 30 periods.

The result in Picture 3 shows that the shock as much as one deviation standard in the variable of ratio of profit loss sharing is responded negatively in the 3rd month as much as 0.005% and it becomes stable in the 6th month as much as 0.008%. The shock of NPF as much as one deviation standard effects in the increase of mudharabah financing in the 2nd month until the 3rd month. Then it becomes negative in the 4th month as much as 0.002% and it becomes stable in the 5th month as much as 0.003%. The shock of one deviation standard in variable ROA is responded positively in the 2<sup>nd</sup> month as much as 0.001% and it started to be stable in the 9<sup>th</sup> month as much as 0.013%.



**Picture 3 Effects of the shock of ratio of profit loss sharing, NPF, ROA**

The result in Picture 4 shows that the shock of one of deviation standard in variable BOPO gives negative response in the 2<sup>nd</sup> month as much as 0.001% and becomes stable in the 9<sup>th</sup> month as much as 0.009%. The shock of one of deviation standard in variable of FDR is responded positively in the 2<sup>nd</sup> month as much as 0.011% and it begins to be stable in the 10<sup>th</sup> month as much as 0.033%. The shock in variable of mudharabah deposit gives positive response in the 2<sup>nd</sup> month as much as 0.005% and becomes stable in the 8<sup>th</sup> month as much as 0.018%.



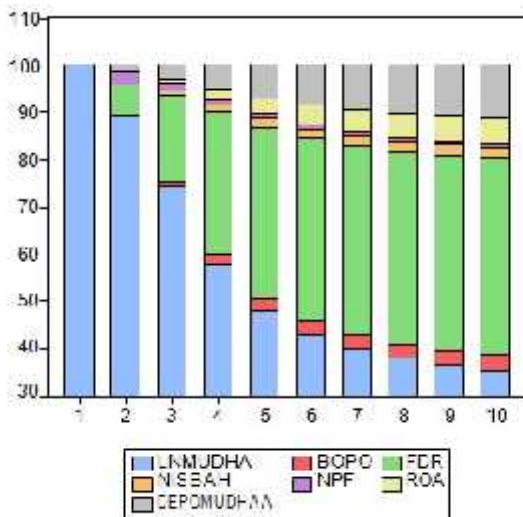
**Picture 4 Effects of the shock of BOPO, FDR, mudharabah deposit**

**3. The Analysis of *Forecasting Error Variance Decomposition (FEVD)***

The analysis of FEVD is a model VAR whose purpose is to predict the variance percentage each variable since there is a change in certain variable in VAR system. The analysis of FEVD is used to describe the importance of every variable in the VAR system due to the shock (Juanda and Junaidi 2012).

The result of Picture 5 shows that in the first month the fluctuation of mudharabah financing is effected by the shock of mudharabah financing itself as much as 100%. The effect of other variables starts to be seen in the second month. In this period, the fluctuation of mudharabah financing is still dominated by mudharabah financing itself as much as 89.39%, FDR as much as 6.32%, NPF as much as 2.87%, mudharabah deposit as much as 1.19%, and BOPO as much as 0.98%.

In the 10th month, there is a decline of effect of mudharabah financing toward the variety of mudharabah financing itself. Picture 5 shows that the effect of mudharabah financing becomes 35.46%. In the tenth month, there is a rise of effect of FDR and it becomes 41.64%, mudharabah deposit as much as 11.08%, and it is effected by BOPO as much as 3.23%. Mudharabah financing is also effected by ratio as much as 2.31% and NPF as much as 0.61%.



**Picture 5 Variance decomposition**

The result of FEVD shows the dynamic contribution from observed variables toward the variety of mudharabah financing. This variety is mostly effected by mudharabah financing itself, FDR, NPF, and mudharabah deposit in the second month. In the tenth month, the contribution is from the mudharabah financing itself toward the variety of financing.

## Conclusion and Suggestion

### 1. Conclusions

- a. The variable of ratio of profit loss sharing gives negative and significant effect in the long term to mudharabah financing.
- b. In the short term, only NPF variable does give significant effect, while mudharabah deposit, BOPO, and FDR give significant effect in the long term and in the short term. Mudharabah deposit and FDR give positive and significant effect to mudharabah financing, meanwhile NPF and BOPO variable give negative and significant influence to mudharabah financing.
- c. The shock occurring in mudharabah financing, ROA, mudharabah deposit, and FDR receive positive response by mudharabah financing, and will be stable in the long term. The shock occurring to ratio of profit loss sharing and BOPO receive negative response from mudharabah financing in the long term, while NPF variable receives negative one, and it will be stable in the short term.

### 2. Suggestion

- a. BPRS should improve mudharabah deposit which is more than 5 month term by giving interesting incentive for customers in order not to cause mismatch, and give a much longer financing. Besides, BPRS should reduce unnecessary cost to be more effective.
- b. Mitigation of risk is necessary to do to minimize the possibilities of potential risks. Mitigation of risk can be carried out by giving extra careful assessment toward the business that will be funded, like analyzing the risks, and improving the control to the business so that the financing will result the optimal return.
- c. The next research can add more external banking variables which effect mudharabah financing like macro-economy variables. Besides, we can also add other variables taken from direct observation (primary data) such as perception of BPRS human resources concerning mudharabah financing.

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## Appendix

### LAMPIRAN Appendix 1 Stationarity Test

Variabel	Level	t-Kritis	
		<i>Mac Kunnon</i>	<i>First Difference</i>
LnMudha	-3.942542	-3.490662	<b>5.807235</b>
Nisbah	-1.869489	-2.911730	<b>-8.849043</b>
LnDepoMudha	-0.759246	-3.490662	<b>-5.539799</b>
FDR	-1.352156	-2.917650	<b>-6.333454</b>
BOPO	-2.753849	-3.487845	<b>9.927607</b>
NPF	-2.111683	-2.911730	<b>-8.974894</b>
ROA	-2.180078	-3.487845	<b>-8.653105</b>

### Appendix 2 VAR Stability Test

Root	Modulus
0.978691	0.978691
0.898410	0.898410
0.739419 - 0.171020i	0.758939
0.739419 + 0.171020i	0.758939
0.741061	0.741061
0.574282	0.574282
0.291547	0.291547

No root lies outside the unit circle.  
VAR satisfies the stability condition.

### Appendix 3 Lag Optimum Test

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-320.0705	NA	0.000345	11.89347	12.14895	11.99227
1	40.55010	616.3334*	4.20e-09*	0.561815*	2.605645*	1.352180*
2	79.74400	57.00932	6.53e-09	0.918400	4.750581	2.400335
3	120.5346	48.94866	1.11e-08	1.216925	6.837458	3.390431
4	173.9519	50.50366	1.55e-08	1.056295	8.465180	3.921371
5	231.1018	39.48539	3.06e-08	0.759935	9.957171	4.316580

\* indicates lag order selected by the criterion

Appendix 4 Cointegration Test

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.598452	160.8262	150.5585	0.0115
At most 1	0.480954	107.9054	117.7082	0.1767
At most 2	0.390318	69.87114	88.80380	0.5121
At most 3	0.281509	41.17173	63.87610	0.8083
At most 4	0.174232	21.99678	42.91525	0.9123
At most 5	0.102598	10.89315	25.87211	0.8812
At most 6	0.076479	4.614565	12.51798	0.6523

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level  
 \* denotes rejection of the hypothesis at the 0.05 level  
 \*\*MacKinnon-Haug-Michelis (1999) p-values

# **BOUNDARY MANAGEMENT IN WORK FAMILY CONFLICT AND COPING STRATEGIES AMONG FEMALE ACADEMICS IN INDONESIA**

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## **Abstract**

Work family conflict has become a major problem for individuals when their role at work interrupts family life or vice versa. With the changing nature of work and technology development, individuals are using different boundary management style as the approaches to manage and organize between their work and family life. The aims of this study are to examine the influence of boundary management style in work family conflict by looking on the source of conflict that it is creating as well as the appropriate coping strategies that is effective to be adopted by female academics in Indonesia. Within a qualitative study, the data were obtained by semi-structured interviews which were considered as the best method after the pilot study. The findings revealed that boundary management style affects the appearance of time-based, strain-based, and behavior-based conflict which becomes the source of work family conflict with different levels and intentions influenced by role identity centric and perceived boundary control. Five effective coping strategies emerged; direct action, help seeking, cognitive restructuring, support from others, and religious coping. Problem-focused coping was the most common coping strategy and was found to be more effective than emotion-focused coping. Religious coping appears by the influence of the context of the study which should be taken into account in the future research of work family conflict. The implications of how boundary management affects an individual's work family life are discussed in this study. The research outcomes suggest that organizations could establish an organizational policy which supports employee's boundary management style and coping strategies in minimizing work family conflict.

**Keywords** –*boundary management, work to family conflict, family to work conflict, coping strategy*

## **Introduction**

Work and family are considered as the most important two distinctive domains in every individual's life. Over the past decades the two domains have been increasingly recognized as many researches have suggested that the two are intertwined and influence one another (Edwards and Rothbard, 2000). There are a considerable amount of studies that examine the implication of the work-family interface and the primary result is generally that the interface between the two domains has the capacity to create positive and negative implications for an individual's experience (Eby et al., 2005). One perspective considers work and family as positive interdependencies, suggesting that a person's role in one domain might be beneficial to the other domain due to positive spill-over where positive experiences from one domain will positively affect the other (Chen et al., 2009). Another perspective, however, focuses on the negative impact of one domain on the other, suggesting that individuals can experience conflict when the demands of one role interfere with the other. The life domains of work and family are often not compatible and an individual's experience in one domain can negatively affect the other. According to Kelly et al. (2014), huge number of workers experience work family conflict to the increasing number of female workers and dual career families. Work family conflict has many kinds of impact on individuals as it creates strain on the individual as well as becoming a stressor that affects the individual's health and well-being (Landy and Conte,

2014).

In order to maintain their role in work and family life as well as minimize the appearance of work family conflict, people make attempt by managing boundary between the two domains. Boundary management style is considered as an individual's approaches to managing and organizing work and family life (Kossek & Lautsch, 2008; Ammons, 2013; Matthews et al, 2010). People who like to make a clear boundary between the two are included in integration style while some others who prefer to make a thick line between the work and family life included into segmentation style. However, there is still a debate on the effectiveness of segmentation and integration of boundary management style in determining the level of work family conflict.

Technological advance creates opportunity for individuals to easily reach their work anywhere and anytime as nowadays there is an increasing number of telecommuting methods as well as people who work from home (Beal, 2004; Madden & Jones, 2008). However, this is in fact perceived by individuals to create more work family conflict rather than eliminating it as a result of individuals experience rapid transitions from one role to another and opportunities for role blurring also appear (Olson-Buchanan & Boswell, 2006). When the boundary is becoming more and more permeable due to various emerging trends and factors, this study would like to focus on how boundary management style influences the appearance of negative interference between work and family life in the context of female academics in Indonesia. This becomes interesting since Indonesia as a developing country has hugely increasing number of women in employment in this country. Aycaan (2013) explained Indonesian cultures that are characterized by specificity and low tolerance for contradiction will perceive work family conflict as a threat that must be prevented. Thus, this study is conducted to fill the gap where there is still little empirical study about boundary management in work family conflict in Indonesia.

Also with the issues of work family conflict having such negative consequences upon individual as well as family and organizational levels (Lande and Conte, 2014), it is important that individuals can cope with the conflict. An individual's ability to cope with work family conflict is pivotal to reduce the level of conflict within a specific context, such as cultural or personal values (Rotondo, 2003). It is therefore the secondary focus of this study to examine effective coping strategies in overcoming work family conflict.

Academia as a profession has a personal job autonomy and the capacity to control when and where the work is done, thus it leads to better coordination in meeting work family demands and creates less work family conflict (Kossek et al., 2005). However, on the other hand, Eby et al (2005) suggested that academicians also have long working hours which leads to greater tendency for experiencing work family conflict as this requires time availability as well as an individual's energy (Steiber, 2009). Thus, academic as a profession is seen as a good example of the changing nature in the workforce where they can reach their work anywhere and anytime which also has big possibility to experience work family conflict.

## **Literature Review**

### **1. Work family conflict**

Work family conflict has been defined by Greenhaus and Beutell (1985) as a form of inter-role conflict when there is role pressure between work and family domain which are non-compatible in some respect. Individuals tend to have multiple roles in their lives where each role has its particular demands, including responsibilities, requirements, duties, commitments, and expectations, all of which should be generally fulfilled by the person (Netemeyer, 1996). According to Lande and Conte (2014), there are two types of role conflict; intra-role conflict and inter-role conflict. Intra-role conflict happens within one



domain of life, such as when individuals experience role ambiguity, uncertainty in the type of job behavior they need to perform in a given situation. Inter-role conflict appears between two different domains in an individual's life. As part of a family and an organization member, employees tend to have multiple roles in the work and family domains that can often cause conflict when the use of time and the negative impact of the job role are opposite to family responsibilities and vice versa (Byron, 2005; Anatan, 2013). Work family conflict is hence seen as a form of inter-role conflict, which occurs when the role demands of work or family make it harder for people to perform their role in the other side.

According to Greenhaus and Beutell (1985), there are three forms which are the sources of work family conflict in an individual's life; time-based conflict, behavior-based conflict, and strain-based conflict. Time-based conflict is conflict that happens when individuals devote time to the demands of roles in one domain and consume their time in meeting the role demands in the other domain. The second form is strain-based conflict, which happens when strain or stress from one role makes it difficult to comply with the demands of the other. Steiber (2009) admitted that strain-based conflict, including anxiety and fatigue, could come from work pressure such as high workload and tight deadlines. Lastly, behavior-based conflict happens when behaviors that may be appropriate for use in one domain are incongruous with behaviors in the other domain. Thoits (1991) posited every individual's role has a set of behavioral expectations, which lead them to creating a set of appropriate behaviors for that role. Behaviour-based conflicts might occur in the workplace or home for example when at home employees are forced to perform emotional stability that they are expected to be warm, caring, and emotionally open whilst at the office they are expected to be more discipline, assertive, and hard work (Anatan, 2013). However, this final source of conflict has been notably absent from the literature unlike the two previous conflicts, which have received the most attention in research (Chen, Powell, & Greenhaus, 2009; Dierdorff and Eliington, 2008; Steiber, 2009).

Earlier research in the measurement of work family conflict has not distinguished between the directions of conflict, even though there is often an ambiguity and overlap between the two domains (Eby et al., 2005). Work family conflict as two different dimensions and as bidirectional was first introduced by Kopelman et al (1983) who stated that work demands that exceed family will contribute to work to family conflict and family demands that exceed work leads to family to work conflict.

Work to family conflict and family to work conflict have sufficient unique variance to warrant independent examination and require different interventions or solutions to prevent and reduce the occurrence of this phenomenon (Mesmer-Magnus and Viswesvaran, 2005). Employees who experience more stress on the job are more likely to have interference from their work demands that exceed family lives, while people who experience more stress at home are likely to have more interference from the family domain on their day to day work (Byron, 2005).

From the previous research it can be seen that work family conflict will affect an individual's role in one domain very differently depending on the direction between work to family or family to work. Theoretical rationale and empirical findings that family variables affect employee's behaviors, particularly work outcomes such as absenteeism, job performance, and turnover (Eby et al., 2005). A lot of studies also mention that family to work conflict has a significant impact on job satisfaction (Anatan, 2013). Family to work conflict also has a significant impact on an individual's career involvement as well as turnover rates (Greenhaus et al., 2001) while in contrast, Wiley (1987) found that people who experience work to family conflict are considered to have more involvement and commitment to an organisation.

On the other side, Frone et al. (1997) examined the impact of work family conflict on an individual's health and found that work to family conflict impacted stress, physical health complaints, and hypertension, whilst family to work conflict created a tendency for higher consumption of alcohol. In other study, Frone (2000) also found that people with work to family conflict are as much as 30 times more likely to experience anxiety disorders, mood disorders, and substance abuse disorders than people who do not experienced it. In the workplace, people who experience family to work conflict are related to higher turnover rate, low perceived career success, and less career satisfaction (Parasurman and Simmers, 2001). With the evidences of unique pattern and different impact of work to family and family to work conflict, hence it is important to use a bidirectional concept to understand the antecedents and consequences of these two forms of conflict.

#### Boundary Management

Boundary theory examines an individual's approach to establishing and maintaining boundaries between multiple roles, such as work and family, both of which influence the other and transition over the two domains (Ashforth et al., 2000). People have different preferences in terms of managing and organizing their work and family roles. Some people tend to separate the cognitive, physical, temporal, and behavioral aspects, which will sharpen the boundaries between one role and the other, whilst others prefer to integrate them, which makes it easier to cross between the role boundaries (Nippert-Eng, 1996). Furthermore, Nippert-Eng (1996) defined boundary management as a continuum with segmentation and integration each at the end, within which an individual's style will likely fall somewhere in the range. Study from Ashforth and (2001) revealed that segmentation style decreases role blurring but increases the magnitude of change make it more difficult to cross over the boundaries, whilst integration style decreases the magnitude of change but increases role blurring and make it more difficult to maintain.

Flexibility and permeability are seen as two important aspects in managing role boundaries, where flexibility refers to the degree to which the role can be enacted in various times and settings; permeability refers to the degree to which a role could be enacted psychologically or behaviorally within the other role's domain (Ashforth, 2000; Kossek & Lautsch, 2012). An individual's tendency to separate their roles with low flexibility and permeability leads to a segmentation boundary management style and the tendency to integrate the roles with high flexibility and permeability leads them to an integration boundary management style.

Individuals have different preferences in terms of boundary management style which is seen to be fit with their values, needs, and desires. To capture the boundary preferences and boundary enactments, Kossek et al. (2012) developed a person-centered approach which can be generally used to identify an individual's boundary management style by examining the three main characteristics: cross-role interruption behaviors, role identity centric, and perceived boundary control. Cross-role interruption behavior is defined as the degree to which an individual allows for interruptions from one role to another. It includes three dimensions of flexibility, permeability, and directionality in the measurement of boundary interruptions. While flexibility and permeability have already been considered as important aspects in managing boundaries, directionality refers to the degree of allowing interruptions in a symmetrical (equal between work to family and family to work) or asymmetrical (more interruption from one domain to another) way. Secondly, identity centrality is an indication of the individual's values towards the different roles, which could be relatively different between work and family. As Ashforth (2001) suggested that each individual is composed of several role identities, which are not equally valued between people; one role can be more important than the others in different people. This leads individuals to focus more effort on one role, where individuals with work role

centrality tend to spend more time on their work and individuals with family centrality prefer to spend more time on their family life (Bagger et al., 2014). The third characteristic of boundary management is perceived boundary control, which is defined by Kossek et al. (2012) as an individual's psychological interpretations of their perceived control over their environment. This was justified by Ammons (2013) that boundary management style is not only influence by individual's needs and desires, but is also influenced by an individual's specific circumstances which offers resources as positive reinforcement over their preference or constraints and potentially becomes negative reinforcement of their boundary management desired. Research found that people with high boundary control were able to enact their boundary management style preference, while those with low control were forced to enact a boundary style that they felt uncomfortable with and this leads to more work family conflict (Kossek and Lautsch, 2008).

Given the concerns of the environmental factor, Kossek and Lautsch (2008) mentioned organisational climate as an important factor which shapes an individual's boundary management style. In a standardised work environment, people usually conform to enacting boundary management style as they are expected to adapt to the organisation's preferred method of managing boundaries with work demands and standard dictations for boundary management enactment. In contrast, organisations which have a more customised organisational work family climate will allow more flexibility for individuals to explore their preferences in managing work and family roles. Here, individuals have a better chance of enacting a boundary management style preference in fitting with their own needs and values that leads to reduce the work family conflict.

#### Boundary management style and work family conflict

People with a high integration style are seen to be better at work life as they have greater accessibility to work, but also potentially greater work family conflict with a possible negative impact on personal well-being and family outcomes (Kossek, Lautsch, & Eaton, 2005). On the other hand, segmentation style is widely believed to create less work family conflict as there is separation between roles thereby preventing distraction and increasing performance (Roberts et al., 2005). However, this may lead to dissatisfaction when individuals face difficulty crossing role boundaries and transitioning between the role at work and the role at home (Sutton & Noe, 2005). Thus, when boundary style is described as a continuum model with segmentation and integration style at each end (Nippert-Eng, 1996), an individual will still have a negative experience in the work and family life as each style has advantages and disadvantages that are seemingly inevitable. When many research reveal implications of an individual's boundary management style in terms of work family conflict, it is still hard to state which boundary management style is better for decreasing work family conflict as every individual has different preferences and environmental conditions which make individual boundaries diverse and unique.

In order to understand how individuals get control over their preferences of boundary management style, it is important to demonstrate the influence on the degree of work family conflict rather than examining the impact of one style on work family conflict. As the topic of boundary management and work family conflict is quite new, there is still a debate on the effectiveness of segmentation and integration boundary management style in determining the level of work family conflict. Furthermore, existing literature haven't show any evidence of the boundary management style that give influence on different source of work family conflict. A study of Chen et al. (2009) revealed segmentation boundary management style influences time-based and strain-based conflict. The authors posited that a high congruency of segmentation style with the environment is positively related to positive spillover, which leads to a lower degree of work to family conflict. However, the study only examined the influence of segmentation boundary management

style with source of work family conflict but only for time-based and strain-based conflict with no differentiation of work to family conflict or family to work conflict.

#### Coping Strategy

The role of coping is important to overcoming and preventing the simultaneous demands of work and family that create unfavorable situations and negative consequences for individuals. Rotondo et al. (2003) posited that an individual's ability to effectively coping with the stressful demands of their roles in the work and family domains is an important way to reduce work family conflict.

Coping is defined by Lazarus and Folkman (1984) as the cognitive and behavioral efforts used by individuals to manage the taxing demands that are considered as exceeding an individual's resources. Furthermore, Lazarus and Folkman (1984) defined coping in two main broad categories: problem-focused coping and emotion-focused coping. Problem focused coping is a coping strategy that concentrates on a direct action to reduce or eliminate the event that they feel threatened by. Emotion-focused coping is attempted to minimize the psychological effects of a stressor on the individual. Lovullo (1997) described the main factor that differentiates these coping strategies is the proximate goal that individuals want to reach. Problem-focused coping concerns on eliminating the stressor, while emotion-focused coping would likely be more focused on reducing the strain.

Originally, the two categories of problem-focused coping and emotion-focused coping are seen to be facilitating one another. Lazarus and Folkman (1984) explained that problem-focused and emotion-focused are interrelated and complementary, problem-focused eliminates the threat and emotion-focused decreases the level of distress so the person can be more calm to think about the problem, which also increases their ability for problem-focused coping. More recently, researchers sought the effects of problem-focused and emotion-focused coping strategy and found that adults tend to use a problem-focused strategy in order to cope with stress, which is linked to higher well-being than emotional-focused coping (Mayordomo-Rodríguez et al., 2014).

#### Coping Strategy and Work Family Conflict

A review of the related literature shows that most employees use different strategies to cope with conflicting family roles and work demands, however, in general problem-focused coping shows higher satisfaction and lower conflict levels in both work to family conflict and family to work conflict. Rotondo et al. (2003) examined the effectiveness of various coping strategies that affect work family conflict. Direct action and help-seeking are perceived as problem focused coping and seen to be effective in reducing work family conflict, whilst avoidance or resignation are found to be associated with higher levels of work family conflict. Statt (2004) admitted that social support from family or a close personal relationship which also a form of problem focused coping will reduce the effect of stress from work family conflict as it creates a positive feeling like concern, liking, respect, and trust for the person, and affirmation of their basic beliefs about themselves and life in general. Only Seiffge-Krenke et al. (2009) suggested the use of emotion-focused coping for people in family to work conflict in order to increase job satisfaction, however this can also have a negative effect on family satisfaction. Seiffge-Krenke et al. (2009) also suggested an avoidance coping strategy to increase satisfaction among family members, but again this contradicts the study by Rotondo et al. (2003) that suggests avoidance will only increase the level of family work conflict.

Besides individual coping strategies that reduce work family conflict there is also the organizational coping role that can help to maximize an employee's ability to cope with stress including work family conflict, for example in the form of family friendly policies, flexible working hours, stress training, employee assistance meetings, etc. Allen et al.

(2014) explained that work family conflict decreased when personal coping and organizational support were aligned. Landy and Conte (2004) mentioned flexible time schedules and child care are becoming more and more important for employees with work family conflict as it reduces their concern about balancing work and family, allowing them to concentrate on their work. Flexible employment, working time and the reconciliation of work and family life are central issues of current policy and academic debate.

### **Methodology**

This study is conducted by using a qualitative research with descriptive-exploratory to portray a deep understanding and an accurate phenomenon of boundary management style and work family conflict, also give insight of the coping strategies adopted in a particular context.

### **Data collection**

A pilot study was conducted to decide the most suitable data collection technique for this study. A focus group was the first method considered as it provides the opportunity for discussion between participants, however, there is doubt about the issue of sensitivity in the topic runs. Participants tend to be unable to speak clearly and fluently and tend to shy away from questions relating to conflict, making the situation not really conducive. When the individual interview is conducted, participants feel more comfortable with giving a response and the situation is very conducive which leads the researcher to obtain more data. Thus, a semi-structured interview was considered as the most suitable method to collect data in this research.

Semi-structured interview data collection techniques enable the researcher to find the most important sources of information required for the study with a clear direction, as well as giving more flexibility to the respondents to explain their answers in detail. The interview questions were open-ended questions that allowed the opportunity for participants to elaborate on their answers. All of the questions were based on existing literature with the aim of filling the gaps in theoretical propositions with the data collection.

### **Sample Study**

Non-probability and heterogeneous purposive sampling was used in the data collection in anticipation of variation in the data from female academicians in public and private university in Indonesia. This technique was beneficial in enabling the demonstration of a particular interest and value, representing the key themes (Patton, 2002). Ten interviews were conducted and then analyzed to obtain equivalent amount of participants, which are five participants from private university and five participants from public university. All respondents chosen were female academics who are married with regard to the work family conflict based on increasing number of female worker and dual career earner in the family as discussed in the literature review. Not only female workers have stronger tendency to experience work family conflict but also academicians as a profession have more flexibility at work but more tension. Hence, female academics are seen to be the most appropriate sample of this study.

### **Data Analysis**

Qualitative data analyses were performed to develop the results by reviewing the data, synthesizing, and then interpreting in order to explain the phenomena being studied. Thus, the data were transcribed, then themed and coded to address the research questions. In order to address the research questions, the data that emerged were themed into:

- Boundary management style

- Source of work to family conflict
- Source of family to work conflict
- Work to family coping strategies
- Family to work coping strategies

The participant's boundary management styles were examined using the person-centered approach of Kossek et al. (2012), as mentioned in the literature review which includes three main characteristics: cross-role interruption, role identity centric and perceived boundary control. From the data that has been collected, from the big theme data then were then categorized and coded based on the following codes were assigned to them:

Boundary management style	Source of work to family conflict	Source of family to work conflict	Coping strategies adopted
<ul style="list-style-type: none"> <li>• Cross-role interruption</li> <li>• Role identity centric</li> <li>• Perceived boundary control</li> </ul>	<ul style="list-style-type: none"> <li>• Time-based</li> <li>• Strain-based</li> <li>• Behaviors-based</li> </ul>	<ul style="list-style-type: none"> <li>• Time-based</li> <li>• Strain-based</li> <li>• Behavior-based</li> </ul>	<ul style="list-style-type: none"> <li>• Problem focused</li> <li>• Emotion focused</li> </ul>

## Result

### 1. Boundary management style

The findings show that participants have different level of perceived boundary control affected by organizational climate in private and public institutions that influence participant's preference and enacted boundary management style. Private institution has more a standardized work environment with 7.30 to 4 working hour, creating female academics conform to prefer and enact more segmentation boundary management style. Participants from public university, on the other hand, can follow their own preferences when it comes to boundary management styles, as they have more flexibility to control their work. However, influence of family particularly husband that enable them to use their boundary management style is also taken into account. They are thus in a position to change between integration and segmentation depending on the opportunities and constraints of the environment. They are most likely to choose alternation as a boundary management style which likely is defined by Kossek and Lautsch (2012) as the notion of when and where to adapt one's style to either integrate or separate the role between work and family. Table 1 gives overview of participants boundary management style.

Participant	Cross-role Interruptions			Role Identity Centric	Perceived Boundary Control
	Flexibility	Permeability	Direction		
A1	Low	Low	Asymmetric	Family	High
A2	Low	High	Symmetric	Dual centric	Low
A3	Low	Low	Asymmetric	Family	High
A4	Low	High	Asymmetric	Family	Low
A5	Low	Low	Symmetric	Dual centric	High
A6	High	Low	Symmetric	Dual centric	High

A7	High	Low	Symmetric	Dual centric	High
A8	High	High	Symmetric	Dual centric	High
A9	High	High	Symmetric	Dual centric	High
A10	High	High	Asymmetric	Family	High

## 2. Influence of Boundary Management Style in Work Family Conflict

The findings show that the boundary management style enacted by participants influences the type of conflict appearance and all of the forms might be interrelated. In order to highlight the source of conflict influenced by boundary management style, this section is divided into two directions, i.e. work to family conflict and family to work conflict to take into account the bi-directionality of work family conflict, with each direction having unique and specific characteristics (Eby et al., 2005).

### Work to family conflict

Participants with a stronger tendency to integrate work and family domains tend to experience more work to family conflict in their everyday lives, unlike participants with a stronger segmentation style. This finding is in line with a previous study by Kossek et al. (2005) which argues that integration style may negatively affect personal well-being and family outcomes, which then increases work to family conflict. The effect of boundary management style enacted by individuals creates different source of work to family conflict that are in keeping with the three forms of work family conflict by Greenhaus and Beutell (1985) stated in the literature review: time based, strain based, and behavioral based.

### A. Time Based

Participants who separate the work and family role tend to not experience time-based conflict in their everyday lives, with the exception of certain periods when an increased workload forces them to work over time. This affects their time that is supposed to be spent in their family role and often creates conflict.

### B. Strain based

Participants who separate work and family domain also admit little strain based conflict in their family lives, in line with Chenet al. (2009) who found that people who enact a segmentation boundary style tend to experience less strain-based conflict. Meanwhile, participants who often take work to home concede that work pressure usually becomes the main problem that results in work to family conflict outcomes, such as being unable to focus on their responsibility at home or to be emotionally sensitive with their family. The findings show that role ambiguity becomes the major source that caused strain-based conflict in the work to family domain, matching Soltani et al. (2013) who find that role ambiguity has a significant impact on work family conflict.

### C. Behavioral Based

The findings revealed that participants either segmentation or integrator experience conflict when they are being too busy to fulfil behaviour expectations from work that decrease their capability to do their responsibility in family role. Participants who separate the two domains are more likely to experience behavioural-based of work to family conflict as small acts such as answering the phone could create conflict between the work and family domain.

### **3. Family to Work Conflict**

In family to work conflict, all of the participants admit that they experience difficulties in their everyday lives between their role in family faced with the obligation to work. Findings show that the major conflict experienced by participants comes from family expectation upon their role. Boundary management style enacted by participants influences the source of conflict appearance with all of the forms might be interrelated.

#### **A. Time based**

Participants who tend to exhibit a segmentation style often come late to the office because they have finish their role at home before they leave the house. Meanwhile, participants with integration style more often experience time-based conflict since there are family demands such as taking care of the children, picking up the children, and taking care of the household.

#### **B. Strain based**

The findings show that participants experience family to work conflict because problems from home make it difficult for them to work. Participants who have a segmentation style experience high level of strain-based conflict as it is hard for them to take control of home when they are away. In addition, participants who have more flexibility to integrate the work and family domain experience more strain-based conflict because of the quick inter-role change that is expected of them.

#### **C. Behavior based**

The findings show that behavior-based conflict appears in the family to work direction, as behavior and psychological expectations in the family role makes it difficult for participants to fulfill work requirements. The conflict appears across all participants regardless of boundary management style. A number of participants admitted that their role as a mother or wife in a family often prevents them from achieving the best results in their work role.

From the findings it can be seen that boundary management style influence work family conflict only in different level and type of sources. Integrators found it more difficult to face work interferes with family causing work to family conflict in terms of time and strain rather than the separators. This is in line with previous study by Chen et al. (2009) which argues that segmentation style will lower the level of time-based and strain-based work to family conflict. Integrators found to experience work to family conflict might be because the rapid and quick boundary crossing activity that decreases the magnitude of change but increases role blurring and make it more difficult to maintain. However, behavioral based is mostly experienced by people with segmentation style as it decreases role blurring but increases the magnitude of change make it more difficult to cross over the boundaries. To conclude, the findings show that integrators are more frequent to experience work family conflict rather than separators, but when a conflict occurs that will be harder for separators to face particularly when the environment does not give them ability to enact their boundary management preferences.

Mostly participants put off their work role and focus on their family role when there is high family demand, which they perceived as pivotal for them, showing family identity centric. This could be influenced by contextual factor where the study was taken in a high culture that women are the most responsible for family as a study by Grover & Crooker (1995) suggested that women tend to restructure their work to meet the demands of family needs.



#### 4. Effective Coping Strategies

The data collection provides evidence of a range of specific coping strategies that are adopted by participants to overcome work to family conflict. Even when there is a significant difference between the source of work to family conflict and family to work conflict, the coping strategies are quite similar between the two directions so that the finding will not be divided into two categories.

- Direct action

In order to cope with work to family conflict or family to work conflict, all participants tend to more directly cope with the problem when they have enough resources to do so. Direct action is a form of problem-focused coping where the person does something to directly affect whatever is interpreted as a strain (Lazarus and Folkman, 1985). Direct action coping tends to be used to overcome time-based and strain-based conflict between work and family roles. People who adopted direct coping strategies in facing work to family conflict tend to have lower levels of work family conflict. However, some participants look for more enjoyable tasks before addressing the problem even if there is enough resource to do so. Dewe and Guest (1991) defined this as postponing action, where individuals distract their attention away from the particular issue by engaging in a more pleasurable activity.

- Cognitive Restructuring

As discussed in the literature review, cognitive restructuring is a form of problem-focused coping which is also defined by Rotondo (2013) as a coping strategy that has a significant influence on work family conflict. Participants tend to restructure their mind over a behavioral-based conflict, particularly within family to work conflicts.

- Help Seeking

Another strategy that emerged is to seek help from others to ease their duties. Rotondo (2003) found that help seeking is a form of problem-focused coping which is strongly effective in reducing work family conflict. In this study, participants usually search out help in the organization environment as well as in the family environment to reduce the conflict between work and family.

- Social Support

According to Lazarus and Folkman (1985), social support is a form of emotional focused coping which refers to seeking emotional support from other people. Participants tend to share their problems with other people in their family and work environment to seek emotional support and advice regarding problems, particularly when facing strain-based and behavioral-based work family conflict. Carlson & Perrewe (1999) suggested social support as an important strategy to cope with work family conflict which will affect the entire stress process. Judging by the findings, problems resulting from work demand tend to be shared with people in the family domain, whilst problems arising from family demands are more likely to be shared with people in the work environment.

- Religious coping

In contrast to the strategies mentioned above, the findings from this sample identified the emergence of religious coping, which was not considered in the literature review. Drawing on the participant's responses, religious coping is commonly used to overcome work family conflict. Somechand Drach-Zahavy (2007) emphasize that no single coping style is considered universally appropriate. This is in line with a previous argument of Rotondo et al. (2003) who claim that some specific forms of coping might work better within a specific context, such as cultural or personal values. In this study, religious coping appeared to be used by participants in work to family conflict as well as family to work conflict by taking recourse to the guidance of the Islamic religion, praying, and the

remembrance of God.

Problem focused coping strategies more often appear and are more effective than emotion focused coping in overcoming work to family conflict as well as family to work conflict by female academics in Indonesia. The tendency to use problem focused coping shows that participants perceive themselves as having sufficient ability to change the unfavorable situation and deal with the problem. As Somechand Drach-Zahavy (2007) stated the use of problem focused coping in work family conflict can only be effective in situations where individuals have the ability to make changes, whereas emotion focused coping is preferable when there is insufficient ability for individuals to change the situation. The findings of the study hence support previous studies which claimed that problem focused coping was more effective in reducing work family conflict (Rotondo, 2003; Dewe & Guest, 1991). The appearance of religious coping highlights the importance of the context of the study, as an individual's culture and religion influence their coping behavior. Therefore, it is important for organizations and or future research to consider the context. Organizational support and family support are needed to enhance female academic's ability to cope with work family conflict.

#### Better Coping Strategies: Employee Perceptions

Somech and Drach-Zahavy (2007) pointed that individual's personal coping strategies required organisational support to decrease work family conflict. Participants admitted that environmental support would be beneficial for them to cope with work family conflict. In organizational environment, participants suggested that institutions could provide routine religious activities to help employees reduce stress and tension. This is seen as important for them to have such activity in the midst of their busy life showing the importance religious coping for them. Participants also asked for a clear definition of their role by the organization in order to feel less overwhelmed by their workload. In the family environment, participants hope more flexibility from their spouse even they understand their role in the family.

#### Conclusion

The findings of this study demonstrated the potential role of boundary management style in the source of work family conflict. This provides a comprehensive view for the literature by showing the influence of boundary management style in creating the source of work family conflict with regard to the bi-directionality attached into it. Finding shows that the source of work family conflict is in keeping with the model of Greenhaus and Beutell (1985), which conflict happens when time from one domain interrupts the other, strain from one domain interrupts the other, and behavior expectation from one domain interrupts in the other. While every individual's boundary management style preferences, (either to separate or to integrate the work and family domain) has the potential to create all of the three forms of work family conflict, the study reveals that role identity centric and perceived boundary control will likely to have more influence in determining the direction and level of work family conflict.

In order to cope with work family conflict, there are five coping strategies that appears in this study which are seen to be effective; direct action, help-seeking, cognitive restructuring, support from others, and religious coping. Problem-focused coping is more likely to be used to overcome work family conflict than emotion-focused coping. One interesting finding shows that cultural context influences the preference of coping strategy. Organization as well as family environment are considered to help individuals cope better with work family conflict by providing support for personal coping strategies and making

clear definition of their role by the organization in order to avoid role ambiguity.

The rapid increase of women who work and also dual earners in the family brings with it huge issues of work family conflict. As flexible working hours usually are a common way to decrease conflict between work and family roles experienced by employees, the changing nature of work brings more opportunities for people to manage their work and family lives. Future research might be required to explore this further, although individual differences are perhaps inevitable.

### Recommendations

This study offers recommendations for companies to minimize work family conflict that experienced by employees. First, organizations need to take action to actively manage cultures that appropriate for employees to perceived boundary management control which growing to be diverse from time to time. This may ultimately enhance organizational effectiveness as well as improve an individual's satisfaction and decrease work family conflict. Managers or supervisors need to better understand, prepare, and support employees by applying a family friendly policy, either formally or informally, which is in line with their boundary management style. For example, if the person tends to separate their work and family life domains, then do not give any sudden events or workloads that will create time-based and strain-based work family conflict. In order to do that, training could be implemented to improve the knowledge of managers, to allow them as well as employees a more manageable life. Training might also help employees with increasing self-awareness over their boundary management style, including helping them feel more or less within the perceived boundary control. Hence, better communication could be established between employees, managers, and families in order to better set and manage expectations and to identify the solutions.

Secondly, the study also emphasized the role of coping strategies in overcoming work family conflict. Organizational interventions might also be initiated or developed to help individuals adjust effective coping strategies to overcome work family conflict. As coping strategies might be used and important for individuals, organizations could enhance personal coping strategies by taking them into account in the organizational strategy. For example, in response to the case of religious coping that appears in this study, organizations could conduct a routine religious meeting which will require an allocated time and fund. The event could be implemented without taking up more than an hour, because this would further create time interruption from work to family which is not intended.

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## OPENING THE BLACK BOX: THE ANTAGONISTIC RELATIONSHIP OF LEADERSHIP ON EMPLOYEE PERFORMANCE

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### Abstract

**Purpose** - To examine the effect of transformational leadership, transactional leadership, empowerment, commitment on employee performance and to examine the difference of employee characteristics, transformational leadership, transactional leadership, empowerment, commitment and employee performance between upper level management and lower level management.

**Design/ Methodology/ Approach** – The research population is employee on industry, specially middle and large organization. The sampling method is purposive sampling and accidental sampling. Analysis method is structural equation model.

**Findings** – This research conduct two models of the relationship of leadership on employee performance. Findings of the first model show there are not significant relationship between independent variables and dependent variable. Then, the model is modified as the second model. Findings of this research show eight relationships. Firstly, the positive and significant relationship between transformational leadership and employee performance. Secondly, the positive and significant between transactional leadership and commitment. Thirdly, the positive and significant between empowerment and employee performance. Fourthly, the positive and significant between empowerment and commitment. Fifthly, the positive and insignificant relationship between transactional leadership and employee performance. Sixthly, the positive and insignificant transformational leadership and empowerment. Seventhly, the positive and insignificant commitment and employee performance. Eightly, the negative and significant between transformational leadership and commitment.

The second findings of this research show there are mean score difference of employee characteristics, transformational leadership, transactional leadership, empowerment, commitment on employee performance between upper level management and lower level management. Specially, there is not mean score difference of commitment between upper level management and lower level management.

**Research Limitation/ Implications** – This research conduct five variables only. To determine model of relationship between leadership and employee performance, it can use many variables or more than five variables. So, the further research should use other variables, for instance organization culture, moral and ethics as moderating variables.

**Practical Implications** – Firstly, the companies should pay attention for implementation of transformational leadership, transactional leadership, empowerment, commitment on employee performance. Secondly, the companies should pay attention for management level, specially upper level management and lower level management.

### Introduction

#### 1. Research Background

Leadership continued to be one of the most widely discussed topic by the researchers from all over the world (Kuchler, 2008). Jong & Hartog (2007) described leadership as a process to influence people in order to get desired results. Lok and Crawford (2004) proclaimed that leadership plays a vital role in determining the success and failure a firm.

There are many different styles of leadership. Nevertheless, in its development, this relatively new model in the field of leadership study is called transformational model (Yukl, 2007).

Transactional leadership is the second part of transformational leadership theory. Transactional leadership concentrates on the exchanges that occur between leaders and followers (Northouse, 2007). These type of leadership deals with maintaining the current situation and motivating people through contractual agreement (Bass, 1985; Jung, et.al., 2008).

The effect of transformational and transactional leadership on performance was first proposed by Burns (1978), then developed by Bass (1985), and followed by other researchers. Various researches such as Lowe, Kroeck and Sivasubramaniam (1996) in their meta-analysis study support the positive effect of transformational and transactional leadership on performance.

Although many researches support the effect of transformational and transactional leadership on performance, only a few researches stress on how leadership style affects performance and infact the process was complicated (Sparks & Schenk, 2001). Therefore, studies are needed to reveal what is behind the effect of transformational and transactional leadership on performance (Kirkpatrick & Locke, 1996) and this study tries to reveal the affecting process. The study about the effect of transformational and transactional leadership on performance is important for three considerations.

First, transformational and transactional leadership will encourage employees, directly or indirectly to achieve organizational goal and to encourage employees for extra effort for the sake of reaching the expected performance (Burns, 1978; Bass, 1985). Hall et.al. (2008) defined transformational leadership as a system of changing and transforming people.

Second, this study explores variables included in the effect of transformational and transactional leadership on performance. Previous researches developed new variables such as, value congruence and trust (Jung & Avolio, 2000); emotion and frustration (Kennedy & Anderson, 2002) and other researches as well. The findings show that there is a need for other variables about the effect of transformational and transactional leadership on performance. This study expands variables by including empowerment and commitment in this research model.

Empowerment is chosen because it has potentials to affect performance that benefits organization and individuals (Liden & Tewksbury, 1995 as quoted by Liden et al., 2000). Commitment also plays an important role in increasing performance. Meyer and Allen (1997) in Brown (2003) explain that commitment potentially predicts performance.

Based on the various studies mentioned above, this research intend to study the effect of transformational leadership, transactional leadership, empowerment, and commitment on performance. That study is needed because the four variables will stimulate employees in developing their full potential to achieve performance (Hartog et al., 1997).

This study also intends to reveal “ the black box“ within the effect process of transformational leadership, transactional leadership, empowerment and commitment on performance viewed by the psychological theory perspectives. It is necessary for better understanding about leadership effect on performance by adding other variables into the whole relationship.

Third, subjects of this research are employees working for both upper and lower management level. This reseach examines the mean differences of respondent characteristics, transformational leadership, transactional leadership, empowerment, commitment, and performance based on management level. The study about the score differences is important because researches merely examine the transformational and transactional leadership on upper management level and is still limited to lower management level, whereas management level is important contextual factors in organization (Antonaksis et al, 2003). The existing study of empowerment is limited to middle management level (Quinn & Spreitzer, 1996). Moreover, the study of the respondent characteristic, transformational leadership, transactional leadership,



empowerment, commitment, and performance differences based on management levels.

The topic of the prior research is the effect of transformational and transactional, empowerment and commitment on performance conclude that there were not influence of transformational leadership, transactional leadership, empowerment and commitment toward employee performance. Based on the information, the further research conduct modifying model. Specially, the influence of empowerment toward commitment.

This study is built and based on previous theories and research model such as: (1) transformational and transactional leadership (Burns,1978 dan Bass, 1985; Bass & Avolio,1990; 1995), (2) empowerment theory (Spreitzer, 1995), (3) commitment theory (Allen and Meyer, 1990), (4) management level theory (Katz & Kahn, 1966), (5) Jung and Avolio model (2000), and (6) relevant psychological theories such as self efficacy theory (Zulkosky, K., 2009), substitute for leadership theory (Lunenbrug, F.C., 2010), social identity theory (Hogg, M.A., 2001), the psychological contract theory (Linde, B., 2015), self determination theory (Gagne, M & Dect, E., 2005), self management theory (Grady,P., 2014).

## **2. Research Objectives**

This study has two objectives : 1) to examine the effect of transformational and transactional leadership, empowerment, and commitment on performance and 2) to examine mean differences of respondent, transformational and transactional leadership, empowerment, and commitment on upper management level and lower management level.

## **Hypotheses and the underlying theories**

### **1. The Theory Of Transformational And Transactional Leadership**

Burns (1978) defined leadership as leader's activities in driving followers to achieve established goals as the representation of values, motivation, wants, needs, aspirations, and the expectation of leader and his followers. Burns divided leadership into transformational leadership and transactional leadership.

Transformational leadership is a process that increased moral and motivates followers to higher level of motivation. Transformational leadership also strive to increase awareness of the followers by imposing moral value and idealism, giving emotional response to follower, and making the follower change their beliefs, values, capabilities, motives in order to increase their performance for the sake of organization rather than their own interest (Burns, 1978; Tichy & Devanna, 1986; Druskat, 1994).

Transformational leaders can create significant organizational change and act change agents, foster higher level of intrinsic motivation and loyalty among follower, introduce a new image or view of the future and create a commitment to this image among followers (Kinicki & Kreitner, 2008; Noorshahi & Yammai Dozi Sarkhabi, 2008). Transformational leadership is comprised of five dimensions which are idealized influence (attribute and behavior), inspirational motivation, intellectual stimulation and individualized consideration.

Transactional leadership concentrates on the exchanges that occur between leaders and their followers (Northouse, 2007), in which helps follower to fulfill their own self interest (Bass, 1999). Transactional leadership is leader's effort to encourage subordinates in achieving the determined performance (Burns, 1978). Transactional leadership has two dimension; contingent reward and management by exception /MBE (consisting of active management by exception /MBE-A and passive management by exception /MBE-P) (Bass, 1985).

### **2. The Empowerment Theory**

Voght and Murrell (1990) defined empowerment as activities to build, develop, and increase power through cooperation, sharing, and working together. That interaction process is

continuous and is based on synergy. Empowerment can also be defined as the authority to make decisions in an area of responsibility without necessity of prior consents from others (Luthans, 2011 as quoted by Ekaningsih, A.S., 2014). Empowerment is viewed as management technique used by a leader in increasing employee performance (Conger & Kanungo, 1988; Kanter, 1989; Spreitzer, 1995, 1996). Empowerment consist of: (1) Impact (2) Competence (3) Meaningfulness: (4) Self- determination (Thomas & Velthouse 1990).

### **3. The Commitment Theory**

Ghosh, et.al. (2014) asserted there has been substantial review of the organizational commitment literature from the approach proposed by Becker (1960) through Meyer and Allen (1999) till Somers (2009). Commitment is defined as a relative power owned by someone in identifying and involving himself to the organization, that is marked especially with the trust of the organizational values and objectives, the willingness to show effort on behalf of organization and strong willingness to remain in the organizational member (Oliver, 1990). Organizational Commitment has three dimensions: 1) Affective commitment, 2) Continuance commitment, 3) Normative commitment (Allen & Meyer, 1990).

### **4. The Performance Theory**

Performance has two dimension such as task performance and contextual performance. Task performance is in role behavior, whereas contextual performance is extra role behavior. Component of task performance such as : 1) job specific task performance, 2) non job specific task performance, 3) written and oral communication proficiency, 4) supervision and 5) management or administration. Whereas component of contextual performance such as demonstrating extra effort, following organization rule and policy, helping and cooperating with others and alerting colleagues about work related problems.

### **5. The Hypothesis Formulation**

#### **A. The Effect of Transformational and Transactional Leadership on Performance**

Transformational and transactional leadership can encourage employees to achieve established organizational goal and are able to motivate followers to work hard reaching performance outcome. Previous empirical studies indicated that transformational leadership has positive effect on performance (Kirkpatrick & Locke, 1996; Lowe et al., 1996). Empirical studies concerning transactional leadership also find that transactional leadership (contingent reward) has positive effect on performance (Hunt & Schuler, 1976, as quoted by Howell & Hall-Marenda, 1999). Bass (1985a, 1985 b, 1985c) The three empirical studies find that transformational leadership and transactional leadership have positive effect on performance. Bass (2005) study conclusion that there is a significant relationship between transformational leadership on performance. Transactional leadership has positive and significant on performance (Ahn, et.al., 2005 as quoted by Sundi, K., 2013).

H<sub>1a</sub>: Transformational leadership has positive effect on performance

H<sub>1b</sub>: Transactional leadership has positive effect on performance

#### **B. The Effect of Transformational and Transactional Leadership on Empowerment**

Transformational leadership created a sense of self identification in group until employees feels empowered and inspires employees in order to achieve performance beyond the established standard with focusing on employee empowerment (Yammarino & Dubinsky, 1994, Kark et al., 2003).

Transactional leadership empowerd employees by giving contingent reward through recognition, strengthening personal competence, and giving insentives to make employees participate and affect the decision making process in their work (Spreitzer, 1995). Through

transformational leadership and transactional leadership dimension, a leader empowers employees. The empirical studies Keller and Danserau (1995); Gomez and Rosen (2001); Jung (2001); Ozaralli (2002) and Kark, Shamir and Chen (2003) found that leadership has positive effect on empowerment. So, the hypotheses are :

H<sub>2a</sub>: Transformational leadership has positive effect on empowerment

H<sub>2b</sub>: Transactional leadership has positive effect on empowerment

### **C. The Effect of Transformational and Transactional Leadership on Commitment**

Transformational leader kept on motivating employees so that they are ready to accept and internalize values and goals directed to them. That internalization process grew and increased commitment (Homrig, 2004). Through idealized influence and individual consideration dimension, transformational leader is able to motivate employees by emotional attachment. Emotional attachment grows because the employees' admiration to leader will develop affective commitment. Emotional attachment grew because employees accept individual attention through individual consideration. This enables affective commitment to grow (O'Reilly, 1989).

Transactional leadership affected short term commitment. The relationship between leader and employees in the transactional leadership is based on economical motive (Crossman, 2004). Bass (1988) stated that transactional leadership is needed when employees commitment and involvement decrease. Employee can be encouraged by contingent reward. Their interest can be developed for achieving their goal. Reward is given in accordance with performance. Management by exception will encourage employee's interest for achieving reward. Cooperation is based on the negotiation, not on problem solving or mission (Bass & Avolio, 1994). Empirical study of Koh et al., (1995), Purwanto (2002), Brown (2003) found that transformational and transactional leadership has positive effect on commitment.

Limsili & Ogunlana (2008) proclaimed that transformational leadership is a better leadership style and worker productivity and organizational commitment is facilitated by transformational leadership. Ismail & Yusuf (2009) studied the impact of transformational leadership on followers commitment and concluded there is significant positive relation between these two variables. The hypotheses are :

H<sub>3a</sub>: Transformational leadership has positive effect on commitment

H<sub>3b</sub>: Transactional leadership has positive effect on commitment

### **D. The Effect of Empowerment on Performance**

Empowerment had positive potential for affecting individual and organizational performance (Liden & Tewksbury, 1995 as quoted by Liden et al., 2000). Employee empowerment process is implemented by delegating the authority of decision making to lower level of organizational hierarchy, and by providing opportunities to employees for affecting organizational performance. According to Kennedy (1995), performance can be increased through employee empowerment. Liden et al. (2000) also found that empowerment has positive effect on performance.

H<sub>4</sub>: Empowerment has positive effect on performance

### **E. The Effect of Commitment on Performance**

Commitment was a power that binds an individual to a certain action to make relevant to the established target (Meyer & Hersovitch, 2001 as quoted by Kark & Van Dijk, 2007). Commitment affected various important behaviors to effective organizational functioning (McCaul et al., 1995). Commitment is needed for productivity. Productivity can be achieved when employees participate with high involvement in achieving the organizational

objectives. It comes through solidarity and behavioral support to achieve the objectives which in turn increase performance (Bass, 1990).

Organizational commitment is a core predictor of employee attitude to the organization and is a strong indicator of turnover behavior, withdrawal tendency and organizational citizenship behavior (Mathieu and Sajak, 1990; Morrow, 1993; Sinclair & Wright, 2005 as quoted by Ghosh, S., et.al, 2014).

High commitment employees will be more likely to stay (in the organization, not leaving), to make extra efforts, and to show good performance (Podsakoff *et al.*, 1996). Morrow (1983) and Pinder (1998) stated that commitment can be used for predicting organization, and performance. Researchers, including Meyer et al (1989) and Brown (2003) found the effect of commitment on performance. Suliman and Iles (2000) found that affective commitment had stronger relationship with employee's performance than continuance commitment and normative commitment. Hackett *et al.* (1994) found that affective commitment has positive effect on performance. Meanwhile normative commitment has no effect on performance and continuance commitment has negative effect on performance.

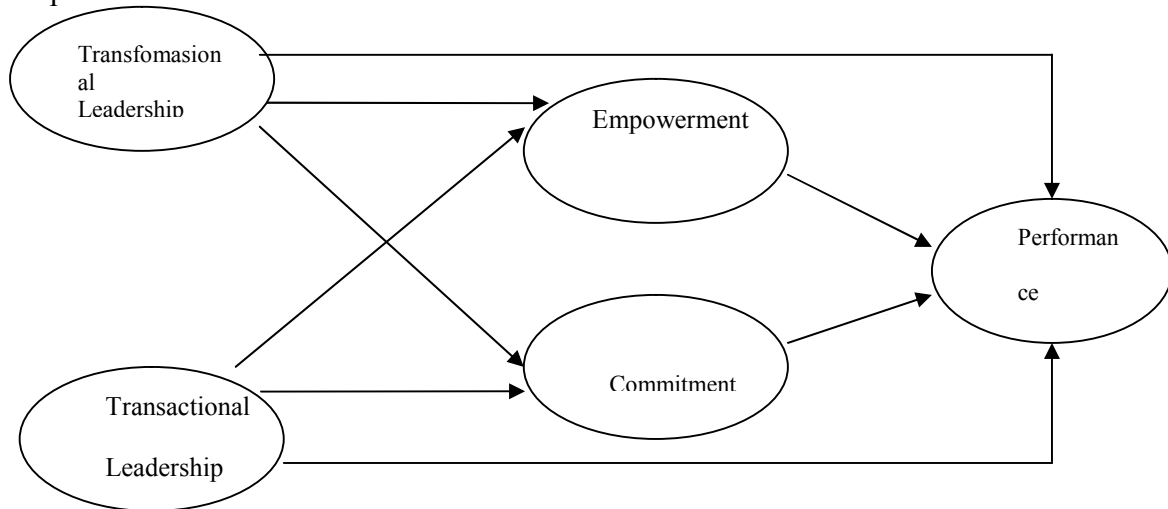
H<sub>5</sub>: Commitment has positive effect on performance

## 6. Research framework

This previous research framework describes the effect of transformational and transactional leadership, empowerment, and commitment on performance is presented in figure 2.1.

Figure 2.1.

The effect of transformational and transactional leadership, empowerment, and commitment on performance



## Research Method

Research data were collected through survey using questionnaire distributed to 35 manufacturing companies at eight regencies and two municipalities in Central Java and Special Territory of Yogyakarta (D.I.Y). Questionnaires were distributed to a sample of respondents consisting of 155 employee from upper- management levels and 1562 employee from lower-level management levels. Thus, both groups are 1717 respondents. The collected data were analyzed with Structural Equation Model, using AMOS-4.

### 1. Transformational Leadership and Transactional Leadership Variables

Measuring transformational leadership and transactional leadership is used by MLQ instrument. The reason of choosing of MLQ such as 1) MLQ is specially instrument for leadership research, 2) MLQ has done many researchers, even the by using MLQ has done

meta analysis such as Lowe, et.al (1996) analyse 39 research, judge and Piccolo analyse 87 research, 3) MLQ is standardized instrument, so it is fit for using this research.

MLQ instrument comprise transformational leadership, transactional leadership and non leader factor (laissez faire). Yet, the non leader factor is not included in this research, because this research does not analyse the factor.

Transformational leadership comprise 5 dimension, such as idealized influence (attribute), idealized influence (behavior), inspirational motivation, intellectual stimulation and individual consideration. Whereas transactional leadership comprise two dimension such as contingent reward and management by exception-active. Management by exception passive is not valid.

## 2. Empowerment Variable and Commitment Variable

Empowerment comprises meaningfulness, competence, self determined and impact. Whereas commitment has three dimension such as affective commitment, normative commitment and continuance commitment.

### Research Result And Analyses

The Statistical calculation results shows reliability coefficient, lamda, error term, and standard deviation of each construct in research model as shown in table 4.1.

**Table 4.1.**

#### Construct Reliability, Lamda, Error Term, and Standard Deviation for each construct

Construct	Construct Reliability ( $\alpha$ )	Lamda	Error	Standard Deviation
Transformational leadership	0,7045	0,3546	0,0527	0,4225
Transactional leadership	0,8724	0,4446	0,0289	0,4761
Empowerment	0,6754	0,3427	0,1785	0,4736
Commitment	0,6057	0,2384	0,0778	0,3068
Performance	0,8448	0,5566	0,0569	0,6056

Source: Data Research analyses result

Model testing was done through two steps. The first step, the initial research tests the structural model of the effect of transformational and transactional leadership, empowerment, and commitment on performance. The results are shown in table 4.2.

**Table 4. 2.**

#### Structural Equation Modelling Research Result

Structural Relationship	Regression Weights	Standard Error	C.R.
Performance ← Transformational leadership	0.298	3.866	0.077
Performance ← Transactional leadership	0.553	4.038	0.137
Empowerment ← Transformational leadership	-1.634	0.499	-3.277*
Empowerment ← Transactional leadership	1.770	0.504	3.510*
Commitment ← Transformational leadership	-4.521	3.945	-1.146
Commitment ← Transactional leadership	4.682	3.997	1.171

Performance ← Empowerment	0.441	0.366	1.204
Performance ← Commitment	-0.056	1.628	-0.034

Significant \*  $p \leq 0.05$

Chi-square 326.007 ; d.f. 21; Probability level 0.000

Goodness-of-fit index (GFI) 0.959

The results of the initial structural equation modelling show that transformational and transactional leadership do not have significant effect on performance. Transformational leadership has negative significant effect on empowerment. Transactional leadership has effect on empowerment. Transformational and transactional leadership do not have any effect on commitment. Empowerment does not have any effect on performance. Thus, there was only one relation that has positive and significant effect i.e transactional leadership and empowerment. Since there is too little significant relation, the initial model will be modified. The next step was to modify the model by including the relationship between empowerment and commitment in new model. The relationship between empowerment and commitment is based on the previous empirical studies findings concerning the relationship between empowerment and commitment (Dewettinck et al., 2003). The findings show five significant relationships (four significant and positive relationship and one significant but negative relationship) and four non- significant relationship as shown in table 4.3.

**Table 4. 3.**

**The result of Structural Equation Modelling**

Structural Relationship	Regression Weights	Standard Error	C.R.
Performance ← Transformational leadership	0.647	0.267	2.428*
Performance ← Transactional leadership	0.188	0.277	0.677
Empowerment ← Transformational leadership	0.006	0.123	0.048
Empowerment ← Transactional leadership	0.108	0.125	0.864
Commitment ← Transformational leadership	-0.281	0.147	-1.907*
Commitment ← Transactional leadership	0.331	0.150	2.210*
Performance ← Empowerment	0.407	0.118	3.455*
Commitment ← Empowerment	0.444	0.048	9.227*
Performance ← Commitment	0.093	0.179	0.520

Significance \*  $p \leq 0.05$ ; Chi-square 319.212; d.f. 20; Probability level 0.000

Goodness-of-fit index (GFI) 0.959

Root mean residual (RMR) 0.093

Figure 4.1. shows the result of structural equation model testing for each research construct.

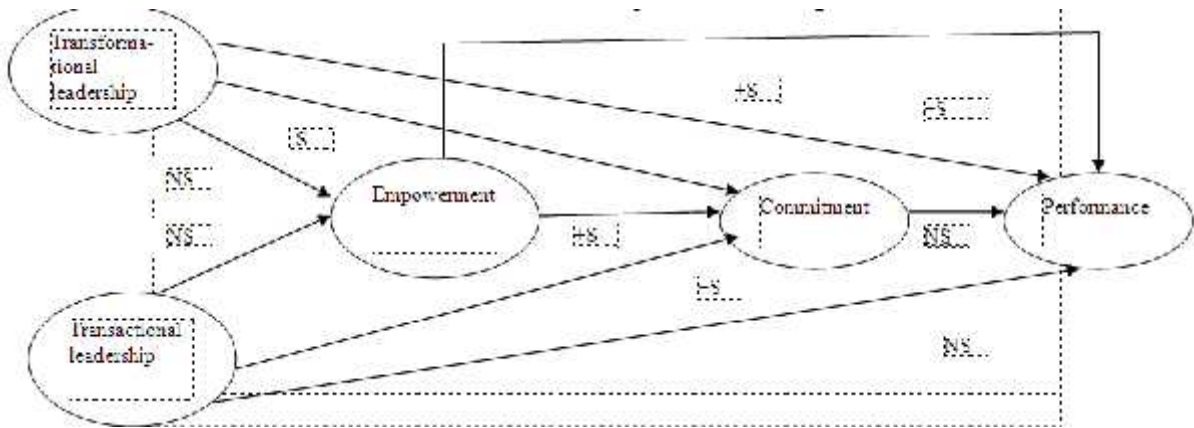


Figure 4.1.

**Research Structural Equation Modelling**

Figure 4.1. shows that transformational leadership and empowerment do have direct effect positively on performance. Empowerment does not mediate relationship between transformational leadership and empowerment.

Transformational leadership and transactional leadership do not have any effect on empowerment. On the other hand, empowerment does have effect on performance. Transactional leadership and empowerment do not have positive effect on commitment. Transformational leadership does have negative effect on commitment. Commitment does have any effect on performance.

In structural model testing, each construct: transformational leadership, transactional leadership, empowerment, commitment, and performance are formulated into variables. However, in the analysis of hypothesis testing, the mentioned variables are explained in the conceptual framework of transformational and transactional leadership. Based on the result of model modification, there is alternative relationship that is needed to test i.e. relationship between empowerment and commitment. The result testing of significant relationship among variables as shown in Table 4.4.

Table 4. 4.

**The relationship among variables in model development**

	Relationship	Hypothesis sign	Testing result	
H1a	Performance ← Transformational leadership	+	Significant	Supported
H1b	Performance ← Transactional leadership	+	Non significant	Non Supported
H2a	Empowerment ← Transformational leadership	+	Non significant	Non Supported
H2b	Empowerment ← Transactional leadership	+	Non significant	Non Supported
H3a	Commitment ← Transformational leadership	-	Significant	Non Supported
H3b	Commitment ← Transactional leadership	+	Significant	Supported
H4	Performance ← Empowerment	+	Significant	Supported
H5	Performance ← Commitment	+	Non significant	Non Supported
H addition	Commitment ← Empowerment	+	Significant	Supported

Signifikan \* p ≤ 0.05

The result of testing in table 4.4. shows that there are supported and not supported Hypothesis and the comparison of hypothesis with the result of testing sign. Hypothesis 1a, 3b, 4, and additional hypothesis are supported. Hypothesis 1b, 2a, 2b, 3b and 5 are not supported.

The test result shows that transformational leadership does have positive effect on performance. Viewed from the social identity theory, subordinates identify themselves to their leader through idealized influence dimension. In this context, transformational leader is able to take part as role model in the belief forming process and feeling, so that subordinates imitate leader's belief, feeling, and behavior (Shamir et al.,1993 in Kark et al. 2003).

The test result also shows that the relationship between transactional leadership and performance is significant. Viewed from self efficacy theory, non influence transactional leadership on performance indicates that the absence of the influence of transactional leadership that stresses on contingent reward or punishment in subordinates willingness in achieving performance cannot support subordinate's efficacy for increasing expected performance.

The test results also show that transformational and transactional leadership do not have any effect on empowerment significantly. Viewed from Substitute for Leadership theory, the research objects are large and middle manufacturing companies with the organizational structure that is formally well managed. It also has fixed task distribution and individual subordinates who work professionally. Such a company condition enables the leadership role to become neutral so that the effect of leadership on subordinates empowerment is low.

The test result also shows that transformational leadership does have effect on commitment significantly and negatively. Viewed from Joffres and Haughey perspectives (2001), subordinates in fact have a feeling that they are not able to respond motivation imposed by transformational leader with negative perception. This finding indicates that when transformational leader stimulates and supports innovation and creativity to subordinates, and realizes the vision and mission of the company, it is possible that the subordinates commitment decreases because of the inefficacy of subordinates.

The test result also shows that transactional leadership does have positive effect on commitment significantly. This finding indicates that transactional leadership is perceived by subordinates positively. Subordinates do the task in line with the guidelines and guidance given by their leader obediently. That phenomenon describes the existing form of paternalistic society that is indicated by subordinate's dependence on the figure of a leader. They are also more interested in contingent reward.

The test result also shows that empowerment does have positive effect on performance. This finding indicates that empowered subordinates will focus on their full potential on achieving performance. According to the self-management perspective, the process absorbing the vision and mission of the organization from the leader to the subordinates has been the belonging of the subordinates. The subordinates play an important role to realize the vision and the mission of organization in their performance.

The result of this research shows that commitment does not have positive effect on performance. According to Ellemmer et al. (1997) perspective, employees who are identified with low performance are perceived as employees with low commitment to their group. They intend to move the organization with high status group than those with high identification understable if a committed employee has low performance. This might be caused by employees' low identification.

The result of additional hypothesis testing shows that empowerment does have positive effect on commitment. Empowerment process increases subordinate's emotional strength.



Motivated subordinates formulate higher identification, increase commitment and believes their leader and mission, and work beyond expectation (Carlson & Perrewe, 1995) because there is trust between a leader and subordinates.

The additional study of T test found that there is mean difference of respondent characteristics, transformational leadership, transactional leadership, and empowerment on upper and lower management level significantly. Yet, T test also found that there is no mean difference of commitment between both management levels significantly. In addition, this research found the result of mean scores of respondent characteristics, transformational leadership, transactional leadership, empowerment, commitment and performance higher on upper management level than on lower level management

The occurrence of mean difference of leadership between both management levels can be studied from leader and subordinates aspect. Study of leadership aspect can be viewed through leadership development perspectives. According to A life Span approach, development process can be implemented through experiences, events, giving meaningfulness to every life events that takes place (Avolio & Gibbons, 1988).

Through the leadership career development, it is understandable if a leader on upper management level obtains higher mean score of leadership than that of lower management level. Because of his long career, it enables him to have higher leadership. Therefore, subordinates score their leader on upper management level higher than lower management level.

## **Conclusion and Research Contribution**

### **1. Conclusion**

This research studies two fold. First is the main study testing the effect of transformational and transactional leadership, empowerment, and commitment on performance. Second is additional studies testing the difference of mean scores of respondent characteristics, transformational leadership, transactional leadership, empowerment, commitment, and performance based on upper management level and lower management level.

The main study found that transformational leadership does have effect on performance. The transactional leadership does not have effect on performance. The transformational and transactional leadership do not have effect on empowerment. The transformational leadership does have negative effect on commitment significantly. The transactional leadership does have positive effect on commitment significantly. The empowerment does have effect on performance significantly. The commitment does not have effect on performance.

The additional studies found that there is mean difference of respondent characteristics, transformational leadership, transactional leadership, empowerment on upper and lower management levels significantly. Yet, T test also found that there is no mean difference of commitment between both level management. This research found that mean scores of respondent characteristics, transformational and transactional leadership, empowerment, commitment and performance were higher on upper level management than lower level management

### **2. Theoretical contributions**

This research gives theoretical contribution on leadership and human resource management literature in sum of matter. This research results various findings. First finding shows that there are positive direction and significant on relationship between two variables in the research model. The testing of effect transformational leadership on performance, effect transactional leadership on performance, effect empowerment on commitment, and effect empowerment on performance show result significantly and positively.

This research finding shows that transformational leadership does have effect on performance. The result of research consistent with previous researches (Bass, 1985; Hater & Bass, 1988; Howell & Hall-Marenda, 1999; Dvir et al., 2002; Hayward, Davidson, Pascoe, Tasker, Amos & Pearse, 2003; Casimir et al., 2006).

The finding of researches that is implemented on manufacturing companies of Central Java and Special Territory of Yogyakarta with research subject consist of upper and lower management levels support the theory of leadership Burns (1978) and Bass (1985;1997;1999) that reveal transformational leadership does have effect on performance universally and across continents, and are able to implement on all over countries including Indonesia (Central Java and Special Territory of Yogyakarta).

The research result shows that transactional leadership does have effect on commitment. This research support empirical researches of Purwanto (2000); Brown (2003); and Walumbwa et al. (2004). This finding indicates the need paying attention to the demographical characteristic factors of research subject in the research of effect transactional leadership on commitment.

The result of research shows that empowerment does have effect on commitment. This research support empirical researches of Dewettinck et al., (2003); Avolio *et al.*, (2004); and Ugboro (2006). This finding indicates that empowerment is one factor that plays an important role in increasing commitment. This research shows that empowerment does have positive effect on performance. This finding supports empirical researches of Conger and Kanungo (1988); Wat and Shaffer (2005) and Webster (2006). This research indicates that empowerment plays an important role in increasing performance. Thus, followers play an important role in increasing performance. Therefore, followership needs to be developed so that the followers can participate in increasing performance actively.

The second finding is that this research shows the sign of relationship between two variables in research model that is significant but negative. This finding shows that transformational leadership does have negative effect on commitment. This research finding is consistent with the research of Felfe and Schyn (2004) that found the correlation between transformational leadership (except intellectual stimulation) and affective commitment. This research finding indicates that the study about subordinates as research respondents and the cultural background as the object of research is needed. It means that demographical characteristic of the research subject and the organizational setting that become the research object must occupy the spotlight.

The third finding shows that transactional leadership does not have effect on performance. Commitment does not have effect on performance. These findings also shows that transformational and transactional leadership do not have effect on empowerment. This result of research indicates that transformational and transactional leadership do not have effect on performance. This finding can be studied from the theory substitute for Leadership theory and self-management.

The research result shows that commitment does not have effect on performance. This finding indicates the importance of further study of other variables that may affect performance. That study is required in order to reveal the phenomena that become the background of their research.

### **3. Practical Contribution**

This research is able to give benefits to companies. This research result indicates that companies must pay attention to leadership, empowerment, and commitment in implementing the company strategies that are orientated in increasing performance. Thus, if a leader intends to achieve the success in performance, he must behave as a transformational leader. Consequently, he must force himself to become a leader who is able to meet the

requirements included in the dimensions of transformational leader, consisting of idealized influence, intellectual stimulation, individual consideration, and inspirational motivation.

A leader is demanded to be able to give example that becomes the guideline. Such a leader is considered charismatic leader. He is able to support subordinates in such way so that they behave creatively and innovatively. In addition, they expected to solve the problems with new approaches. Beside, he has to care for the problems faced by his subordinates and motivate them for higher performance.

The research result reveals that transactional leadership does have positive effect on commitment. This finding indicates that if a leader intends to increase subordinates commitment, he has to be able to influence his subordinate's commitment by giving guidance concerning tasks that must be implemented by subordinates along with contingent reward and management by exception. Both dimension of transactional leadership affect subordinate commitment. It mean that for increasing a leader reprimand, warn, and punish in order subordinates do not make mistakes. On the other hand he must does a task in line with leader's guidelines.

The research result shows that empowerment does have effect on commitment. This finding indicates that empowerment is able to increase commitment. Thus, for increasing commitment, a leader must encourage sense of self meaningfulness, competence, subordinates self determination. He is also able determine him self and his action so that subordinates feels empowered. If leader trusts to subordinates, it can encourage psychological attachment and contract to subordinates. Both elements increase commitment.

The result of the research shows that there is positive effect of empowerment on performance. This research indicates that empowerment can increase performance. Empowerment can encourage a sense of meaningfulness, competence, self determination, and performance-affecting action by subordinates. Therefore, increasing performance can be done by empowering subordinates.

This finding implies managerially that increasing subordinate's commitment can be affected by transactional leadership and empowerment. Meanwhile, increasing performance is affected by transformational leadership and empowerment. Thus, for increasing commitment, a leader must consider transactional leadership and empowerment. On other hand, for increasing performance a leader must consider transformational leadership and empowerment. The finding can be important for companies in running training for their employees.

The research finding shows that there are mean difference of respondent characteristics, transformational leadership, transactional leadership, empowerment, and performance based on upper and lower level management significantly. Yet, commitment between both level management is not different significantly. This research also found the result of mean scores of respondent characteristics, transformational and transactional, empowerment, commitment and performance are higher on upper level management than those of the lower level management.

The mean difference of each variable indicate that if a leader wants to achieve success in acting leadership, empowerment and performance increasing efforts, management need to be cared of. Therefore, any policies that a company takes in acting leadership, empowerment, and striving to increase performance effort on upper management level must be different from those on lower management level. Yet, company policies in striving to increase commitment can be implemented with the same policies on both management levels.

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## LEADERS' WILLINGNESS TO SACRIFICE: A PHENOMENOLOGY OF BATIK ENTREPRENEURS IN SURAKARTA

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### Abstract

This research discussed a leader's willingness to sacrifice. The purpose of this study was to develop a model of leader's willingness to make sacrifices in accordance with the values of local wisdom. This research was conducted to explore the meaning of a leader's willingness to sacrifice. This study employed a qualitative research with a phenomenological approach to explore the leader's willingness to sacrifice among batik entrepreneurs in Surakarta. Batik industry was chosen as the research object with the consideration that batik is one product that is unique or distinctive that will improve the nation's competitiveness. The results showed that there were nine factors underlying the willingness to sacrifice of a leader in the context of batik entrepreneurs in Surakarta, namely: confidence, dare to take risks, responsibility, respecting history (lara lapa), sincere, preserving culture, customer orientation, liability and spirit to rise.

**Keywords:** *leader's willingness to sacrifice, entrepreneur and values of local wisdom*

### Introduction

As part of the Indonesian culture, batik has high historical value, not only as fashion or commodity, but as visual communication of cultural philosophy and value (Rarick & Sunaryo, 2013). Batik industry recently faces tighter competition. According to Indonesian Bureau of Statistics, 1,037 tons of Chinese batik worth of US\$30 million were imported to Indonesia (www.kemenperin.go.id, 2012). To be able to compete with other countries, the industries should continuously improve their competitiveness. This effort is done by looking inside the industry on its human resource aspect and adopting practices with values and uniqueness. Every organization has unique human resource competence (Barney, 1991, 2001). One of the uniqueness is leadership.

Studies on leadership were focused more on the transformational leadership than on transactional leadership model (Bass, 1985; Burns 1978). Transformational leadership model motivates the subordinates to internalize common and bigger value and objective (Bass, 1995; Burns, 1978). This leadership tradition highlights charismatic leadership which directly focuses on the importance a certain leadership aspect, i.e. "the leader's willingness to sacrifice" (Conger & Kanungo, 1998). This behavior contributes substantially on the effectiveness of the leadership (Choi & Mai-Dalton, 1998), and the leader's willingness to sacrifice is an important component in the charismatic leadership (Conger & Kanungo, 1987; Yorges et al., 1999).

The model was first empirically elaborated by Choi & Mai-Dalton (1999). They show that the willingness to sacrifice improves transformational quality perception and that a leader with such willingness is more influential than that with no willingness. Other studies confirm the relationship between the willingness and a leader's effectiveness. Yorges *et al.*, (1999) shows that a sacrificing leader will be perceived more charismatic and could motivate the subordinates better to contribute in charities. Further, De Cremer (2002) and De Cremer & Knippenberg (2002) also show that the willingness will result in better subordinates' performance.



On the other hand, organizations nowadays focus more on improving transformational leadership for their managers because it will result in better organizations' performance (Waldman et al., 2001). One of the variables to improve transformational leadership is the leaders' willingness to sacrifice (Choi & Mai Dalton, 1999; De Cremer & van Knippenberg, 2002, 2004; Yorges et al., 1999). Previous studies show that the willingness to sacrifice influences the subordinates by encouraging reciprocal norm (Choi & Mai Dalton, 1999) by projecting the leader as the example (Shamir et al. 1993), and by projecting the personal needs that the leader is closely related with the vision (Avolio & Locke, 2002).

The inconsistencies on research findings about the leader's willingness to sacrifice are indicated to happen because of the differences in research contexts, especially the local contexts. On the other hand, there are still a few empirical studies discussing the model of a leader's willingness to sacrifice that is in accordance with local wisdom values. In this case, the form of willingness might be different between west and east. Western concept of leadership highlight competition, meanwhile the Eastern leadership suggests cooperation. While western leadership concept focuses on mind and rationale, Eastern leadership is on wisdom. Therefore, it is crucial to develop a model of leaders' willingness to sacrifice that is based on the local context and in accordance with local wisdom values.

This research was qualitative in nature and employed phenomenology method. Phenomenology method is not only a study that tries to describe behaviors (shown in attitude, expression, and or discussions between subjects) as it is in detail, holistic and contextual, but it also tries to explicate the meanings behind the phenomena, that are *noumena* which are in line with local wisdom values.

This study specifically was conducted on batik industries which recently face tighter competitions. Batik is one of the products which has uniqueness to elevate the nation's competitiveness.

## Literature Review

### 1. Leaders' Willingness to Sacrifice

Leaders could be categorized into two, transactional and transformational leaders. Transactional leaders make initiative in contacts with the subordinates by exchanging something valuable. On the contrary, transformational leaders attracts the subordinates to higher moral value (Burns, 1978).

The influence of transformational leadership process is through internalization; the subordinates tend to accept (internalize) the interesting vision promoted by the leader. A vision becomes interesting to the subordinates when it is in line with their value and principle (Dvir and Shamir, 2003). A leader could elevate the subordinates' commitment to his vision through the willingness to sacrifice. This willingness contributes on many important things, such as charismatic perception, reciprocal norm, contribution on public's goodness, willingness to show extra effort, willingness to be part of a group, and attributions done on the leader's behavior (Choi & Mai-Dalton, 1999; De Cremer & van Knippenberg, 2002, 2004; Halverson et al., 2004; Yorges et al., 1999).

Most literatures suggest that the willingness to sacrifice shows one's disposition to „suffer certain loss to preserve personal belief and value“ (Yorges et al., 1999) and it is acknowledged as the common practice done by great leaders (Burn, 1978). The concept of leaders' willingness to sacrifice shows a similarity with an approach in which the leader leads by serving the others (Greenleaf & Spear, 2002), although there is no clear indication of the leaders' benefit (Avolio & Locke, 2002).

The concept of leaders' willingness to sacrifice shows that a leader is willing to take risks personally to achieve the objective or mission of certain group or organization (Conger & Kanungo, 1987). The willingness improves the subordinates' feeling and perception as well as dependencies. In this case, the leader with such willingness is evaluated as charismatic and interesting, as well as a perfect example (Conger & Kanungo, 1987).

The other concept of leaders' willingness to sacrifice defines this leadership as „the total/partial omission and/or permanent deferment of personal interest, privilege or prosperity in labor division, reward distribution, and power application“ (Choi & Mai Dalton, 1998). This statement is supported by Yorges et al. (1999) who define the willingness as „giving up or losing something important“. The point highlighted here is that both definitions focus on „giving up personal benefit“. On the other hand, De Cremer & Knippenberg (2004) see this construct in a wider perspective by including benefits taken by other parties if a leader is willing to sacrifice. They define the willingness as a leader's disposition to „spend personal expense (or bear the cost) to achieve the objective or mission of certain group or organization“.

Transformational leaders are those who are willing to sacrifice for common good (Bass & Steidlmeier, 1999). Such willingness builds trust, receives public acceptance, and helps in shaping community.

Smith et al., (1983) state that the willingness focuses on „personal sacrifice“. Meanwhile, Singh & Khrishnan (2008) in agreement with Choi & Mai Dalton (1998) operationalize and define the willingness as the action of omission or deferment of personal interest, privilege, and prosperity.

## 2. The Measurement of Leaders' Willingness to Sacrifice

Some previous studies has identified indicators to measure leaders' willingness to sacrifice (Table 1).

**Table 1.**  
**Measurement of Leaders' Willingness to Sacrifice**

No	Researcher	Dimension	Indicator
1	Conger & Kanungo (1987)	Providing one dimension of leaders' willingness to sacrifice	Proposing two questions
2	Choi & Mai Dalton (1999)	Developing a model of leaders' willingness to sacrifice which consists of one dimension	Developing 13 questions
3	Singh & Khrishnan (2008)	Providing two dimensions, but the second dimension consists of items with low reliability that should be omitted so only one dimension that could be used	Developing six questions

Source: Various sources, edited, 2016

Conger et al., (2000) finds that showing the willingness to sacrifice results in positive influence on the subordinates' respect to the leader. Such willingness leads to giving out and being not egoistic cultures in organization (Choi & Mai-Dalton, 1999).

Based on Table 1 above, it can be seen that the previous studies result in inconsistency findings which were indicated as a result of research's context differences.

## **Research Method**

### **1. Research Design**

This research was a qualitative study with phenomenology approach. The assumption of employing phenomenology is that individuals in interacting with others will give various meanings. The meaning of experiences forms realities performed by each individual (Waters, 1994; Dimiyati, 2000; Collin, 1997). This phenomenology approach studies the meaning conceptualized by individuals which then is expressed in phenomena and tries to answer the question of what a certain phenomenon means to the individual (Ritzer, 1992).

The phenomenology approach in a qualitative study states that to understand someone's behavior, it is related to various kinds of because motives and in order to motives (Schutz, 1972). The steps in this phenomenology study refer to the steps proposed by Fatchan (2013).

### **2. Population, Sample and Sampling Technique**

The population of this research was batik entrepreneurs in Surakarta. The sampling technique of this study employed purposive sampling technique with consideration that the number of owners in the companies is not the same. The samples were taken from those who were willing to participate in this study and the sampling stopped when the last sample did not provide new information on the research topic. The total entrepreneurs who became the respondents of this study was four people.

### **3. Type of Data**

This research used data got from primary source through direct interviews with the respondents and active participation in the respondents' business during the data and information gathering stage.

## **Findings and Discussion**

### **1. Informants/Process of finding the informants**

In finding the informants, the researcher tried to find batik entrepreneurs in Surakarta who are willing to share their experiences in preserving their business in the midst difficult condition through snowballing (Neuman, 2009: 220). The process was done by using reference from one informant who recommended the next competent informant to provide relevant information for the study. Meanwhile, for the sampling method, the researcher employed purposive sampling, in which the researcher by design looked for several batik entrepreneurs for this study. The main purpose of sampling in qualitative studies is to find specific cases, events or behaviors to clarify certain context (Neuman, 2009: 219). The respondents participated in this study were:

1. Informant 1 is a neighbor of one of the researchers' parents-in-law who is a batik entrepreneur from Boyolali. The good relationship between the researcher and her started with the frequent interaction between them since the informant is the researcher's parents-in-law's best friend who also joins the same Koran recitation group. The first informant has been an entrepreneur for more than 25 years. She started from zero, from being a retailer who bought batik from bigger entrepreneurs to a business owner who has a big industry and her own production unit.

2. Informant 2 is the founder of Batik Mayaratna in Mojosongo Surakarta. The researcher interviewed her in one of the charity gatherings of Lions Club Solo Putri. She runs a beauty salon and batik business by building both conventional shop and the online one.
3. Informant 3 established handmade batik in Penumping Solo inheriting the industry initiated by Eyang Broto. The business has been running for more than 25 years supplying batik to entrepreneurs in Jakarta and other areas through social media.
4. Informant 4, a brother of one of the researchers, is an entrepreneur who is running a family-owned batik industry which has been running for generations in one of batik centers in Solo, namely Laweyan. The kinship between the informant and the researcher is very helpful in the effort of understanding the psyche of the informant. In Laweyan, batik industry is ingrained since the industries existed even before the city was established and continued from generation to generation.

## 2. Data Analysis and Data Analysis Procedure

This part provides in-depth explanation on the procedure used in this study. This explanation provides information on how the data analysis was conducted and shows how the themes were extracted. The in-depth analysis covers short repetition of data analysis procedure implemented and is followed by specific examples from the data. The themes extracted described important general and essential experiences from the informants in terms of their willingness to sacrifice.

The data analysis process followed Fatchan's procedures (2013) which cover: 1) conducting general observation, 2) deciding focus and subject as well as the informants, 3) conducting participation observation, 4) conducting observation on discussions among research subjects, 5) conducting description analysis and data validation, 6) conducting in-depth interviews in form of dialogs with research subjects, 7) conducting substantial analysis and data validation, 8) extracting the subjects' meaning, 9) understanding the subjects' meaning. The essence of this data was word-by-word quotations from the informants and in general was represented by the dimension presented.

In one or two weeks after each interview, the researcher finished transcribing the interview. Every transcript was checked its accuracy and the researcher read over and over to be able to internalize the meaning in the interview completely. The data analysis was started when the researcher examined the transcript and isolated significant statements from each participant. The comprehensive narration description of each informant then was analyzed to become dimensions and indicators. Appendix 1 provides short version of narrative description for each informant and the corresponding themes. The themes from all informants were analyzed and some similarities were gathered to extract the main themes that represented all informants.

## 3. The phenomenology of leaders' willingness to sacrifice

### A. Confidence

The business deterioration experienced by batik entrepreneurs in Surakarta did not deter them. The underlying reason they were struggling to be better was confidence. This could be seen from the first informant's statement as follows.

*"In facing problems, my thought is simple, "every business could experience deficit." The second is when some of my friends close their business and change to other business (usually because they are running out of money, goods, etc.) I will not follow them changing lines of business. In my mind and heart, I say "I have done this for long time"*

Based on the description above, researchers proposed the following proposition:

P1. Confidence is the cause of the leaders' willingness to sacrifice in batik industries in Surakarta.

### **B. Dare to Take Risks**

The other background why the entrepreneurs are willing to sacrifice for the sustainability of their business was their business instinct. The instinct is close to the courage to take risks. This can be seen in the first informant's statement as follows.

*"The thing I think about is how I keep running the business and my employees are not leaving or fired. That is, it is too bad if the employees are leaving because the market is stagnant. I return to the initial thought I said, "every business could experience loss". In addition, my bad feeling was also based on the feeling and the assumption that the employees that I have are not just employees, I consider them as my "children". If we are happy so everybody is happy, and when everything is hard we understand one another well."*

Based on the description above, researchers proposed the following proposition:

P2. Dare to take risks is the cause of the leaders' willingness to sacrifice in batik industries in Surakarta.

### **C. Attachment**

The entrepreneurs were willing to sacrifice to continue the business because they have strong feeling of having the business. This can be seen in the first informant's statement as follows.

*"The point is batik is my life that is inherent with my life. So, I extremely hope that my children continue the business, and thank God, my oldest son has started opening business gradually (he also is my merchant)."*

They considered business has been attached in them. The job they do was an important aspect in their lives, not only for the sake of money but it was inseparable bond.

Based on the description above, researchers proposed the following proposition:

P3. Responsibility is the cause of the leaders' willingness to sacrifice in batik industries in Surakarta.

### **D. Respecting History (*lara lapa*)**

The other background that became the reason why they struggled was their liability to respect history.

*"It is clear that the efforts have led me up to this kind of life. At first my father (deceased) and I had the determination, the most important is working without considering the benefit. It turned out that with diligence, sincerity, and love, the benefit was beyond our forecast when we did not have anything. At that time, my father was only a driver and after undergoing this effort, thank God, he could pay for schools, have a home, etc. Now we have stamp and embroidery businesses, and our employees could also have children and they all go to school. This "lara lapa" time cannot be overlooked. I am sincere if I need to sacrifice a lot to maintain this business."*

Respecting culture is not only done to memorize the past, but to continue what has been done by the predecessors. This this reason, an entrepreneur will never leave his/her job even though they experience hard times. Their tactical thought was they have experienced harder times when they started the business. All problems they have now could not be compared to the problems they had when clearing their ways for the business.

Based on the description above, researchers proposed the following proposition:

P4. Respecting culture (*lara lapa*) is the cause of the leaders' willingness to sacrifice in batik industries in Surakarta.

### **E. Sincere**

The entrepreneurs' motivation to keep their business was their willingness to sacrifice. This could be seen from informant 2 statement as follow.

"It turned out that with diligence, sincerity, and love, the benefit was beyond our forecast when we did not have anything."

The batik entrepreneurs in Surakarta sacrificed a lot sincerely. They did not do any transaction with the business they have. They were willing to do anything to keep the business running. This cannot be separated from the role of business they have gone through in providing livings for them.

Based on the description above, researchers proposed the following proposition:

P5. Being sincere is the cause of the leaders' willingness to sacrifice in batik industries in Surakarta.

### **F. Preserving Culture**

The thing underlying the entrepreneurs to keep their business although they experience hard times was their responsibility to preserve culture which is inherited from the predecessors.

This can be seen in the fourth informant's statement as follows:

*"Because batik is an inherited business. Laweyan is a batik center in Solo, even before the city existed. Batik from my great-grandparents that I continue made me survive. Batik is also a cultural and family heritage that should not be abandoned let alone forgotten".*

From the statement above, this study could be compared to the previous studies in which the leaders could improve the commitment perception towards the vision by looking at the leaders' willingness to sacrifice. The willingness contributes to many important results, such as charismatic perception, reciprocal norm, contribution on public's goodness, willingness to show extra effort, willingness to be part of a group, and attributions done on the leader's behavior (Choi & Mai-Dalton, 1999; De Cremer & van Knippenberg, 2002, 2004; Halverson et al., 2004; Yorges et al., 1999). The strong culture creates bond with the subordinates who feel that they belonged to the same group that wanted to preserve their culture. The vision becomes interesting for the subordinates since it is in line with their value and ideal (Dvir and Shamir, 2003). The same vision between the leaders with their subordinates on the importance of preserving culture makes stronger bond to maintain the business. The culture also made the leaders stronger in facing critical business situations. They do not easily change direction to other more "prospective" business, but they will struggle to respect the cultural inheritance which they think should not be abandoned or even forgotten.

Based on the description above, researchers proposed the following proposition:

P6. Preserving culture is the cause of the leaders' willingness to sacrifice in batik industries in Surakarta.

### **G. Customer Orientation**

The next background that motivated batik entrepreneurs to maintain the business was their care to the customers who are the most valuable assets of the industry. There are many family businesses who experience declines in customer's demand since they are not responsive in taking care of the customers' needs. This was an example provided by informants 2 and 3 in developing their business. Informant 2 showed that the way a business could survive is by employing technology (internet), that is by opening online shops. The use of technology also helps companies to survive that is by promoting through WhatsApps and Blackberry Messenger as described by informant 3.

*“We have supportive business climate to promote batik. Especially in Solo? I promote batik through WA or BBM. I send Batik pattern pictures so the customer knows the meaning of the patterns. Trend style sometimes is not idealistic, I receive any customer's feedback, the buyer is our king, right?”*

Based on the description above, researchers proposed the following proposition:

P7. Customer orientation is the cause of the leaders’ willingness to sacrifice in batik industries in Surakarta.

#### **H. Liability**

The sustainability of a business that is inherited from the predecessors is something that should be preserved. This encourages the entrepreneurs in Surakarta to be willing to sacrifice for the business.

*“There should be someone who will continue a family business, right? Because I am the oldest son, I become the backbone of the family.”*

A prevailing cultural value in the Javanese community is that preserving culture is obligatory. The predecessors’ inheritance is an heirloom which should be taken care of and respected. This motivation leads to the willingness to sacrifice on batik entrepreneurs in Surakarta in their efforts of maintaining the business.

Based on the description above, researchers proposed the following proposition:

P8. Liability is the cause of the leaders’ willingness to sacrifice in batik industries in Surakarta.

#### **I. Spirit to Rise**

A business owner migrated to Malaysia to work for two years in the attempt to collect funds as well as experience. There, the owner got precious experience which turned him 180 degrees since the change of role from an owner to an employee. In Malaysia, apparently the owner learned many new skills, including screen printing. After the monetary crisis was over, he went back to Indonesia with funding and experiences got from Malaysia. His business is expanding today. From the story of the business owner, it could be seen that the leader’s willingness to sacrifice showed one’s willingness to “suffer to preserve personal belief and value” (Yorges et al. 1999). This spirit to rise is similar with the concept of leaders’ willingness to sacrifice in which the leaders are willing to take risks personally to achieve the objective and mission of a group or organization (Conger & Kanungo, 1987). The leader was willing to leave his stagnant business to maintain the sustainability of the business and his subordinates’ fate. He was willing to go to other country to get money to support the survival of his batik business in Laweyan. This spirit to rise makes the leader stronger in facing critical conditions as well as him becoming an example to the subordinates, as stated by Conger et al. (2000) who find that the willingness to sacrifice influence positively to the subordinates’ respect to the leader. This spirit to rise and willingness to sacrifice of a leader will result in giving out and being not egoistic culture in the organization (Choi & Mai-Dalton, 1999).

Based on the description above, researchers proposed the following proposition:

P9. Spirit to rise is the cause of the leaders’ willingness to sacrifice in batik industries in Surakarta.

#### **Conclusion and Suggestion**

The conclusion drawn from this research was nine factors influencing batik entrepreneurs in Surakarta to be willing to sacrifice to maintain the sustainability of their business, they are:

- a. Confidence

- b. Dare to take risks
- c. Responsibility
- d. Respecting culture (*lara lapa*)
- e. Being sincere
- f. Preserving culture
- g. Customer orientation
- h. Liability
- i. Spirit to rise

The suggestions for the next studies are as follows:

1. The research could be done with wider scope for multi-industries so that it could be used to generalize the findings.
2. Longitudinal study could be conducted to measure the leaders' willingness to sacrifice level from time to time.

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**Appendix 1. The Narrative Description and Its Corresponding Themes**

No	Informant	Narrative Description	Corresponding Theme
1	Informant 1	In facing problems, my thought is simple, "every business could experience deficit." The second is when some of my friends close their business and change to other business (usually because they are running out of money, goods, etc.) I will not follow them changing lines of business. In my mind and heart, I say "I have done this for long time"	Confidence
2	Informant 1	The thing I think about is how I keep running the business and my employees are not leaving or laid off. That is, it is too bad if the employees are leaving because the market is stagnant. I return to the initial thought I said, "every business could experience loss." In addition, my bad feeling was also based on the feeling and the assumption that the employees that I have are not just employees, I consider them as my "children". If we are happy so everybody is happy, and when everything is hard we understand one another well.	Dare to take risks
3	Informant 1	The point is batik is my life that is inherent in my life. So, I extremely hope that my children continue the business, and thank God, my oldest son has started opening business gradually (he also is my merchant).	Responsibility
4	Informant 1	It is clear that the efforts have led me up to this kind of life. At first my father (deceased) and I had the determination, the most important thing is working without considering the benefit. It turned out that with diligence, sincerity, and love, the benefit was beyond our forecast when we did not have anything. At that time, my father was only a driver and after undergoing this effort, thank God, he could pay for schools, had a home, etc. Now we have stamp and embroidery businesses, and our employees could also have children and they all go to school. This "lara lapa" time cannot be overlooked. I am sincere if I need to sacrifice a lot to maintain this business.	Respecting history ( <i>lara lapa</i> )
5	Informant 2	Sacrifices sometimes are not worth the effort. I rotated employees, and even cross-subsidy the business with other businesses. To build the market I tried to modify conventional and online marketing. The thing I sometimes cannot handle, while I am out of town, and the clients remain determined to be served by me and does not want the employees to serve him.	Sincere

6	Informant 4	Because batik is an inherited business. Laweyan is a batik center in Solo, even before the city existed. Batik from my great-grandparents that I continue made me survive. Batik is also a cultural and family heritage that should not be abandoned, let alone forgotten.	Preserving culture
7	Informant 3	We have supportive business climate to promote batik. Especially in Solo? I promote batik through WA or BBM. I send Batik pattern pictures so the customers know the meaning of the patterns. Trend style sometimes is not idealistic, I receive any customer's feedback, the buyer is our king, right? "	Customer orientation
8	Informant 3	There should be someone who will continue a family business, right? Because I am the oldest son, I become the backbone of the family.	Liability
9	Informant 4	The owner worked in Malaysia for two years to raise money as well as experience. After the financial crisis has returned to normal, the owner returned to Indonesian armed with funds and experience gained in Malaysia and the business continues to grow until today.	Spirit to rise

**Source:** Analyzed primary data, 2016



## ECONOMIC BEHAVIOR OF COFFEE SMALL FARMERS: CASE IN BONDOWOSO

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### Abstract

Coffee small farmers in District of Tlogosari sell their product with tebas system or independent harvesting (self-harvesting). The existence of the tebas system may cut value chain in coffee agribusiness. The consequence of this is cost reduction. On other side, reduction allows the possibility of income farmers decreasing.

This study used a phenomenology method, because it is associated with symptoms and social phenomena and their interactions on the environment and conditions. Farmers have option to direct selling early or harvest.

In value chain analysis, development of modified warehouse receipt considered very necessary. MWR must be built with sufficient ability in assessment activities that cover plant maintenance, processing and finishing of yields, and selling. Coffee farmers' income levels are very concerned. With an area of 1 ha coffee plantation, farmers only earn between 2 million rupiahs in bad condition up to 12 million rupiahs in good condition per year.

**Keywords:** *Coffee farmers, harvest, value chain, modified warehouse receipt system*

### Introduction

Most coffee farmers in the district of Tlogosari sell coffee with a few ways: tebas system and self-harvest. Tebas system is pursued because farmers get money quickly and did not think about various expenses. Expenses in coffee plantation include labor wage, especially for harvesting and post-harvest activities. It is a factor that drives the majority of farmers to choose not handles self-harvest and post-harvest activities.

The impact of tebas system, in a region that coffee stocks decreased. Only a percentage of just farmers who bring their crops to be stored. Harvest by tebas system way is an option because farmers can calculate profit and loss directly. Farmers can give high price, when coffee plants bargained for. This system provides the opportunity to earn money quickly. The existence of tebas system in coffee farming looks like cutting the coffee value chain in agribusiness. The consequence of it is cost reduction. On the other hand, the reduction of cost may be cut farmers income.

One of the main problems is the lack of ability of small farmers to determine cost of products. At the time of harvest, farmers only based on the price offered by the buyer without knowing whether the loss or profit. In fact, by knowing the price of coffee, farmers to take the decision to hold or sell coffee (Baswir, 1990).

The various harvest treatment in coffee plantation raises questions what is the reason coffee farmers in Kembang District Tlogosari choose harvesting system and how farmer behaviors post harvest.

### Literature Review

Accounting research related to coffee farmers is still relatively rare. Some of which highlighted the environmental costs (Pramastiwi et al., 2013); adoption patterns of farming (Junaidi and Yamin, 2012); revenue organic and non-organic farmers (Gani, 2010), and the competitiveness of robusta coffee (Sutriono, 2011).

Gani (2010) conducted a study to determine the difference in the income of coffee growers of organic and non-organic in the Gayo highlands, Bener Meriah, Nanggroe Aceh Darussalam. The results showed that the organic coffee farmers' income is higher than the non-organic. The difference of income caused organic coffee production which is higher than the non-organic. The price of organic coffee production is also higher than ones.

The market structure is the organization that determined by characteristics of the relationship between the seller with the buyer. It can be seen from the number of agencies involved in marketing, market share, market concentration and market conditions. Based on the characteristic, market can be classified into two kinds, namely that markets are perfectly competitive and imperfectly competitive markets (Kottler, 1999). Imperfectly competitive market consists of monopoly, duopoly, oligopoly market, monopsony, and oligopsony market.

## **Methods**

### **1. Research Approach**

This study used phenomenology method, because it is associated with symptoms and social phenomena and their interactions with the environment and specific conditions. Technique used qualitative techniques to understand reality. The results are expected to provide a summary of the information as possible regarding the consideration of small farmers about the decision to sell coffee with tebas system and independent self-harvesting system. Farmer's motivation was obtained through in-depth interviews against the informant. Observation and in-depth interview process is primary data gathering.

### **2. Subject and Object Research**

Subjects were farmers, harvesters, transporters, and coffee merchants in Kembang-Tlogosari. Researchers act as collectors in an effort to collect data in the field. Other data collection instruments are a variety of tools and other documents that can be used to support the validity of research results. The presence of researchers in field directly attempt to better understand the research problem. The data used in this study were interviews and observations. Techniques of data analysis is the process of sequence categories of data, organizing it into a pattern, categorizing and summarizing description of the basic unit. Data analysis was performed to formulate propositions.

Data analysis was performed with the set, sort, categorize and provide a specific code and categorized. Data management aims to find themes and propositions are finally promoted to substantive propositions. Data analysis was performed from data collection and intensively. Researchers also need to be confirmed until a response is saturated.

## **Results and Discussion**

Participants in this study were coffee farmers who have land. Fifteen people ask to be primer participants and forty farmers is added to be additional informants in this study. All live in and have a coffee plantation in Kembang Village. The youngest participants were 23 years old and the oldest 65 years old. Education level of participants varies, such as elementary, junior high schools, and high school.

All participants came from all Muslim and Madurese tribes. Because the researchers can not communicate Madurese language, the interview process and the data acquisition ask local people to help field data collection. Land holdings varies between one-half acre to five acres. Scattered locations in the Kradjan, Salak, Koparas, and Kradjan Pedukaran village.

## 1 Cluster Research Themes

The research results obtained through in-depth interviews with participants. From the results of the data analysis, the researcher found four clusters of research themes that describe the problem. Theme clusters obtained on the production and selling of coffee is (1) the amount of production is uncertain, (2) the effect of weather on production, (3) effect of treatment on the production, (4) select tebas system or self-harvesting; (5) choose to sell directly or further processing; (6) selling in village or in the city, (7) ability to determine prices.

Determination of the theme clusters formed from the analysis of data derived from fifteen participants. Initial analysis process did to determined keywords each participant, and then set the first level theme of each participant. Here is a list that contains the level 1 theme 57 statement. The first level themes that have same meaning analyzed and incorporated into the second level. Further analyses of the second-level themes that have similar meanings are combined in a cluster theme.

57 codification statements are reduced to the level 2 statement. The following list is a statement in second levels of summarization of statement: number of production fluctuations, decline of production, weather influences production, treatments improve yields, treatment had no effect on yields, more profitable, further processing yields, better direct selling, more simple to sell in location, choose to sell in big buyer, price is determined buyer, and hold the coffee production is as strategies to obtain a good price.

Of the twelve statements in second level theme compile following research themes: production amount is uncertain; the influence of weather on production results; effect of treatment on the production; Choosing tebas system or self-harvest; Choose to sell directly or further processing; Sell on the location or in the city; and ability to determine prices.

## 2 Interpretation of Results

The purpose of this study focuses on the determinants of coffee production, alternative choice to self-harvest or tebas system, cultivate more or direct selling, selling on location or in Bondowoso city, and ability farmers to determine their coffee prices. Four themes result are weather effects and treatment effects on farmers' crops, self-harvest or tebas system, further processing or direct selling, selling in locations or city, and whether farmers have the bargaining power to determine prices of their product.

Yusriadi (2013) states that the decline in coffee production due to adverse weather factors. Natural factors does not result in the fertilization process is complete because of the interest already falling, following the absence of rain. During the process of fertilization, coffee plants need rain. Due to the unpredictable weather lead to decreased production.

Climate change cannot be predicted now. Many stages to be followed in making climate predictions. Including estimates of greenhouse, gas emissions in the future, calculation of the effects of emissions on the global climate and local climate. Each stage produces a number of uncertainties that continue to grow (British Council, 2013). Because climate change is causing changes in the weather, so the weather is too fickle. This is disclose by the participants. Impact to yields is also confirmed. It is revealed from the statement of the participants decreased crop yields.

This uncertainty affects the weather as well as the impact of foster. Maintenance cannot be carried out during the rainy season. It often affect to no optimal fertilization. One reason is the non-fulfillment of the basic principle that timely fertilization, the right type, the right dosage and the right application. Timely fertilization also refers to precisely the time of fertilization and plant age. Fertilization should be done at the beginning of the rainy season. Because this time the difference between wet and dry seasons is not sure then fertilizing should be done in the air humid weather conditions (high rain probability). Fertilization is

done during the dry season causing volatile fertilizer and plants become dry. Improper application allows the amount of fertilizer that is lost due to evaporation and leached by rain. Mindset easily and efficiently is also owned by the people in the village coffee in Kembang-Bondowoso. They sell coffee fruit is red and almost ready to harvest. The deal price is obtained by estimating the amount of coffee that may be harvested.

Tebas system would spoil farmers. Farmers process land preparation, seed preparation, planting and maintenance. When the fruit has begun to ripen, then the middlemen come buy with tebas system (Bisnis Bali, 2012). Farmers who sell their crops in the field are generally sold with a tebas system. Farmers see the advantages of the system of tebas system and profitable on both sides (Rusastra et al. 2001).

Coffee farmers in the village who did tebas system constituted by several reasons: practicality, more profitable, speed up the acquisition time money, fluctuations in the price of coffee.

The coffee farmers who choose tebas system found more profitable because tebas system avoid potential losses resulting from price fluctuations. This is in contrast with the general opinion that the tebas system considered detrimental to farmers because of the low price obtained.

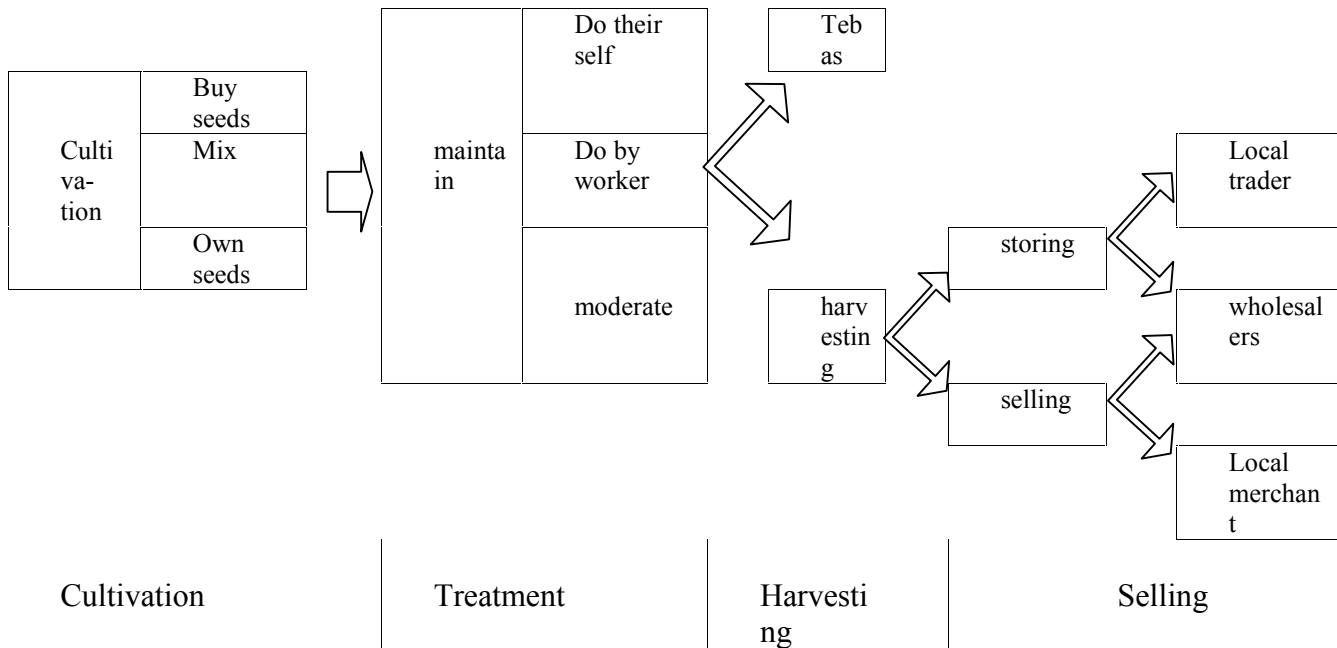
Farmers who self-harvesting reasoned that this harvest type is more beneficial because can hold coffee to improved selling prices, buyer caused tree damage inadvertently, the social aspect in considering: in part harvesters who are neighbors, and already done every year routinely.

Farmers generally cannot be considered in calculating the economic costs and benefits. Most farmers employ family to participate process. Labor costs of this kind do not enter the calculation yields. The others reason, farmers can determine the time of selling, in accordance with the price good. Farmers who have other sources of income will generally perform this action. They are not too hasty to sell the crop at the time immediately after harvest. But it must be supported with a warehouse or storage area either.

Farmers will further processing coffee if you feel it will gain good results and can hold coffee to obtain the expected price. In the conditions when farmers are faced with the immediate needs, they can do sales under expect profit.

Some farmers even prefer to directly sell because there is still long the processing of coffee beans and the treatment depends on the weather. However, it depends on the weather. Farmers still process by traditional way, and it depends on natural conditions. The more rain the longer drying, and price of coffee beans sometimes are bad.





**Figure 1. Value chain of coffee agribusiness in Kembang Village**

There is some activity on the chain coffee farmers in Kembang-Bondowoso. Each stage has contribution margins. The focus of the discussion centered on the stage of harvest and direct selling. Value chain of coffee agribusiness consists of two i.e, tebas and harvest. In detail, there is a value chain

1. Planting - treatment- tebas
2. Planting - Maintain -harvesting-storing-Small Traders
3. Planting - Maintain -harvesting-storing-Wholesalers
4. Planting - Maintain –harvesting –selling -Local Merchants
5. Planting - Maintain -harvesting-selling-Wholesalers

To strengthen the bargaining position, farmers who have adequate storage space generally save the crop to be sold at a good time. They are farmers who have a warehouse, not being chased needs and have other sources of income. Revenues can be increased, so it will help farmers.

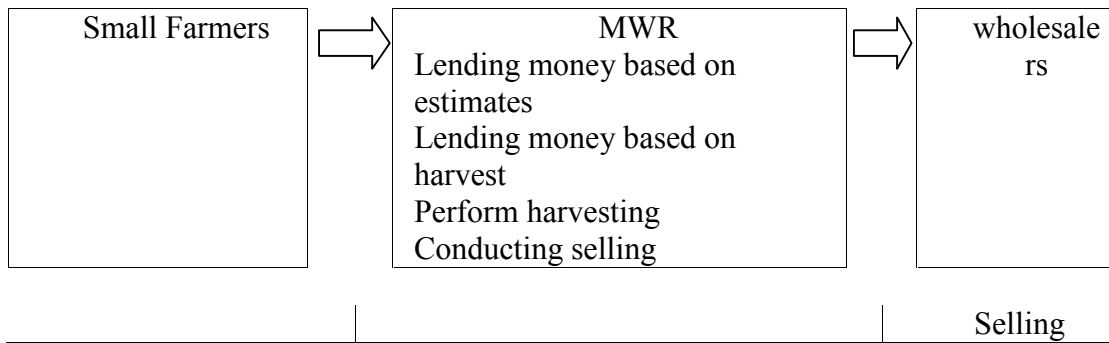
Comparison of each step contribution margin can be explained as follows:

**Table 1. Comparison of tebas system and self-harvesting profit**

	Operational profit				
	2010	2011	2012	2012	2013
Tebas	2.153.76	1.993.6	7.350.400	3.480.2	2.987.
	0	00		60	700
Harvesting-local traders	3.395.41	5.101.7	11.768.80	7.539.6	2.752.
	0	00	0	60	450
harvesting-wholesalers	3.345.21	5.010.2	11.632.90	7.672.7	2.657.
	0	00	0	10	950

The pattern of warehouse receipts is ideal for farmers. Patterns of warehouse receipt can be an alternative marketing system because of the potential benefits that can be achieved is quite high, besides containing a social mission to help farmers.

Models that use modified ware house receipt system looks as follows:



**Figure 2. Modified ware house receipt**

Modified warehouse receipt must be built with sufficient ability in the assessment activities include crops, processing crops, and selling. The adequacy of the initial funds can be obtained from the local government or other agencies. For Kembang-Tlogosari district, with an area of about 100 ha of coffee plantations, the estimated production of 60 tons of dry coffee, the current market price of Rp. 21.500,00 / kg. Outside investment is needed Rp. 1,290,000,000.00 for each harvesting period. But note, the coffee farmers' income were very sadden. With an area of 1 ha plantation ownership, coffee farmers only earn between 2 million rupiahs in bad condition up to 12 million rupiahs in good condition. Its mean, coffee plantations only provide between Rp. 160.000,00 to 1.000.000,00 per month per Ha.

## Conclusions and Recommendations

### 1. Conclusion

The purpose of this study focuses on the determinants of coffee production, alternative choice to self-harvest or tebas system, cultivate more or direct selling, selling on location or in Bondowoso city, and ability farmers to determine their coffee prices. Four themes result are weather effects and treatment effects on farmers' crops, self-harvest or tebas system, further processing or direct selling, selling in locations or city, and whether farmers have the bargaining power to determine prices of their product.

Farmers in the Kembang village have the option to tebas system or self-harvest. Tebas system choice base on reasons of practicality, more profitable, accelerating time to earn of money, and fluctuations in the price of coffee.

Farmers who do self-harvesting reasoned that the harvest is more beneficial because: mostly done himself and family, can hold coffee to improved selling prices, tebas system caused tree damage inadvertently, the social aspect in considering the interests of workers in part harvesters who are neighbors, and already routinely done every year.

### 2. Limitations and Suggestions

This study has several limitations. Many farmers are not willing to be interviewed for reasons that are not clear so comprehensive information that is not expected to be fully achieved. Future research should be conducted in a long time and involvement with the community researchers attached.

Farmers do not have the written records so that more data is just a memory. This leads to the calculation in detail. Future research may begin with teaching regarding the recording data.

The selling price is determined by world market demand so that the results of this study are only intended to assist farmers in making decisions.

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## THE GOVERNMENT SYSTEM OF INTERNAL CONTROL, QUALITY FINANCIAL STATEMENTS AND ACTS OF CORRUPTION LOCAL GOVERNMENT IN INDONESIA

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### Abstract

This research aims test the influence of the system of Internal control systems (SPIP) Government and the quality of the financial report of local government (local government) against acts of corruption of local government in Indonesia. The data used in this study is an overview of the data the Agency's inspection results Badan Pemeriksa Keuangan (BPK) from 2013 and 2014. The number of samples used in the study was 239 regional Governments in Indonesia, while the number of panels (balanced) observations used in analysis as much as 478. The results showed the weakness of the Government internal control systems which include the weakness of the control system of accounting and reporting, the weakness of the budgetary implementation of control systems revenue and budget as well as the weakness of the internal control structure of the positive effect against acts of corruption, while the variable quality of the financial report of the Government of the region of negative effect against the acts of local government corruption in Indonesia.

### Introduction

Corruption in Indonesia is described as issues that are difficult to enforce because of the acts of corruption has become a culture. Basically, corruption is a form of violation of the law that has become a habit. Survey of Corruption Perception Index (CPI) 2015 indicates the level of corruption in Indonesia is still high, because Indonesia is at position 88 of 168 countries with a score of CPI (Corruption Perception Index) of 36 (CPI, 2015), while the survey Indonesia Corruption Watch (ICW) corruption going on in the financial sector of the area with the perpetrators of corruption in most areas is carried out by local government officials (ICW, 2015). The second survey results the Institute described the condition of corruption in Indonesia is still high and thoroughly and not only occurred in the Central Government, but already in the existing local government in Indonesia. The system of Government in Indonesia since the issued Act No. 22 of 1999 on local government impact on granting autonomy to the larger areas of the region. The impact of the promulgation of these laws is the duty of local authorities to complete and more accountable. On the other, the granting of autonomy to local governments in need of a good surveillance so that it does not happen cheating (fraud) in the area. Cheating in government sectors as well as the private sector essentially caused by weak internal control is done. Cheating survey results reported by the Association of Certified Fraud Examiners (ACFE) based on the results of a survey of 106 countries in 2010, that losses caused by fraud companies around the world is 5% of total annual revenues or if applied on the value of estimated value of Gross World Product in 2009 reached the value of potential losses amounting 2.9 billion dollars. Cases of cheating that is at most asset misappropriations (86%), then followed by corruption (33%) and the least amount (5%) are financial reporting fraud (fraudulent statements). Nevertheless the cheating financial report brings the most losses by a median loss of approximately 4.1 million dollar (ACFE, 2012). Internal control has a very important role for an organization including local

governments. In Act No. 1 of 2004 article 56 paragraph 4 explaining that the financial management area should be supported by an appropriate internal control system. Research on internal control a lot done in the private sector and non-profit organizations among them perpetrated by Ge and McVay (2005); Doyle, Ge and McVay (2007); Ashbaugh-Skife, Collins and Kinney (2007); Zhang, Niu and Zheng (2009); Petrovits, Shakespeare and Shih (2010). The results of the study indicate that internal control can be affected by several factors. Results of the audit of the financial statements BPK local government semester 1 2013 showed that the weakness of the system of internal control which is dominant in the examination of the financial weakness of the control systems is the implementation of budget revenue and spending as much as 2,498 cases (42%), the weakness of the control system of accounting and reporting as much as 2,136 cases (36%) and weak internal control structure as much as 1,314 cases (22%). These weaknesses by looking at the level of internal control compliance audit standards.

The problem of the quality of the financial report of the Government is an issue that is interesting enough to be examined further, because some research is rarely research examines the problem of the quality of the financial report of the Government much less associated with the problem of corruption. Some researchers who study the problem of public sector financial statements include Gu, *et al.* (2002); Francis., *et al.* (2004,2005); Pagalung (2006); Cohen (2003, 2006); Chaney, *et al* (2006) performed with the approach of the study on the factors of what causes the resulting quality financial reporting. The study tested the influence of the quality of accounting information of Government have also done Arvanitidou Virginia, *et al* (2007) explained that the use of the transparency of financial accounting information can improve the effectiveness of Government that can eventually prevent corruption. While in Indonesia, Santoso and Pambelum (2008) explains that the implementation of the public sector accounting and accounting information quality affecting the accountability of the Government. This meaning that the better the quality of the financial report of the Government, then it will increase the accountability of the performance of government agencies. Therefore, on the basis of a variety of conditions, it provides motivation for research by testing the influence of the quality of the financial report of the Government of the region against acts of corruption of local government. In this research the question the problem is whether the weakness of the system of internal control and the quality of the financial report of the Government of the region to follow up the corruption of local government in Indonesia. This research is expected to contribute to the study of materials relating to the system of internal control of the Government, the quality of the financial report of the Government of the region and acts of corruption that occur in local government in Indonesia. In the next part of the review of literature related to research and present the research hypothesis. The next section describes the research methods, data analysis and statistical test results. The final part describes the main research findings and limitations, as well as implications for subsequent research.

## **Literature Review and Hypothesis Development**

### **1. Agency Theory in Government Sector**

Agency theory can be applied in public organizations (Lane, 2003). Further described Lane (2003), that modern democracies are based on a series of principal-agent relationship. MoE (1984); Bergman and Lane (1990); Christensen (1992); Strom (2000); Andvig *et al.* (2001) and Gilardi (2001) explains that organizations in the public sector with regard to the theory of Agency. Moe (1984) argued that the concept of a public sector organization economics by using agency theory explanation. Bergman and Lane (1990) the framework of the relationship with the principal agent is a very important approach to analyze public policy commitments. The making and application of public policy related

to problems contractual, is an information that is not symmetric (asymmetric information), moral hazard, and adverse selection. Further, Christensen (1992) States the theory of principal-agent can be analytical tools for the preparation and implementation of the budget of the public. Gilardi (2001) and Strom (2000) describes the relationship of the Agency as the delegation relationship (chains of delegation), the delegation of the community to his Deputy in Parliament, from Parliament to the Government, from the Government as a whole to a Minister, and from the Government to the bureaucracy. The relationship does not always reflect the hierarchy, but can only be relations delegation, as stated by Andvig *et. al*, (2001). In Indonesia, agency theory began gaining attention since the establishment of autonomous region in 1999 which was subsequently amended by law No. 32 of 2004. In the agency relationship, the legislature delegate the authority to run the Government to the Executive. This shows that between the legislative and Executive Agency relation (Halim and Abdullah, 2006). Agency relations is a concept that describes the relationship between principals and contractual agents. This form of accountability over authority given, agents provide accountability reporting against the principal, although it does not occur directly, but through existing community representatives in Dewan Perwakilan Rakyat (DPR). Agency relationships in the Government between the Executive and the legislature, the Executive and the legislature is an agent is the principal (Halim, 2002; Fozzard, 2001; Moe, 1984). Lupia and McCubbins (2000) explains that the issues facing the legislature refers to a phenomenon called the agency problems. Executive-Legislative relations agency also expressed by Andvig *et al*. (2001) and; Lupia and McCubbins (2000). As a Principal, the legislature can also behave moral hazard or in realizing its self-interest (Elgie and Jones, 2001) as it applies to corrupt (corrupt principals) (Andvig *et al*. 2001). According, Colombatto (2001) the existence of the discretionary power in one party will give rise to breach of contract agents, such as the occurrence of rent seeking behavior and occurrence of acts of corruption.

In the context of the preparation of the budget, the proposal put forward by the Executive in charge of Executive interests (Smith and Bertozzi, 1998). The Executive submits budget that can enlarge the agency, both in terms of financial as well as nonfinancial. While Keefer and

Khemani (2003); Mauro (1995); and Von Hagen (2005) implicitly stated that the budget was also used by the legislature (politicians) to meet its self-interest. In the end the primacy of the information owned by executives who used to draw up the draft budget will be dealing with the primacy of authority (discretionary power) owned by the legislature.

## 2. Hypothesis Development

In the Government Regulation Number 60 in 2008 described that is the internal control System (SPI) is an integral process in actions and activities performed continuously by the leadership and all employees to give appropriate confidence top goal the Organization through effective and efficient activities, the reliability of financial reporting, the State asset security and adherence to laws and regulations. The system of internal control the system of internal control is the Government organized thoroughly surroundings of the Central Government and local governments. In article 56 paragraph 4 of Act No. 1 of 2004 on the Treasury of the State explained that regional financial management must be supported by an adequate internal control system. Thus the internal control has a very important role for an organization, including local governments.

According to Anthony and Govindarajan (2011) internal factors within an organization is the most important is the culture within the Organization itself. The cultural environment is good, then it can strengthen the internal control system and will played an important role in preventing the occurrence of fraud in an organization. About *et al* (2002) describes

the internal control that can effectively reduce the tendency of cheating, it is in line with the statement of the research conducted by Wilopo (2006) States that effective internal controls provide a significant influence and negatively to accounting fraud. Some of the research that examines the issue of internal control within an organization associated with the cheating has done some researchers, such as Khanna (2009); Coram *et al* (2006); Shanmugam *et al* (2012); Josiah, Samson and Elizabeth (2012); and Omar and bakar (2012). Research results Khanna (2009) describes a powerful control system can prevent the occurrence of a form of fraud in the Organization, while Coram *et al* (2006) argued that internal audit can provide added value by making improvements in control and monitoring to detect the occurrence of fraud. Shanmugam *et al* (2012) holds internal control conducted within an organization can improve the performance and accountability of the Organization, while Josiah, Samson and Elizabeth (2012) the existence of acts of corruption in an organization, are a reflection of the weakness of the system of internal control. Based on some of the arguments can be formulated the hypothesis as follows:

***H1: Accounting and reporting Control Weaknesses influential positive against acts of corruption of local government in Indonesia***

***H2: Internal control weaknesses of the implementation of the budget and the positive effect of income against acts of corruption of local government in Indonesia***

***H3: The weakness of internal control structures control the positive effect against acts of corruption of local government in Indonesia***

The quality of financial reporting in the private sector according to Schipper (2004) can be seen from two views, first stated that the quality of financial reporting is closely related to the performance of the company that realized in profit the company earned in the current year. The second view is that the quality of financial reporting related to the performance of the company's shares on the capital market. The same view about the quality of financial reporting is also delivered by Francis *et al.* (2004) which divides into two groups become attributes based accounting and market-based. In the public sector, the problem of the quality of financial reporting more accountability for the implementation of the Government to the community. In Indonesia, especially in local government, the issue of the representation of financial reporting and management has been carried out since the enactment of Act No. 17 of 2003 that oblige the Central Government or local governments to present a financial report as a form was. As a form of accountability, financial reporting quality should be used to detect the existence of acts of corruption.

Some research like Klitgaard (1998) and De Asis (2006) that examines the issue of public accountability in corruption eradication needs to be attention given the issue of public accountability is considered to have significant influence towards acts of corruption. Klitgaard (1998) and De Asis (2006) also argued that one of the strategies that can be done to eradicate corruption is to increase accountability. Accountability can be translated as accountability for resource management and implementation of the policy is entrusted to the reporting entities in achieving the objectives that have been set on a periodic basis (SAP, 2005). Research on the importance of accountability in efforts to combat corruption in the doing by Desta (2006) which found that for the case of Eritrea anti-corruption strategy is the most important thing to do is transparency in reporting. In the public sector, Haque (1997) explains that the problem of accountability associated with the increased responsibilities that should be run by the local government, i.e. by encouraging the creation of a climate that can realize its accountability. Increased and improved accountability of government performance will hopefully have implications for minimum



practices against corruption in Government. Some of these arguments can be formally formulated in the following hypothesis:

**H4: The quality of the financial report of the Government of the region of negative effect against acts of corruption of local government in Indonesia**

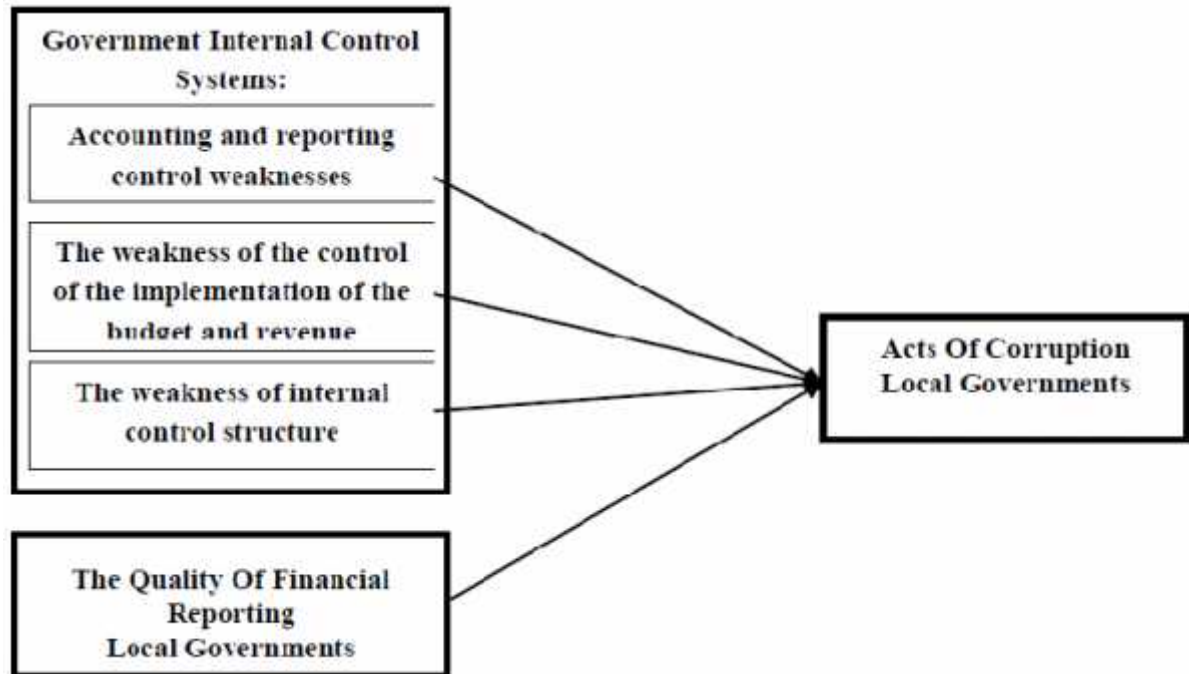


Figure 1. A Conceptual Framework For Research

## Research Methods

### 1. Samples, Data research and measurement of Variables

The population in this research is local governments throughout Indonesia. The technique of determination of purposive sampling carried out sample i.e. the sample comes from the local government that has been submit the local government finance report (LKPD) and have been audited by Badan Pemeriksa Keuangan (BPK). Types of data used in this research is data sekunder that is an overview of the results of the examination of the BPK by 2013 and 2014. Internal control system variables in this study measured using a scale ratio i.e. the number of

Cases of weakness that are found from the audit results of the BPK. The measurement of the quality of local government financial reports using data opinion on audit results of the BPK while acts of corruption measured by using the findings of regional losses over the BPK findings have been acted upon in the review process.

### 2. The Regression Model

Testing the influence of the system of internal control and the quality of the financial report of the Government of the region against acts of corruption of local government in Indonesia using time series data for two years i.e. years 2013 and 2014. The regression model used in this study as follows:

$$\text{Corruption} = \beta_0 + \beta_1 \text{AK\_LAP} + \beta_2 \text{ANGG\_PEND} + \beta_3 \text{SPI} - \beta_4 \text{KUAL\_LK} + e$$

Where: Corruption : Acts of corruption of local government  
 AK\_LAP : Accounting and reporting control weaknesses

ANGG\_PEND : The weakness of the control of the implementation of the budget and revenue.  
 SPI : The weakness of internal control structure  
 KUAL\_LK : The quality of the local government finance report e : error

**The Results of the Analysis and Discussion**

Based on the sample criteria have been determined, the number of local governments used to do analysis for 238 local government is as much, while the data used to do analysis on the period of 2013 and 2014 as much as 476. The overall model in this study being estimated by using data panel model i.e. the fixed effect model. Gujarati (2003) explains that the data panel regression model estimation by fixed effects model approach depending on the estimation used in the slope coefficient, intercept and the error term. The use of fixed effect model is based on the results of testing with test Hausman and chow test by comparing the value of the probability. The results of the comparison of the probability value shows that the right model is a model of fixed effects models. The results of the regression using the fixed effect model are described in the following table 1:

**Table 1. The regression results (fixed effect model)**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1163,939	397,8317	2,925707	0,0038
X1	2,316776	36,41345	0,063624	0,9493
X2	8,678851	23,70758	0,366079	0,7146
X3	5,695052	37,08406	0,153571	0,8781
X4	-193,8922	93,80427	-2,06699	0,0398**

Sample: 2013 2014  
 Periods included: 2  
 Cross-sections included: 239  
 Total panel (unbalanced) observations: 478

R-squared 0,556868  
 Adjusted R-squared 0,098143  
 Durbin-Watson stat 3,007594  
 F-statistic 1,214499  
 Prob(F-statistic) 0,067285\*

\*\* Significant at alpha 0,05, \* Significant at alpha 0,1

Based on the criteria of the sample used and samples have been determined based on sampling criteria, then the number of samples is used as many as 239 local governments, whereas periods used in this test is two years (2013 and 2014). The magnitude of the total panel used in the analysis is e-views in this research is as much 478. The model equations of regression results table 1 are as follows:

$$\text{Corruption} = 1163,939 + \beta_1 2,316776 + \beta_2 8,678851 + \beta_3 5,695052 - \beta_4 193,8922 + e$$

The results of the analysis show that variable weakness of internal control system of Government which include weakness of the control system of accounting and reporting,

the weakness of the budgetary implementation of control systems revenue and budget as well as the weakness of the internal control structure has a positive coefficient variable against acts of corruption, that is, the higher the number of cases of weakness in the internal control system elements the Government then have an impact on the high criminal corruption that occur in local government in Indonesia. The results of this study support several previous studies that have been done, such as Khanna (2009); Coram *et al* (2006); Shanmugam *et al* (2012); Josiah, Samson and Elizabeth (2012); and Omar and bakar (2012). Khanna (2009) and Coram *et al* (2006) holds a powerful control system can prevent the occurrence of a form of cheating, while Josiah, Samson and Elizabeth (2012) acts of corruption in an organization, are a reflection of the weakness of the system of internal control. Further analysis of the results from table 1 shows that the variable quality of the Government's financial reports significantly ( $p < 5\%$ ) negative effect against acts of corruption in local government in Indonesia with the value of the coefficient of 193.8922 means that the higher the quality of the financial report of the Government of the region then it can lose the follow corruption that occur in local government in Indonesia. The results of this research supports research conducted by Klitgaard (1998) and De Asis (2006). According to Klitgaard (1998) and De Asis (2006) public accountability the accountability demonstrated by transparent and accountable financial management has significant effects against acts of corruption. Further Klitgaard (1998) and De Asis (2006) argues that to eradicate the occurrence of corruption then done by increasing accountability in the management of resources as well as implementation of the policy is entrusted to the reporting entities in achieving the objectives that have been set. The results of the same study also dikemukakan by Desta (2006) which describes the importance of accountability in an effort to combat corruption, while Haque (1997) adds the issue of accountability associated with the increased responsibilities that should be run by the local government, i.e. by encouraging the creation of a climate that can realize the accountability so that it can have implications for minimum practices against corruption that happens in Government.

## **Conclusions, Suggestions and Implications**

### **1. Conclusion**

Corruption happens in Indonesia is a State problem that is rooted in the socio-political structure. Corruption is considered as a problem that is difficult to enforce because it has become a culture. One of the efforts to prevent and reduce the occurrence of corruption in the Government is to enhance the internal control in the Government sector. Internal control of the Government as a form of action and activities performed continuously to provide appropriate belief the top goal of the Organization through effective and efficient activity. The results showed the more weak internal control in Government, then in potentially increasing corruption that occur in local government, or in other words the Government internal control is good, then it can reduce the occurrence of acts of corruption, especially in local government in Indonesia. The results also describes the quality of local government financial reports are good, then it can also suppress the occurrence of acts of local government corruption in Indonesia. The quality of a good financial reports illustrate the increasing accountability in the management of resources as well as implementation of the policy is entrusted to the reporting entities in achieving the objectives that have been set.

### **2. Suggestions**

The analysis of the data used in this study using a panel data for two periods namely by 2013 and 2014, the results of this research will further illustrate that better if the range of

data that is used for more than two years of examination results. The use of the variable corruption tend to use the criteria of regional losses set by the BPK from the results of the examination of the financial statements of local government (LKPD) is done, the use of variable corruption will further illustrate the actual corruption when the size of the corruption uses the size of the result of the decision of the courts over acts of corruption that occur in an area officials.

### 3. The implications

This research is expected to give an overview of the importance of the system of internal control and the quality of financial statements that are in the local government in Indonesia which is associated with the occurrence of acts of corruption that occur in Indonesia, especially in local government (county or city). Theoretically this research can give you an idea of the importance of financial management of local government that is transparent and accountable so it can improve the quality of financial reporting in the local government.

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## ANALYSIS OF TRAVELOKA.COM WEBSITE QUALITY WITH IMPORTANCE PERFORMANCE ANALYSIS (IPA) METHOD

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### Abstract

At this time, the usefulness of a separate website to be excellent for companies in marketing their products. So that makes the proliferation of e-commerce website in Indonesia. One of the websites that follow this trend is traveloka.com. Websites traveloka.com give a service system new the website other e-commerce. This study aimed to describe the level of quality traveloka.com based on the judgment of the actual quality and perceived quality of the ideal. This research is quantitative descriptive WebQual dimensions namely usability, information quality, and service interaction is assessed based on the perspective of the level of performance and the level of importance. Respondents were examined in this study amounted to 100 users using incidental sampling technique. From this study showed that overall there is value gaps (gap) is negative between the actual quality (performance) and ideal quality (importance) of (-0.27). Value gap is greatest dimension of service interaction with the value (-0.42). Based on it can be concluded that the quality of actual felt could not met the ideal desirable website users traveloka.com especially of attributes quality associated with service interaction in website. An improvement priority of them are view that draws, website the inexperience positive when using, information in the proper format and having a good reputation.

**Keywords:** *Website quality, e-commerce, Importance Performance Analysis, digital business*

### Background

In the information age of today, the need for computer-based information system is increasingly important, with globalization and free trade are happening around the world. The success of computer-based information system is strongly supported by the infrastructure and facilities are sufficient. The use of information technology in everyday life and the world of business in the community were very widespread. The computer-based information systems can provide a competitive advantage, so as to give high priority to a business enterprise.

Online business has now penetrated into various groups, one of the online businesses are constantly being developed today is developing a website. At this time, the website must be one that is owned by a company. In addition, many strategic benefits of which are owned website as a means of providing information, promotion and communication with customers. In this case the website has served as part of the customer relationship. Therefore, companies must be able to present a website that professionalism and quality.

One of the companies that follow this trend is Traveloka with the launch of their online business such as web site addresses Traveloka.com air. Previously the company was founded in 2012 by Ferry Unardi, Deniarto Kusuma, and Albert. At the beginning of the concept, Traveloka serves as a search engine to compare airfares from various other sites. In mid-2013 Traveloka then turned into air ticket reservation site. Users can make a booking on the official website. In addition, hotel booking services already available on the site Traveloka in July 2014.

Previously there was no outcome measurement study on the quality of traveloka.com website. Research on quality levels can be used as a reference for improving the

management of the website to be better again. With the indication of the authors interested in studying the quality of the website traveloka.com using WebQual. WebQual is one method for measuring the quality of a website based on an assessment of end users. WebQual based on three criteria, namely usability research, information and service interaction.

### **Literature Review and Methods**

#### **1. Website**

According to O'Brien and Maracas (2010: 262), "The website is a facility that offers chat rooms, e-mail, and instant messaging where internet surfers can browse the World Wide Web using a browser software to get various kinds of information, entertainment and for business purposes".

#### **2. Website Quality**

According Walczak (2010: 5) explains that "the quality or the quality of the website home page can be seen as an attribute of the website whose utility to help consumers". Previous research quality website identifies several dimensions of website quality, information quality dimensions, ease-of-use, usability, aesthetics, trust building technologies and the emotional appeal".

#### **3. WEBQUAL**

The Website Quality theory is explained by Barnes and Vidgen (2002:114) that:

*WebQual 1.0 The first version of the WebQual instrument was developed in the domain of UK business schools. development methodology for the instrument was to use quality function deployment (QFD), which is a structured and disciplined process that provides a means to identify and carry the voice of the customer through each stage of product and or service development and implementation.*

#### **4. Importance Performance Analysis**

Wong, Hideki & George (2011:21) argues that the "importance Performance Analysis (IPA) is an evaluation tool used to determine the priority of attributes that must be corrected and can be used as guidelines in the strategic development". Moreover, it also explained that the two-dimensional model of the IPA is divided into four quadrants with importance on the x- axis and performance on the y- axis.

### **Research Method**

This type of research is categorized into quantitative descriptive study. Variables used in this research are measurement criteria based approach to quality website WebQual 4.0 i.e, usability, information and service interaction is viewed from two perspectives: the actual perceived quality (performance) and the ideal desired quality (importance). Assessment indicators used can be seen in the table 1.

The population in this study is traveloka.com users in Indonesia. The sample used by 100 respondents to the sampling technique is done by sampling incidental. Sampling incidental is a sampling technique based on chance, that anyone who by chance / incidental met with investigators can be used as a sample, when viewed people who happen to encounter it suitable as a data source (Sugiyono, 2014: 156). Data was collected through an online questionnaire with a scale of 1-5 (1 = strongly disagree, 5 = strongly agree).



**Table 1: Indicators**

Dimensions	Indicators
<i>Usability</i>	Website is easy to operate
	Website has clear interaction
	Easy to navigate the website
	Website is easy to use
	Website design is appealing
	Website design is appropriate
	Website has competitive advantage
	Positive experience in using website
<i>Information Quality</i>	Accurate information
	Trustworthy information
	Actual information
	Relevant information
	Comprehensible information
	Good level of information details
	Appropriate format of information
<i>Service Interaction</i>	Good reputation
	Secure transaction
	Secure private information
	Personality room
	Sense of community
	Easy to interact with the company
	Quality service

**Result and Discussion**

Based on the research results, the characteristics of the respondents indicated the number of men more than the number of women, with a percentage of 63% men and 37% women. In terms of age, 58% aged 21-25 years, 34% aged <21 years, 6% at age 26-30, and 2% age > 30 years. Based on 76% work with student jobs, student jobs 8%, 6% and private employees, 6% to public servants, 4% with self-employed work.

**1. Scale Weighs**

Weighting the data questionnaire using Likert scale (1-5) is performed with a frequency tabulation of the overall indicator of each dimension of WEBQUAL are *usability*, *information quality*, and *service interaction*.

**A. Gap Analysis**

Analysis of the gap (gap) is taken to see the level of Traveloka website quality seen from the gap (gap) between the perceived quality (actual) and the desired quality (ideal). Shown by the actual quality of the respondents' assessment of the performance (performance) forming attributes based on the dimensions of website quality WebQual, while the quality of the intended ideal of respondents rating the level of importance (importance) of the quality attributes. To determine the value of the gap, it can be seen from the difference between the value of the actual quality (performance) and ideal quality (importance).

**Qi= Pi- Ii**

where:

Qi = quality level

Pi = actual quality value (performance) Ii = ideal quality value (importance)

**Table 2. Weighting Scale**

Indicators			<i>Perform</i>	<i>Importa</i>
1	<i>Usability</i>	Item 1	4.81	3.74
2		Item 2	3.78	3.94
3		Item 3	3.76	3.97
4		Item 4	3.83	3.96
5		Item 5	3.76	3.98
6		Item 6	3.74	3.96
7		Item 7	3.81	4.01
8		Item 8	3.84	3.96
9	<i>Information Quality</i>	Item 1	3.61	4.1
1		Item 2	3.74	4.13
1		Item 3	3.65	4.05
1		Item 4	3.77	4.12
1		Item 5	3.75	4.13
1		Item 6	3.6	4.04
1		Item 7	3.66	4.12
1	<i>Service Interaction</i>	Item 1	3.67	4.08
1		Item 2	3.79	4.13
1		Item 3	3.75	4.05
1		Item 4	3.69	3.95
2		Item 5	3.5	4.01
2		Item 6	3.48	3.94
2		Item 7	3.71	4.13
		<b>Mean</b>	<b>3.76</b>	<b>4.02</b>

**Table 3. Gaps of Usability Dimension**

Indicator		Performan ce (P)	Importan ce (I)	Q (P-I)
1	Item 1	4.81	3.74	1.07
2	Item 2	3.78	3.94	-0.16
3	Item 3	3.76	3.97	-0.21
4	Item 4	3.83	3.96	-0.13
5	Item 5	3.76	3.98	-0.22
6	Item 6	3.74	3.96	-0.22
7	Item 7	3.81	4.01	-0.2
8	Item 8	3.84	3.96	-0.12
<b>Average</b>		<b>3.92</b>	<b>3.94</b>	<b>-0.02</b>

**Table 4.6 Gaps of Information Quality**

Indicator		Performan ce (P)	Importan ce (I)	Q (P- I)
1	Item 1	3.61	4.1	-0.49
2	Item 2	3.74	4.13	-0.39
3	Item 3	3.65	4.05	-0.4
4	Item 4	3.77	4.12	-0.35
5	Item 5	3.75	4.13	-0.38
6	Item 6	3.6	4.04	-0.44
7	Item 7	3.66	4.12	-0.46
<b>Average</b>		<b>3.68</b>	<b>4.10</b>	<b>-0.42</b>

**Table 4.7. Gaps of Service Interaction Dimension**

Indicator		Performance (P)	Importance (I)	Q (P-I)
1	Item 1	3.67	4.08	-0.41
2	Item 2	3.79	4.13	-0.34
3	Item 3	3.75	4.05	-0.3
4	Item 4	3.69	3.95	-0.26
5	Item 5	3.5	4.01	-0.51
6	Item 6	3.48	3.94	-0.46
7	Item 7	3.71	4.13	-0.42
Average		3.66	4.04	-0.39

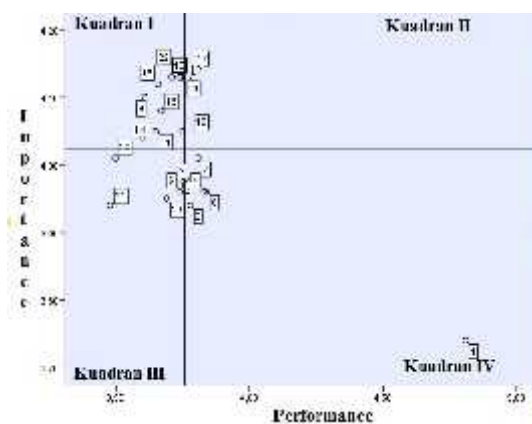
**Table 4.8 Gap Values of all WEBQUAL dimensions**

Dimensions	Perf. (P)	Imp. (I)	Q (P-I)
Usability	3.92	3.94	-0.02
Information Quality	3.68	4.10	-0.42
Service Interaction	3.66	4.04	-0.39
Average	3.75	4.02	-0.27

The table above shows the value of the gap (gap) of the three-dimensional WebQual. From the above table, overall, the value of the difference between the actual quality (performance) and ideal quality (importance) has a negative value. The differences of the average of (-0.27). Which has the largest gap dimension is information quality with a difference of (-0.42). From these results indicate a negative value or  $Q < 0$ , which means the actual quality perceived not currently able to meet the desired quality of the user base, the level of quality is still bad otherwise.

## 2. Importance Performance Analysis

Importance Performance Analysis (IPA) is used to view any website quality indicators that have been in accordance with the wishes of the user and which need improvement. The results of the analysis of the IPA shows the location of each indicator in the IPA matrix consisting of 4 (four) quadrants.



**Picture 1. Graphs of IPA Matrix**

Based on the above chart image can be seen the position of each of the indicators in the IPA matrix. Each quadrant has a specific interpretation that explains what strategic actions that should be done for each indicator.

### Conclusion

1. The results showed that the level of quality of website Traveloka not in accordance with user expectations. There are differences that indicate the gaps (gap) between the two perspectives between the level of performance assessment (performance) and the level of importance (importance) or the quality of the ideal. Overall, the difference from the two perspectives of this assessment is negative with the value of the average difference (-0.02). As for the difference in usability Indicators that have the biggest gap is the indicator number 1 is "easy to learn and operate" with the value gap by (1:07). Therefore, the level of quality dimensions Usability declared bad and cannot meet the ideal activity. Furthermore, the differences of the average of (-0.42). Indicators of quality informant who has the biggest gap is the number one indicator that is "easy to learn and operated" by a margin of (-0.49). Information Quality variable value is negative indicating that the level of quality dimensions of Information Quality declared bad and cannot meet the ideal activity, as well as the value of the average difference (-0.39). Indicators that have the biggest gap is the indicator of the number 5 is "sense of community" with a difference of (-0.51).
2. Based on the analysis of quadrant IPA consists of four (4) quadrants, the quality attributes that the top priority is the improvement of the information is accurate, reliable information, the actual information, easily understandable information, and information to the proper level of detail, the information in the appropriate format, good reputation, the implementation of the services as promised. Furthermore, competitive, relevant information, security in the interaction, the security of personal information is an important attribute and should be maintained. Easy to navigate, appropriate design, has room personnel, a sense of community and ease of access are things that users do not need to be in priority. Recently attributes according to ordinary users but is packed with excellent in Traveloka website is easy to learn and operate, interactions clear and understandable, easy to use, attractive appearance and perceived positive user experience.

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## EFFICIENCY OF ISLAMIC BANKING SCHEMES IN INDONESIA AND RELATION TO ITS GROWTH

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### Abstract

Initially, Islamic banking has developed to create partnership and share funds between depositor, creditor and bank as management towards Profit Loss Sharing (PLS) principle in business activities. But nowadays, Islamic banking has adapted markup and other non-PLS schemes which does not reflect Islamic principles. It also prevented Islamic banks from becoming the profit-loss investment intermediaries that the Islamic economic theory demands. This situation causes problem that Islamic banks have survived not on PLS principle (e.g.: *mudharaba*, etc) but via markup (*murabaha*) and other non-PLS transactions. The embarrassment happens because the greater complexity of the transactions involved puts Islamic banks at a disadvantage in comparison with conventional banks. This empirical research is based on data from 2004-2014 retrieved from Central Bank of Indonesia. The financial information (balance sheets and income statements) of all Islamic conventional banks and Islamic Banking Units (IBUs) in Indonesia is examined. This research investigates the efficiency of two schemes of Indonesian Islamic banking by using the non-parametric method of Data Envelopment Analysis (DEA) based on intermediation approach. The researched schemes are divided into Profit Loss Sharing (PLS) schemes and the schemes other than PLS (non-PLS). Mann Whitney test will be conducted whether there are differences of PLS and non-PLS schemes. Then, regression analysis is applied to determine the significance of each schemes efficiency results regards to the market share (represented by change of total asset) of Islamic banking in Indonesia and input and output variables toward its market share (represented by total assets). The finding from collected data is the average total deposits PLS is 88.32% and the average total loans 7.54%. While the average total deposits Non-PLS is 11.68% and the average total loans 93.46%. The proportion implies that Islamic banks is not fair with return-risk sharing. The finding from DEA efficiency measurement suggests that non-PLS scheme efficiency score is statistically significant higher than the efficiency score of PLS scheme consistently from 2004 to 2014. There is no statistically significant relationship between changes of efficiency toward its change of total assets for both PLS and non-PLS scheme and There is statistically significant relationship between Input and output variables toward its total asset. The findings provide useful guidelines for policies, regulations, and concerns of Islamic banking strategic planning in regard to future growth of Islamic banking transactions especially PLS schemes.

**Keywords:** *Islamic banking, Indonesia, Efficiency; Data Envelopment Analysis (DEA)*

### Introduction

The Islamic banking existence is purposed to provide financial services which are free from interest practice, gambling, speculation and other prohibited things in Islamic principle. Islamic banking has developed in rapid growth around the world, including Indonesia. Nowadays Islamic banking is available not only in Moslem majority countries but also in Moslem minority countries. The first Islamic bank has established in 1992 named Bank Muamalat. In period 1992-1998, the growth of Islamic banking was not really significant because the regulation of free interest banking system was still on trial.

Moreover, some parties thought that free interest banking system was impossible. Based on Faturrohman (2013), the average total asset growth of Islamic banking industry exceeded 50% per annum over the period 2001 to 2010.

As largest Moslem population country, Indonesia has a potential to become a global player in Islamic banking. The prospect of Indonesia economy is high with 6-6.5% economy growth, increasing of sovereign credit rating Indonesia into investment grade attracts more investor, and abundance natural resources underlie Islamic finance industry transaction. Under dual banking system in compliance with the Indonesian Banking Architecture (API), Islamic banking and conventional banking systems jointly and support a wider public fund mobilization in the framework of fostering financing capability of national economic sectors. . By providing various products and banking services supported by various financial schemes, Islamic banking will become a credible alternative that gives benefits to all Indonesian people without exception

It is evident from the preceding information that Islamic banking growth in Indonesia is extensive due to 87% local moslem population. However it is slower than expected. Until June 2014, the market share is still below 5%. This research aims to determine the efficiency of Islamic Banking schemes, profit loss sharing (PLS) and non-profit loss sharing (non-PLS) scheme, to analyze the impact of the efficiency on total asset growth, and build a relationship model of efficiency and total asset growth.

Islamic banking is a rapidly growing part of the financial and banking sector in the world. More recently, it has caught the attention of conventional financial markets as well. According to some estimates, more than 250 financial institutions in over 45 countries that have been growing at a rate of more than 15 percent annually for the past five years (Helmy, Muhammad, 2012). This following table is described the comparison national banking and Islamic banking. The growth of Islamic banking from 2009 to 2013 is 2 times compared to national banking growth. According to IAEI in the 8<sup>th</sup> meeting, the average growth of Islamic banking in 2007-2011 is 40.2% compared to 16.7% national banking growth. The growth of institution networks, third party funds, total asset and market share of Islamic banking from 2009 to June 2014 can be seen in table 2. The total asset per June 2014 is about 4 times compared to 2009. The asset growth of Islamic banking in 2009 to 2012 was above 30% although in 2013 the asset growth was only 24.23%.

**Table 1. Average CAGR Indonesia Banking 2009-2013**

CAGR 2009-2013 (%)	National	Islamic Banking
Funding	16.88	36.89
Financing	20.57	40.77
Total Asset	18.25	38.37

Islamic banking systems which started in year 1940 has well-known reputation around the world (Antonio, 2001). According to Young, the Islamic banking growth is 1.9 times conventional banking growth in period 2009 to 2013 entirely. In Indonesia, Islamic banking started in 1992 through Bank Muamalat Indonesia. According to Faturrohman (2013), the growth of Islamic banking in period 2001 to 2013 is 46.8% while the growth of conventional banking is only 14.6% in respective year. Although, the growth of Islamic banking is faster than the growth of conventional banking, the market share of Islamic banking could not meet the expectation of Bank Indonesia and Karim Consulting Indonesia. The figure can be seen in this following chart.

According to the 8<sup>th</sup> meeting of Ikatan Ahli Ekonomi Islam (IAEI), Islamic banking has got more attentions because of these reasons. First, Islamic banking is closer to the real sector because offered products, especially financing products, use underlying transaction



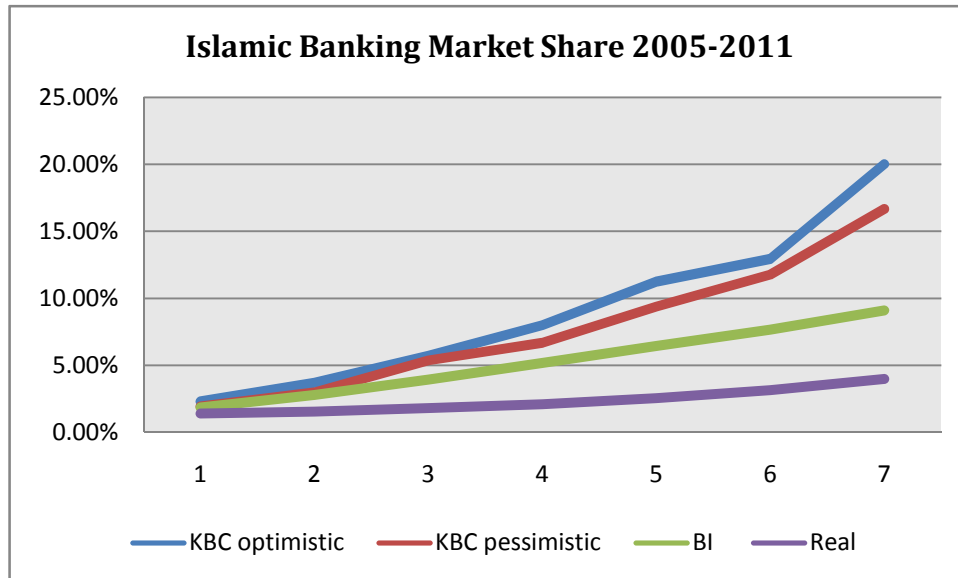
in real sector thus the impact is more vivid in order or encourage economy growth. Next, the products of Islamic banking are free from speculation (gharar). It supports the durability and resilience of Islamic banking from a direct hit of global finance crisis. Last, the profit lost sharing (PLS) as the spirit of Islamic banking gives fairness to every involved party, like depositor as the investor, entrepreneur as the debtor and bank as the management.

**Table 2. The growth of Islamic Banking (source: KCI Financial Outlook 2015)**

	2009	2010	2011	2012	2013	2014*
Institutions	6 BUS, 25 UUS	11 BUS, 23 UUS	11 BUS, 24 UUS	11 BUS, 24 UUS	11 BUS, 23 UUS	11 BUS, 23 UUS
Third party funds (IDR)	52.271	76.036	115.415	147.512	183.534	185.508
Financing growth (%)	22.74	45.42	50.56	43.69	24.82	2.14
Asset (IDR)	66.1	97.5	145.5	195	242.3	244.2
Asset growth (%)	33.37	47.55	49.17	34.06	24.23	0.79
Market Share (%)	2.61	3.24	3.98	4.58	4.89	4.95

According to OJK Statistic 2014, the 41% of consumption financing in Islamic banking is used murabahah scheme while Working Capital Financing (Kredit Modal Kerja) in Islamic banking is 40%. The 40% of working capital financing is lower than conventional banking which is 47% because Islamic banking did not have encouragement to use mudharabah and musyarakah scheme. The reason is because financing with PLS scheme, such as mudharabah and musyarakah, has the higher risk than murabahah. The statistics tell us that theoretically Islamic banking uses PLS because its fairness and partnership system, while practically Islamic banking use non-PLS scheme because of its safety, convenient and low risk. According to Karim Consulting Indonesia, Deposito products with mudharabah product was dominant in 62%. The deposito proportion is higher than national banking, which is 43%. The other low-cost fund product, saving accounts, in wadiah and mudharabah scheme is 6% and 24%. In funding, PLS scheme which is mudharabah is more favorable than non-PLS scheme, which is wadiah, although wadiah saving account is free from administration expense.

According to Vogel in Islamic Law and Finance: Religion, Risk, and Return, Islamic finance has been limited to Islamic banking activities to try Islamic version of conventional commercial banking. Regardless the theory, Islamic banking found that their regulations make them resemble conventional bank. It is pushed them into short term and low-risk investment while give their depositor similar return and risk to those obtain by the conventional depositors. This means that the financing products in Islamic banking is not profit loss sharing based, partnership and long term, any more, which is similar to financing proportion data from chart above. According to EY Islamic Banking Competitiveness Report 2016, Indonesia Islamic banking would remain stagnant without initiative and encouragement of authority to nurture its participant banking. The regulation would attract new entrant and create an environment to help its banking industry.



**Figure 1. The reality and expectation of Islamic Banking Market Share**

### Literature Review

Islamic finance products are contract-based and may be classified into three broad categories: (Hussain, Shahmoradi, and Turk 2015):

- a. Debt-like financing structured as sales, which could be sales with mark up and deferred payments (Murabahah) or purchases with deferred delivery of the products (Salam for basic products and Istisna' for manufactured products), and lease (Ijārah) with different options to buy. Pure lending is allowed only when benevolent (Qard, which is often used for current deposits);
- b. Profit-and-loss-sharing (PLS)-like financing with two modalities: (i) profit-sharing and loss-bearing (Mudarabah) whereby the financier (investor, bank) provides capital and the beneficiary provides labor and skills (profits are shared, but losses would be borne by the financier who does not have the right to interfere in the management of the financed operation, unless negligence, misconduct, or breach of contract can be proven); and (ii) pure profit-and-loss-sharing (Musharakah) where the two parties have equity-like financing of the project and would share profits and losses; and
- c. Services, such as safe-keeping contracts (Wadi'ah) as for current deposits, or agency contracts (Wakalah), which are also increasingly used for money market transactions.

The efficiency theory started from the microeconomic theory, it was about producer and consumer. The producer theory was to maximum the profit and minimizes the cost. Whereas, the consumer theory said that the consumer disposed to maximize their utility or satisfied (Diana Yumanita 2005). The efficiency of bank is a socially optimal target, because its decreasing the average cost of financial transactions therefore enhances the welfare of society (Hussein 2004). There are two methods that used to efficiency measurement, (1) non-parametric approach that included DEA (Data Environment Analysis) and Free Disposal Hull. (2) Parametric approach that include SFA (Stochastic Frontier Analysis), TFA (Thick Frontier Approach) and DFA Distribution Free Approach. The function of bank's efficiency measurement is to determine the performance level of distribution of financial services, based on the inputs that they use (Yousfi 2011).

**Methodology**

There are two methods used in this research. First is Data Envelopment Analysis (DEA) and second is regression analysis. DEA is used to determine the relative efficiency of Indonesian Islamic bank schemes, divided into profit loss sharing (PLS) scheme and other PLS (Non-PLS) scheme over 2004 to 2014. Regression analysis is used to determine statically correlation between; 1) the changed efficiency of each scheme towards its changed growth (total asset) and 2) output and input variables of each scheme towards its growth (total asset).

Central Bank of Indonesia runs Indonesia banking industry through implementation Indonesian Banking Architecture (API). Under API, Central Bank of Indonesia issues regulations to make banking industry runs and achieves improvement. According to BI, partnership and mutual benefit principle that provides alternatives for public and bank is the characteristic of Islamic banking operation. The system priorities fairness and ethical value of working together and partnership to create bigger impact and also avoids speculation in financial transaction. Thus, the commercial banks Indonesia were classified into conventional and Islamic commercial banks (called BUS) that included Islamic business units (called UUS). This research just uses BUS and UUS as data sample.

In DEA (Data Envelopment Analysis) approach, It have to be viewed the inputs and outputs specification that used to measure the efficiency (Yudistira 2004) In determining the inputs, this research applied the standard intermediation approach, where the capital and labor used to intermediate deposits into loans and other earning assets. Intermediation approach used to observe the financial institution as the intermediation. It used to change and transfer the financial assets from the excess fund units to the shortage fund units. The outputs of this research are total loan, total interest income and total non-interest expense while the inputs are total deposit, total interest expense, and total non-interest expense.

The data used in this research is secondary data of BUS and UUS in Indonesia from 2004 to 2014. The available data is collected from financial annual report, balance sheet and income statement, published by BI (later OJK).

No	Bank type	Number of banks in Indonesia											
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
1	BUS	3	3	3	3	5	6	1	1	1	1	1	1
2	UUS	1	1	2	2	2	2	2	2	2	2	2	2
		5	9	0	6	7	5	3	3	4	3	2	2

No	Bank type	Number of available data											
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
1	BUS	3	3	3	3	3	6	1	1	1	1	1	1
2	UUS	1	1	2	2	2	2	2	2	2	2	2	2

	U S	5	7	0	6	7	5	3	3	4	1	2
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Data with zero or negative figures cannot be used in DEA as all output and input variables. Data needs to be greater than zero (positive). Islamic banks (BUS or UUS) has zero figures in their financial data especially in newly established ones. The zero data can be seen in year one or two for total deposit and total loans variable. In this case, the application of DEA needs to consider treatment for that data set. The slacks in output and input variable in DEA application that need to be treated are a) ratio variable, b) zero or negative, c) outliers, d) imprecise number and e) data adjustment (T. Sueyoshi, M. Goto, 2013). According to Faturrohman (2013), the zero or negative data is replaced by 0.1. The replacement affect original data in minor deviation. For 2008, due to existed outliers in data set (5 banks reduced), it is necessary to drop them thus DEA can produce reliable result.

DEA (Data Envelopment Analysis) is a technique of linear programming that used to examining how DMU (Decision Making Unit) or banks operates relative to the other banks that included in the sample. The technique of DEA creates a frontier set by inefficient banks and compared with efficient bank to produce the score of efficiency (Yudistira 2004) He said that completely efficient bank have one score of efficiency, it bordered between zero and one scores, the most efficient bank generates the best practice level of output than the other banks in the sample, from given the inputs, It doesn't need to generate the maximum level of output.

DEA (Data Envelopment Analysis) is a mathematical technical program that measure the efficiency of Decision Making Unit (DMU) relative to the other kind of DMU, where the units consist of or under frontier efficiency curve (Ascarya 2005) Data Envelopment Analysis (DEA) is a tool of decision making that based on linear programming, It used to measuring the relative efficiency of a set of proportional units. DEA introduced the sources and level of inefficiency for each of the outputs and inputs, besides the identification of efficient and inefficient units that relative (Milan M. Martic 2009).

**Findings**

The explanation starts with descriptive analysis of output and input that used in this research. In DEA (Data Envelopment Analysis) approach, It have to be viewed the inputs and outputs specification that used to measure the efficiency (Yudistira 2004). Intermediation approach used to observe the financial institution as the intermediation. It used to change and transfer the financial assets from the excess fund units to the shortage fund units. The outputs of this research are total loan, total interest income and total non-interest expense while the inputs are total deposit, total interest expense, and total non-interest expense.

The input variables are total deposit (used as the input represents the customer trust to save the money), total interest expense (According to Avkiran (2000) it is a proxy for deposits in which to model bank behavior) and the non-interest expense (According to Batchelor and Wadud (2004) represents the resources expended in converting deposits to loan). The output variables are total loan (According to Yudistira (2004), mostly the Islamic transaction consisted by the total loans of the banks), total interest income (a proxy for net loans) and total non-interest income (a proxy to non-traditional activities (Batchelor and Wadud, 2005)).

### 1. Descriptive Statistics

The table below is average of input and output variables used to measure efficiency in 2004 to 2014. The changes of average percentage per year can be seen table 3 and 4. The table is from input and output variables of Islamic banks (BUS and UUS) divided into PLS and Non-PLS scheme from 2004 to 2014. From the chart, we can see that

- The average total deposits PLS is 88.32% while the average total loans 7.54%. it implies that most of deposit product in Islamic bank uses PLS scheme
- The average total deposits Non-PLS is 11.68% while the average total loans 93.46%. it implies that most of financing/loan products in Islamic bank uses Non-PLS scheme
- The average total interest expense PLS is 89.78% while the average total interest income 33.29%. It implies that most expenses uses PLS scheme, which means revenue sharing distributed from mudharabah and musyarakah contract is bigger than bonus expenses from wadiah and other Non-PLS contract.
- The average total interest expense Non-PLS is 10.22% while the average total interest income is 66.71%. it implies that most income is from Non-PLS scheme such as margin profit from murabahah and other Non-PLS contract

It can implies that,

- For example in 2004, as for output variable for PLS scheme, total deposit is 0.99 times total interest expense. While, for input variable, total loan is 0.08 times total interest income. Then, for output variable for Non-PLS scheme, total deposit is 1.03 times total interest expense. While total loan is 1.42 times total interest income. Comparing this result, *it shows that total deposit with PLS scheme has lowered interest expense by 0.01 while total deposit with Non-PLS scheme has increased interest expense by 0.03. Total loan with PLS scheme has lowered interest income by 0.92 while total loan with Non-PLS scheme has increased income by 0.42.*
- From the table, it can be seen that, total loan in PLS scheme has lowered the total interest income by 0.40 to 0.92. While total loan in Non-PLS scheme has increased the total interest income by 0.13 to 0.61.

**Table 3. Proportion of Output and Input Variables in PLS scheme**

Year	Total Loans	Total Deposits	Interest Income	Interest Expense	TD/TIE	(+/-)	TL/TI	(+/-)
2004	0.03	0.86	0.31	0.86	0.99	0.01 (-)	0.08	0.92 (-)
2005	0.02	0.86	0.37	0.92	0.93	0.07 (-)	0.06	0.94 (-)
2006	0.05	0.82	0.38	0.86	0.95	0.05 (-)	0.12	0.88 (-)
2007	0.04	0.96	0.38	0.91	1.05	0.05 (+)	0.12	0.88 (-)
2008	0.08	0.86	0.43	0.90	0.96	0.04 (-)	0.19	0.81 (-)
2009	0.07	0.95	0.36	0.92	1.03	0.03 (+)	0.18	0.82 (-)

2010	0.10	0.97	0.35	0.92	1.06	0.06 (+)	0.28	0.72 (-)
2011	0.14	0.87	0.24	0.90	0.97	0.03 (-)	0.60	0.40 (-)
2012	0.10	0.86	0.27	0.93	0.93	0.07 (-)	0.38	0.62 (-)
2013	0.11	0.84	0.28	0.90	0.93	0.07 (-)	0.39	0.61 (-)
2014	0.09	0.87	0.28	0.86	1.01	0.01 (+)	0.31	0.69 (-)

**Table 4 Proportion of Output and Input Variables in non-PLS scheme**

Year	Total Loans	Total Deposits	Interest Income	Interest Expense	TD/TIE	(+/-)	TL/TII	(+/-)
2004	97.42%	14.20%	68.62%	13.76%	1.03	0.03 (+)	1.42	0.42 (+)
2005	97.94%	14.34%	62.86%	7.50%	1.91	0.91 (+)	1.56	0.56 (+)
2006	95.36%	18.09%	61.54%	14.15%	1.28	0.28 (+)	1.55	0.55 (+)
2007	95.60%	4.04%	61.85%	8.94%	0.45	0.55 (-)	1.55	0.55 (+)
2008	91.66%	13.96%	56.93%	10.36%	1.35	0.35 (+)	1.61	0.61 (+)
2009	93.48%	5.28%	64.46%	8.43%	0.63	0.37 (-)	1.45	0.45 (+)
2010	90.07%	2.79%	65.00%	8.34%	0.33	0.67 (-)	1.39	0.39 (+)
2011	85.66%	12.91%	75.97%	9.93%	1.30	0.30 (+)	1.13	0.13 (+)
2012	89.51%	13.99%	72.69%	7.20%	1.94	0.94 (+)	1.23	0.23 (+)
2013	89.02%	15.76%	71.76%	9.53%	1.65	0.65 (+)	1.24	0.24 (+)
2014	91.33%	13.09%	72.20%	14.28%	0.92	0.08 (-)	1.27	0.27 (+)

- It shows consistency in total loan and total interest income relationship from 2004-2014. At the same amount of total loans for each schemes, it will affect greater in Non-PLS scheme. For example in 2004, a \$100 of total loan will make \$8 of total income in PLS scheme and \$142 in Non-PLS scheme. It implies that loan/products in Non-PLS scheme give greater interest income or more profitable than that in PLS scheme.
- It shows inconsistency in total deposit and total interest expense relationship. For example in 2004, total deposit in PLS scheme has lowered interest expense and in Non-PLS scheme has increased interest expense. While in 2007, 2009, 2010, and 2014, total deposit in PLS scheme has increased interest expense and in Non-PLS scheme has lowered interest expense. The increased range is 0.01 to 0.06 in PLS scheme. The decreased range is 0.08 to 0.67 in Non-PLS scheme. A \$100 of total

deposit will make \$99 of total interest expense in PLS scheme and \$103 of total interest expense in Non-PLS scheme. It implies that deposit products in PLS scheme is more safely and profitable than that in Non-PLS scheme.

## 2. DEA Findings

Efficiency in this research conducted by using intermediary approach with output oriented. The computer software used DEAP 2.1 (Coelli, 1996) to obtain technical efficiency score of Variable Return to Scale (VRS) DEA model. Mann-Whitney test is conducted whether there are significance differences of PLS scheme and Non-PLS scheme. The benchmark for statistical significance was p-value of 0.05. The following table shows the summary of comparative efficiency of PLS scheme and Non-PLS scheme in Islamic banks.

Banks is called efficient if the efficiency score is 1 or 100% and inefficient if the score is below 1 or 100%. From the table 5, Non-PLS scheme has higher efficiency score each year from 2004 to 2014. The highest efficiency score of Non-PLS scheme is 0.934 in 2007, while the lowest score is 0.798 in 2010 and 2012. The highest efficiency score of PLS scheme is 0.900 in 2005, while the lowest score is 0.544 in 2008. Based on Mann-Whitney test, there are consistent differences in efficiency of PLS and Non-PLS scheme every year except 2007 and 2008.

**Table 5. Summary of PLS and non-PLS efficiency**

Year	Profit Loss Sharing		Non-Profit Loss Sharing	
2004	0.784	-	0.881	+
2005	0.900 (highest)	-	0.927	+
2006	0.820	-	0.846	+
2007	0.756	-	0.934 (highest)	+
2008	0.544 (lowest)	-	0.876	+
2009	0.755	-	0.878	+
2010	0.731	-	0.798 (lowest)	+
2011	0.722	-	0.866	+
2012	0.698	-	0.798 (lowest)	+
2013	0.787	-	0.830	+
2014	0.718	-	0.844	+

## 3. Regression analysis

The findings discussed in previous section show that there are differences between the efficiencies in PLS and Non-PLS scheme. In this section, we consider whether the differences of those schemes are associated with changes in total assets (it is the growth of banks). This issue will be addressed by utilizing regression analysis. The results will provide in this following section.

### *Finding Model I*

The result of this regression analysis model indicate the impact of the changes in annual relative efficiency scores of bank schemes on the changes in their total assets. The missing data of this regression shows in following table

**Table 6. Missing data for regression**

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Bank Mega Syariah (d/h Bank Umum Tugu)					x*						
PT. BNI (UUS)					x*		x**				
PT. Bank Rakyat Indonesia (UUS)					x*	x**					
PT. Bank Danamon					x*						
PT. Bank Permata					x*						
PT. Lippo Bank					x	X	x	x	x	x	x
PT. Bank IFI						X	x	x	x	x	x
PT. Bank Bukopin (UUS)						x**					
PT. Bank Ekspor Indonesia							x	x	x	x	x
HSBC, Ltd.										x	x

\* eliminated to remove outliers

\*\* become BUS

*PLS*

The significance level 0.472, which is higher than p-value of 0.05, explains that there is no statistically significant correlation between changes in efficiency of PLS scheme to changes in total assets.

**Table 7. Model Summary Finding Model I PLS**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.041 <sup>a</sup>	.002	-.002	2128144.241953

**Table 8. ANOVA Finding Model I PLS**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	2347441309374.309	1	2347441309374.309	.518	.472 <sup>b</sup>
1 Residual	1363228372281611.000	301	4528997914556.848		
Total	1365575813590985.000	302			

**Table 9. Coefficient Finding Model I PLS**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	873041.011	125002.797		6.984	.000
Delta Efficiency	256730.382	356599.686	.041	.720	.472

*Non-PLS*

From table 11 and 12, the significance level 0.613, which is higher than p-value of 0.05, explains that there is no statistically significant correlation between changes in efficiency of Non-PLS scheme to changes in total assets.

**Table 10. Model Summary Finding Model I non-PLS**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.029 <sup>a</sup>	.001	-.002	2118847.304496



**Table 11. ANOVA Finding Model I non-PLS**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1149430501447.976	1	1149430501447.976	.256	.613 <sup>b</sup>
1 Residual	1342364656031677.000	299	4489513899771.497		
Total	1343514086533125.000	300			

From this regression analysis, we can see that both changes of efficiency of PLS and Non-PLS scheme have no statistically correlation to changes in their total assets. The next finding model is to find whether output and input variables of PLS and Non-PLS scheme are associated with total asset. The output and input variables are total loan, total interest expense, total non-interest expense, total deposit, total interest incomes and total non-interest income

**Table 12. Coefficient Finding Model I non-PLS**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	881764.522	126194.589		6.987	.000
Delta Efficiency	182897.577	361465.002	.029	.506	.613

*Finding Model II*

The result of this regression analysis model indicate the impact of the output and input variables on their total assets

*PLS*

The significance level 0.000, which is higher than p-value of 0.05, explains that there is statistically significant correlation between output and input variable of PLS scheme to total assets.

**Table 13. Model Summary Finding Model II PLS**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.990 <sup>a</sup>	.981	.980	1295720.84643

**Table. 14 ANOVA Finding Model II PLS**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	26388127471549120.000	6	4398021245258187.500	2619.597	.000 <sup>b</sup>
1 Residual	522135571188630.940	311	1678892511860.550		
Total	26910263042737748.000	317			

From table 15, the significance implies positive relationship between total deposit, total interest income and total interest expense with total assets of banks. It suggests that

- Increasing in total deposit (which p value is 0.000 and coefficient is 0.866) of PLS scheme is aligned with increase in total asset,

- Increasing in total interest expense (which p value is 0.001 and coefficient is 4.417) is aligned with increase in total asset
- Increasing in total interest income (which p value is 0.009 and coefficient is 3.173) is aligned with increase in total asset

**Table 15. Coefficient Finding Model II PLS**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	284846.992	80565.934		3.536	.000
Total Loans	.151	.131	.013	1.152	.250
<b>Total Interest Income</b>	3.173	1.206	.089	2.631	<b>.009</b>
Total Non-Interest Income	.532	.471	.015	1.129	.260
<b>Total Deposit</b>	.866	.056	.679	15.484	<b>.000</b>
<b>Total Interest Expense</b>	4.417	1.328	.165	3.326	<b>.001</b>
Total Non-Interest Expense	1.007	.595	.054	1.693	.092

The regression model can be stated as

$$\text{Total Asset} = 284846.992 + 0.866 \text{ Total Deposit} + 4.417 \text{ Total Interest Expense} + 3.173 \text{ Total Interest Income} + 80565.934$$

*Non-PLS*

The significance level 0.000, which is higher than p-value of 0.05, explains that there is statistically significant correlation between output and input variable of Non-PLS scheme to total assets

**Table 16. Model Summary Finding Model II non-PLS**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.988 <sup>a</sup>	.976	.975	1446371.57043

**Table 17. ANOVA Finding Model II non-PLS**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	26259653928897628.000	6	4376608988149604.000	2092.079	.000 <sup>b</sup>
1 Residual	650609113840128.000	311	2091990719743.177		
Total	26910263042737748.000	317			

**Table 18. Coefficient Finding Model II non-PLS**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-27017.833	87814.905		-.308	.759
<b>Total Loans</b>	.410	.026	.324	15.523	.000
Total Interest Income	.756	.725	.044	1.043	.298
Total Non-Interest 1 Income	2.729	.840	.076	3.250	.001
<b>Total Deposit</b>	4.291	.226	.529	18.945	.000
<b>Total Interest Expense</b>	-4.245	1.568	-.034	-2.707	.007
Total Non-Interest Expense	1.772	1.024	.096	1.730	.085

The significance implies positive relationship between total loans and total deposit with total asset and negative relationship between total interest expenses with total asset. It implies that

- Increasing of total deposits of Non-PLS scheme of Islamic banks is aligned with increasing in total asset. It is positive statistically significant with p value 0.000 and coefficient 4.291
- The increasing of total loans is aligned with increasing in total asset. It is positive statistically significant with p value 0.000 and coefficient 0.410.
- While, increasing of total interest expense of Non-PLS scheme of Islamic banks is not aligned with increasing in total asset. It is negative statistically significant with p value 0.007 and coefficient -4.245.

The regression model can be stated as

$$\text{Total Asset} = -27017.833 + 4.291\text{Total Deposit} - 4.245\text{Total Interest Expense} + 0.410\text{Total Loan} + 87814.905$$

This study measures the efficiency of PLS and Non-PLS schemes in Islamic banks using Variable Return to Scale (VRS) DEA models. Applying Mann Whitney test, this research finds statistically significant difference in in VRS efficiency of each schemes. The difference in VRS efficiency of PLS and Non-PLS scheme is consistent, which Non-PLS scheme is always greater than PLS scheme. A very interesting situation is that current average proportion of deposit as input is high and loan as output is low in PLS schemes. It gives hope that the competitiveness of PLS can improve by increasing loan and lowering deposit.

From the regression analysis. It is evident changes in total deposit, total interest income and total interest expense of PLS scheme have positive statistically significant impact to total asset while changes in total deposit and total loan have positive relationship and total interest expense has negative relationship in Non-PLS scheme.

### Recommendation

Islamic banking of Indonesia has promising potential with government supports and commitments. It is also supported with great national and international potential market.

According to Ascarya in Islamic finance institution development strategy in Indonesia, the challenges that are faced by regulators are:

- a. Limited human resources
- b. People's lack of understanding
- c. Limited networking offices
- d. No standardized Islamic finance products
- e. No synchronization with related institution

The challenges that are faced by practitioners are

- a. Funding structures that makes cost of fund of Islamic banking is higher than conventional one
- b. Financing structure that is dominated by murabahah (non-PLS)
- c. Internal problem in Information Technology, limited products, limited human resources and limited CAR
- d. External problem, no supported regulations, limited financial instrument, lack of competition spirit.

The funding and financing structures are proven by descriptive analysis in chapter 3. The funding scheme is dominated by mudharabah scheme (PLS scheme) from 2004 to 2014 while financing structure is dominated by murabahah scheme (non-PLS scheme). Islamic banking did not take risk for long term investment that require long term management and partnership. The murabahah scheme is chosen because of its convenient, safety, and low risk. However, the funding product that dominated by mudharabah scheme is known for profit loss sharing. The point of profit loss sharing financing is partnership. Depositor as investor have to maintain the business, debtor as entrepreneur have to make that business worked and bank as management need to provide support for both parties. Profit loss sharing as function of revenue (or loss) is more profitable in normal condition. The reason is this PLS scheme is not interest based thus it is spared from negative spread risk. Thus, it makes Islamic bank is not fair enough in taking risk.

Based on the result of this research and recommendation from previous research, the implementation plan is provided in points:

- a. The fully support from government to make integrated development with political will, commitment and political courage. The creation of new jobs, especially in small medium enterprise, is in line with Islamic banking orientation. According to Ascarya, the factors that affect the development of Islamic banking in Indonesia are players, competitors/substitues, market/society, infrastructure, authorities, government, legislative and judicative.
- b. Increasing the quantity and quality of involved human resource in Indonesia Islamic banking industry, such as government, practitioner, regulator, academician, religious scholars and citizens/people. The education can be formal and informal. There is small number of human resources with good qualifications, fiqh muamalah, finance and economics, in Indonesia. Government and educational institutions have to produce bachelors with those qualifies to meet high demand of Islamic banking. The education can be like mentorship, coaching or workshop about Islamic banking market and products and services. It can be done by partnership with other party such as Pusat Komunikasi Ekonomi Syariah (PKES). The membership of PKES is not only Islamic banking professional but also government, training and university ring. So, the education can be done more intensive, significant and integrated. The direct management of Islamic banking from higher to lower level such as manager, customer service, and tellers need to be educated about Islamic banking. Then, the

worker knows main scheme and alternative scheme that offered to customer in funding and financing. Thus, it increase management and quality service of Islamic banking

The quality of human resources, customers and management, in order to build economy system starts from preference building. According to Roadmap Islamic Banking 2015-2019, the preferences include fathanah (professional), amanah (trustworthy), shidiq (integrity), and tabliq (communicative). Professional concept is used to support competent and professional characteristic in order to make quality, operational efficiency and mental learning continuously (continuous learning process). Trustworthy concept is used to create discipline and commitment to increase accountability, productivity and keandalan of Islamic banking system entirely. Integrity concept is used to create integrity and consistency in order to increase transaction safety that will affect to people trust. Communicative concept is used to create transparent and communicative that can decrease problem from misinformation

- c. Developing more products, services and networking office. Islamic economics point togetherness in gaining benefits (sharing benefits). This principle bases every transactions in Islam. So, someone could not get benefit upon others loss (dzalim). The development of Islamic economics is directed for economy activities that reflect togetherness in process and equity. For example, educating entrepreneurs of small and medium enterprises to develop their capacities and competitiveness. The program have to educate entrepreneurs from beginning until their business become bankable. The education need supports from academicians, banks, and government.

Then, the PLS schemes in financing proportion have to be increase. The profit loss sharing idea of Islamic banking does not work optimally. If the financing with PLS schemes works then the development of real sector and productive sector also increase. Then, the national welfare will be achieved.

By doing various products and service, Islamic banking have to socialized or educate public. Expansion of networking offices is also one of solution. The knowledge of banking system of Indonesian is also problem for expanding Islamic banking market share. According to financial literacy study of OJK in 2013, 22% of Indonesian people knows banking service and 57% of Indonesian citizens uses banking services. One of factors that affects the people understanding about Islamic banking is networking office. In big cities, like Jakarta, Surabaya and Bandung, the customers are not only moeslem but also non-moeslem. Thus, expanding networking offices can support economy activities and educate more people about Islamic banking at the same time. It also support equalization of welfare and alleviation of poverty.

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## CORPORATE SOCIAL RESPONSIBILITY AND TAX AVOIDANCE

Titik Puji Astuti and Y. Anni Aryani

### Abstract

This paper examines the effect of tax on corporate social responsibility avoidance. The sample that used in this research is companies listed on the Indonesia Stock Exchange (BEI), based on purposive sampling method was Obtained 27 companies. Observation period was 2010-2014. Corporate tax avoidance is a proxy by ETR. The disclosure of CSR indicators is using the Global Reporting Initiative (GRI) guidelines. The Data in this research was processed using SPSS with multiple regression method. The result of this research shows that the CSR have a significant negative influence to the practice of tax avoidance.

**Keywords:** *ETR, Corporate Social Responsibility (CSR).*

### Background

The phenomenon of tax avoidance can be found in Indonesia. In 2005 there were 750 Foreign Investment Company (PMA) who are suspected of tax avoidance by reporting losses of the company for five consecutive years and did not pay taxes to the state (Bapennas, 2005). In 2012 there are 4000 companies PMA report nil tax is due to the losses for seven consecutive years. Generally, the company is engaged in manufacturing and processing of raw materials (Directorate General of Taxation, 2013). There are at least a quarter of the number of companies in the United States also has tax avoidance i.e pay less tax of 20 per cent while the average tax to be paid by the company close to 30 percent (Dyrenge, Hanlon, and Maydew, 2008).

The manufacturing industry experienced the greatest growth from other industry sectors in the amount of 4.12% in 2012 increased from the year 2011 amounted to 4.10%. In 2010, the VAT contribution of the manufacturing sector increased to 46%, then surged 60.5% in 2011 and increased again to 74.2% in 2012. Contributions Income in 2010 increased to 34.7%, in 2011 at 41, 9% and in 2012 it again increased by 55% (CBS, 2012). Even so, there remains a gap between revenue due to the reception which actually occurred on taxes in the manufacturing sector both from income tax, VAT or other taxes related to the manufacturing sector. Reception gaps that occur due to the low tax payment compliance, there are many transactions that are not recorded (*underground economy*) and the tendency of tax avoidance ([www.pajak.go.id](http://www.pajak.go.id) accessed on October 23, 2014). This is due to the taxation system in Indonesia is still weak, so many companies are tax avoidance that eventually led to the tax revenues that are not optimal (merdeka.com, 2015)

Taxes for companies is a burden that will reduce net income that the company always wants a minimum tax payment (Hardika 2007; Kurniasih & Sari, 2013). The existence of the tax burden on businesses and their owners that there is an attempt to tax avoidance (Chen, 2010). Companies utilizing the regulations are not clear in the context of tax avoidance to obtain *outcome* favorable tax (Dyrenge, Hanlon, and Maydew, 2008). Tax avoidance is a reduction of tax rates explicitly that represents a series of tax planning strategies that originated from the management of tax (*tax management*), tax planning (*tax planning*), aggressive tax (*tax aggressive*), *tax avoidance* and *tax sheltering* (Hanlon & Heitzman, 2010) , According to Lim (2011) tax avoidance can lead to conflicts of interest between management and creditors because of asymmetry of information and moral hazard problems. Tax avoidance can also leave a negative or positive reactions to the market. When the market expects that the company's expense rises, then there will be a negative reaction. If the market expects that the exposure increases, arising positive reaction (Frischman, Shevlin, & Wilson, 2008).



According to a social perspective, the act of tax avoidance can be detrimental to the country. Taxes as a source of state revenue is used to improve people's welfare. The higher the level of tax avoidance, the state revenues will decrease. High tax avoidance actions could be considered as an act that is not socially responsible and unethical (Lanis & Richardson, 2012). According to Watson (2011) revealed that companies that have low social responsibility is considered that the company would not be socially responsible in order to conduct a high tax avoidance. Lanis & Richardson (2012) and Yoehana (2013) proved that the lower the level of tax avoidance company, the higher the social responsibility of the company.

Corporate social responsibility can be described as the availability of financial information and non-financial interaction of the organization with the physical environment and the social environment, Disclosure of social responsibility in Indonesia has been regulated in the Law on Limited Liability 40 Article 74 of 2007 which explained that the company in carrying out business activities related to natural resources are required to conduct social responsibility and environment. Article 66 paragraph 2c Law 40 of 2007 states that all the company is obliged to report on implementation of social and environmental responsibility in the annual report. If the company does not undertake the social responsibility it will be penalized in accordance with the law.

The involvement of the company in the practice of tax avoidance became commonplace and legally carried out by the company, but it is not desired by the government. The government expects the company to pay the tax without a tax avoidance mechanism. The company's efforts to optimize the company's profit is still a firm reason for tax avoidance is considered less good for the community. Based on the above background, the purpose of this study was to examine the influence of corporate social responsibility (CSR) against tax avoidance. Other benefits of the research which is for the development of literature in the field of taxation, in particular to determine the impact of corporate social responsibility (CSR) against tax avoidance manufacturing company. This study is also beneficial for the government in making decisions about the creation of tax laws and can be input to the Directorate General of Taxes in detecting companies that undertake social responsibility activities that accompanied the activity of tax avoidance is high.

## **Prior Research and Development of Hypotheses**

### **1. Agency Theory**

Differences reporting between commercial profits with taxable income may pose a conflict of interest (*agency theory*) for managers in reporting activity / performance of the company. The manager (*agent*) will report higher earnings in the financial statements (profit commercial) in order to obtain compensation (bonus), or related regulations with the contract of debt (*debt covenant*). In the agency theory, tax planning can facilitate managerial *rent extraction* is justification for opportunistic behavior of managers to manipulate earnings or the placement of resources which are not appropriate (Desai and Dharmapala, 2006). Planning activities can be done through tax *avoidance* is by taking a tax deduction explicitly (Hanlon, 2010). Activities tax planning (*tax avoidance*) raises opportunities for management in an activity designed to conceal the bad news that mislead investors or managers lacked transparency in running the company's operations (Desai & Darmapala, 2006).

### **2. Theory of Legitimacy**

According Lanis & Richardson (2011) explains that theories of legitimacy is a social contract between the company and community social and environmental disclosure. Their legitimacy theory provides the foundation that the company must comply with the norms prevailing in society so that operations can run smoothly without any conflict with the

surrounding communities (Adawiyah, 2013). To get legitimacy of stakeholders, the company's CSR activities conducted throughout the year in general will be reported and disclosed in the annual reports, sustainability reports, or on the company website.

### 3. Tax avoidance

Of taxation developments on *tax avoidance* continues to grow. In the past many people equate *tax avoidance* as legal action, but now the *tax avoidance* itself branched. Assume that there is no *tax avoidance acceptable* and *tax avoidance is unacceptable*, the differences were revealed by Slamet (2007): (i) the purpose of business is good / not, (ii) solely to avoid taxes / not, (iii) appropriate / not with the spirit and *intention of* parliament, (iv) does/does not do a transaction engineered. Meanwhile, Brian and Michael (2002) distinguishes *tax planning* becomes *defensive tax planning* is a *tax planning* is done by not placing experts or advisors taxation and was only based on domestic laws, and *offensive tax planning* that puts experts as advisors taxation and done with take advantage of the countries that entered the category of *tax haven* countries.

Lim (2010) defines tax avoidance as the tax savings arising by utilizing tax provisions legally do to minimize liability. Dyreng, *et al.* (2008) stated that tax avoidance is any activity that gives effect to the tax liability, both activities are allowed by tax or special activities to reduce taxes. Tax avoidance is part of *tax planning* is done with the aim of minimizing payment (Masri, 2013). This is different from *tax avoidance* where *tax avoidance* is tax avoidance and an attempt to minimize the amount of taxes by violating tax regulations and applicable law in a country. *Tax avoidance* is illegal and therefore may be subject to administrative and criminal sanction.

In Indonesia taxpayer given full discretion to calculate, pay and report tax obligations. This is due to the implementation of system *self-assessment* in the tax laws of Indonesia. The implementation of system *self-assessment* as providing an opportunity for the taxpayer to reduce the amount of taxes to be paid. Company which is a taxpayer of course want to reduce costs of companies including the tax burden. The company can use two ways to minimize the amount of taxes to be paid. First, reduce the tax value to stay abreast of tax laws that apply to the way tax avoidance. Both by reducing the tax value by taking action that is not in accordance with the tax laws by means of tax avoidance.

Tax avoidance is an attempt taxpayers to take advantage of the opportunities that exist in the tax laws so that the taxpayer can pay his taxes will be lower. Activities of tax avoidance when performed in accordance with the tax laws then such activity is an activity that is legal and acceptable.

Tax avoidance in this study was measured using ETR, as well as research Hanlon (2005), Graham & Tucker (2006), Desai and Dharmapala (2006), Dyreng, Hanlon, and Maydew (2008), Richardson & Lanis (2007; 2012; 2013), Chen *et al.* (2010) and Minnick & Noga (2012). Measurements made in research Hanlon (2005), Graham & Tucker (2006), Desai and Dharmapala (2006), Dyreng, Hanlon, and Maydew (2008), Richardson & Lanis (2007; 2012; 2013), Chen *et al.* (2010) and Minnick & Noga (2012) states that the ETR is one measure of *tax avoidance*. Here is the formula ETR.

$$ETR = \frac{\text{Tax Expense } i_t}{\text{Pretax Income } i_t}$$

ETR is the effective *tax rate* based on the reporting of financial accounting regulations. *Tax expense* is the corporate income tax expense for the company *i* in year *t* based on the company's financial statements. *Pretax Income* is income before taxes for firm *i* in year *t* based on the company's financial statements.

ETR is calculated by dividing the income tax expense and profit before tax. The use of ETR is expected to provide an overall picture of the burden of the tax will have an impact on accounting earnings. ETR (*effective tax rate*) is expected to identify corporate tax avoidance is done using permanent differences and temporary differences (Chen, *et al*, 2010). Companies that have ETR (*effective tax rate*) is low will seek to raise the ETR with lower earnings because companies tend to want the accounting profit small to avoid the possibility of paying higher taxes in the future so that the company could carry out a policy on accrual contained in deferred *tax expense* by creating a deferred *tax expense* becomes smaller. *Deferred tax expense* is the product of temporary differences with the applicable tax rate (Harnanto, 2003).

#### 4. Corporate Social responsibility (CSR)

Disclosure CSR aims to establish good communication and effective so intertwined a close relationship between the company and stakeholders about the CSR activities of companies (Novita & Djakman, 2008). CSR is a company's commitment as an act of responsibility by the company voluntarily. Benefits of CSR companies, among others, to create a company's reputation, obtaining a license to operate socially, reducing the risk of the company's business, expand access to resources for Operational business, expand market opportunities widely, reducing the costs associated with the impact of waste disposal, improving relations with stakeholders, adjust and improve relations with regulations, improve morale and productivity of employees and their chances of obtaining an award (Rasidah & Chairina, 2010). In this study, a component of CSR disclosure include the environment, energy, health and safety of workers, others labor, product, community involvement and the general adoption of research Hackston & Milne (1999) in Rasidah & Chairina (2010) which consists of 78 item.

#### Hypotheses Development

The theory legitimacy of the claim that the company can continue living in the long run if it has a good recognition in society. This can be expressed in the company's annual report. The company's reputation is getting nice if the level of disclosure of CSR is getting higher and vice versa, the lower the disclosure of CSR, companies deemed socially responsible so that it can conduct tax avoidance is high (Watson, 2011).

Research on the effect of CSR on tax avoidance has not been getting the results same. According Lanis & Richardson (2011) states that there is a positive relationship between CSR and so the higher tax avoidance disclosure of CSR, the lower rate of corporate tax avoidance. The logic is supposed to pay taxes in accordance with applicable law in any country it operates. If the company conducting tax avoidance is high then the company is considered to harm the country and in the long term can damage the reputation of the company. Thus the high tax avoidance activities should be regarded as an activity that does not have a social responsibility. Results of research Lanis & Richardson (2011), in line with Avi-Yonah research stating that the company is a real entity. In the view of real entity, a separate company from the State or shareholders. The implication is that CSR has nothing to do with the company but CSR is beneficial to the people. So companies do CSR greatly appreciated although there is no law. On the revenue side, the company should not have to make the effort of tax avoidance.

The two of views above, Davis, Guenther, Krull, and Williams (2013) states the argument about the relationship of CSR and taxes is that the negative correlation between CSR with tax avoidance. It is based that the company can use the proceeds of the tax savings to directly invest in CSR activities. Furthermore, some activities that improve social welfare also be tax deductible. In the context of Indonesia, for example, some of the expenses related to the

company's CSR can be a tax deduction (*deductible expenses*) as stipulated in Government Regulation No. 93 Year 2010. As a result, the greater the CSR, the tax burden could be on the wane. Of the two views above, it can be hypothesized as follows.

**Hypothesis 1: CSR negative effect on tax avoidance.**

**Methods**

This study uses multiple regression analysis model with the dependent variable is the avoidance of corporation tax and the independent variable is CSR. To strengthen the testing, used some of the control variables that are most likely affect the taxation of companies which is a measure of companies and the size of the audit committee.

**1. Samples**

Samples were public companies listed on the Indonesia Stock Exchange for 2010-2014. Associated with a proxy measurement of tax avoidance in the form ETR then sampling criteria are:

- a. manufacturing company in addition to *real estate*/ properties listed on the Indonesia Stock Exchange,
- b. presenting the financial statements ended December 31,
- c. have the data of financial statements and annual report for 2010-2014,
- d. ETR value between 0 and 1,
- e. did not experience a loss in the year 2010-2014,
- f. Financial statements are presented in Rupiah.

The calculation of ETR, the data used are the financial statements while to develop the scores of CSR disclosure, the data used is the annual report. By doing content analysis, qualitative data to get a quantifiable CSR disclosure score.

**2. Control Variables**

Control variables in this study there are three, namely size, leverage, and the audit committee. SIZE is the control variables of the size of the company by proxy the natural logarithm of total assets. The use of firm size as a control variable is to control the size *effect* on the activity of tax avoidance (Lanis & Richardson, 2011). LEV is the control variables of the level of leverage of the company. The use of leverage as control variables based on the premise that the large the greater leverage of debt financing and the greater interest expense. Given the interest expenses can be deducted in calculating the income tax (*deductible expenses*), the interest charges can affect the tax payable and ETR. KOMAU is a control variable representing corporate governance mechanisms, namely the number of audit committee members. KOMAU is the control variables of the proportion of independent directors compared with the rest of the commissioners.

**3. Methods of Analysis**

The determination effect of CSR practices toward corporate tax avoidance, then the hypothesis testing is done by multiple linear regression method. Before testing the hypothesis test is conducted prior to the data, such as test and classical assumption of normality. The equation model hypothesis testing are:

$$ETR_i = \alpha + \beta_1 CSR_{it} + \beta_2 SIZE_i + \beta_3 LEV_i + \beta_4 KA_i + e$$

**Results**

The using purposive sampling method the number of samples are 27 companies with five-year study period. Descriptive statistical tests are shown in the following table:

**Table 1.**  
**Description Statistics**

	N	Mean	Max	Min	St.Dev
ETR	100	0.25	0.36	0.18	0.032
SIZE	100	28.09	31.69	25.08	1.52
LEV	100	0.36	0.70	0.01	0.149
KAI	100	3.10	4.0	3.0	0.3
CSR	100	0.19	0.43	0.038	0.096

Source: Secondary data is processed 2016

Based on the above data, it can be concluded that the low levels of ETR which means that the high level of tax avoidance. As well as a high level of CSR, which can be seen from Table 1. Results of test for normality using the Kolmogorov-Smirnov showed that the research data was normally distributed with significant values of 0.29 is greater than 0.05. Further testing multicoloniarity classic assumption test, heteroscedasticity test, and test autocorrelation shows that research model free from the classical assumption test. Results of testing the hypothesis by using multiple linear regression can be seen in Table 2.

**Table 2**  
**Multiple Linear Regression Analysis**

	B	t	Sig
Constant	0,485	3,82	0,000
CSR	-0,054	-1,36	0,177
SIZE	-0,008	-3,22	0,002
LEV	0,134	3,02	0,001
KAI	-0,013	-1,16	0,246

Source : Data are processed, 2016

### Discussion of Results

Based on the results of the regression turns out that the level of CSR activity negatively affects tax avoidance represented by ETR. It points out that the size of the company (SIZE) has a negative effect on ETR as well as to leverage positive effect on ETR. Only the audit committee does not affect the ETR. CSR has a negative effect on tax avoidance. This means that the higher the level of CSR disclosure of a company, the lower the corporate tax avoidance practices. The results are consistent with research conducted by Lanis and Richardson (2012), Watson (2011), as well as Hoi, Wu and Zhang (2013). Companies with low rankings in CSR is not considered socially responsible so that tax avoidance is higher (Hoi *et al*, 2013) .The more responsible socially expected lower tax avoidance.

Reducing the tax burden could be seen as a matter of course in the company, due to the cost reduction can improve profitability, increase shareholder value. But also depends on the tax regulations to support the government's social programs. Tax avoidance actions are seen by some people as an act of irresponsible socially caused the company does not pay taxes fairly. It is given that the company has many stakeholders both internal and external. CSR is an act that not only take into account the economic but also the social, environmental and other impacts of actions by the company itself as a form of responsibility to stakeholders. Act of tax avoidance is high is seen as unethical and irresponsible by the public, and therefore CSR affects negative against acts of tax avoidance (Hoi *et al*, 2013).

### Conclusions, suggestions and the limitations

This study have aim to examine the effect of CSR on tax avoidance in Indonesia. By using multiple regression analysis, it was found that in the context of Indonesia level of CSR activity negatively affects tax avoidance.

Limitations of this study include SSR assessment of social responsibility using the PROPER and use of annual reports that allow information related to CSR are incomplete and are not the same for each company.

For further research could use another more complete information about the company's CSR ratings and are expected to use a proxy vote or add other corporate governance.

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# DO MACHIAVELLIANISM AND ETHICAL CLIMATE AFFECT PUBLIC ACCOUNTANTS' ETHICAL PERCEPTIONS OF TAX EVASION? EVIDENCE FROM INDONESIA

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## Abstract

The purpose of our study is to investigate the effect of Machiavellianism, a general measure of the propensity for manipulative and deceitful behavior, and ethical climate on public accountants' ethical perception of tax evasion. Our study is based on a survey of 76 public accountants in Indonesia. The direct effect test was used to examine the effect of Machiavellianism and ethical climate on ethical perceptions of tax evasion. The results indicates that Machiavellianism was not influence public accountants' ethical perceptions of tax evasion. Consistent with the expectations, ethical climate positively affects ethical perceptions of tax evasion. In other words, public accountant perceptions of the extent to which the organization (public accounting firm) supports public interest and social responsibility clearly encourage them to judge tax evasion as more unethical. To our knowledge, this is the first study to address the effect of Machiavellianism and ethical climate on public accountants' ethical perceptions of tax evasion in Indonesia. The findings have important implications, suggesting that by enhancing ethical climate in a public accounting firm that encourages ethical behavior may lead public accountants to be more critical to tax evasion.

**Keywords:** *Ethical climate, ethical perceptions, Machiavellianism, public accountant, tax evasion*

## Introduction

An effective system of taxation and revenue administration makes a significant contribution to the improvement of national welfare. However, tax evasion is one phenomenon that undesirably causes a serious threat to revenue generation efforts of government. Tax evasion is an illusive concept and can be defined as a condition in which, intentionally and by illegal means, individuals either partially pay the tax they are liable to pay or do not pay at all (Lewis, 1982, p. 123). Consequently, this will affect to the loss of tax revenue, which will in turn affect the effectiveness of the tax system in a great deal. Crowe (1944) stated that tax evasion is illegal, immoral and unethical. However, is that still unethical even if government is wasting the collections or spending the collected money on unworthy projects and unjust causes?. Thus, some groups of society have different perceptions, whether tax evasion is ethical or unethical.

The ethics of tax evasion has been discussed in the relevant literature for a long period of time. However, the vast majority of the studies have addresses the issue in the perspective of business student. Thenk (2012), McGee *et al.* (2008), McGee and Djatej (2007), and McGee and Maranjyan (2006) found that business student perceived tax evasion is ethical if the government corrupt, tax system is unfair and tax rates are too high. On the other hand, McGee and Gupta (2008) found that business student in New Zealand perceived tax evasion is unethical because every taxpayer have responsibility to pay tax in accordance with the tax regulations. A follow-up study McGee and Maranjyan (2006) found a widespread perception that tax evasion is often not unethical because of the widespread belief that there is no duty to pay taxes to a corrupt government. Moreover, Benk *et al.*



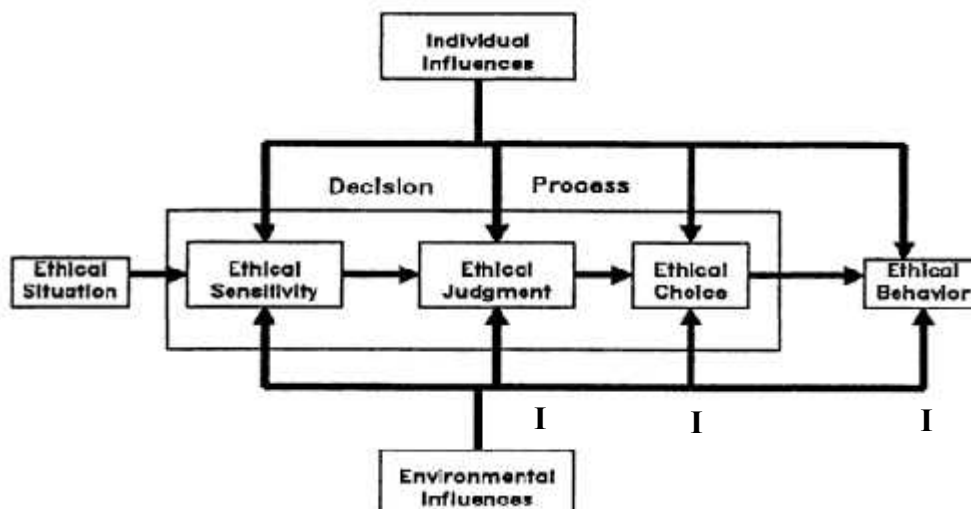
(2009), McGee and Bernal (2006), McGee and Lingle (2008), and McGee and Ho (2006) found that respondent perceived tax evasion is ethical in some cases but not in others. From those previous studies, we can conclude that respondent have different ethical perception of tax evasion, accordingly there is much opportunity for further work in this area.

Not much has been written about tax evasion from an ethical perspective. Some early studies of tax evasion focused primarily on assessing and reporting attitudes toward such behaviors, thus, a limited number of independent variables affecting have been investigated. Therefore, there is clearly a need to obtain a better understanding of the behavioral factors (e.g. Machiavellianism, ethical climate) that influence ethical perceptions of tax evasion. Behavioral research on tax evasion provides a distinct advantage over market-based studies in this regard by focusing on the factors that influence the decision making processes of professional public accountants, the people who actually have responsibility to detect fraud, such as tax evasion.

## Literature Review and Hypotheses Development

### 1. Ethical Perceptions

Rest (1986) proposed a four-stage ethical decision making sequence to describe individuals' cognitive stages when they faced an ethical dilemma. Rest's four-component model comprises 1) ethical perception – being able to interpret the situation as being ethical or unethical; 2) ethical judgment – deciding which course of action is morally right; 3) ethical intention/choice – prioritizing ethical alternative over other alternatives; and 4) ethical behavior – engaging in ethical behavior as shown in figure 1. This model influenced by various individual factors (e.g., personality trait, attitudinal measures) and environmental factors (e.g., ethical climate) (Jones, 1991; Trevino, 1986). This current study primarily focuses on the first stage of the ethical decision making (ethical perceptions) because this stage is the fundamental and crucial stage in the ethical decision making process and helps to initiate ethical decision making. Hunt and Vitell (1986) describe ethical perceptions as the catalyst that entirely drives ethical decision making process. Thus, an ability to identify and properly assess the ethical issue in a situation is a necessary prerequisite to right ethical decisions (Rest, 1986).



Source: Wittmer (2005:54)

Figure 1. Behavioral Model for Ethical Decision Making

## 2. The Ethics of Tax Evasion

Soyode and Kajola (2006) defined tax evasion as a deliberate and willful practice of not disclosing full taxable income in order to pay less tax. According to Fagbemi *et al.* (2010), tax evasion is the general term for efforts by individuals, firms, trusts and other entities to evade taxes by illegal means. Tax evasion usually entails taxpayers deliberately misrepresenting or concealing the true state of their affairs to the tax authorities to reduce their tax liability. The differentiation between tax evasion and tax avoidance lies on tax payer compliance with laws and regulations. In tax avoidance, tax payer take full advantage of the tax code to reduce their tax liabilities, without violate the law, such as postponement of taxes. Conversely, tax evasion is the illegal reduction in tax liabilities, such as declaring less income.

According to McGee (2006), from the legal, economic, and psychology perspective, there are some reasons that encourages taxpayer to evade tax. For instance, taxpayer do evade tax because the tax system is unfair, legal system is weak, tax rates are too high, and a large portion of the tax collected is wasted. The ethics of tax evasion can be examine from a number of perspective. Historically, there have been three main views on the morality of tax evasion (McGee, 2006; Crowe, 1944). First approach is to examine the relationship of the individual to the state. Second, the relationship between the individual and taxpaying community or some subset thereof. Finally, the relationship of the individual to God.

### A. View One: Tax evasion is never ethical

One strand of this view is that individuals owe a duty to the state to pay whatever taxes the state demands (McGee, 2006). In a democracy, such as Indonesia, the leaders are elected and the people consent to be taxed. Thus, there is an absolute duty to pay whatever taxes the government imposes. Consequently, tax evasion is never ethical.

### B. View Two: Tax evasion is always ethical

This viewpoint begins with the premise that all government is illegitimate (McGee, 2006). Government is a mere thief, which confiscates assets, percentages of paychecks, etc., without the consent of the owners of the property. The definition of theft is the taking of property without the owner's consent. Even though someone lives in a democracy, such as Indonesia, does not mean that the government represents the interests of all the people, or that the government works for the general welfare. Thus, some people perceived that tax evasion is always ethical because government is illegitimate.

### C. View three: Tax evasion is sometimes ethical

This view holds that tax evasion is ethical in some cases and unethical in others (McGee, 2006). The point is that, once it is conceded that tax evasion is sometimes ethical, there is no clear dividing line that people can agree on regarding when evasion is ethical and when it is not.

## 3. Machiavellianism

The Machiavellianism construct was intended to describe individuals with manipulative, cold and calculating personalities and little concern for conventional standards of morality (Christie and Geis, 1970). High Machiavellians have traditionally been viewed as relatively aggressive and possessing a strong desire to pursue "winning" even at the expense of morality of ethics (Geis *et al.*, 1970). Recent studies have recognized the potential negative effects of Machiavellianism on ethical decision making. Shafer and Simmons (2008) found that high Machs' believe less strongly in the importance of

corporate and social responsibility and are more likely to condone aggressive tax avoidance. Hartmann and Mass (2010) also found that Machiavellianism has significant effects on business unit controllers' propensity to create budget slack. Moreover, Shafer and Wang (2011) found that high Machiavellians were more likely to perceive accounting manipulations as ethically acceptable.

We sought to replicate and extend those above findings by examining the effect of Machiavellianism on ethical perceptions of tax evasion. According to Gunnthorsdottir *et al.* (2002), "high Machs with their cool, rational attitude, should be true gamesmen, and better than Lows at going after their short-term self-interest [...]". This reasoning clearly suggests that high Machiavellian will be more likely to perceive tax evasion as more ethical. Accordingly, we propose the following hypothesis:

**H1:** Machiavellianism affects ethical perceptions of tax evasion

#### 4. Ethical Climate

The organizational ethical climate is "the prevailing perceptions of typical organizational practices and procedures that have ethical content" (Victor and Cullen, 1988). The ethical climate constructs developed by Victor and Cullen (1987, 1988) is a two-dimensional matrix, which captures both the ethical criteria and locus of analysis involved in decision making. The ethical criteria derived from theories of moral philosophy and psychology, include egoism, benevolence and principle. The locus of analysis derived from sociological theory, specifies the scope of consideration when making ethical decisions, which may be on the individual, local or cosmopolitan level. The cross section of the two dimensions forms a 3 x 3 matrix consisting of nine types of ethical climates, as shown in Table 1.

**Table 1**  
**Theoretical Ethical Climate Types**

Ethical Criteria	Locus of Analysis		
	Individual	Local	Cosmopolitan
Egoism	Self-Interest	Company Profit	Efficiency
Benevolence	Friendship	Team Interest	Social Responsibility
Principle	Personal Morality	Company Rules and Procedures	Laws and professional Codes

Source: Victor and Cullen (1988)

In the ethical criteria dimension, egoistic climates focus on self-interest; benevolent climates on the well-being of the parties involved; and principled climates on following rules, laws and professional codes of conduct. An individual locus of analysis encourages a focus on self-interest, relationships and personal moral principles of organizational members. The local level of analysis is usually interpreted as an emphasis on the company or organizational subunits. A cosmopolitan focus extends the scope of concern on the societal level. The research has documented the intuitive proposition that egoistic climate will tend to result in less ethical decisions in organizational contexts, while benevolent and principled climate will result in more ethical decisions (Peterson, 2002; Trevino *et al.*, 1998). When the ethical climate in an organization is perceived as supportive of ethical behavior and intolerant of unethical behavior, this should influence the employees' views of the moral acceptability of questionable actions. It seems apparent that these relationships should also true in the contexts of tax evasion. Shafer and Wang

(2011) found that ethical climate was influenced ethical perceptions. Consequently, we propose the following research hypotheses:

**H2:** Ethical climate affects ethical perceptions of tax evasion

**Research Method**

Before spreading the questionnaires, we conducted pre-test and pilot test to determine the validity and reliability of the research instrument. Participant responded to (1) fifteen items from the ethical perceptions of tax evasion scale adapted from McGee and Guo (2007); (2) fifteen items from the Ethical Climate Questionnaire (ECQ) (Cullen *et al.* 1993); (3) twenty items from the Mach IV Machiavellianism scale (Christie and Geis, 1970); and (4) a demographic questionnaire. Since all participants were Indonesian native speakers, the questionnaire was translated into Bahasa by researcher, who is an Indonesian native speaker, and checked by professional English lecturer. Bahasa questionnaires were piloted to 33 accounting students at STIE Perbanas Surabaya.

The respondents of this study were public accountants employed in Indonesia public accounting firm. Access to participant was obtained through personal contact. A total of 51 public accounting firm participated in the study. The survey was accompanied by a cover letter assuring participants that their responses would be treated as strictly confidential. The mailing also contained pre-paid, addressed envelope for sending replies directly to the researchers. The mailing was undertaken in early February 2016. Approximately 204 instruments were distributed and 87 respondents returned their instrument, giving a response rate of approximately 42.6 percent. Eleven instruments were discarded because of incomplete information given, resulting in a usable sample of 76 responses, as shows in Table 2. In order to check for non-response bias, early and late responses were compared, and no significant differences were noted, as shown in Table 3.

**Table 2**  
**Percentage of Questionnaire Returned**

Description	Total	Percentage
Questionnaires sent	204	100%
Questionnaires not returned	117	57.3%
Questionnaires returned	87	42.6%
Questionnaires cannot be processed	11	5.4%
Questionnaires which can be processed	76	37.2%

Source: Proceed data.

**Table 3**  
**Non-Response Bias (Paired Sample Test)**

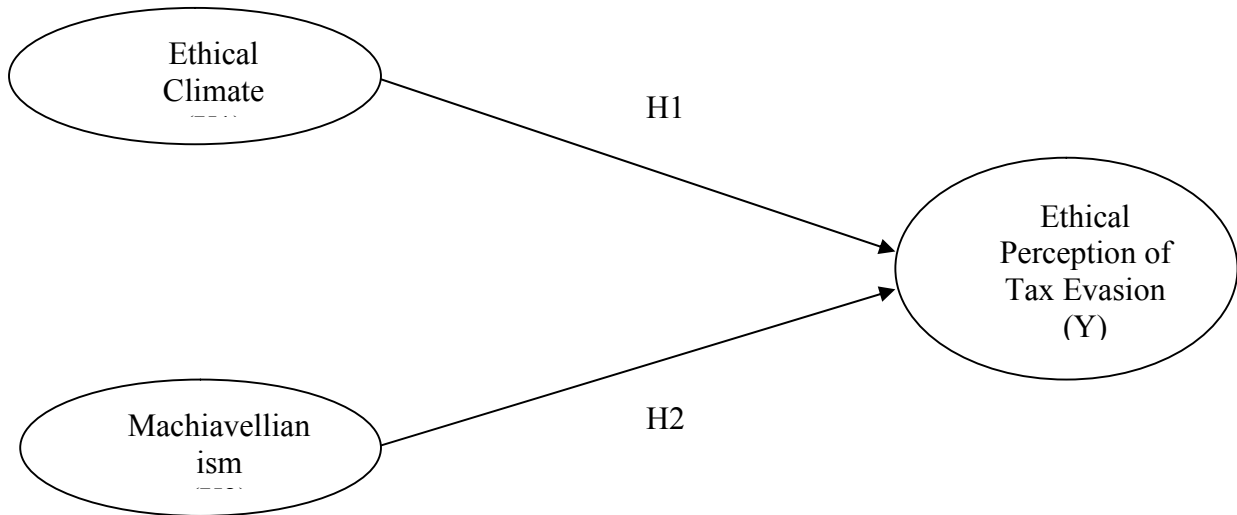
	Sig. (2-tailed)
Pair 1 TE_E - TE_L	0.470*
Pair 2 EC_E - EC_L	0.501*
Pair 3 MACH_E - MACH_L	0.329*

Source: Proceed data.

Description: TE: Tax Evasion, EC: Ethical Climate, MACH: Machiavellianism, E: Early response, L: Late response

Note: \*p<0.05

The exogenous variable in our study consists of ethical climate and Machiavellianism. Yet, the endogenous variable is ethical perception of tax evasion, as shown in Figure 2. The analytical tool used in our study is the *Partial Least Square* (PLS). This current study extends prior research by developing an integrated model of the effect of individual factor (Machiavellianism) and organizational factor (ethical climate) on ethical perceptions relating to tax evasion.



**Figure 2**  
**Research Model**

**Findings**

**1. Model Evaluation**

Model evaluation consist of outer model and inner model. Outer model is used to evaluate the value of validity and reliability. Reliability test can be seen from Cronbach’s Alpha and Composite Reliability value that must be higher than 0.7. This criterion was met for each of the latent construct, as shown in Table 4. Yet, validity test consist of convergent validity and discriminant validity. To test the convergent and discriminant validity of the measures of ethical perceptions, ethical climate, and Machiavellianism, we adopted the procedures recommended by Chin (1995). Chin (1995) recommended that to establish adequate convergent validity, the average variance extracted (AVE), communality and factor loading should exceed 0.5. This criterion was met for each of the latent construct, as shown in Table 5, Appendix 1 and Appendix 2.

**Table 4**  
**Result of Reliability Test**

Variable	Composite Reliability	Cronbachs Alpha
<b>EC</b>	0.955185	0.946867
<b>EP</b>	0.973343	0.970598
<b>MACH</b>	0.924586	0.915620

Source: Proceed data.

Description: EC: Ethical Climate, EP: Ethical Perception of Tax Evasion, MACH: Machiavellianism

To establish discriminant validity between latent construct, Chin (1995) suggests that the correlation between the constructs should be less than squared each of the constructs’ AVEs; and cross loading should exceed 0.5. This criterion was met for each of the comparison between the ethical perceptions, ethical climate, and Machiavellianism, providing evidence for discriminant validity, as shown in Table 5 and Appendix 1.

**Table 5.**  
**Result of Convergent and Discriminant Validity**

Variable	Communality	AVE	Squared AVE	EC	EP	MACH
EC	0.663874	0.663874	0.814784	1.000000		
EP	0.509031	0.710048	0.842643	0.757031	1.000000	
MACH	0.710047	0.509031	0.713464	-	-	1.000000
				0.264198	0.281299	

Source: Proceed data.

Description: EC: Ethical Climate, EP: Ethical Perception of Tax Evasion, MACH: Machiavellianism

## 2. Hypotheses Testing (Inner Model)

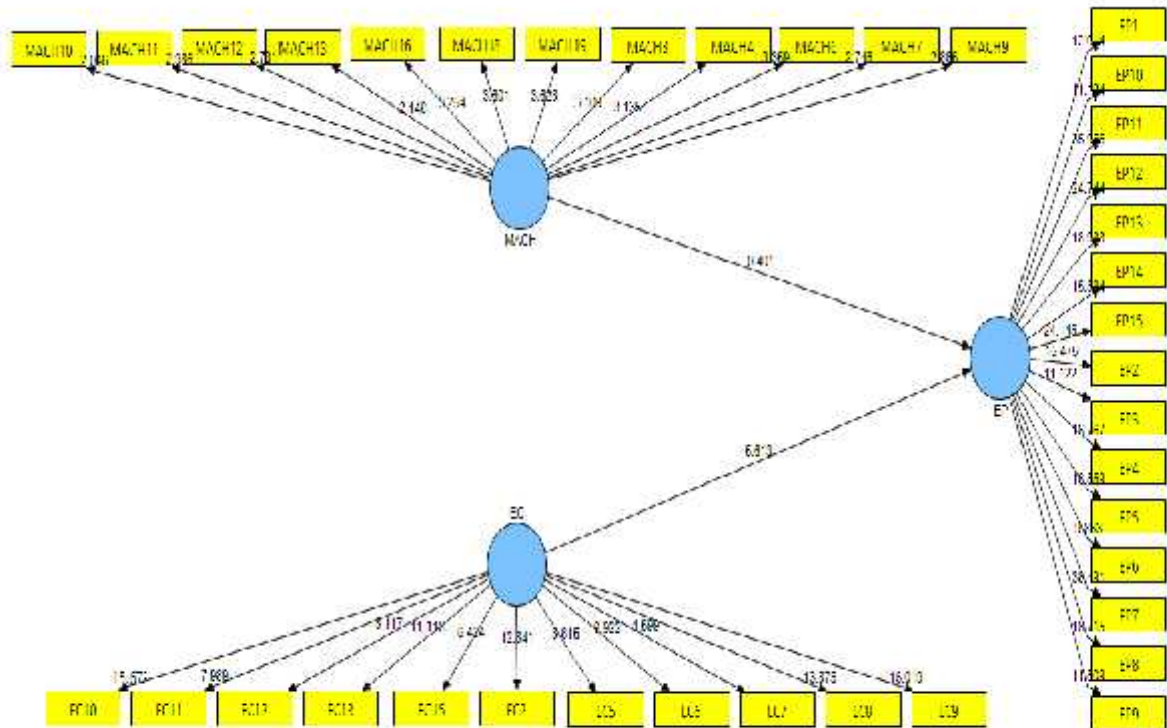
Based on the research model (Figure 2), our study was testing 2 hypotheses. Hypotheses 1 (H1) states that Machiavellianism affect ethical perception of tax evasion. The result of total effect test for the inner model show that Machiavellianism was not affected ethical perception of tax evasion as indicated by the t-statistic value of 0.401 (less than t-table value of 1.96). Consequently, hypotheses 1 (H1) is rejected. Hypotheses 2 states that ethical climate affect ethical perception of tax evasion. Consistent with the expectation, the result show that ethical climate has positively effect on ethical perception of tax evasion, as indicated by the original sample estimate value (path coefficient) of 0.738594 and t-statistic value of 5.613 (higher that t-table value of 1.96). Therefore, hypotheses 2 (H2) is supported.

**Table 5.**  
**Result of the Total Effect Test**

	Original Sample (O)	Standard Deviation (STDEV)	Standard Error (STERR)	T Statistics ((O/STERR))
EC -> EP	<b>0.7386</b>	0.1316	0.1316	<b>5.612</b>
MACH -> EP	<b>-0.0589</b>	0.1471	0.1471	<b>0.400</b>

Source: Proceed data.

Description: EC: Ethical Climate, EP: Ethical Perception of Tax Evasion, MACH: Machiavellianis



**Figure 3**  
**Inner Model**

**Discussion and Conclusions**

This study provides some interesting findings with respect to ethical perceptions of tax evasion in Indonesia, and raises questions that should be addressed in future research. Inconsistent with prior accounting and business studies (Richmond, 2001; Wirtz and Kum, 2004; Shafer and Simmons, 2008; Hartmann and Maas, 2010; Shafer and Wang, 2011), we found that Machiavellianism as a basic personality trait of the respondents was not influenced their ethical perceptions. This result is surprising, inconsistent with four-component model Rest (1986), which is ethical perceptions were not influenced by individual factors (Machiavellianism). This finding may be due to the fact that the vast majority of the respondents’ Machiavellianism scores were low (ninety five percent of the respondents’ MACH IV score was below 100). In addition, different findings with the prior studies may be also due to cross-cultural studies. According to Hofstede (1991), Indonesia is classified as collectivism country with individualism score 14 (range 0-100). In other words, Indonesian may tend to do something together rather than relatively aggressive and possessing a strong desire to pursue “winning” or personal success at the expense of morality and ethics.

Consistent with the expectation, the results indicate that ethical climate positively affects ethical perceptions of tax evasion. In other words, respondents of this study feel that the company places a strong emphasis on the pursuit of public interest and social responsibility (benevolent and principled climate). This clearly encourages them to perceive tax evasion as more unethical. The result of the current study consistent with Peterson (2002), Martin and Cullen (2006) and Shafer and Wang (2011), if employees find

themselves in an environment that encourage ethical behavior, organizational climate may lead them to rationalize the dysfunctional behavior, such as tax evasion as morally unacceptable. Our study proved that an individual perception as part of ethical decision making is influenced by environmental (organizational factor). Therefore, public accounting firm can enhance ethical climate that encourages ethical behavior to lead public accountants to be more critical to tax evasion. The result of the current study provides support to the Rest's (1986) four-component model, which is ethical perceptions is influenced by environmental factors, such as ethical climate.

This study is subject to a number of limitations, consequently, the results should be interpreted with caution. First, the current study is that relied on a convenience sample obtained through a network of personal contact. Therefore, future research may consider using probability sampling method in order to assess high external validity of the research findings. Second, as the study was restricted to public accountant in Indonesia, further research is required in order to assess the generalizability of the result outside that territory. Finally, approximately eleven instruments were discarded because of incomplete information given. Thus, further research could confirm to the personal contact when the instruments have already distributed in order to minimize discarded instruments. One possible avenue for future research could also expand on the model used in the current paper to simultaneously examine the effects of Machiavellianism, ethical climate, and other personal or environmental variables that have been found to influence ethical decision making such as personal moral philosophy and code of ethics.

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APPENDICES

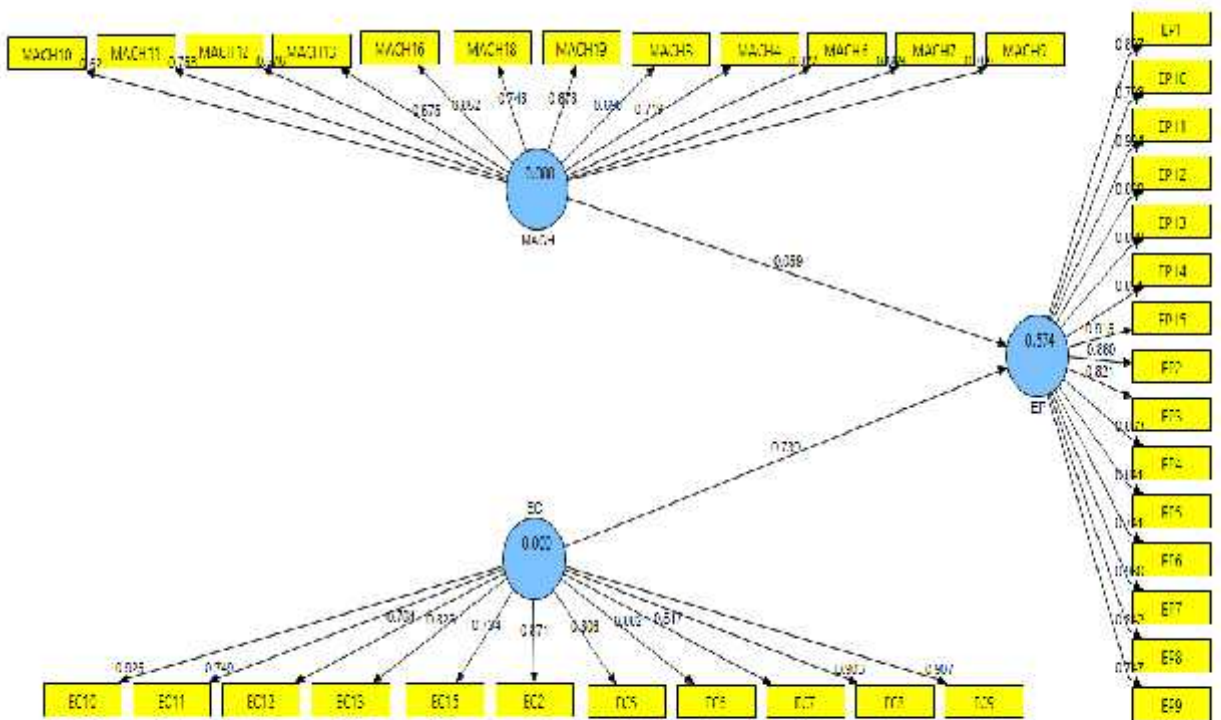
Appendix 1. Cross Loading

	EC	EP	MACH
EC2	<b>0.870583</b>	0.691126	-0.330869
EC5	<b>0.806008</b>	0.664284	-0.332077
EC6	<b>0.881824</b>	0.728162	-0.311597
EC7	<b>0.516561</b>	0.383861	-0.169603
EC8	<b>0.903066</b>	0.683283	-0.181088
EC9	<b>0.907423</b>	0.647629	-0.312516
EC10	<b>0.925309</b>	0.658844	-0.186364
EC11	<b>0.749071</b>	0.461333	-0.164812
EC12	<b>0.760702</b>	0.613628	-0.276565
EC13	<b>0.822809</b>	0.620766	-0.134989
EC15	<b>0.733941</b>	0.499181	-0.092110
MACH3	-0.266552	-0.169328	<b>0.697807</b>
MACH4	-0.259213	-0.095820	<b>0.718684</b>
MACH6	-0.404418	-0.278277	<b>0.822291</b>
MACH7	-0.298685	-0.176291	<b>0.669009</b>
MACH9	-0.078014	-0.020068	<b>0.784665</b>
MACH10	-0.083812	0.023529	<b>0.620774</b>
MACH11	-0.199900	-0.139482	<b>0.758004</b>
MACH12	-0.133818	-0.253812	<b>0.576274</b>
MACH13	0.243826	-0.055762	<b>0.574552</b>
MACH16	-0.218167	-0.111815	<b>0.851598</b>
MACH18	-0.073355	-0.186217	<b>0.747556</b>
MACH19	-0.091276	-0.197241	<b>0.677718</b>
EP1	0.647303	<b>0.807312</b>	-0.165084
EP2	0.688417	<b>0.859790</b>	-0.147527
EP3	0.571721	<b>0.820551</b>	-0.262031
EP4	0.614484	<b>0.863462</b>	-0.180172
EP5	0.564158	<b>0.841374</b>	-0.229867
EP6	0.547478	<b>0.741013</b>	-0.151486
EP7	0.731887	<b>0.929673</b>	-0.245279
EP8	0.515423	<b>0.842125</b>	-0.310075
EP9	0.475625	<b>0.747323</b>	-0.386302
EP10	0.362452	<b>0.702814</b>	-0.101726
EP11	0.701143	<b>0.924051</b>	-0.214356
EP12	0.655885	<b>0.868534</b>	-0.294699
EP13	0.773834	<b>0.888016</b>	-0.254498
EP14	0.750584	<b>0.851132</b>	-0.208568
EP15	0.734490	<b>0.914721</b>	-0.268253

Source: Proceed data.

Description: EC: Ethical Climate, EP: Ethical Perception of Tax Evasion, MACH: Machiavellianism

Appendix 2. Outer Model



### **Appendix 3. Scale Items**

#### *Ethical Perception of Tax Evasion*

1. Tax evasion is ethical if tax rates are too high.
2. Tax evasion is ethical even if tax rates are not too high because the government is not entitled to take as much as it is taking from me.
3. Tax evasion is ethical if the tax system is unfair.
4. Tax evasion is ethical if a large portion of the money collected is wasted.
5. Tax evasion is ethical even if most of the money collected is spent wisely.
6. Tax evasion is ethical if a large portion of the money collected is spent on projects that I morally disapprove of.
7. Tax evasion is ethical even if a large portion of the money collected is spent on worthy projects.
8. Tax evasion is ethical if a large portion of the money collected is spent on projects that do not benefit me.
9. Tax evasion is ethical even if a large portion of the money collected is spent on projects that do benefit me.
10. Tax evasion is ethical if everyone is doing it.
11. Tax evasion is ethical if a significant portion of the money collected winds up in the pockets of corrupt politicians or their families and friends.
12. Tax evasion is ethical if the probability of getting caught is low,
13. Tax evasion is ethical if some of the proceeds go to support a war that I consider to be unjust.
14. Tax evasion is ethical if I cannot afford to pay.
15. Tax evasion is ethical even if it means that if I pay less, others will have to pay more.

#### *Ethical Climate*

1. In this organization, people are mostly out for themselves.
2. People are expected to do anything to further the organization's interests.
3. There is no room for one's own personal morals or ethics in this organization.
4. Work is considered sub-standard only when it hurts the organization's interests.
5. In this organization, people protect their own interest above other considerations.
6. The first consideration is whether a decision violates any law or professional standard.
7. People are expected to comply with legal and professional standards over and above other considerations.
8. People are concerned with the organization's interests to the exclusion of all else.
9. In this organization, people are expected to strictly follow legal or professional standards.
10. In this organization, the law or ethical code of one's profession is the major consideration.
11. It is expected that you will always do what is right for the public.
12. People in this organization have a strong sense of responsibility to the outside community.
13. Decisions here are primarily viewed in terms of contribution to profit.
14. People in this organization are actively concerned about the public interest.
15. People in this organization are very concerned about what is best for them.
16. The effects of decisions on the public are a primary concern in this organization.

*Machiavellianism*

1. Never tell anyone the real reason you did something unless it is useful to do so.
2. The best way to handle people is to tell them what they want to hear.
3. One should take action only when sure it is morally right [1].
4. Most people are basically good and kind [1].
5. It is safest to assume that all people have a vicious streak and it will come out when they are given a chance.
6. Honesty is the best policy in all cases [1].
7. There is no excuse for lying to someone else [1].
8. Generally speaking people would not work hard unless they are forced to do so.
9. All in all, it is better to be humble and honest than to be important and dishonest [1].
10. When you ask someone to do something for you, it is best to give the real reasons for wanting it rather than giving reasons which carry more weight [1].
11. Most people who get ahead in the world lead clean, moral lives [1].
12. Anyone who completely trusts anyone else is asking for trouble.
13. The biggest difference between most criminals and other people is that the criminals are stupid enough to get caught.
14. Most people are brave [1].
15. It is wise to flatter important people.
16. It is possible to be good in all respects [1].
17. The man who said "there's a sucker born every minute was wrong [1].
18. It is hard to get ahead without cutting corners here and there.
19. People suffering from incurable diseases should have the choice of being put painlessly to death.
20. Most people forget more easily the death of a parent than the loss of their property.

*Note*

1. Reverse scored.

**PROCESS OF POSITIVE ATTITUDE FORMATION OF SOCIETY TOWARD  
GREEN PRODUCTS  
(QUALITATIVE STUDY OF GREEN PRODUCTS' CONSUMERS IN  
INDONESIA)**

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**Abstract**

This research aimed to explore the constructed variables that were to influence the process of the positive attitude formation of the developing country's society toward the green products. Those several variables were the green brand perception, green price fairness, and country of origin.

Next, exploratory study was used to understand these research variables through the deep interview toward 15 participants of the public area of Yogyakarta City.

The study results showed that the conceptualized variables could be used to build the process of the positive attitude formation of the society toward the green products and delivered some propositions. The study suggests several implications both theoretically and practically. The propositions in this study can be continued in the future study by testing the conceptualized variables in this research.

**Keywords:** *Green Brand Perception, Green Price Fairness, Country of Origin, Society Positive Attitude toward Green Products*

**Introduction**

The Attitude is the issue that is still interesting in this research, especially in the process of the positive attitude formation toward the green products. It is because the previous studies indicated the model inconsistencies that implicated on the limited model application's capability to explain the issue (Tsakiridou *et al.*, 2008; Chen and Chai, 2010; Cheah and Phau, 2011). The first factor assumed to contribute the inconsistencies was the problem developing in the observed objects and settings. Furthermore, the study approach perspective was the second factor assumed also to cause the inconsistencies.

The problem development in the previous studies appeared because the individual social responsibility sense to be aware of the environment and health (Kaiser *et al.*, 1999; Chan and Lau, 2000; Laroche *et al.*, 2001; Tsakiridou *et al.*, 2008; Barber *et al.*, 2009; Chen and Chai, 2010; Boztepe, 2012; Lim *et al.*, 2013). It was because there was still the differences of the society awareness level toward the green products both in the developed countries and developing countries. The developed countries' society such as Europeans and Americans had indicated the relative high awareness toward the green products expressed through the society's care about the environment, health, and the willingness to pay the high prices for the products (Laroche *et al.*, 2001; Barber *et al.*, 2009). Meanwhile the developing countries' society such as Asia still indicated the relative low awareness toward the green products uncovered by the still little-knowledge of the environment and green products (Chan and Lau, 2000; Bing *et al.*, 2011; Chen and Chai, 2010; Lim *et al.*, 2013; Kong *et al.*, 2014). Indonesia as one of the developing countries in Asia still had the society that also still indicated the relative low awareness toward the green products that was showed by the price perception of the relative expensive green products that did not bring advantages yet (Panjaitan & Sutapa, 2010; Suharjo *et al.*, 2013). This condition needed the effective strategies to grow the society's awareness through the liking in the green products as the first step.

Furthermore, the study approach perspective of the consumer research was assumed to also contribute in the inconsistencies of the attitude model. The intended study approaches were the *behavioral* and *attitudinal* approaches. It was because in the *behavioral* approach, the attitude was built by the individual learning process through the external environment factors (Foxall *et al.*, 2006; Bray, 2008; Foxall *et al.*, 2011). Meanwhile, in the *attitudinal* approach, the attitude was developed through the individual thinking process based on 3 components those were cognitive, affective, and conative components (Fazio and Olson, 2003; Schiffman and Kanuk, 2007).

This research model was developed by the *attitudinal* approach because it was to explain the consumers' ways of thinking through the society's positive attitude toward the green products. Then, 4 variables were observed in this research, those were the green brand perception, green price fairness, country of origin, and society's positive attitude toward the green products. These variables were assumed to be effective in the process of the positive attitude formation toward the green products because there were still the different meanings of these variables in several previous studies (Laroche *et al.*, 2001; Hartmann *et al.*, 2005, D'Souza *et al.*, 2006; Kinra, 2006; Ahmat *et al.*, 2011; Kabadayi & Lerman, 2011; Jap and Business, 2013; Sinrungtam, 2013). It gave the opportunity in this research to explore again the variables so the same understanding was obtained in the process of the positive attitude formation of the society toward the green products.

## Literature Reviews

### 1. Theory of Consumer Behavior

The theory of consumers' behavior was used as the basic concept to build this research model because the consumer decision making in this research was explained as the process of thinking, behaving, and acting person (Bray, 2008). Literature reviews showed that there was the approach perspective difference in the consumer research, those were behavioral and attitudinal approaches (Pachauri, 2002; Foxall *et al.*, 2006; Bray, 2008; Foxall *et al.*, 2011). Nonetheless, attitudinal approach was used to build the individual's awareness in this research through the individual thinking process expressed in the variables of the green brand perception, green price fairness, and country of origin. Meanwhile, the behaving process was expressed in the variable of the society positive attitude considered as the first step to establish the society's awareness toward the green products.

### 2. Positive Attitude toward Green Products

Attitude was defined as the individual subjective assessment of a brand or product (Bodur *et al.*, 2000; Peter and Olson, 2002; Bohner and Dickel, 2011). This evaluation result was then stated in the forms of the pleasant or unpleasant attitude, advantageous or disadvantageous object (Krosnick and Smith, 1994; Pachauri, 2002; Schiffman and Kanuk, 2007). So the attitude occurred as the society's awareness form toward the negative impacts of the consumed products or brands (Wise *et al.*, 2008).

The literature reviews indicated that the strong attitude influenced the strong behavior. It was because the strong attitude more resisted the change rather than the weak attitude (Krosnick *et al.*, 1993; Schwarz, 2007). Attitude was formed through the consumers' learning process at stimuli developed by the marketers to arouse the consumers' positive responses (Uta and Popescu, 2013). In the context of green products, the positive attitude could be built by the society's awareness first by the stimuli assumed to influence the consumers' interest in the green products.

### 3. Green Brand Perception



The green brand perception is conceptualized as the stimulus considered effective in influencing the process of the positive attitude formation of the society toward the green products. It is because several studies still indicate the perception variety of the green brands expressed through functional and emotional values (Hartmann *et al.*, 2005; Hartmann and Ibañez, 2006; Chen, 2009), and the symbol uses of *eco labeling* in the products (Lim *et al.*, 2013; Kong *et al.*, 2014). The functional values of the green products can be revealed as the indicators of environment-friendly, air pollution minimalizing, save with the money, and having quality. Meanwhile, the emotional values can be reflected in the emotion encouragement through the pleasant image projection that arouses someone's feeling such as inhaling the fresh mountain air or feeling the healthier body (Hartmann *et al.*, 2005; Hartmann and Ibañez, 2006; Koller *et al.*, 2011).

Furthermore, eco labelling was also commonly used by the marketers as the individual's guidance to choose the environment-friendly products with minimal impacts on the environment (D'Souza *et al.*, 2006; Rex and Baumann, 2007), but a part of the individuals still showed skeptical on the green brands (Aji, 2015). It was because the green brands were still perceived to have the inferior quality with the more expensive prices than the non-green products' prices, and there was still skeptic on the benefits and/or values offered by the green products (Mahenc, 2007; Chang, 2011; Suharjo *et al.*, 2013; Aji, 2015). This condition needed the right understanding development on the green products.

The empirical study showed not all products labelled as environment-friendly were perceived to be advantageous for the consumers because the lack of the individual's knowledge about the products (Lim *et al.*, 2013). Nevertheless, products labelled as environment-friendly could also influence positively the consumers' behavior when the label was established by the organization with the good reputation (Kong *et al.*, 2014). These studies still indicated the difference of the individual's perception on the green brands. It was because there were still the differences in individual's understanding, knowledge, and awareness so affecting the individual's attitude toward the brands (Hartmann *et al.*, 2005; Hartmann & Ibañez, 2006; Chen, 2009; Koller *et al.*, 2011; Kong *et al.*, 2014). Therefore, the further exploration was needed to get the same individual's understanding about the green brands' perception.

#### **4. Green Price Fairness**

Green price fairness is the next stimulus assumed to be effective in influencing the process of the positive attitude formation of the society toward the green products. It is because there are still the various consumers' understandings about the price fairness of the green products. The literature review defines the price fairness as the consumers' judgment and emotion related with the existence or non-existence of the prices' differences offered by the sellers compared with the other sides' prices in the transactions that can be accepted and approved by the consumers (Xia *et al.*, 2004). This definition indicates that a price is perceived as fair when the consumers have the positive motives in buying; on the contrary, a price is perceived as unfair when the consumers have the negative motives in buying (Campbell, 1999).

Commonly the green products are priced higher than the non-green products. It is because the production costs of the green products are relatively higher than the costs of the non-green products (Mahenc, 2007; Suharjo *et al.*, 2013). The several studies showed the contradiction of the high price influence on the behaving process (Laroche *et al.*, 2001; Shirsavar and Fashkamy, 2013; Suharjo *et al.*, 2013). On the other hand, a part of individuals were not interested in the green products because the relative high products' prices (Suharjo *et al.*, 2013). Meanwhile, the other individuals were interested to willing to pay the high green products' prices because the products gave the additional values

(Laroche *et al.*, 2001). This difference causes the variable of the green price fairness needs to be re-explored to get the same individual's understanding about the variable; so the individual is encouraged to have the liking in the green products.

### **5. Country of Origin**

Commonly the country of origin (COC) is used by consumers as the indicator of the products' judgment. It happens when consumers have little information about the products (Lin and Sternquist, 1994), and when consumers have difficulties in judging the products objectively (Balestrini and Gamble, 2006). The COC is also used to show the country where the products are made (Bilkey and Nes, 1982; Cattin *et al.*, 1982), the brands' producer's country (Agrawal and Kamakura, 1999), country image (Balestrini and Gamble, 2006), and country of manufacturer, country of assembly, country of parts, country of design, country of corporation ownership (Ahmed *et al.*, 2004; Showers and Showers, 2009; Sinrungtam, 2013). Therefore, the COC is considered as the last stimulus that influences the process of the positive attitude formation of the society toward the green products. It is because there is still the variety of understandings about the COC (Bilkey and Nes, 1982; Cattin *et al.*, 1982; Agrawal and Kamakura, 1999; Showers and Showers, 2009; Sinrungtam, 2013). This condition needs the further exploration to understand the meanings of COC.

The previous studies indicated the influence difference of the COC in the consumer decision making (Kinra, 2006; Batra *et al.*, 2000; Magsusson *et al.*, 2011). On one side, COC was perceived as not influencing the consumers' decisions (Kinra, 2006); on the contrary, on the other side, COC influenced the consumers' decisions (Sinrungtam, 2013). In this research, COC is considered as the variable that has the role to strengthen or weaken the relationship between the green brand perception and green price fairness of the society positive attitude toward the green products. It is because the previous studies still indicated the various understandings and influences from the COC variable in the consumer decision making; so the further exploration is needed about the COC's role in the process of the positive attitude formation of the society toward the green products.

### **Methodology**

This study is exploratory because it searches the understanding of the individual's perception about the stimuli that form the individual's positive attitude toward the green products. The qualitative deep interview was used to get the same understandings about the variables conceptualized in the study. Fifteen informants were recruited from several public areas such as campuses, offices, and shopping places in Yogyakarta City based on the individual's interest in the green products. The interview was done in the areas chosen as long as April, May, and June 2015. The informants were interviewed not by using the demography criteria and voluntarily. Seven males and eight females participated in this interview. The interview was done semi-structured, guided by a number of questions in the way of face-to-face with the informants. The interview results were documented by tape recorder as the media. The interpretative approach was used to analyze the interview results; that was through the involvement of the inductive thinking process by understanding the research subjects, balancing the findings with the interpretation that had conception based on the relevant theoretical reviews and empirical reviews, and doing the coherent concept testing. Finally the findings are presented in the next section.

## Findings and Discussions

### 1. Definition of Green Products

The interview results indicate that individuals still had the various opinions about the understanding of the green products; but there are 2 things related with the meanings of the green products, those are (1) the products focused in the environment and (2) the products focused in health. It is because the individual, who understands the green products as the products focused in environment, cares with the environment through the actions not to damage the environment and not to pollute the environment. When individuals were asked about “what they knew about the green products”, so the participants who cared the environment can be explained as follows:

- I.1 : “... products do not damage or pollute environment”.
- I.2 : “...products care with environment’s safety”.
- I.11: “...products do not have negative effects toward air, surrounding environment”.
- I.13: “Products do not affect negatively living beings’ continuation, do not damage environment, materials do not pollute environment, products are made without polluting and damaging living environment. Production process and waste materials do not damage environment”.

This explanation implies that individual realized the consequences of the consumed products. This interview are consistent with Ottman’s study (1997) in Ottman *et al* (2006) and Terenggana *et al* (2013) who described the green products as the products that protected or improved the realm environment, and the products that had minimal impacts on the environment. The next explanation about the meanings of the green products can be shown as follows:

- I.9 : “... products which process from beginning until created have already minimize environment damage aspect so becoming environment-friendly products.
- I.10: “... products which process from production until packaging care environment problems; it means that there is tendency that goods can be reduced, reused and recycled. Or not causing harmful effects toward surrounding environment and users”.

This answers indicate that individuals realized the results caused by the production process of the green products, so it does not support Lim *et al*’s study (2013) that stated that consumers just realized the consequences of the uses of the green products, but ignored the situation and production process. Furthermore, the explanation that understands the green products as the safe products for environment can be shown as follows:

- I.5 : “... products that are environment-friendly, safe toward environment, do not damage environment. Products that can be reduced, reused, recycled”.
- I.6 : “... products do not damage environment, can be recycled”.
- I.15: “... products are environment-friendly, can be recycled, do not pollute and do not damage environment”.

This exposure is consistent with Durif *et al*’s study (2010) that stated the green products as the products that used the sources that could be recycled that minimized the environment damage, and reduced the environment impacts, could be reused, and could be recycled. Then the answer related with the green products as the products focused on health can be shown as follows:

- I.3 : “... products are environment-friendly and healthy for environment and users”.
- I.4 : “... products are environment-friendly and not harmful for health mainly human beings’ health”.

This explanation is consistent with Sangkumchaliang and Huang's study (2012) that showed that consumers judged the green products because the hope of becoming healthier and environment-friendly production.

## 2. Familiar Green Products

The second question was about "what kinds of products that were relatively known by individuals". It was intended to give the researcher insight about the kinds of the green products that were familiar with the consumers in the market. The interview results showed some interviewed individuals were relatively familiar with the green products such as the electronics, food materials, and automotive products. Below is the explanation of the interview results.

- I.1 : "... first, food products; second, electronics (uses of lamps with low voltage), flat televisions with low voltage, refrigerators with no CFC".
- I.3 : "...products of food, vegetables, other food materials, rice, fruits, vitamins, nutrition, include medicines and electronics (such as refrigerators, computers' monitor screens, televisions, lamps)".
- I.4 : "...food, vegetables, fruits, low voltage lamps (electronics), LED televisions, lower voltage".
- I.6 : "...light steel, energy-saving automotive products, electronics: uses of energy-saving lamps, low voltage LED, but brighter lighting in long time and energy-saving, in offices: paper uses' reduction such as meeting invitations that are replaced with sms".
- I.7 : "...food products, electronics' uses of high radiation tubes of high electric waste are shifted into LED, vehicles that avoid emission effects".
- I.8 : "...organic rice, electronics with flat screen and lower radiation, usual AC is replaced with AC with eco label".
- I.13: "...vegetables with holes/free from pesticides, organic rice (brown rice), watches from wood materials and metal only in machines".
- I.15: "...products of bathroom's cleaner that do not use prohibited substances, energy-saving electronics (LED). Low voltage refrigerators. Energy-saving AC".

This explanation indicates that most consumers recognized enough the green food products such as the products with the organic materials. It is supported by Tsakiridou *et al* (2008); Salleh *et al* (2010); Wee *et al* (2014)'s studies that attempts to gain knowledge the organic products and to help marketers develop marketing strategies. A part of the individuals was relative familiar with the saving-energy electronics such as lamps, refrigerators, televisions, and fans. It was because lamps, fans, and televisions could have low voltage until saving energy (*low watt - save energy*). These individuals had the perception that the tools that could save energy included in the green products' category. Furthermore, a part of the other individuals was relative familiar with the LED televisions with the low radiation effect, non CFC refrigerators, and green ACs with *eco labels*. This explanation is supported by Teranggana *et al.*'s study (2013) that indicated that trust influenced individuals' attitudes toward green AC products. But little part of individuals recognized the saving-fuel automotive and fuel with the minimal lead effect as the green products. The interview explanation can be shown as follows:

- I.7 : "...vehicles that avoid emission. Expelled smoke does not pollute environment".
- I.9 : "...fuel with final waste minimalized from premium to pertamax".

This explanation is consistent with Yusof *et al.*'s study (2013) that stated that consumers' responsibility feeling toward environment influenced consumers' perception on environment-friendly cars.

### 3. Green Brands' Information

The next explanation is to answer the question of "From which sources does individual know about the green-symbolized brands?". The interview results indicated that individuals knew the information of the brands or green products from various media such as the marketers' promotion through electronic media (such as television), printed media (such as newspaper, magazine), salespersons, and packages. A part of individuals got the green brands' information from the products themselves such as labels and packages. The interview results' explanation can be shown as follows:

- I.2 : "...consumers sometimes get information including green products from producers usually from products' suspect".
- I.14: "...from writings in packages or products' labels. There are organic plastic packages with triangle symbols for vegetables".

This explanation is consistent with Hartmann and Ibañez (2006); Schmitt (2012) and Kong *et al* (2014)'s studies that green brands' perception could be strengthened by emotional values in the products by giving green labels (*eco labeling*) and green packages, mainly giving symbols or logos' that characterized green products. Meanwhile a part of participants got the products or green brands' information from the surrounding people such as from the assembly in schools and friends. The interview explanation can be shown as follows.

- I.10: "...in schools' events such as writings of go green on t-shirts for *family gathering*, from parents in schools".
- I.11: "...packages – triangles, writings on products' manuals, promotions, newspapers' readings, internet, friends' info, billboards".

### 4. Green Brand Perception

Commonly green products can be known from products' characteristics or green-symbolized brands/products. The next question is related with "how does individual know that a product or brand has green symbol". The interview results indicate that individuals know products or green brands from labels and/or products' packages. Next, the answers' quotation from the participants:

- I.4 : "... from certain logos or labels (such as herbals), electronics with low-energy, low-radiation codes".
- I.5 : "...clear writings of environment-friendly and certain signs/symbols/logos such as triangles in products' packages. Logos, symbols, packaging".
- I.6 : "... little size in packages with big character of people who used products and experienced that products had environment-friendly effects".
- I.7 : "... there is information in packages that can be emerged such as symbols on food".
- I.10: "... in packages. Detergent with green labels. Recycled papers with eco-writings in front. Beautiful food packages or separated organic foods' places".
- I.12: "...packages – of arrow triangles showing recycled, writings on products' manual such as low watt".
- I.13: "...there is writings in products' packages/labels. There are triangle symbols on organic vegetables/packages. The fresher of the greenness of organics".

This answer is consistent with Kong *et al.*'s study (2014) that stated that consumers' perception on environment-friendly labels (*eco labels*) influenced positively consumers' buying decisions. But several participants understood green brands by seeing certain logos or symbols attached on the products; a small part of individuals could explain the logos, such as arrow triangle, *eco in paper*, *eco labeling*, and *safe energy* logos. It can be explained in the answers as follows.

- I.8 : "...there are environment-friendly signs of eco-labeling signs/symbols on electronics in shops. Foods such as organic rice have green signs in their packages".
- I.10: "... recycled paper has *eco in paper* at front".
- I.12: "...packages – arrow triangles showing *recycle*, writings on products' manual such as low watt".
- I.13: "...there are writings in products' packages/labels. On vegetables' plastics/organic packages, there are triangles symbols. The greenness of organics is fresher".

### 5. Relationship between Green Brands' Perceptions and Consumers' Attitudes

Based on individuals' understanding on green perceived brands, so the next question was "Do green-perceived brands influence individuals' interest in green brands?". The interview results indicate that the whole participants felt that the green-perceived brands influenced their interest in the green products. It was because individuals realized that the green products did not affect the environmental damage and made the users healthy so the green products were perceived healthier, better, and more qualified. This statement is consistent with Sangkumchaliang and Huang (2012) and Kong *et al.* (2014)'s studies that the greener the products are perceived, the more certain that the products have quality, mainly the products' brands perceived stronger and healthier.

From the explanation of the green brands and their relationship with the individuals' positive attitudes toward the green products, the propositions are proposed as follows:

- P1: The higher the consumers' perceptions on the green brands are, the higher the society positive attitudes toward the green products are.

### 6. Green Price Fairness

The next question was intended to know "how should the green products be appreciated" by individuals. The interview quotations results indicate that most participants hoped that the green products did not have to be expensive so they could be afforded by society. Individuals regarded that in the beginning of the green products' introduction with the relative expensive prices, the prices were still regarded as normal with the assumption that the prices' differences were not much different from the non-green products' prices. But in the following time, the green products known by consumers could be cheaper. The participants' answers' explanation can be shown as follows.

- I.1 : "...until today, it is known that green products are relative expensive; if possible, they should not be too expensive to make the society easy to use or afford the products. If not, they will not be bought".
- I.3 : "...Green products must not always be expensive. Cosmetic products must not always be expensive because made of local ingredients, not necessary to be imported".
- I.4 : "...because our country is still not very developed and not developed country so green products are not too expensive compared with non-organics".
- I.12: "...if there are more than one green product, the chosen one is the cheapest".

The explanation shows that individuals wanted the relative cheap green products that could be afforded. It is consistent with Lichtenstein *et al* (1993)'s studies that prices could emerge positive or negative perspective in consumers' buying decisions. If the prices were high, the products' quantity was sold lowly; on the contrary, if the prices were low, the products' quantity was sold highly. It is also supported by Sachdev (2011)'s study that consumers did not buy products if prices were high. But a part of individuals still said that it was normal if the green products were more expensive than the non-green products. It was because of the high technology, imported materials, and different processes from the non-green products' ones, and it needed researches and advertisements. This participants' answers' explanation can be shown as follows.

- I.3 : "...with sophisticated technology, products become more expensive; it can be accepted because the more expensive production costs and technology are. Green products are priced in accordance with materials and technology used. Expensive prices will be normal if feeling effects/impacts in not too long time".
- I.4: "...It is normal to be more expensive because the different processes from the conventional ones, as long as not too expensive. It is normal if not too different from non-greens".
- I.11: "...because of the high cost of technology, it is normal if prices of green products are more expensive, but ways need to be found to make prices cheaper in the future. They produce not too many so prices are more expensive, moreover packages are different, treatments are different".
- I.15: "...It is normal because they need advertisements and money for the innovations. At one time, products' mass will decrease by themselves. They need researches and markets' penetration is still low".

The above explanation is consistent with Kahneman *et al* (1986); Ahmat *et al* (2011) and Khandelwal and Bajpai (2012)'s studies that normal-perceived prices by consumers could influence consumers' attitudes and buying decisions. This result is also supported by Laroche *et al* (2001)'s studies that although products were more expensive, they gave additional values; so consumers were still willing to buy.

## 7. Relationship between Green Price Fairness and Attitudes

Furthermore, after individuals were able to explain the green products' prices, individuals were asked to explain "do prices become the determinant variable in liking the green products". The interview results indicate that most individuals stated prices as the determinant variable that became the consideration before deciding to buy green products, although prices were not the main considerations in buying. It was because most individuals were encouraged to like the green products because they regarded that the prices of the green products were relative normal or regarded not too far different from the non-green products' prices. This statement is supported by Campbell (1999)'s study that the consequences of the abnormal prices could direct to negative behaviors. This explanation is consistent with Khandelwal and Bajpai (2012)'s study that there was the positive influence between the prices' fittingness and consumers' positive attitudes.

Next, a small part of individuals were interested with green products because realizing that green products had better quality than non-green products. It is consistent with Lichtenstein *et al* (1993)'s study that prices influenced buying decisions if prices were identical with products' quality. Although it is belief that green products have the better

quality, a part of individuals still considers prices when facing the other kinds of the green products' alternatives. Individuals like the cheaper green products more. It is consistent with Daskalopoulou and Petrou (2006)'s study that the increase of consumers' expense was related positively with the perception of price fairness. But a small part of individuals are interested with green products because green products' prices are affordable. From the answers, it is shown that individuals still consider prices in liking green products so the proposition can be developed as follows:

P2: The higher the Fairness of the green products' prices is, the higher the society's positive attitudes toward green products are.

### 8. Relationship between Country of Origin and Attitudes

The next interview quotation was about "is the COC attached to a green product becomes the individual's consideration in liking the green products". The interview results indicated that a part of participants considered the COC in liking the green products. It was shown in certain green products such as automotive and electronics because a part of participants considered certain countries, such as Europe, Japan, South Korea in choosing products. Participants considered the countries as the countries that paid attention to the quality of products' development. This statement is consistent with Agrawal and Kamakura (1999); Balestrini and Gamble (2006); Magnusson *et al* (2011)'s studies that products' COC indicated country's impression that finally influenced consumers' attitude toward a brand or product. The explanation of the interview results can be shown as follows:

- I.1 : "...electronic products from Japan must be good, more expensive, more long-lasting, and more trustable. Local products as food products that are more familiar can be made superior green products".
- I.2 : "...green products from West European, Japan are still trusted, but from China, Malaysia are still not trusted".
- I.4 : "...electronics from Japan are more in the market. From Japan will be chosen more rather than China because of the better quality".
- I.9 : "...electronic products from European or Japan have certain qualification because of quality".

But a small part of participants considered to choose the local electronic products or from certain countries in their decisions. The participants were still uncertain with the green products of the certain countries. It was because the less good information accepted by the participants related with the products produced by the countries. This condition is consistent with Chao (2005)'s study that COC was used as the sign to value products and their attributes. Also Kabadayi and Lerman (2011); Chang *et al* (2013)'s studies that stated that COC influenced judgments and consumers' buying intentions toward foreign products. Next, a small part of participants did not consider the COC of the green products. The answers explanation indicates that COC are still considered by consumers in liking green products. Next the explanation:

- I.2 : "...West European, Japan green products are still rather trusted, but China, Malaysia ones are still not trusted".
- I.5 : "...automotive, electronics are still influenced by origin countries. For foods, local products are still trusted".
- I.8 : "...examples of AC products made in China vs Korea vs Japan. With the same green labels, not from China are chosen".
- I.11: "...not influencing, but China products still need consideration. It is okay for local brands such as Politron and Maspion".
- I.14: "...must be careful in buying products from China. There is bad news of China



products”.

## 9. Country of Origin Image

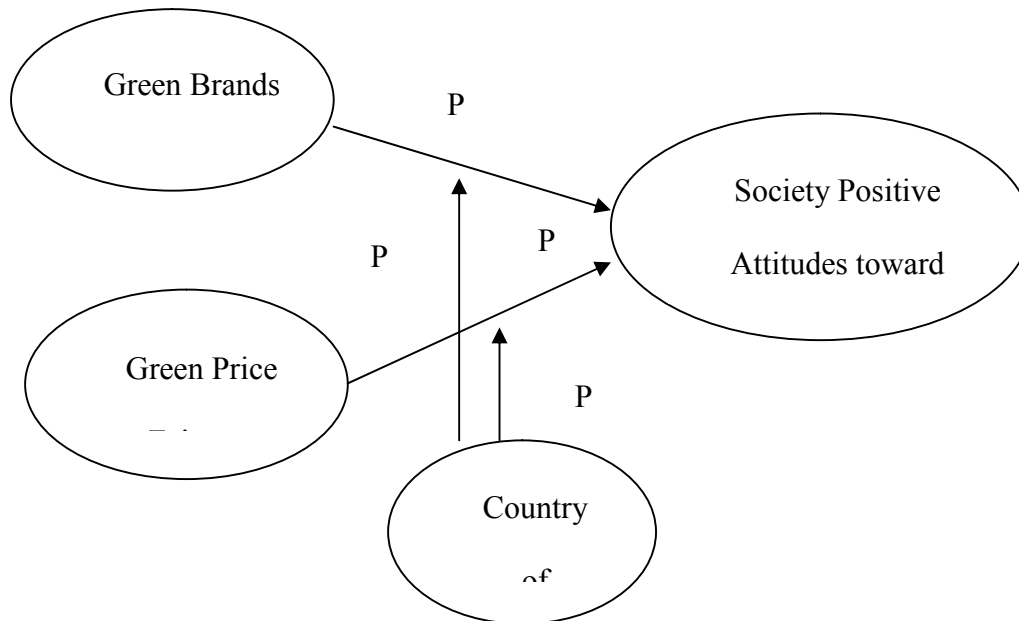
The last question was intended to know “how does individual’s image when seeing product or brand from COC at the first time”. The interview results indicate that participants had different impressions on products or green brands produced by certain countries. A part of participants had products or green brands impression from certain countries as more qualified, especially produced by developed countries. It was because developed countries had applied the good quality system control to their products. Several other participants gave the impressions of products’ making process of the developed countries with high technology. Also several participants had products or green brands impressions of certain countries as products that were comfortable, reliable, with good performances, low operational costs, and high prices if re-sold. It is consistent with Kaynak *et al* (2000)’s study that electronic products were regarded as advantageous by consumers if the products were from Japan, Germany, and USA. The answers explanation can be shown as follows:

- I.1 : “...when knowing that electronic products are from Japan, a large part trust and like products; people know that European’s cars are safer, more comfortable, although the problem is the expensive prices”.
- I.2 : “...still trust developed countries’ products because of technology and deep researches about products’ protection”.
- I.3 : “...control facilities of products’ quality of developed countries are commonly more qualified; it is different from developing or under-developed countries, because of lower quality, lower guarantee, although it is not right 100%. Good facilities are more possible to exist in developed countries”.
- I.5 : “...technology, usability, and reliability aspects. But local food products are still more trusted. China products have impressions of easy to damage, not long-lasting, although cheaper. China products, mainly foods, are poisonous”.
- I.6 : “Brands influence our perception so brands can be perceived good or bad according to experiences. Japan’s automotive pays attention to performance in a long time. But several countries have disarrayed automotive”.
- I.7 : “...Developed countries have good qualities, good images, but certain countries still need considerations. China has impression of bad products’ producer”.
- I.8 : “...China products are less reliable, low durable for electronics. Automotive is less than 1000 cc, although with the same environment-friendly label. Japan or Europeans will be chosen more because of reliability”.
- I.10: “...products with better quality will influence interest level. Toiletries products will not give influence because the goods are easy to get. Indonesia is still in food level, so food products will be chosen more”.

Propositions can be developed from the explanation as follows:

- P3: The higher the origin country is perceived by consumers, the stronger the influence of green brand perceptions and society positive attitudes toward green products.
- P4: The higher the origin country is perceived by consumers, the stronger the influence of prices’ fittingness on society positive attitudes toward green products.

Relationship pattern is developed from 4 propositions and research model is formed.



**Figure 1. Developed Model Framework**

**Conclusions and Implications**

The findings of this study give a model framework that form the process of the society positive attitude toward green products. Moreover, three stimuli were included in this model to develop the positive attitude toward green products, those are green brand perception, green price fairness, and country of origin.

Our results indicate that individuals expects the green products as the healthier, not damaging the environment, and not polluting the environment products, and the production process minimalizes the environment damage through the actions of 3R – reduce, reuse and recycle. Furthermore, individuals are relative familiar with green products such as energy-saving electronics, organic food materials, and automotive that minimalizes lead impacts, but individuals still perceive green brands only from labels and packages attached to the products. Individuals who positively perceive green products will like green products.

The study argues that individuals still regard the more expensive prices of green products than non-green products as normal, but still hope the not expensive prices of green products in the future so they can be afforded by much society. Individuals who regard green products’ prices as normal or fair will like green products. Nevertheless, individuals consider the COC in liking green products especially electronics and automotive.

Furthermore, the study suggests several implications theoretically and practically, and for the future research(s). Study’ implication theoretically suggest that the constructed and explored variables in the study involve green brands perception, green price fairness, country of origin; it is hope that they can explain the phenomenon of the formation of society’s positive attitudes toward green products. Study implication practically suggest that this research is expected to be the first study to give insight to the marketers in developing consumers’ interest in green products through the stimuli related with variables developed in this research. Finally, study implication in continuation study suggest that this research is expected to be continued in the future research(es) by testing propositions and developed model.

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## EXPLORATION OF CONCEPT OF FORMATION PROCESS OF INTENTION TO ONLINE TRANSACTION: IN THE CONTEXT OF ONLINE SHOPPING IN INDONESIA

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### Abstract

Online transaction intention is still a topic that is interesting to study because there is still no model in the formation of intention to online shopping that can be applied to various researches settings. So this research aims to explore the formation process of intention to online transaction by using the concept of behavioral theory applied to the information system and to explore media exposure effects of giving the stimuli of cognitive, affective, and conative behavior relationships of explaining online transaction process of youth ages group. The finding results show that the intention to online transaction that is the conative behavior form is influenced by affective behavior that consists of cognitive attitude and behavior those are perceived easy of use and risk perception. The formation of online transaction intention is also influenced by external factor that is media exposure that gives information stimulus to individuals who can give emotional responses and behaviors.

**Keywords:** *intention to online transaction, attitude, perceived easy of use, risk perception, media exposure*

### Introduction

Intention to online transaction is a topic that is still interesting to study. It is because there is no model that forms intention to online shopping that can be applied to various researches settings. It means that the previous researches still produced one model applied to an observed object (Agarwal *et al.*, 2004; Lin, 2007). It can be explained that each model was oriented toward problem implicated on variable variety (Probst *et al.*, 2006; Green and Pearson, 2011; Hsieh and Lio, 2011). Previous studies showed that the variable variety formed intention to online transaction become the research purpose that had impact on various research results (Grandon and Mykytyn, Jr., 2004; Yang *et al.*, 2007; Lin, 2007). The research results' variety of intention to online transaction gives opportunity to the researcher to construct model by putting in the other variables indicated theoretically in explaining the formation of intention to online transaction.

Model development of the formation of intention to online transaction can be explained by behavioral model applied to information system (Compeau *et al.*, 1999). It is indicated that there are 3 approaches of behavioral information system that are used to explain online shopping model and still have application's weaknesses. The first model is *Theory of Planned Behavior* TPB developed by Ajzen (1988). But, TPB as a common model has weakness of individuals' cannot explain specifically, especially belief variable related with certain behavior of the application of online transaction research (Sentosa and Mat, 2012). The second model used to explain online shopping is *Technology Acceptance Model* (TAM) developed by Davis *et al.* (1989). The results' inconsistency indicates that there are the other factors that are not contained in TAM (Collerette *et al.*, 2003). The research results variety using TAM basic model indicates that the users' behaviors of information technology system of TAM are not controlled by the behavioral control that limits the behavioral intention (Collerette *et al.*, 2003; Sun and Zhang, 2006; Probst *et al.*, 2006; Hsu and Lin, 2008). And, the joined model of TAM and TPB is the third model that is used to explain the online shopping behavior (Lin, 2007; Yaghoubi and Bahmani, 2010;

Daud *et al.*, 2011; Sentosa and Mat, 2012). But research by joining TPB and TAM still has weakness of variance contribution of the joined models of TPB and TAM that can only explain 57% of forming behavioral intention (Lin, 2007) and the constructions' measurement that is adapted from the previous research(es) that makes the various observed objects cannot be generalized (Daud *et al.*, 2011; Sentosa and Mat, 2012). The re-evaluation is needed in the used constructions' operation (Green and Pearson, 2011) and the used methods in accordance with the research observed objects (Agarwal *et al.*, 2004) in online transaction research.

This research variety of online transaction gives opportunity to make alternative model by the observed phenomenon. The constructed model of this research is the basic model that can be applied in accordance with the problems and observed objects. To construct the formation model of intention to online transaction, the qualitative method needs to be used with the purpose of understanding phenomenon or social indication by emphasizing the complete picture of the observed object that is reviewed to become the related variables (Sarantakos, 2005). It refers to Hsieh and Liao (2011)'s statement that stated that the research of online business could not be generalized in the different object phenomenon, country, and culture with the same approach.

The research with qualitative method in this study is based on the behavioral theory that reveals three structures of consumers' behavioral process in online shopping. Literature review indicates 3 structures that form the behavioral processes those are cognitive, affective, and conative (Ajzen, 1991). Cognitive is the process of knowing and understanding of defining an object's information (Brooks *et al.*, 2013). The variables that build the cognitive behaviors are identified among others are belief (Ajzen, 1991), perceived usefulness and perceived easy of use (Lin, 2007), fittingness (Daud *et al.*, 2011), and risk perception (Almoussa, 2011). These cognitive behavior variables are the predecessor stage that can form consumers' affective behavior (Ajzen, 1991; Brooks *et al.*, 2013).

Affective behavior is affected by the social interactions experienced by individuals in the forms of both favorable feelings and *unfavorable feelings* of an object (Ajzen, 1991). Several variables that build the affective behavior among others are belief (Hsieh and Lio, 2011) and online shopping attitude (Pi and Sangruang, 2011). This affective behavior can show the existence of individuals' tendency to behave frankly (Davis *et al.*, 1989; Ajzen, 1991; Hsieh and Lio, 2011) based on the faced object. Based on the behavioral process, it can be proposed that influencing intention to online shopping as the form of individuals' conative behavior is complex because of the many variables that influence it (Wu and Wang, 2005).

Related with the cognitive structure, the perceived easy of use becomes the important variable of forming consumers' attitudes and intentions to online transactions (Kim *et al.*, 2005; Schepers and Wetzels, 2007; Ha and Stoel, 2008). But there is still inconsistency of the relationship results between the variables of perceived easy of use, attitudes, and intentions to online transaction (Lin, 2007; Ha and Stoel, 2008; Almoussa, 2011). This inconsistency needs the continuation testing of the relationship concept between perceived easy of use, attitudes, and intentions to online transaction, so the results' certainty are produced, so attitudes and intentions to online transaction can be formed effectively.

Risk perception is the other cognitive structure of forming consumers' attitudes and intentions in online transactions (Pi and Sangruang, 2011; Chen *et al.*, 2011; Almoussa, 2012). In the research context of online shopping, it is indicated that risk perception influences negatively *e-commerce* adoption (Ahn *et al.*, 2004), online shopping attitudes (Shih, 2004), and intentions to online shopping (Almoussa, 2011), in which risk perception



is regarded as a belief in uncertainty potential of negative outcomes of behaviors and disadvantages' attributes' consequences (Pi and Sangruang, 2012). This explanation shows that risk perception can become the buying decision determinant to reduce the occurred disadvantages in online shopping (Li and Huang, 2009).

As the conative behavior, the formation of intention to online transaction is influenced by the predecessor variables those are the easy to use perception (Almoussa, 2011; Hsieh and Lio, 2011; Sentosa and Mat, 2012), risk perception (Almoussa, 2011; Green and Pearson, 2011; Pi and Sangruang, 2011), and attitudes (Suh and Han, 2003; Schepers and Wetzels, 2006; Hsu and Lin, 2008). Commonly, there are no differences in those three variables in both the information system study and online transaction. But the distinguishing factor in this study is the existence of *media exposure* that can be the key variable that has the role to influence consumers' intentions in online transactions (Agarwal *et al.*, 2004; Jordaan and Ehlers, 2009), that online transaction is the two ways communication in which in getting the information, the different process from traditional marketing channel is needed.

Media has important role in changing internet users' behaviors in online transactions. The continual media exposure effect will tend to improve the people's longing of getting the stimulus of actions (Ruiz and Sicilia, 2004). Effects of this digital media exposure can influence both direct and indirect process of consumers' cognitive (van Raaij *et al.*, 2005), affective (Kim *et al.*, 2002; van Raaij *et al.*, 2005), and conative (van Raaij *et al.*, 2005) behaviors. So, the purpose of this study is to explore media exposure effects of giving the stimulus of the relationship between cognitive behavior (perceived easy of use and risk perception), affective behavior (attitudes), and conative behavior (intentions) in explaining online transaction process of the youth ages group. Therefore this study will focus on how the behaviors are and how online shopping of the youth ages consumers because of the used media exposure is.

### Literatures Review

Commonly intention is defined as the longing to behave (Ajzen, 1988). In the concept of TRA, actions by individuals are based on the assumption that individuals tend to behave consciously by considering the available information and also considering the impacts of the established actions (Ajzen, 1988). The explanation is strengthened by Ajzen (1991) that described intention as individual's willingness of trying to do certain behavior. This definition indicates that individual's intention to behave or not to behave can become the prediction of the individual's direct determinant to behave.

The intention concept explanation in the context of online shopping is focusing on individual's willingness of doing transactions (Ha and Stoel, 2008). Intention to online transaction is defined as the consumer's willingness to use *website* in the relationship of online exchange and service providers (Sanz-Blas *et al.*, 2008; Green and Pearson, 2011). The form of online exchange relationship among others is business information sharing, business relationship maintenance, and business transactions. Based on business transaction process, e-commerce acceptance requires consumers to use website to get and provide information, and then finish the transactions by buying products or services (Pavlou, 2003). The discussion can explain that the consumers' intentions to decide online shopping need website effectiveness that can facilitate online transactions and services.

The formation of online transaction intentions is not different from consumers' behaviors concept with attitudinal approach, in which consumers' behaviors are built of the contented attitudes of a brand or product (Lichtle dan Plichon, 2008), and intentions to buy are the attitudes' measurement of behaviors. In behavior formation, the attitudinal approach is the behavior prediction that can be used to complete the lack of behavioral

theory in building consumers' motivation with psychological evaluation to create consumers' positive feelings (Lichtle and Plichon, 2008). So the formation of intentions to online transaction with the belief process in a service (cognitive) builds the positive attitude on a service (affective), and willingness to do transactions (conative).

The tendency of online shopping phenomenon in Indonesia in the one last decade influences consumers' behaviors change in the willingness to do transactions mainly by the youth ages group because of the development of online selling and buying forum (Piarna, 2014). Online shopping characteristics that offer the low costs, comfort, and easiness, but also show risks in transactions processes form consumers' attitudes and intentions changes. It indicates that intentions to online transaction are not separated from the existences of the intentions framer variables confirmed by evaluation process and individuals' beliefs in perceiving objects. The previous studies indicated the existences of the variables of the framers of intentions to online transactions among others are online shopping attitudes (Lin, 2007; Ha and Stoel, 2008; Hsu and Lin, 2008), easy to use perceptions (Sun and Zang, 2006; Fang *et al.*, 2008; Celik, 2011), and risk perceptions (Wu and Wang, 2005; Tong, 2010; Almousa, 2011). The decisions of doing online transactions are also influenced by the external variables that both directly and indirectly can influence individuals. This research proposes media exposure used as the external variable that both directly and indirectly can influence individuals to do online transactions (Agarwal *et al.*, 2004; van Raaij *et al.*, 2005).

Media exposure is media use or media acceptance that is defined as individuals' activities of listening, watching, and reading mass media's messages (McQuail, 1994). Media exposure is not only related with individuals physically; it is in mass media reach, but also really touched by messages in the forms of reading, listening, watching activities, or just only watching the media messages. Referring to the statement, online information media is the part of mass media in giving information to the users in the online or virtual form.

Online information media is media construction that changes individuals' behaviors significantly as the new communication tool (Jordan and Ehlers, 2009). So, several studies regarded that online information media as the new media aspects became digital (texts, pictures, and voices combined in two ways channel), interactive (the existence of feedbacks from information receivers), arousing audiences (audiences' capability to contribute), not together (the communication actions that were distributed anytime), multimedia (presentation methods), and focus (communication channel was dedicated to specific audiences) (Nabi and Kremar, 2004; Jordan and Ehlers, 2009). It can be concluded that the internet media contents can encourage mainly the users' emotion and can encourage the buying behaviors because of the watched, listened, and searched information (Marimoto *et al.*, 2003).

## Methods

This research aims to stimulate individuals' perceptions of online transactions to tell their opinions in group discussion(s) and deep interview(s) of exploring the framer factors of online transactions intentions using the phenomenology paradigm. Phenomenology research gives contribution of proofs' searching of the number of aspects of the research's theories and and practices phenomena reality happened by seeing reality perception and humans perception as the research's objects (Sarantakos, 2005) that can be used to get the familiarity of phenomena or to find the new relationships to be able to formulate the matters to be more exact and to find hypotheses if necessary. The used approach in this research is ethnography approach in which the researcher did the research of transaction behavior culture using online shopping website.

Data collection used *Focus Group Discussion* (FGD). FGD aims to explore and clarify the findings of theoretical reviews and phenomena of online transaction practices in Indonesia (McMillan dan Morrison, 2006). FGD in this research was designed for participants group who were used to use information system but did not have experience in online selling and buying transactions yet. So, the participants were university students who took Industry Engineering Study Program and had knowledge of information system.

The further data collection stage was the deep interview. Interview is data collection method of asking something to the respondent by being engaged in face to face conversation (Sarantakos, 2005). The interview participants were the university students of Management Study Program who had taken the subject of Management Information System and were expected to understand information system but did not have experience of online transaction yet.

Qualitative data analysis in this research is constant comparative analysis that is useful for theory development researches (Zoran *et al.*, 2009). There are three main stages of constant comparative analysis; first, the open coding that is classifying data to be put into small units. The second stage is *axial* coding that is coding grouped into categories. Lastly is selective coding with the function of building one or more themes that reveal the content(s) of each codes group. The coding purpose is to organize data, classify them into units that can be managed, synthesize them, search and find pattern(s), and find something important, then deciding to formulate ones that can be formed into themes to be formulated in work hypothesis as suggested by data. The data arrangement and management aims to find the process of individuals' behaviors formations in the use of online shopping website for online selling and buying transactions.

## Results

### 1. Concept of Online Transactions

Theoretical reviews show several term differences on both goods and services selling and buying using internet networks among others are internet e-commerce (Wu and Wang, 2005), internet shopping (Kim *et al.*, 2004), online transactions (Green and Pearson, 2011), and shopping online (Tong, 2010). The differences are caused by the characteristics scope of online users used as samples by the researcher. Wu and Wang (2005) proposed the term of internet e-commerce that included online advertisements, online shopping, online investments, online banking, and the other online services (such as email, information searching) that made possible for everyone to interact by internet in daily life. Meanwhile the term of internet shopping proposed by Kim *et al.* (2004) was given meaning by products shopping via internet that represented easiness, economical efficiency, and entertainment. The meaning of this sense is that the shopping via internet is understood as the easiness of products information searching of the searching freedom for products information, existence of the sale product variety, and also freedom of comparing various products of competitors.

The other term of goods and services' selling and buying using internet network was online transaction proposed by Green and Pearson (2011). According to Green and Pearson (2011) online transaction emphasized the exchange relationship in the way of online that included sharing business information, managing business relationship, and doing business transactions. Based on the online transaction process, consumers are expected to use online retailers' website to get and provide complete information of products or services buying transactions. The meaning giving of the other online shopping term was proposed by Tong (2010) who explained virtual shops' activities that could influence consumers' behavior to search the wanted products and finally do transaction in internet.

In Indonesian society environment the terms related with selling and buying in internet are also developed. It can be seen in the results of *Focus Group Discussion* that revealed the existence of two terms of selling and buying in internet those were online transaction and online shopping. According to participants, the similarity of online transaction and online shopping is their searching of goods in internet network(s), meanwhile the difference is that there is still additional process in online transaction because of the online shopping.

The similarity may be that online shopping and online transaction searches goods, meanwhile the difference is when we do shopping we can buy the searched goods directly but in the transaction there is still one more process because of the online shopping.

(Participant 4 – FGD – September 9<sup>th</sup>, 2015)

But the term of online shopping is much developed in the society because it is easier to understand. It is because media has the big role of informing online shopping term although the society does not know the real meaning of online shopping.

.....it seems to be easier to use the term of online shopping that is developing in the society because it is easy to understand.

(Participant 2 – FGD – September 9<sup>th</sup>, 2015)

.....common society may understand more online shopping.

(Participant 1 – FGD – September 9<sup>th</sup>, 2015)

I understand more this online site; it may be because the site puts very many advertisements into both the printed media and electronic media.

(Participant 1 – FGD – September 9<sup>th</sup>, 2015)

.....I also know much from media mainly many in social media and sometimes also family informs that the site is good for online shopping.

(Participant 4 – FGD – September 9<sup>th</sup>, 2015)

Participants agreed to use the term of online transaction in which online transaction did not only look for goods through online site but also there was additional process after goods searching. Besides, online transactions were not only transactions in the forms of goods, but also could be in the forms of service transactions including exchange transactions of both goods and services. Participants also regarded that the term of online transaction was safer because in the process, the steps that consumers must do were informed. Next were the answers revealed by participants about the online transaction understanding.

The difference is it may not be only in the forms of goods in transactions, but it is in the forms of goods in shopping.

(Participant 3 – FGD – 9 September 9<sup>th</sup>, 2015)

....in transaction, there is still one additional process because of online shopping.

(Participant 4 – FGD – September 9<sup>th</sup>, 2015)

The easy term to use may be online transaction because we can choose the wanted goods and know the steps.

(Participant 2 – FGD – September 9<sup>th</sup>, 2015)

....there are safety and comfort in online transaction; the term of online transaction is more exact.

(Participant 1 – FGD – September 9<sup>th</sup>, 2015)

Based on discussion results with participants, the meaning of online transaction can be concluded as the continuation process of online shopping result of both goods and services transactions through the determined steps by the site manager to improve safety and comfort as the transaction process goes on. This finding strengthens the term of online transaction developed by Green and Pearson (2011), in which online transaction is explained as the online exchange relationship including business information sharing, business relationship management, and doing business transaction that obligates each doer involved in the transaction to give the whole and complete information in the transaction process.

The same explanation of online transaction was also proposed by Jiang *et al.* (2006) who stated that to improve intention to business transaction of the site manager of online selling and buying, the transaction process mechanism should be informed including consumers' private protection, because in online transaction, the information of transaction process mechanism was the important thing as the knowledge for the site manager of online selling and buying oriented to consumers. It can be concluded that in the process of selling and buying by internet, the more exact term uses online transaction that explains the transaction process that can improve consumers' safety and comfort.

The intention concept was commonly defined by Ajzen (1988) as the willingness to behave. The intention's meaning is the individual's willingness to try to do certain behavior (Ajzen, 1991). In its development, intention experiences meaning change based on the used research object. In the context of online transaction, based on the discussion results with the participants, intention to online transaction occurred if participants had knowledge and understanding of online transaction process. Participants' statement of knowledge and understanding of online transaction process is presented as follows.

....if person is easy in understanding online shopping, person is influenced to tend to buy.

(Participant 2 – FGD – September 9<sup>th</sup>, 2015)

....buyers will tend to buy products of cheap and easy site.

(Participant 4 – FGD – September 9<sup>th</sup>, 2015)

The meaning of the discussion results is that intention to online transaction is defined as the individual's willingness to continue the process of online shopping results of both goods and service transactions through the steps determined by the site manager. The definition of intention to online transaction explains that if consumers know and understand the steps of online transaction process, consumers' willingness to continue online transaction can be influenced; but if consumers do not have knowledge of online transaction, it causes the low willingness to do online transaction. This explanation strengthens the meaning of online transaction intention that is defined as consumers' willingness to use website in online exchange relationship with the service providers (Sanz-Blas *et al.*, 2008; Green and Pearson, 2011) that need consumers' knowledge understanding of online transaction process of sharing business information, managing business relationship, and doing business transaction.

## 2. Intention to Online Transactions

The formation of intention to online transaction is not different from behavioral concept of cognitive, affective, and conative processes (Lichtle and Plichon, 2008). The discussion results with the participants find variables included in the cognitive behavior group that are perceived easy of use, benefits perception, privation, risk perception, service quality, innovativeness, and knowledge. The discussion results of the factors that form intention to online transaction are revealed as follows.

....the easiness to use, because online shopping can be done wherever the place is and whenever the time is as long as there is internet connection.

(Participant 3 – FGD – September 9<sup>th</sup>, 2015)

....benefits that are gotten. We will also use time more efficiently, while we must come to the goods one by one in shops. If online, we just open HP and search.

(Participant 2 – FGD – September 9<sup>th</sup>, 2015)

....buyers information privation, in online selling and buying, sellers often ask for information, but buyers are afraid if the information will be mistreated.

(Participant 1 – FGD – September 9<sup>th</sup>, 2015)

....gotten risks. We often hear deception news of online shopping. For example, we buy A and transfer money, but getting different goods from what we want.

(Participant 1 – FGD – September 9<sup>th</sup>, 2015)

....service quality of site manager. Quality will affect online shopping factors, because low quality may make many people remove them from site feature.

(Participant 3 – FGD – September 9<sup>th</sup>, 2015)

....site innovativeness. With innovative site feature, consumers may be willing to try to buy from the online site; for example, what we buy is the same with what we want; it makes consumers trust the online site.

(Participant 6 – FGD – September 9<sup>th</sup>, 2015)

....according to me, transaction process knowledge, if buyers less understand with the transaction process, they will suffer losses.

(Participant 1 – FGD – September 9<sup>th</sup>, 2015)

....transaction process concern. If money is transferred but goods are not sent according to the determined date, buyers will worry. Buyers must wonder whether goods are sent or not.

(Participant 4 – FGD – September 9<sup>th</sup>, 2015)

Based on the discussion results, it is explained that there is the framer variable variety of intention to online transaction of cognitive behavior group that is perceived by the participants. This finding is not different from the theoretical review that shows the existence of the variable variety of the framer of intention to online transaction among others are risk perception (Wu and Wang, 2005), perceived usefulness (Almoussa, 2011), perceived easy of use (Lee, 2009), benefits perception (Rao *et al.*, 2008), privation (Polychronopoulos *et al.*, 2012), website quality perception (Compeau *et al.*, 1999), and experiences (Kim *et al.*, 2004). The variable variety of the framer of intention to online transaction is caused by observed object variety that has impact on the research purpose (Grandon and Mykytyn, Jr., 2004; Yang *et al.*, 2007; Lin, 2007).

## 3. Relationship between Perceive Easy of Use and Intention to Online Transaction

Referring to the discussion results with the participants, the framer variable of intention to online transaction of cognitive behavior group directs to two variables those are perceived easy of use and risk perception. In which the perceived easy of use is explained as individual level who believes that using online transaction is free from effort (Shih, 2004). In the context of online shopping, the perceived easy of use is defined as

consumers' belief perception of using website to exchange goods and services that are free from effort (Tong, 2010; Green and Pearson, 2011). The variety of giving meaning to the perceived easy of use is also revealed in the interview done with participants presented as follows.

....it just only needs access through gadget or computer wherever we want....  
(Participant 1 – Interview – October 27<sup>th</sup>, 2015)

....doing transaction with chats....  
(Participant 1 – Interview – October 27<sup>th</sup>, 2015)

....payment is done by transfer and goods are sent until buyers' home without buyers' going outside.  
(Participant 1 – Interview – October 27<sup>th</sup>, 2015)

....just needs little time to transfer money.  
(Participant 2 – Interview – October 27<sup>th</sup>, 2015)

....shopping without tired and very tired, we are easy in buying far goods because we just order goods via internet; we do not need to get busy, just order and transfer, goods will be sent home....  
(Participant 3 – Interview – October 27<sup>th</sup>, 2015)

....buying the wanted item fast and easily.  
(Participant 4 – Interview – October 27<sup>th</sup>, 2015)

Can choose various kinds of goods without visiting selling places. More effective and simpler.  
(Participant 4 – Interview – 27 October 2015)

The participants' answers found were various in giving meaning to the easiness of online transaction. But the statement revealed by participants such as "access whenever and wherever", "paying by transfer", "without going outside", "not tired and busy", and "fast and easy" are the indications of online transaction easiness. The answers revealed by participants were the individuals' belief in the online transaction easiness that was free from efforts. The answers support the explanation revealed by Tong (2010) who stated that easiness perception focus of online shopping object was the transaction's easiness by *website* that gave contribution to consumers' perception that they were free from effort because of buying in online shops rather than traditional shops. The explanation means that giving meaning to perceived easy of use in online transaction is consumers' rational reaction when using information technology (Gefen *et al.*, 2003).

Participants revealed that intention to online transaction was easy and to improve intention to online transaction, the process easiness was necessary. Next is the presentation of discussion results answers by participants about the easiness that becomes the important factor in online transaction.

....online shopping makes the transaction easy. Sellers and buyers do not have to be face to face and they can have online connection.  
(Participant 1 – FGD – September 9<sup>th</sup>, 2015)

....the easy use is caused by the easy to understand online shopping. It means that if people are easy in understanding online shopping, it will influence them to buy.  
(Participant 2 – FGD – September 9<sup>th</sup>, 2015)

....benefit of online shopping is the easiness, can be used whenever and wherever  
(Participant 3 – FGD – September 9<sup>th</sup>, 2015)

....everything is sophisticated in this era. We can do easy transaction by using smart phone, social media and the other media such as laptop. Just enter the website and we will be able to choose the wanted items directly.  
(Participant 4 – FGD – September 9<sup>th</sup>, 2015)

....online shopping eases us in buying goods transaction.

(Participant 5 – FGD – September 9<sup>th</sup>, 2015)

...it is easy enough to find the wanted items in online shopping, not like in offline shops.

(Participant 6 – FGD – September 9<sup>th</sup>, 2015)

In using online site, we do not need to come to shops; just search goods and we can get them easily.

(Participant 7 – FGD – September 9<sup>th</sup>, 2015)

The discussion results explain that participants perceived that online transaction was easy and giving easiness to the users. It is consistent with Davis (1989)'s idea that mentioned that in the context of information technology, the use easiness was needed to improve individuals' willingness to use it (Ha and Stoel, 2008). It can be concluded that easy to use perception becomes the important factor of online transaction process.

**Proposition 1 : the higher perceive easy of ease, increasingly the desire of individuals conducting online transactions**

#### 4. Relationship between Risk Perception and Intention to Online Transaction

The other dominant factor of cognitive behavior group that can influence individual's intention to online transaction is risk perception. Participants really did not only reveal risk perception as the framer factor of intention to online transaction, but also gave answer about risk forms in online transaction such as privation and worry. Risk factor of forming online transaction intention was expressed by participants as follows.

...buyers information privation; in online selling and buying, sellers ask information from buyers, but buyers feel afraid if the information is mistreated.

(Participant 1 – FGD – September 9<sup>th</sup>, 2015)

...transaction process worry; in online shopping, it is usually the payment first and then the item is accepted in different time so there is worry that sellers will lie.

(Participant 1 – FGD – September 9<sup>th</sup>, 2015)

...transaction process worry. If money is transferred but item is not sent yet in accordance with determined date, it causes buyer's worry. Buyer must wonder whether item is sent or not.

(Participant 4 – FGD – September 9<sup>th</sup>, 2015)

The study of discussion results from the participants can be meant that online transaction reveals risk caused by participants' not knowing in understanding the transaction process. In the context of consumers' behavior, risk is given meaning as consumers' uncertainty perception and involves the existence of financial loss possibility in each transaction process activity (Grazioli and Jarvenpaa, 2000). Meanwhile in the context of online transaction, risk perception is defined as consumers' subjective belief in the financial loss gotten from intentional payments in online transaction processes (Green and Pearson, 2011). This explanation was revealed in discussion and interview with participants that is presented as follows.

....what we buy, apparently not in accordance with what we hope.

(Participant 2 – FGD – September 9<sup>th</sup>, 2015)

....there is fear that seller will lie.

(Participant 1 – FGD – September 9<sup>th</sup>, 2015)

.... Must give worry to buyers.

(Participant 4 – FGD – September 9<sup>th</sup>, 2015)

....the coming item is too big; we suffer financial loss....

(Participant 7 – FGD – September 9<sup>th</sup>, 2015)

I have tried to buy online item, but the item is not like expected.

(Participant 4 – Interview – September 9<sup>th</sup>, 2015)



The expressed answers by participants show that there was fear to do online transaction that was perceived by individuals in doing actions because of not knowing the expected results. The meaning of the answers expresses that risk perceived by participants in online transaction means that there was results' uncertainty as what expected. This explanation is consistent with the statement expressed by Rao *et al.* (2008) who proposed that risk was an action or not an action that would have impact on financial loss possibility. The explanation gives meaning that risk is an individual's behavior form that involves the consequence of negative potential or financial loss caused by an action.

Risk in online transaction occurs because of the existence of the individual's not believing in an object. Trust has an important role to be one of the determinants of individual's seeing the risk (Agarwal *et al.*, 2004), in which trust is regarded as the control mechanism that can facilitate exchange relationship characteristic that is the uncertainty in the future (Fang *et al.*, 2009). It was expressed in both discussion and interview done with participants that is presented as follows.

...we must really trust the services given by the online site including the goods' choices, not just order.

(Participant 2 – FGD – September 9<sup>th</sup>, 2015)

To trust online sale is not easy because there are also many deceivers in online sales.

(Participant 2 – Interview – October 27<sup>th</sup>, 2015)

...according to me, this online business has trust from customers toward businessmen and vice versa as the capitals.

(Participant 4 – Interview – October 27<sup>th</sup>, 2015)

If we intend to buy online, we must find information whether the online business can be trusted or not.

(Participant 2 – Interview – October 27<sup>th</sup>, 2015)

The answers of the participants show that in online transaction process, risk as objective reality has impact on consumers' uncertainty that is caused by the limited information that is gotten. This review gives proof that risk of online transaction process is the personal belief that is involved in each online transaction based on the owned limited information (Wu and Wang, 2005). Based on the explanation, it can be concluded that risk perception is defined as consumers' subjective belief in getting financial loss because of getting the wanted outcomes in online transaction process (Green and Pearson, 2011). It means the highness of the not believing and lack of gotten information give impact on the highness of risk perception level in online shopping that can become the cause of consumers' avoiding buying (Harper *et al.*, 2004).

**Proposition 2 :**            **the higher of risk perception, lower the desire of people conducting online transactions**

## **5. Relationship between Perceive Easy of Use, Risk Perception, and Attitude Toward Using Online Transactions**

The formation of intention to online transaction in the behavioral process is also influenced by affective behavior. Affective behavior refers to emotional interpretation as an object's evaluation form to get the positive or negative judgment (Nahl, 2001; Huitt and Cain, 2005; Brooks *et al.*, 2013). The discussion results with the participants that include the affective behavior are trust and like that are the participants' evaluation results of an object expressed by participants as follows.

...fondness of users themselves. He/she can select and buy item(s) so he/she gets pleasure. Items that he/she can buy in offline shops may not exist but in online shops, they exist so he/she gets pleasure.

(Participant 4 – FGD – September 9<sup>th</sup>, 2015)

...fondness of users. All people are happy or willing to buy online because the variation kinds and various prices.

(Participant 5 – FGD – September 9<sup>th</sup>, 2015)

....trust of site manager. Usually the known site will be guaranteed and not be deceptive.

(Participant 3 – FGD – September 9<sup>th</sup>, 2015)

The discussion results can mean that individual's trust and like or vice versa are the forms of individual's evaluation on an object that can form attitude. Ajzen (1971) gave meaning to attitude as individual's belief evaluation on positive or negative feeling for an object. The discussion of attitude in the affective dimension is focused on individual's feeling in term of like on the observed object and he/she measures the appeal emotional level of the object (Yang and Yoo, 2004). Meanwhile attitude in the context of consumers' behavior is individual's feeling for certain product that causes individual responds well or unwell the certain product (Luque *et al.*, 2009).

The behavioral discussion in the context of online transaction gives the same explanation in giving meaning to attitude. Attitude explains the good or not good consumers' feelings that can direct to the website use decision of online shopping (Lin, 2007). It is assumed that consumers' decisions to do online transactions based on their beliefs in the knowledge of an object's attributes involving internet use experiences that can form attitudes (Hsieh and Liao, 2011). So it is expected that the good attitude eases the online transaction and reduces consumer's obstacles to adopt online shopping website (Hassanein and Head, 2007). It can be concluded that individual's trust and like of online transaction is the attitude directed on the online transaction use.

The attitude formation on online transaction, individual's experiences and knowledge factor have important role in giving the attitude meaning (Hsieh and Liao, 2011). Using his/her knowledge and experiences in giving meaning to the online transaction, individual evaluates object that is felt in the attitude formation on online transaction. It is revealed in interview done with the participants to express the attitude's meaning. The interview results are expressed as follows.

...attitude on online shopping is the technology improvement that eases consumers....

(Participant 1 – Interview – October 27<sup>th</sup>, 2015)

....must know whether online business is deceptive or not.

(Participant 2 – Interview – October 27<sup>th</sup>, 2015)

....online business is a trust....

(Participant 3 – Interview – October 27<sup>th</sup>, 2015)

....according to me, this online business has trust from customers to businessmen and vice versa as the capital.

(Participant 4 – Interview – October 27<sup>th</sup>, 2015)

....will occur based on others, friends or best friends' experiences who previously did transactions with certain online shops....

(Participant 1 – Interview – October 27<sup>th</sup>, 2015)

Based on statement expressed from the interview, it is shown that participants' knowledge and experiences could form perceived easy of use and risk perception in online transaction as participants' bases of evaluating online transaction of building motivation directed to attitudes. This statement is consistent with what was expressed by Hsieh and Liao (2011) who assumed that consumers' decision process of doing online transaction based on their beliefs in knowledge of attributes of an object involved internet use experiences that could form attitudes. The discussion means that consumers' knowledge

and experiences of online transactions are expected to form individuals' positive attitudes to ease and reduce obstacles that can influence individuals' online transactions.

**Proposition 3 :** **the higher perceived ease of use, higher the positive attitude towards online transactions**

**Proposition 4 :** **the higher of risk perception, lower the positive attitude towards online transactions**

## **6. Relationship between Attitude Toward Using and Intention to Online Transactions**

Consumers' decisions processes of attitudes formation are influenced by individuals' motivations that are identified to have two motivations of shopping those are hedonic shopping (for pleasure) and utilitarian shopping (with purposes as wanted) (Babin *et al.*, 1994). There was motivation variety built by participants in forming attitudes on online transactions. The variety was influenced by the background of participants' characteristics among others are income level, knowledge level, and experience level. The answers variety of participants' motivations of forming attitudes on online transactions is presented as follows.

...young generation today tends to want to be seen the same as the other friends. They want to be cool, although actually what they do and what they need sometimes do not have relationship, just only want to be regarded the same as their environment.  
(Participant 2 – FGD – September 9<sup>th</sup>, 2015)

Items can be chosen and bought, so buyers are happy.  
(Participant 4 – FGD – September 9<sup>th</sup>, 2015)

All people love or want to buy online because of the variations of kind and price.  
(Participant 5 – FGD – September 9<sup>th</sup>, 2015)

...just search the wanted items and we can get them fast.  
(Participant 7 – FGD – September 9<sup>th</sup>, 2015)

...do not need to go outside and easy; just only need to order in accordance with the pictures of online shops....  
(Participant 1 – Interview – October 27<sup>th</sup>, 2015)

Do not need to visit items' selling places but buy directly the wanted items fast and easily.  
(Participant 4 – Interview – October 27<sup>th</sup>, 2015)

From the statements of the participants, it is found that there is individuals' motivation variety of forming attitudes on online transactions. The words "can be cool", "want to be regarded the same", and "give pleasure" show that participants had hedonic motivation that meant that individuals in online transactions just did them for pleasure; it could form attitudes on online transactions. This statement is consistent with what was revealed by Babin *et al.* (1994) who stated that hedonic shopping motivation was the shopping decision of giving pleasure to self that involved internet searching process in shopping site and only visiting his/her pleasure related sites.

Based on participants' answers, it is also revealed that there are words such as "there are variations", "fast to get", and "fast and easy" that means that individuals' motivations in online transactions are rational by buying online products according to their needs. This rational motivations are the forms of utilitarian motivation that is given meaning that the rational shopping motivation of doing shopping process has characteristics of easiness, informativeness, selectors in online shopping, and ability to control the shopping desire by the clear information sources needs before buying (Babin *et al.*, 1994). The answers' variety given by participants shows the existence of individuals'

motivations differences of evaluating online transactions in forming attitudes. It means that there is motivation variety of building attitudes of each individual of understanding online transactions that can direct to online transaction intentions. From this explanation, it can be concluded that there is attitude role in online transaction in the formation of intention to online transaction.

**Proposition 5 :** **the higher positive attitude towards online shopping, increasingly intention to online transactions**

### 7. Role of Media Exposure

Information becomes the important part of changing individuals' behaviors (Nahl, 2001). The processes of individuals' verbal or visual information can influence individuals' perception from their environment stimuli that can create emotional responses and behaviors (Morimoto *et al.*, 2003). The explanation gives meaning that media has the important role for individuals to get information that can improve individuals' capacity to achieve their purposes. So, individuals' decision makings need information gotten from media exposure continuously.

Online media is the part of media that gives information to the users in the online or virtual forms that can be the main triggering factors of the users' emotions and can encourage buying behaviors because of the seen, heard, and searched information (Marimoto *et al.*, 2003; Jordan and Ehlers, 2009). Online media role in forming individuals' behaviors, mainly in young generation environment was also revealed in the discussion with the participants who were the parts of individuals.

...has important role because young generation cannot be separated from both social and advertisement media so the site target is young generation.

(Participant 1 – FGD – September 9<sup>th</sup>, 2015)

...according to me, media role is important enough because young generation or society is commonly not far from the needs to get information of wanted items continuously. So media role helps enough both in the forms of social media and the other information media that give easiness in finding wanted items' information.

(Participant 6 – FGD – September 9<sup>th</sup>, 2015)

The answers expressed by participants show that online media has become part of living. It is normal because the all nowadays conditions are digital that can be accessed wherever and whenever they are. The explanation concludes that media exposure, mainly online media, can mean as individuals' activities of listening, watching, and reading messages of mass media in online channels (McQuin, 1994). Individuals' change of getting information by using online media with high intensity can influence the users' behaviors. The statement is consistent with what expressed by Jordan and Ehlers (2009) who stated online information media is media construction that change individuals' behaviors significantly as new communication tools. Information and entertainments of website can make consumers useful and more active in watching and reading messages processes (Oh and Xu, 2003). The behavior changes, mainly among the young generation, in getting information from online channels influenced the selections of website services of online shopping by participants. It was revealed in discussion with participants that showed the existence of website variety of shopping online chosen by participants.

OLX.com. Maybe because this online site gives advertisement both in printed media and electronic media more and very many so I know the site more.

(Participant 1 – FGD – September 9<sup>th</sup>, 2015)

OLX.com. Yes, I know from the advertisement by OLX.

(Participant 5 – FGD – September 9<sup>th</sup>, 2015)

Berniaga.com. Yes, the same with others, I know much from media, mainly social media information and sometimes family inform that the site is good to use for online shopping.

(Participant 4 – FGD – September 9<sup>th</sup>, 2015)

Bukalapak.com. I get much information from social media.

(Participant 3 – FGD – September 9<sup>th</sup>, 2015)

These differences of website selections by participants were caused by the existence of information differences gotten by participants from various sources including social media information. The elements of media messages can predict the memory process; next, positive or negative behaviors' strengthening is done; it can develop or reduce individuals' actions. It explains that essentially information purposes of online shopping web are to create products' awareness, consumers' information of products' attributes, help consumers evaluating various products alternatives, encourage consumers to try products and influence buyings (Sanz-Blas *et al.*, 2008). But the manager of online shopping website should also be careful in giving services that may have impact on consumers' knowledge and trust to do online transactions. This explanation was poured in the answers expressed by participants in both discussion and interview who saw information that could increase individuals' willingness to do online transactions.

...according to me, transaction process knowledge, if buyers less understand transaction process, he/she will suffer losses. Sellers should give good information.

(Participant 1 – FGD – September 9<sup>th</sup>, 2015)

...gotten information, the more information of products of online shops we get, the more increase of buying in online site.

(Participant 5 – FGD – September 9<sup>th</sup>, 2015)

If we intend to buy online, we must find information whether the online business can be trusted or not.

(Participant 2 – Interview – October 27<sup>th</sup>, 2015)

The expressed answers of the participants means the risk decrease perceived by individuals and buying decision increase are influenced by the existences of both consumers' searching and getting more information in overcoming uncertainties of the potentials of positive or negative consequences. This statement is consistent with what was expressed by Agarwal *et al.* (2004) who expressed that the existence of the strong role of media exposure effects could improve trust and belief, and reduced consumers' risk beliefs in influencing behavior intentions formation in online shopping. Besides, in accessing information, the internet users get easiness of just using *mouse* to click icons, writings, or pictures in asking results. It means that if compared with the other media formula, internet capability of getting information has relative easier interaction of getting consumers' attention and giving stimulus to individuals to act (Taylor and Todd, 2005). This explanation means that web media of online shopping should give easy services in interaction with the users and give comprehensive information of products to influence individuals' intentions to do online transaction. It can be concluded that the media exposure effects are many more in producing information for consumers about online transaction knowledge that can reduce risks perceived by individuals to improve the decisions of doing intentions to online transaction.

**Proposition 6**      **the higher information obtained from media exposure further strengthening relations positive attitude toward online transactions on intention online transactions**  
:

**Proposition 7**      **the higher information obtained from media exposure further strengthening relations perceived ease of use on positive attitude**  
:

**toward online transactions**

**Proposition 8**     **the higher information obtained from media exposure further**  
**:**                   **strengthening relations perceived ease of use on intentions to**  
                          **online transactions**

**Proposition 9**     **the higher information obtained from media exposure further**  
**:**                   **strengthening relations risk perception on attitude toward online**  
                          **transactions**

**Proposition**       **the higher information obtained from media exposure further**  
**10 :**                 **strengthening relationship risk perception on intention to online**  
                          **transactions**

**Conclusions**

Online transaction intention is a topic that is still interesting to study. It is because there is no model in the formation of intentions to online transaction that can be applied in various research settings, although just only one. The explanation gives opportunity for the researchers to construct models by putting in the other variables indicated theoretically in explaining the formations of intentions to online transactions. To construct the models of the formations of intentions to online transactions, qualitative method needs to be used with the purpose of understanding phenomena or social signs by emphasizing the complete pictures of the observed objects reviewed to become related to each other variables (Sarantakos, 2005). So this research purpose is exploring the formation process of intentions to online transaction using behavioral theory applied to information system. This research also explores media exposure effects of giving stimuli of cognitive behavior (perceived easy of use and risk perception) and affective behavior (attitude), and conative behavior (intention) relationship of explaining online transaction process among young generation.

The first discussion explains the difference between online shopping and online transaction. The discussion is intended to give the same exact understandings of the meanings of the concepts of online shopping and online transaction applied to the real condition. In Indonesian society environment, the terms related with selling and buying are developed in internet among others are *internet e-commerce*, *internet shopping*, online transaction, and online shopping. Participants knew more two terms of internet selling and buying those are online transaction and online shopping. According to participants, the similarity of online transaction and online shopping was looking for goods through internet network, meanwhile the difference was that there was still an additional process in online transaction because of online shopping.

In selling and buying application in internet, participants agreed to use online transaction term, in which online transaction was not only looking for goods through online site but also there was additional process after searching goods. Besides, online transactions did not only consist of online goods transactions but also could be service transactions including exchange transactions of both goods and services. Participants also regarded online transaction term safer because in the process, the steps that must be done by consumers were informed. This explanation strengthens online transaction term developed by Green and Pearson (2011), in which online transaction was explained as online exchange relationship including sharing business information, managing business relationship, and doing business transaction that obligated each doer involved in the transaction giving the whole and complete information in his/her transaction process.

The formation pattern of online transaction intention is not different from behavioral concept of cognitive, affective, and conative processes (Lichtle and Plichon, 2008). Online transaction intention as conative behavior was defined by participants as individuals' willingness to continue processes because of online shopping, both goods and services transactions through the steps determined by the site manager. This explanation strengthens the meaning of intention to online transaction defined as consumers' willingness to use *website* with the service providers in an online exchange relationship (Sanz-Blas *et al.*, 2008; Green and Pearson, 2011) that needs consumers' knowledge understanding of online transaction process of various business information, business relationship management, and online business transaction implementation.

Based on behavioral concept of intention to online transaction, the conative behavior form is influenced by affective and cognitive behaviors. Affective behavior explains emotional interpretation as an evaluation form of an object to get positive or negative judgment (Nahl, 2001; Huitt and Cain, 2005; Brooks *et al.*, 2013). Participants gave meaning to affective behavior that if individuals believed and happy or vice versa, it was the individuals' evaluation realization of an object that could form attitudes. Ajzen (1975) defined attitude as individuals' belief evaluation through positive or negative feeling toward an object. The explanation defines that the good or not good consumers' feelings can direct to the decision of website use of online shopping as consumers' attitudes realization (Lin, 2007) that is influenced by individuals' motivations; two shopping motivations are identified those are hedonic shopping and utilitarian shopping based on consumers' knowledge and experiences (Babin *et al.*, 1994).

Cognitive behavior has role in forming both affective behavior and conative behavior. Cognitive behavior refers to the process of knowing, understanding, and perceiving an object's attributes that can direct the behavior formation (Izard, 1993; Huitt and Cain, 2005). Referring to the discussion results with participants, the variable of the framer of intention to online transaction of cognitive behavior group directs to two variables those are perceived easy of use and risk perception. In the discussion of easy to use perception, participants expressed the statements such as "access whenever and wherever", "pay by transfer", "without going outside", "not tired and busy", and "fast and easy". It is the indication of online transaction easiness. The answers expressed by the participants define easy to use perception as individuals' belief in online transaction easiness that is free from efforts. The discussion of online transaction easiness defines that participants perceived that online transaction was easy and giving easiness to the users. The statement supports the explanation expressed by Tong (2010) who stated that easiness perception focus of online shopping object was transaction easiness in *website* that contributed to consumers' perception of freedom from efforts in buying in online shops rather than traditional shops.

The other dominant factor in the cognitive behavior group that can influence the individuals' intentions to online transaction is risk perception. Participants really did not only express risk perception as the framer factor of intention to online transaction but also gave answers for risk forms in online transactions such as privation, worry, and not knowing the expected results in online transactions that can influence consumers' decisions. The meaning of the answers expresses that risks perceived by participants in online transaction were not certain for the expected results. Based on the explanation, it can be concluded that risk perception is defined as consumers' subjective beliefs in the losses gotten because of getting the wanted outcomes in online transaction processes (Green and Pearson, 2011).

The relationship between risk perception and attitudes and intentions to online transaction is influenced by participants' perceptive level in interpreting online

transactions. Participants saw online transactions had risks; it had impact on the lack of participants that had attitudes on online transactions and intentions to do online transactions. The explanation defines that the higher the risks perceived by consumers, the lower the willingness to do transactions. To reduce risks perceived by consumers to improve the attitudes on online transactions and intentions to do online transactions, consumers' trust improvement toward online transactions is needed by improving consumers' knowledge and experiences. In the improvement of consumers' knowledge and experiences of online transactions, the issues that need attention from consumers such as safety, privation, and risk perception are the important factors that can influence consumers' buying decisions (Teo and Liu, 2007).

The formation of intentions to online transaction is also influenced by external factors that give stimuli to individuals to behave. Information becomes the important part in changing individuals' behaviors (Nahl, 2001). The individuals' processing of verbal or visual information can influence individuals' perception because of the stimuli from their environments that can produce emotional responses and behaviors (Morimoto *et al.*, 2003). The behaviors' change mainly in young generation in getting information through online channels influences website service selections of online shopping chosen by participants among others were OLX.com, Berniaga.com, and Bukalapak.com. The explanation defines that media in giving information has role that can increase buying decision influenced by both consumers' searching and getting more information in overcoming uncertainties of the potential of positive or negative consequence. This statement is consistent with what was expressed by Agarwal *et al.* (2004) who expressed that strong role existence of media exposure effects could improve belief, trust, and reduce consumers' risks belief in influencing behavior intention formation in online shopping.

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## FACTOR MODEL WITH EARNINGS' YIELD AND ILLIQUIDITY WHICH ONE IS THE BEST TO EXPLAIN STOCK RETURNS?

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### Abstract

Previous research (Satrio, 2015) shows that the CAPM and the Three-Factor Model (TFM) Fama French (1993) is a model that can provide an explanation for the change on stock returns. TFM Fama French (1993) tested in this study involving illiquidity factor and earnings' yield. Testing by modifying the TFM Fama French (1993) to determine the role of illiquidity and earnings' yield factor in explaining excess stock returns based TFM Fama French (1993). The results showed that (1) earnings' yield and illiquidity plays an important role in providing explanations on stock returns, (2) TFM has better explanatory than single factor model, (3) the models is formed based CAPM, TFM Fama French and TFM modified by earnings' yield and illiquidity, as a whole showed no statistically significant difference in error in giving an explanation on stock returns.

**Keywords:** *Fama French Three-Factor Model, Earnings' Yield, Illiquidity*

### Introduction

Measurement of risk and return of stocks in the capital market is an important topic and opportunities in the development of asset pricing models. Single factor models underlying asset pricing model (CAPM) by Sharpe (1964), Lintner (1965), Mossin (1966) and Black (1972) states that the market premium may provide an explanation for the individual stock returns. Asset pricing tests has evolved and provide an explanation to the risk and return. To test the validity of asset pricing models, one of which is the development of three-factor model (TFM) Fama and French (1993). TFM Fama and French (1993), namely size and value factors can provide an explanation for the excess stock returns. TFM Fama French (1993) stated that the excess return ( $R_i - R_f$ ) can be explained by three factors: excess market return ( $R_M - R_f$ ), the difference between returns on the stock categorized as small and big stocks (Small Minus Big), as well as differences between stock returns based on the book value to market value (BE/ME) high and low BE/ME portfolio returns (High Minus Low). TFM was then supported by a number of previous researchers (Maio and Santa-Clara (2012), Satrio (2015).

After successfully combines the excess returns by capturing market size and value factors in the explanation of the excess returns, TFM Fama French experienced a number of developments. Although the TFM considered the best model (Maio and Santa-Clara, 2012), but the TFM is not the most perfect model of the explanation for the securities return. Three-factor model is just a model that certainly can not give explanations on all securities and portfolios (Fama and French, 1996). The usefulness of pricing models should be trusted to work in many varied conditions and not only on a limited portfolio (Kothari, Shanken and Sloan, 1995). However, that does not mean a domestic asset pricing model and international models may provide an explanation entirely on stock returns (Fletcher, 2001) because each model has its limitations. Therefore, it's necessary to consider about the relationship between size and other factors in testing the stock returns (Banz, 1980). This requires new approaches to the model in conducting comprehensive test on time series variation in stock returns. Earnings' yield as noted by Basu (1983) and illiquidity proposed by Amihud (2002) plays an important role in providing explanations

on stock returns. Common stock of high earnings price firms (E/P) earn, on average, higher risk-adjusted return than the common stock of low E/P firms (Basu, 1983), common stock of smaller firms earn, on average, higher risk-adjusted return than common of large firms (Banz, 1980). Illiquidity can give better explanation as time series and cross section on stock returns (Amihud, 2002). Both of these factors follow the asset pricing based CAPM can form TFM proposed by Fama and French (1993). The main objective of this study is to compare the accuracy of CAPM and TFM put forward by Fama-French (1993) as modified by involving elements of illiquidity and earnings' yield. The study was conducted using the basic TFM combined with the earnings' yield and illiquidity in order to determine the role of each factor in giving explanations on stock returns.

## Review of Literature

### 1. Fama French Three Factor Model

TFM Fama French (1993) proposed the excess market returns ( $R_M - R_f$ ), size factor (SMB) and value factor (HML) in providing explain excess returns. Based on the theoretical model of a single index of Sharpe (1964), the price of a security will fluctuate in line with market price index. The stock price tends to increase if the stock price index has increased and vice versa. Empirically testing related to the premium market has also been performed by a number of researchers. Sarwar, Hussan and Malhi (2013) showed that the market premium confirm positive relationship with stock returns.

**H1:** Excess market returns factor reflects the movement of excess stock returns in the same direction. The higher the excess market returns, reflects high excess stock returns.

Sarwar, Hussan and Malhi (2013) by testing at the Karachi Stock Exchange showed the positive relationship between size and stock returns. Results of testing Fama French (1993), three factors ( $R_M - R_f$ , SMB, and HML) with the establishment of 25 portfolios indicates that beta consistently have a positive influence on the excess returns, but the big-size stock portfolios category tend to have a negative direction while small and medium stocks category have a positive direction.

**H2:** SMB reflects the movement of excess returns, dominant in the positive direction.

Sarwar, Hussan and Malhi (2013) find that the book-to-market is negatively correlated with stock returns in the Karachi Stock Exchange. Auret and Sinclair (2006) suggest there is a positive relationship between book-to-market and stock return as predictable. Fama French (1993) shows small BE/ME, HML might reflect excess returns in the negative direction, but overall, small to big stocks BE/ME, HML reflect the movement of excess return in the positive direction.

**H3:** HML reflect stock price volatility, dominant in the positive direction.

### 2. Three Factor Model and Earnings' Yield

Research results Basu (1977) shows portfolio with lower P/E, on average, to have higher absolute risk adjusted rates of return. Common stocks in the firm with higher earnings-price (E/P), on average, significantly had higher risk-adjusted return, and the effects of firm size disappear when controlled for risk returns and E/P (Basu, 1983). Based on that description, the following hypothesis can be proposed:

**H4:** Positive effect Earnings' yield on excess returns. The higher the earnings' yield, reflects high excess stock returns.

### 3. Three Factor Model and Illiquidity

Positive illiquidity effect on stock returns (Brennan and Subrahmanyam, 1996). Refers to Amihud (2002), on the NYSE stock, using the average size of all stocks on the

ratio of the daily of stock returns in absolute versus the dollar volume indicates illiquidity has a positive and significant impact on the expected return, and the effect of illiquidity stronger in stocks of small firms. Dey (2005) portfolio liquidity, as measured by using the turnover ratio which is calculated from the value of shares traded throughout the market capitalization shows that generally supports the positive relationship between return and turnover, in which the test indicated significant relationship, especially in emerging markets. Based on these descriptions, the following hypothesis can be proposed:

H5: Illiquidity has positive effect on excess return. The higher the illiquid, reflects high excess stock return.

## Measurement Variable

### 1. Illiquidity

Illiquidity in this study refers to Amihud (2002) which is the simple average of absolute stock returns to trading volumes over the period of observation. Refers to Amihud (2002), the measurement of illiquidity can be done by using the spread between bid and ask prices (quoted or effective), transaction-by-transaction market impact and probability of information-based trading requires data microstructures that are not available in many capital markets and when available, the data does not cover a long period of time.

Stock illiquidity determined by reference to the Amihud (2002) is the ratio of the absolute return on average daily trading volume on the day  $|R_{iyd}|/VOL_{iyd}$ .  $R_{iyd}$  is a stock return (i) on the day (d) of the year (y) and  $VOL_{iyd}$  is the daily transaction volume in the Rupiah. This ratio gives the absolute percentage change in the price of a particular currency of daily trading volume, or the daily price impact on the order flow.

### 2. Earnings' Yield

Earnings' yield measurement refers to Basu (1983) that the earnings to price (E/P). E/P is measured for each firm to then form portfolio of stocks based on earnings' yield. E/P can be seen as a direct proxy for the expected returns (Ball, 1978). Variable E/P is an important factor in providing an explanation of the return (Basu, 1983).

## Model Testing Empirical

The study was conducted for the period December 2002 to December 2014, in which the period December 2002 to December 2012 is the estimation period, while the period January 2013 to December 2014 was the testing period. Total 284 firms are used. To be included in the tests, a firm must have minimum initial public offering in 2001. Data that not used in the study are firm data that do not have a daily trading transaction in a month, in order to testing illiquidity criteria as proposed by Amihud (2002). Factor models involved earnings' yield in the tests refers to the implications of the model of Fama and French (1993) with the same pattern. OMU (Over Medium Under) is the difference between simple average of portfolios returns is  $\{(OS+OM+OL)/3-(US+UM+UB)/3\}$  and  $\{(OH+OM+OL)/3-(UH+UM+UL)/3\}$ . Factor models that involve the earnings' yield, namely:

$$(1) R_i - R_f = b_i(R_M - R_f) + s_iSMB + o_iOMU + \varepsilon_i$$

$$(2) R_i - R_f = b_i(R_M - R_f) + h_iHML + o_iOMU + \varepsilon_i$$

The establishment of a model involving illiquidity factor in this study also refers to Fama and French model. HML (High<sub>illiq</sub> Medium<sub>illiq</sub> Low<sub>illiq</sub>) is the difference between simple average return of the portfolio, namely  $\{(H_{illiq}S+H_{illiq}M+H_{illiq}B)/3-$

$(L_{illiq}S+L_{illiq}M+L_{illiq}B)/3$ ) and  $\{(H_{illiq}H+H_{illiq}M+H_{illiq}L)/3-(L_{illiq}H+L_{illiq}M+L_{illiq}L)/3\}$ . Factor models involving illiquidity factors, namely:

$$(3) R_i - R_f = b_i(R_M - R_f) + s_iSMB + i_iH_{illiq}ML_{illiq} + \varepsilon_i$$

$$(4) R_i - R_f = b_i(R_M - R_f) + h_iHML + i_iH_{illiq}ML_{illiq} + \varepsilon_i$$

Tests on a model error in giving an explanation for the excess stock returns is done by testing the U-Theil. Testing with U-Theil is a good measurement in comparing models (Wilson and Keating, 2007), by the following equation:

$$(5) U = \frac{\sqrt{\sum(A_t - F_t)^2}}{\sqrt{\sum(A_t - A_{t-1})^2}}$$

Kruskal-Wallis testing conducted to determine significant differences in explaining the stock returns. Determining of the differences of each model in the explaining stock return, can be done by taking the average difference in rank and then calculate the z-value (Ghozali, 2006), by the following equation:

$$(6) Z = \frac{\alpha}{k} (k - 1) \sqrt{\frac{N(N+1)}{12} \left( \frac{1}{nu} + \frac{1}{nv} \right)}$$

### Analysis and Discussion

Testing is done by forming 72 portfolios based on size, value, earnings' yield and illiquidity to build four equations that combine earnings' yield and illiquidity into TFM Fama and French (1993). The establishment of a portfolio based SMB, HML,  $H_{illiq}M_{illiq}L_{illiq}$  and OMU to capture the stock returns associated with firm size factor, the value of the firm, earnings' yield and illiquidity into the tests. The use of portfolios formed based on the size and value of the firm refers to the TFM Fama French (1993) by incorporating earnings and illiquidity. Table 1 shows the descriptive statistics on a portfolio that is formed on the model. The average value of excess return highest monthly to the portfolio based on value-earnings, earnings-value, size-earnings, earnings-size, value-illiquidity, illiquidity-value, size-illiquidity, illiquidity-size respectively 3.067 percent, 3.420 percent, 2.775 percent, 3.101 percent, 3.757 percent, 3.456 percent, 2.650 percent and 2.512 percent, while the smallest excess return successively 0.119 percent, 0.070 percent, 0.674 percent, 0.451 percent, -0.436 percent, -0.146 percent, -0.393 percent, and 0.010 percent. Results showed that overall portfolio with positive returns, but leaving a negative return on the stock portfolio category with high-value, high-illiquidity and small-size category. Results of descriptive statistics showed that portfolio of stock formed by: (1) categories of big size, has high returns, (2) low value categories, tend to have a higher returns, (3) low earnings categories tend to have low returns, (4) high illiquidity categories for small firm or has high value, has low returns.

### Table 1: Descriptive Statistics Excess Return Portfolio Formed on Size, Value, Earnings, and Illiquidity: 2003-2012, 10 years

Summary statistics for 72 portfolios formed on size (ME), value (BE/ME), earnings' yield (E/P) and illiquidity ( $|R|/VOL$ ). All the stock portfolios is formed on percentage (30:40:30), and conducted reclassifying based on other variables with a similar percentage. For example: a portfolio of Value-Earnings formed from: (1) 30 percent of the stocks that are high BE/ME categories, with over, medium, and under earnings category (HO, HM and HU), (2) 40 percent of the stocks are medium category, with over, medium, and under



earnings category (MO, MM, and MU), and (3) 30 percent categorized as low, with over, medium, and under earnings category (LO, LM, and LU). Excess returns is the return of each stock individually (monthly returns obtained from the average daily returns) that formed the portfolio, after deducting the risk-free return (monthly returns of Bank Indonesia Certificates (SBI)).

Value	Earnings					
	Over Average	Medium	Unde	Over Standard Deviation	Medium	Under
High	0.018	0.00696	0.0011	0.0656	0.06691	0.083
Medium	0.026	0.01311	0.0144	0.0657	0.05911	0.067
Low	0.030	0.03050	0.0211	0.0733	0.06068	0.087

Earnings	Value					
	High Average	Medium	Low	High Standard Deviation	Medium	Low
Over	0.015	0.01820	0.034	0.0686	0.06007	0.076
Medium	0.007	0.01655	0.030	0.0686	0.06077	0.061
Under	0.000	0.01604	0.022	0.0840	0.06695	0.085

Size	Earnings					
	Over Average	Medium	Unde	Over Standard Deviation	Medium	Under
Small	0.019	0.00742	0.006	0.0614	0.06551	0.079
Medium	0.022	0.01671	0.018	0.0684	0.05869	0.080
Big	0.027	0.01877	0.025	0.0821	0.06712	0.074

Earnings	Size					
	Small Average	Medium	Big	Small Standard Deviation	Medium	Big
Over	0.016	0.01972	0.031	0.0625	0.06528	0.081
Medium	0.014	0.01796	0.020	0.0695	0.05968	0.066
Under	0.004	0.01499	0.020	0.0767	0.07894	0.077

Value	Illiquidity					
	High <sub>illi</sub> Average	Medium <sub>illi</sub>	Low <sub>il</sub>	High <sub>illi</sub> Standard Deviation	Medium <sub>il</sub>	Low <sub>illi</sub>
High	-	0.01227	0.016	0.0694	0.07668	0.069
Medium	0.010	0.02250	0.018	0.0580	0.07077	0.064
Low	0.023	0.03757	0.019	0.0856	0.07492	0.054

Illiquidit	Value					
	High Average	Medium	Low	High Standard Deviation	Medium	Low
High <sub>illiq</sub>	-	0.00414	0.026	0.0734	0.05298	0.086
Medium <sub>il</sub>	0.014	0.02181	0.034	0.0788	0.07257	0.079
Low <sub>illiq</sub>	0.015	0.01926	0.023	0.0622	0.06394	0.056

Size	Illiquidity					
	High <sub>illi</sub> Average	Medium <sub>illi</sub>	Low <sub>il</sub>	High <sub>illi</sub> Standard Deviation	Medium <sub>il</sub>	Low <sub>illi</sub>
Small	-	0.02091	0.012	0.0696	0.07826	0.057
Medium	0.011	0.02189	0.022	0.0594	0.07696	0.067
Big	0.026	0.02478	0.018	0.0800	0.08207	0.059

Illiquidit	Size					
	Small	Medium	Big	Small	Medium	Big
	Average			Standard Deviation		
High <sub>illiq</sub>	0.000	0.00843	0.019	0.0762	0.06853	0.072
Medium <sub>il</sub>	0.024	0.02512	0.020	0.0735	0.08271	0.074
Low <sub>illiq</sub>	0.016	0.01919	0.022	0.0497	0.06370	0.071

Tests modeling involves market factors developed in the equation to establish models that provide explanations on stock returns, namely (1) testing with market risk premium ( $R_M - R_f$ ), (2) testing of excess market returns ( $R_M - R_f$ ), size (SMB) and earnings' yield (OMU), (3) testing market factor ( $R_M - R_f$ ), value (HML) and earnings' yield (OMU), (4) testing market factor ( $R_M - R_f$ ), size (SMB) and illiquidity ( $H_{illiq}M_{illiq}L_{illiq}$ ), (5) testing market factor ( $R_M - R_f$ ), value (HML) and illiquidity ( $H_{illiq}M_{illiq}L_{illiq}$ ). Table 2 provides an explanation of a market factor in the role of providing explanations on stock returns. From the table it is known that the market factors consistently provide explanations on stock returns in the same direction, for all portfolios are formed. The determination coefficient that is 89.7 percent of the shares with a low illiquidity but big-size category, showing that market factor capture the variation in common stock returns, for all portfolios are formed. In average, the portfolios return is formed by earnings-size, illiquidity-size, earnings-value, and illiquidity-value can be given explanations by market factor are respectively 51.34, 51.64, 52.81, and 54.9 percent. This means that the market factor plays an important role in providing explanations on stock returns, with the explanatory ability of more than 50 percent, while the remainder is equal to 48.66, 48.36, 47.19, and 45.1 percent is explained by other factors. The ability of market factors in giving explanations on stock returns has the lowest value that the coefficient of determination of 18.2 percent on the stock category has illiquidity high however small, which indicates that the market factors still leave a lot of variation in stock returns can be explained by other factors.

**Table 2: Testing Market Risk Premium and Stock Excess Return: 2003-2012, 10 years**

Tests 36 portfolios formed on the size, value, earnings' yield, and illiquidity. Excess stock returns ( $R - R_f$ ) is the difference between the monthly returns derived from the average daily return of each individual stock that formed the portfolio, and then minus by the risk-free monthly returns of Bank Indonesia Certificates (SBI). Excess market returns ( $R_M - R_f$ ) represents the difference between the monthly returns derived from the average daily returns that is reflected in the stock market price of the Composite Stock Price Index (CSPI), the SBI monthly returns.

		$R_{(t)} - R_{f(t)} = a + b[R_{M(t)} - R_{f(t)}] + e_{(t)}$					
		Size			t		
		Sma	Mediu	Big	Small	Medium	Big
Earnings	Over	0.48	0.832	2.11	5.709	11.226	15.19
	Medium	1.08	0.760	2.13	10.73	13.278	19.90
	Under	1.05	0.992	1.18	8.243	9.917	12.31
Illiquidity	High <sub>illiq</sub>	0.55	0.705	0.58	5.204	8.642	7.904
	Medium <sub>il</sub>	1.11	1.001	1.02	10.41	11.990	15.93
	Low <sub>illiq</sub>	0.37	0.772	0.92	8.736	16.233	30.37

		Adjusted R <sup>2</sup>			s(e)		
		Sma	Mediu	Big	Small	Medium	Big
Earnings	Over	0.21	0.517	0.66	0.056	0.043	0.082
	Medium	0.49	0.602	0.77	0.067	0.033	0.061
	Under	0.36	0.450	0.55	0.085	0.066	0.064
Illiquidity	High <sub>Illiq</sub>	0.18	0.382	0.35	0.062	0.054	0.041
	Medium <sub>Ill</sub>	0.49	0.556	0.68	0.062	0.048	0.042
	Low <sub>Illiq</sub>	0.40	0.699	0.89	0.024	0.027	0.017

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		Value			t		
		Hig	Mediu	Low	High	Medium	Low
Earnings	Over	0.72	1.007	1.12	9.083	13.583	13.46
	Medium	0.87	0.786	0.98	13.03	13.679	15.57
	Under	1.22	2.132	0.88	12.32	8.879	7.012
Illiquidity	High <sub>Illiq</sub>	0.71	0.483	0.70	7.932	7.193	6.681
	Medium <sub>Ill</sub>	1.16	1.161	1.22	13.38	14.480	13.67
	Low <sub>Illiq</sub>	0.95	0.808	0.75	14.93	16.948	21.22

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		Adjusted R <sup>2</sup>			s(e)		
		Hig	Mediu	Low	High	Medium	Low
Earnings	Over	0.40	0.607	0.60	0.053	0.049	0.055
	Medium	0.58	0.610	0.67	0.044	0.038	0.037
	Under	0.55	0.399	0.30	0.066	0.141	0.065
Illiquidity	High <sub>Illiq</sub>	0.34	0.299	0.27	0.060	0.044	0.061
	Medium <sub>Ill</sub>	0.59	0.637	0.61	0.058	0.053	0.059
	Low <sub>Illiq</sub>	0.65	0.710	0.81	0.042	0.028	0.018

In Table 3 are shown market factor in the three-factor model involving the firm's size and earnings' yield. Implementation of market factor, size and earnings' yield can capture the higher variation in common stock returns, with a coefficient of determination over 50 percent for all stock portfolios formed on earnings' yield. Application of a alone market factor alone can only capture variation of stock returns of at least 18.2 percents, with the highest explanatory value that is equal to 89.7 percent of that in the portfolio have low illiquidity with a big-size category. The test results involving size and earnings' yield indicate that the application of the factor market size and earnings' yield securities can capture the variation in average stock returns are greater (63.44 percent), compared to the ability of explanatory only involves market factor (52.68 percent). Portfolios formed based on earnings' yield and size indicate market factor have a dominant role in capturing variations in stock returns, with t-value entirely in the top 10 that showed statistically significant. Size of the firms can capture the variations of returns on portfolios of common stocks, especially stocks of small and medium category, with minimum t-value is 3.220. Earnings' yield can capture variations stock returns, especially firm categorized over and under earnings, with the highest t-value is 8.529.

**Table 3: Testing the Three Factor Model Based Excess Return Market, Size and Earnings' Yield: 2003-2012, 10 years**

Tests conducted with 18 portfolios formed on size and earnings. Excess stock return ( $R_f$ ) is the difference between the monthly returns based on the average daily returns of

each stock and monthly risk-free return (SBI). Excess market return ( $R_M - R_f$ ) is the difference between the monthly returns (obtained by a simple average of the daily returns) stock price index in Indonesia (JCI) with SBI monthly returns. SMB (Small Minus Big) represents the difference between the monthly returns of small-size stocks (SO, SM, SU) and a monthly return of big-size stocks (BO, BM, BU). OMU is the difference between the monthly returns based on over-earnings stocks (OS, OM, OB) and under-earnings stock returns (US, UM, and UB). Monthly return of each stock which formed the stock portfolios is the result of the daily average of each stock.

$$R_{(t)} - R_{f(t)} = a + b[R_{M(t)} - R_{f(t)}] + sSMB + oOMU + e_{(t)}$$

		Size			t(b)		
		Small	Medium	Big	Small	Medium	Big
Earnings	Over	1.053	0.874	1.257	10.511	11.009	16.841
	Medium	0.996	0.827	1.016	12.730	12.179	20.724
	Under	1.015	1.098	1.146	14.667	10.331	11.399
		s			t(s)		
		Small	Medium	Big	Small	Medium	Big
Earnings	Over	0.928	0.227	0.016	6.995	2.199	0.162
	Medium	0.718	0.160	-0.073	7.022	1.873	-1.130
	Under	0.865	0.233	-0.094	9.561	2.917	-0.714
		o			t(o)		
		Small	Medium	Big	Small	Medium	Big
Earnings	Over	0.450	0.136	0.342	3.575	1.358	3.667
	Medium	-0.200	-0.011	-0.012	-2.046	-0.141	-0.185
	Under	-0.738	-0.379	-0.700	-8.529	-4.641	-5.575
		Adjusted R <sup>2</sup>			s(e)		
		Small	Medium	Big	Small	Medium	Big
Earnings	Over	0.505	0.545	0.766	0.049	0.039	0.042
	Medium	0.592	0.605	0.842	0.044	0.033	0.024
	Under	0.738	0.590	0.646	0.039	0.045	0.057

		Earnings			t(b)		
		Over	Medium	Under	Over	Medium	Under
Size	Small	0.840	1.317	1.021	11.831	12.407	13.460
	Medium	1.137	0.847	1.153	13.378	13.256	11.380
	Big	1.183	0.869	1.261	15.351	16.901	13.800
		s			t(s)		
		Over	Medium	Under	Over	Medium	Under
Size	Small	0.819	0.951	0.894	8.824	6.855	9.017
	Medium	0.282	0.303	0.410	2.536	3.622	3.220
	Big	-0.212	0.032	-0.118	-2.103	0.455	-0.986
		v			t(v)		
		Over	Medium	Under	Over	Medium	Under
Size	Small	0.433	-0.156	-0.763	4.877	-1.177	-8.039
	Medium	0.405	-0.120	-0.403	3.810	-1.497	3.108
	Big	0.263	-0.009	-0.603	2.726	-0.136	-5.281
		Adjusted R <sup>2</sup>			s(e)		
		Over	Medium	Under	Over	Medium	Under
Size	Small	0.569	0.572	0.707	0.040	0.060	0.043
	Medium	0.639	0.617	0.601	0.048	0.036	0.048
	Big	0.759	0.767	0.719	0.044	0.025	0.052

TFM tested by involving market factor, value and earnings' yield are shown in Table 4. The model can give an explanation at a minimum of 50.2 percent, which is in the portfolio formed based on earnings' yield and high value. The model has the ability to capture the variations in the highest stock returns in stocks that are formed on a high value but has a low earnings' yield, the explanatory capability of 71.3 percent. The value of the firm can capture the largest variations in stock returns, especially in high-value firms, with the lowest t-value 2.685. Overall, the earnings' yield factor can provide an explanation for the variation of stock returns on portfolios formed on earnings' yield. TFM testing involving the earnings' yield may provide an explanation for the average stock returns that is equal to 62.69 percent, higher than the capability involves only a single factor (market factor) in the amount of 52.68 percent. Results of the establishment of a portfolio based on factors value and earnings' show that: (1) stocks formed on low value category tend to have return the opposite direction, and stocks that have medium and high value category tend to have high return, (2) stock of the firm formed on the portfolio that have high earnings tend to have high return.

**Table 4: Testing the Three Factor Model Based on Excess Return Market Value and Earnings' Yield: 2003-2012, 10 years**

Tests conducted on 18 portfolios formed based on earnings' yield and value. Excess stock returns ( $R - R_f$ ) represents the difference between the monthly stock returns derived from the average daily return of stock with returns of SBI monthly risk-free. Excess market returns ( $R_M - R_f$ ) represents the difference between the monthly returns (derived from the average daily return) JCI is based on the average daily return ( $R_M$ ), the SBI monthly return ( $R_f$ ). HML (High Minus Low) represents the difference between the monthly returns of the stock firms that have high value (HO and HU) and low value (LO and LU). OMU (Over Minus Under) represents the difference between the monthly returns the stock portfolios categorized over earnings (OH, OM, OL) and under earnings (UH, UM, UL). Monthly stock returns as average daily return of each stock that formed the portfolios.

$$R_{(t)} - R_{f(t)} = a + b[R_{M(t)} - R_{f(t)}] + vHML + oOMU + e_{(t)}$$

		Value					
		b			t(b)		
		High	Mediu	Low	High	Mediu	Low
Earnings	Over	0.73	0.897	1.124	10.04	15.456	13.86
	Mediu	0.87	0.785	0.974	13.52	13.946	15.25
	Under	0.94	0.817	0.870	13.13	9.280	8.909
		v			t(v)		
		High	Mediu	Low	High	Mediu	Low
Earnings	Over	0.42	0.183	-	4.127	2.919	-
	Mediu	0.22	0.146	-	2.554	1.867	-
	Under	0.61	0.197	-	6.206	1.649	-
		o			t(o)		
		High	Mediu	Low	High	Mediu	Low
Earnings	Over	0.20	0.092	0.325	1.960	1.573	2.796
	Mediu	-	-0.178	0.016	-	-2.205	0.193
	Under	-	-0.650	-	-	-5.429	-
		Adjusted R <sup>2</sup>			s(e)		
		High	Mediu	Low	High	Mediu	Low
Earnings	Over	0.50	0.674	0.623	0.048	0.045	0.054
	Mediu	0.61	0.626	0.667	0.042	0.037	0.037
	Under	0.68	0.504	0.543	0.047	0.051	0.075

		Earnings						
		b			t(b)			
Value	e	Over	Mediu	Under	Over	Mediu	Unde	
		High	1.03	0.966	0.960	12.43	14.869	14.13
		Mediu	1.06	1.030	0.904	13.61	16.208	11.19
	Low	1.11	1.112	0.812	15.95	15.748	9.845	
		v			t(v)			
Value	e	Over	Mediu	Under	Over	Mediu	Unde	
		High	0.50	0.188	0.662	4.396	2.685	7.029
		Mediu	0.05	0.143	0.215	0.793	1.627	2.467
	Low	-	0.056	-	-	0.584	-	
		o			t(o)			
Value	e	Over	Mediu	Under	Over	Mediu	Unde	
		High	0.22	-0.022	-	1.888	-0.342	-
		Mediu	0.06	-0.068	-	0.948	-0.751	-
	Low	0.28	-0.267	-	2.884	-2.654	-	
		Adjusted R <sup>2</sup>			s(e)			
Value	e	Over	Mediu	Under	Over	Mediu	Unde	
		High	0.59	0.653	0.713	0.055	0.050	0.045
		Mediu	0.62	0.688	0.561	0.041	0.042	0.062
	Low	0.70	0.698	0.613	0.046	0.040	0.054	

Table 5 shows the role of three-factor model that involves market factor, value and illiquidity. The model can provide an explanation for the smallest (48.8 percent) in the medium value and high illiquidity of stocks, and provide the greatest explanation (81.8 percent) in the portfolio which was established by medium illiquidity but has a high value factor. The model can provide an explanation to the stock return with t-value on the market factor, value and illiquidity are almost entirely statistically significant in the portfolio formed. The portfolio formed by value and illiquidity show that: (1) stock of the firm that low value tends to give an explanation for the high returns, (2) firms that have a high illiquidity and medium tend to have a high returns.

TFM testing involving illiquidity may provide an explanation to the average market return that is equal to 67.57 percent, 32.43 percent explained by other factors, which in addition to market factors, value, and illiquidity.

**Table 5: Testing the Three Factor Model Based on Excess Return Market Factor, Value and Illiquidity: 2003-2012, 10 years**

Testing 18 portfolios formed based on the value and illiquidity. Excess stock return ( $R - R_f$ ) is the difference between the monthly stock returns based on daily return (R), the SBI monthly return ( $R_f$ ). Excess market return ( $R_M - R_f$ ) is the difference between the monthly returns derived from the average daily return JCI ( $R_M$ ), the SBI monthly return ( $R_f$ ). HML is the difference between monthly returns on stocks are categorized by high BE/ME ( $H_{H_{illiq}}$  and  $H_{L_{illiq}}$ ) and the low category ( $L_{H_{illiq}}$  and  $L_{L_{illiq}}$ ).  $HML_{illiq}$  represents the differences between the monthly returns on stocks are categorized by High $_{illiq}$  ( $H_{illiq}H$ ,  $H_{illiq}M$ , and  $H_{illiq}L$ ) with the Low $_{illiq}$  categories ( $L_{illiq}H$ ,  $L_{illiq}M$ ,  $L_{illiq}L$ ). Monthly stocks return that formed the portfolio is the average daily returns of individual stocks that formed the portfolio.

$$R_{(t)} - R_{f(t)} = a + b[R_{M(t)} - R_{f(t)}] + vHML + iHML_{illiq} + e_{(t)}$$


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Value

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b

t(b)

Illiquidity	High <sub>illiq</sub>	High	Medium	Low	High	Medium	Low
	Medium	1.245	0.915	1.09	14.68	9.971	13.4
	Low <sub>illiq</sub>	1.058	1.037	1.22	19.40	15.619	13.3
Illiquidity	High <sub>illiq</sub>	0.781	0.794	1.03	14.64	15.595	17.4
	Medium	v			t(v)		
	Low <sub>illiq</sub>	High	Medium	Low	High	Medium	Low
Illiquidity	High <sub>illiq</sub>	0.648	0.313	-	7.284	2.534	-
	Medium	0.365	0.276	-	4.520	2.942	-
	Low <sub>illiq</sub>	0.272	-0.010	-	3.797	-0.144	-
Illiquidity	High <sub>illiq</sub>	i			t(i)		
	Medium	High	Medium	Low	High	Medium	Low
	Low <sub>illiq</sub>	0.857	0.816	1.19	9.996	7.236	11.9
Illiquidity	High <sub>illiq</sub>	0.272	0.562	-	3.893	6.353	-
	Medium	-	-0.124	-	-	-1.950	-
	Low <sub>illiq</sub>	Adjusted R <sup>2</sup>			s(e)		
Illiquidity	High <sub>illiq</sub>	High	Medium	Low	High	Medium	Low
	Medium	0.755	0.532	0.71	0.043	0.059	0.05
	Low <sub>illiq</sub>	0.818	0.725	0.60	0.028	0.036	0.05
Value	High	0.693	0.689	0.74	0.034	0.028	0.02
	Medium	Illiquidity			t(b)		
	Low	High <sub>i</sub>	Medium	Low <sub>i</sub>	High <sub>i</sub>	Medium	Low <sub>i</sub>
Value	High	0.796	1.034	0.94	14.32	12.192	14.1
	Medium	0.928	1.201	0.73	9.029	15.190	14.8
	Low	1.159	1.181	0.80	11.41	15.383	15.7
Value	High	v			t(v)		
	Medium	High <sub>i</sub>	Medium	Low <sub>i</sub>	High <sub>i</sub>	Medium	Low <sub>i</sub>
	Low	0.643	0.284	0.40	8.323	2.477	4.50
Value	High	0.309	0.310	0.04	2.241	2.919	0.62
	Medium	-	-0.018	-	-	-0.175	-
	Low	i			t(i)		
Value	High	High <sub>i</sub>	Medium	Low <sub>i</sub>	High <sub>i</sub>	Medium	Low <sub>i</sub>
	Medium	0.779	0.298	-	11.09	2.802	-
	Low	0.870	0.122	-	6.889	1.252	-
Value	High	1.043	-0.014	-	8.117	-0.153	-
	Medium	Adjusted R <sup>2</sup>			s(e)		
	Low	High <sub>i</sub>	Medium	Low <sub>i</sub>	High <sub>i</sub>	Medium	Low <sub>i</sub>
Value	High	0.774	0.590	0.67	0.031	0.046	0.04
	Medium	0.488	0.677	0.67	0.066	0.051	0.02
	Low	0.626	0.673	0.70	0.057	0.050	0.02

Model based on market factor, size and illiquidity to explaining the stock returns can be seen in Table 6. The results show the model can provide an explanation of the changes in stock returns at a minimum of 46.3 percent i.e. the portfolio formed by small size with low illiquidity. The models may provide an explanation in the portfolio category low illiquidity but medium-sized, which amounted to 82.6 percent. Results of the establishment of a portfolio based on size and illiquidity show that: (1) the firms that have high illiquidity tend to give an explanation for the high returns, (2) firms that have small and medium size tends to have a high return and the firm with a big-size has low returns. TFM testing involving excess market return, size, and illiquidity, on average, can provide

an explanation of 65.98 percent, with the higher explanatory capability compared to the ability of single factor models that only involve market excess return is 52.68 percent.

**Table 6: Testing the Three Factor Model Based on Excess Return Market, Size and Illiquidity: 2003-2012, 10 years**

Testing 18 portfolios formed based on size and illiquidity factors. Excess return is monthly stock returns based on the average daily stock return ( $R$ ) with a risk-free monthly return ( $R_f$ ) of SBI. Excess market return is based on the average monthly return JCI daily return after deducting the risk-free monthly returns (SBI). SMB is the difference between the monthly returns of small stocks ( $SH_{illiq}$ ,  $SM_{illiq}$ , and  $SL_{illiq}$ ) with large stock return ( $BH_{illiq}$ ,  $BM_{illiq}$ , and  $BL_{illiq}$ ).  $HML_{illiq}$  represents the difference between the monthly returns stocks with high illiquidity ( $H_{illiq}H$ ,  $H_{illiq}M$ ,  $H_{illiq}L$ ) with stock returns with low illiquidity ( $L_{illiq}H$ ,  $L_{illiq}M$ ,  $L_{illiq}L$ ). Portfolios return based on the monthly average of the daily returns of individual stocks that formed the portfolios.



		$R_{(t)} - R_{f(t)} = a + b[R_{M(t)} - R_{f(t)}] + sSMB + iHML_{Illiq} + e_{(t)}$					
		Size					
		b			t(b)		
Illiquidity	High <sub>illiq</sub>	Smal	Medium	Big	Smal	Medium	Big
	Medium	1.171	0.955	0.64	10.97	13.756	7.75
	Low <sub>illiq</sub>	1.545	1.296	1.28	15.76	13.696	15.4
Illiquidity	High <sub>illiq</sub>	0.624	0.927	1.02	10.36	20.757	19.9
	Medium	s			t(s)		
	Low <sub>illiq</sub>	Smal	Medium	Big	Smal	Medium	Big
Illiquidity	High <sub>illiq</sub>	0.854	0.389	-	5.737	4.011	-
	Medium	1.167	0.437	-	8.534	3.309	-
	Low <sub>illiq</sub>	0.341	0.054	0.05	4.294	1.282	1.26
Illiquidity	High <sub>illiq</sub>	i			t(i)		
	Medium	Smal	Medium	Big	Smal	Medium	Big
	Low <sub>illiq</sub>	0.881	0.584	0.81	6.882	6.999	8.10
Illiquidity	High <sub>illiq</sub>	-	-0.149	0.13	-	-1.309	1.30
	Medium	-	-0.189	-	-	-3.672	-
	Low <sub>illiq</sub>	Adjusted R <sup>2</sup>			s(e)		
Illiquidity	High <sub>illiq</sub>	Smal	Medium	Big	Smal	Medium	Big
	Medium	0.603	0.663	0.57	0.061	0.040	0.03
	Low <sub>illiq</sub>	0.676	0.633	0.73	0.056	0.054	0.04
Size	Small	0.496	0.826	0.81	0.029	0.031	0.02
	Medium	Illiquidity			b		
	Big	High <sub>i</sub>	Medium	Low <sub>i</sub>	High <sub>i</sub>	Medium	Low <sub>i</sub>
Size	Small	0.880	1.261	0.75	12.66	13.809	9.79
	Medium	1.037	1.393	1.04	10.92	13.756	13.7
	Big	1.125	1.277	0.71	11.95	20.191	14.0
Size	Small	s			t(s)		
	Medium	High <sub>i</sub>	Medium	Low <sub>i</sub>	High <sub>i</sub>	Medium	Low <sub>i</sub>
	Big	0.706	0.855	0.57	7.279	7.389	5.58
Size	Small	0.056	0.373	0.42	0.420	2.637	4.04
	Medium	-	0.111	-	-	1.262	-
	Big	i			t(i)		
Size	Small	High <sub>i</sub>	Medium	Low <sub>i</sub>	High <sub>i</sub>	Medium	Low <sub>i</sub>
	Medium	0.644	0.011	-	7.720	0.105	-
	Big	0.889	0.070	-	7.800	0.572	-
Size	Small	0.651	-0.202	-	5.758	-2.663	-
	Medium	Adjusted R <sup>2</sup>			s(e)		
	Big	High <sub>i</sub>	Medium	Low <sub>i</sub>	High <sub>i</sub>	Medium	Low <sub>i</sub>
Size	Small	0.673	0.617	0.46	0.040	0.046	0.03
	Medium	0.603	0.633	0.65	0.054	0.058	0.04
	Big	0.707	0.819	0.69	0.054	0.036	0.02

**Robustness Test**

Testing the ability of each model to provide an explanation on stock returns, conducted with U-Theil test to determine the error in giving an explanation on stock returns. Testing errors in each model provides an explanation of the stock return is done with different test statistic non-parametric Kruskal-Wallis. The use of non-parametric statistics is done because there is a difference in the number of stock portfolios formed based on each model is formed, involving a relatively small test data. The test results of each error in giving the explanatory models on stock returns shown in Table 7. The test results demonstrate the value of Chi-Square is 14.709, with probability 0.023. This value indicates that there are differences in each model in giving explanations on stock returns, i.e. at least there is one model that is significantly different from the others. Based on the value of the U-Theil mean rank error, it is known that the two-factor model that involves the size and value, as well as TFM Fama French is the best model in giving explanations on stock returns (mean rank 58.44 and 58.89 percent). Market factors have a mean rank error 84.87, which shows that only involves the CAPM market excess returns has limited capacity associated with changes in stock returns. Implementation of market factor, value and earnings' yield may provide a better explanation because it has a lower error (mean rank error 78.06) compared with CAPM modeling.

**Table 7: Different Test Error Model, Year 2013-2014**

Tests conducted for each error in explaining the equation formed by seven equations, i.e. Market Factor, Size and Value, TFM Fama French, TFM with earnings (Market Factor, Size, Earnings and Market Factor, Value, Earnings), TFM with Illiquidity (Market Factor, Value, and Market Illiquidity Factor, Size, and Illiquidity). Initial testing two-factor model (Size and Value), as well as TFM Fama French (Market Factor, Size and Value) to give explanations on stock returns was formed by 18 portfolios, each of which is formed by nine portfolios based Size-Value and Value-Size. Testing errors in providing explanatory models on stock returns, monthly testing is done in the period of 2013 and 2014.

Model	Equation	U-Theil Mean Rank	Chi-Square	Sig.
1	Market Factor	84.87		
2	Size and Value	58.44		
3	Fama French TFM	58.89		
4	Market Factor, Size, Earnings	90.17		
5	Market Factor, Value, Earnings	78.06	14.709	0.023
6	Market Factor, Value, Illiquidity	106.00		
7	Market Factor, Size, Illiquidity	87.33		

Testing was conducted to compare the differences between the models in providing explanations on stock returns, are summarized in Table 8. Comparison between the models is done by comparing the critical value to determine the difference statistically different models.

**Table 8: Absolute Difference 7 Ranking Model**

Testing is done with the involvement of a single factor model (market factor), two-factor model (size and value), TFM Fama French (market factor, size, and value), and TFM

modified by involving earnings' yield and illiquidity. Absolute difference is the difference of the average rank error of each model (R1=Market Factor, R2=Size and Value Factor, R3=Fama French TFM, R4=TFM Market Factor, Size, Earnings, R5=TFM Market Factor, Value, Earnings, R6=TFM Market Factor, Value, Illiquidity, R7=Market Factor, Size, Illiquidity).

	R7	R6	R5	R4	R3	R2
R6	18.667					
R5	9.278	27.944				
R4	2.833	15.833	12.111			
R3	28.444	47.111	19.167	31.278		
R2	28.889	47.556	19.611	31.722	0.444	
R1	2.463	21.130	6.815	5.296	25.981	26.426

Tests using 6 equation shows the real difference is in the size and value factors (the 2<sup>nd</sup> model) with equations involving market factor, value, and illiquidity (the 6<sup>th</sup> model), with a value of 47.556. Other equations showed no significant difference, meaning CAPM by Sharpe (1964), Lintner (1965) and Mossin (1966), TFM by Fama and French (1993), and TFM modified by involving factors illiquidity and earnings' yield showed no difference significant. Thus, all factors in general may provide explanatory on stock returns, except in the 2<sup>nd</sup> model and 6<sup>th</sup> model that show significant differences. Two models involving market factor and size have a better ability in providing explanations on stock returns (with a mean error 2.604) compared with the 6<sup>th</sup> model that include market factors, values and illiquidity (with a mean error 8.561).

## Conclusion

This study examined the ability of market factor and three-factor modified model to provide an explanation to the stock return in Indonesia. There are numbers of important results: (1) The CAPM can give a prediction of stock returns consistently, with a positive direction, (2) TFM Fama French (1993) and TFM modified by involving earnings' yield and illiquidity is a model that can capture variation on stock returns, (3) statistically, the equations model showed no difference in error in giving an explanation on stock returns. Differences error in giving an explanation on stock returns were significant only in the two-factor model that involves factors of size and value (low mean rank error of 58.44), with TFM involving market factor, value, and illiquidity (high mean rank error of 106.00). Illiquidity and earnings' yield shows significant role in providing an explanation for the return of shares in firms listed on the Indonesia Stock Exchange. The application of single factor model that involves market factor may provide an explanation for the stock returns that is equal to 52.68 percent, but the application of TFM involving earnings and illiquidity able to give an explanation to the average of 67.57 percent.

The test results tend to support the hypothesis that built and supports a number of previous studies. Testing support: (1) CAPM by Sharpe (1964), Lintner (1965), Mossin (1966) and Black (1972) in relation to excess market return in giving explanations on stock returns, with a positive direction, (2) testing the earnings' yield by Basu (1983), firms with high E/P reflects high returns, (3) testing the size effect by Sarwar, Hussan, and Malhi (2013), which confirmed positive relationship with stock returns and Fama French (1993), which confirmed positive relationship to the stock price, but stock with big category tend to have a negative direction, (4) dominant positive value effect on stock returns, which according to Sarwar, Hussan and Malhi (2013), Auret and Sinclair (2006) and low stock category tend to have negative direction on stock returns (Fama and French,

1993), (5) illiquidity by Brennan and Subrahmanyam (1996), which shows the positive illiquidity effect at the firm that has high illiquidity, and the illiquidity effect is stronger in the stocks of firms with a high level of illiquidity.

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## INVESTOR PSYCHOLOGY ON BUYING AND SELLING COMMON STOCK DECISION IN EMERGING MARKET: EVIDENCE FROM PALEMBANG, SOUTH SUMATERA, INDONESIA

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### Abstract

**Purpose** – To analyze the Investor's Psychology in Buying and Selling of Common Stock in the Stock Exchange of Emerging Market. The specific purpose of this research is to provide the simultaneous empirical evidence about the Cognitive and Cognative aspects towards the Confidence and Performance.

**Design/methodology/approach** –The quantitative research on 100 individual investors in Palembang, South Sumatera, Indonesia. The Data are collected during March-May 2016 by using questionnaire instrument and descriptive and inferential data analysis technique. The evaluation of the Hypothesis uses structural equation model by SmartPLS.

**Findings** – The findings of this research show that Cognitive is not significant towards the confidence but significantly positive towards performance, cognative is significantly positive towards confidence but not significant towards the performance, while confidence has a significantly positive impact to performance.

**Research limitations** – This research hasn't fully explained the Investor Psychological aspects, so the additional variable may be needed as the full reflection of Investor Psychology. The further research may use the experimental study, starts from the Buying of stocks, and then the factors that can be considered in Selling stock.

**Originality/value** –This research has the originality in specific research object in Palembang with a numerous number of respondents so that it can be used as a source of information for Investor in Buying or Selling Stock.

**Keywords** : *Individual investor psychology, confidence, performance.*

### Introduction

Individual investor behavior in The Emerging Market, in this case, well knows as Indonesian Stock Exchange (IDX), makes them gradually turn to be more professional in Stock Investment. The growth of Investor in Indonesia has reached 12 % and reaching 485.000 people per April 2016, in which, 4.573 of them are Palembang Investor with range of 26-30 years in age. It means that more people start doing financial investment in the Capital Market by Buying or Selling Stocks. The Increasing in number of the Investor makes some Group of Individual do Trading in expectation for the improvement on Financial Performance of the Stocks bought, in the future.

Some studies show that Individual Investor is able to Increase the stocks Financial Performance (Kaniel et al. 2008; Kaniel et al. 2012; Wang & Zhang 2014; Wang & Zhang 2015), Individual Investor and Stock Return (Kaniel et al. 2008; Kaniel et al. 2012; Hui & Li 2014; Odean 2015), Investor Psychology (Kahneman & Riepe 1998; Daniel et al. 1998; Hirshleifer 2001) that leads to Investor Behavior (Qawi 2010; Shive 2010; Linnainmaa 2010; Bayar 2013; Iwasawa & Uchiyama 2014; Phan & Zhou 2014).

Investor Psychology on Buying and Selling Common Stock Decision in The Capital Market gets through Cognitive process that includes Physical Condition, Mental Condition, and surrounding environment. Psychological Cognitive is a response that comes from Individual Investor itself such as Mood and Persuasion (Bless et al. 1990; Kodia & Said

2009; Lepori 2015), Investor becomes happy (Merkle et al. 2015) and leads to an increase in the Common Stock Investment Performance(Linnainmaa 2010; Wang & Zhang 2015).

This Paper consists of four parts. The First part will explain about The Background, Secondly, explains about the Literature and Hypothesis Development Third part will be Research Methodology, and The Fourth, about Research Findings that will be ended with Closing.

## **Literatur Review and Hypothesis Development**

### **1. Investor psychology**

Psychology is a study that learns about Mental and Behavioral Process, Including how the processes influenced by Human Physical Condition, Mental Condition, and external environment (Gumanti 2009). Scientific Investigation in acknowledging the human behavior related with the Financial Behavior appears as the way to explain about several Modern Financial Phenomenon by observing Investor behavior in the capital market.

The Investor behavior in the Capital Market is discussed in the Financial Behavior that explains the understanding about the patterns of Investors' reason in making decisions. Cognitive Psychology is a study about the empirical process of information in the Human behavior. The goal of this study is to explore the way Individual looks at its surrounding environment (Kodia & Said 2009). The Process discusses about the Internal Mentality, such as Problem Solving, Perception, short term and long term memory, habit and anxiety (Kumar 2008); (Chandra & Kumar 2012).

Investor's psychological aspects in making decision are related to the three things that contained in Decision Theory(Kahneman & Riepe 1998), that is Normative, Descriptive, and prescriptive analysis. Normative analysis focuses on peoples' habits in making decision, while Prescriptive analysis creates a more rational decision. According to (Daniel et al. 1998); (Subrahmanyam 2007), saying that Investor Psychology such as Mood and Happiness is shown in their behavior in the Capital Market (Bless et al. 1990; Bayar 2013; Stephan & Nitzsch 2013; Phan & Zhou 2014; Lepori 2015; Merkle et al. 2015)

The Research finding from (Phan & Zhou 2014) about the factors that influence the Investor's behavior in the Vietnam Capital Market, shows that Psychological factors such as, Overconfidence, Excess Optimism, and Psychology of risk and herd behavior, have a significant effect on the Individual Attitude towards Investment. The Research by (Bayar 2013) in Borsa Istanbul using the questionnaires to the 234 Investors finds that The effect of the Financial crisis has an impact to the Investor's Psychology and Confidence in the capital market. A research conducted by (Lucey 2005) about the effect of Investor's Feeling to the Equity Price and also develops the Principal theory that is used to understand the appearing findings in this area (feeling). This research studies about the effect of the Environmental factors such as weather, biorhythms of the body, Social Factor and Image that may influence the mood of the Investor and in the end, will impact the decision making of the investment. This research finds that, (1) Investor tends to invest by their feeling, (2) Feeling has an effect to the Equity Price, (3) Weather, body biological cycle, disruption of sleeping pattern, Lunar Phase, Social activity and Image will impact the Mood, and in the end, will impact the Decision Making Process.

Then, The Research Finding from (Worhington 2006) that tests the relation between Weather to the Mood and Feeling of Investor in the Australia Capital Market during 1958-2005. There are eight elements of the Weather used, such as Precipitation, Evaporation, Relative Humidity, Maximum and Minimum Temperature, Average of Daily Temperature, Time the Sun Shines, Maximum Speed and Direction of the Wind, Average of Daily Wind Speed to the return of Real and Nominal Market, using the non parametric correlation

analysis and autoregressive moving average model. And The Finding tells that Weather Factor does not have any effect to the Market Return.

Other Research conducted by (Durand & Sanghani 2008) tests the relation among Personality, Investment Decision, and Portfolio Performance. The samples of this research are 18 individual investors that hold the Australian Equity Portfolio for the financial year that ended 30 June 2005. The Finding of this research include: (1) a more extrovert individual tends to innovate and Less Masculine in achieving a more superior portfolio, (2) Individual with higher negative emotions tends to take a higher risk, and to be more open to the experience of choosing a higher risk portfolio, (3) A higher negative emotion and tendency of taking a higher risk is also related with increasing of Trading behavior, while a more extrovert investor found to have a lower tendency to the Trading Behavior, and (4) The Role of Psychological gender is better than Biological gender in analyzing investor.

## **2. Confidence**

According to the study of the Financial Behavior of (Gumanti 2009), there are four theories about the Financial Behavior, overconfidence theory, financial cognitive theory, regret theory, and prospect theory. The first theory, about the Overconfidence theory shows the tendency to trust and believe on the ability to predict and succeed. The concrete example of overconfidence is the existence of the investor that does trading just as the follower in buying and selling of common stock decision in the capital market without doing deep analysis on the performance of specific stocks. Moreover, the fact that Indonesian capital market that is still in the emerging market that allows the individual to act as follower. A dominant Foreign investor in one of the causes of the phenomenon, but a plan-with investor will not play a follower role because stock investment has a short term and long term goal. For the plan-with investor, they will make some analysis and looking for more information about the stock performance before making any decision.

Researches about The Investor's confidence can be found in some previous researchers such as, (Goel & Thakor 2008; Grinblatt & Keloharju 2001; Barber & Odean 2001; Takeda et al. 2013; Bayar 2013; Burnside et al. 2015). These researches find that Investors have a tendency to be overconfidence in Financial Investment Decision. Even, the impact of Global Financial Crisis has an effect to the overconfidence of Investors in Borsa Istanbul (Bayar 2013). An interesting Finding by Barber & Odean (2001) with a 35.000 household investors as the respondents, shows that Male Investor tends to be more confidence than Female, and the male investors also have more frequent transactions compared to the women, but this condition, in turn, may lead to an incorrect investment and a high transaction cost. The result of high frequency trading by male investors is the lower return earned by the male investors for about 2,5 % compared to the Female Investors that just lose 1,72%.

## **3. Performance**

Stock Performance reflects the Value of a company in the eye of the investors. The better the Stock Performance, it gives a positive signal for the Investors to make a financial investment. Stock Performance shows how individual investor earns the capital gain and receive dividend. Capital gain is a positive difference between buying and selling price of a stock. Price Momentum is a situation in which the price of a specific stock is going to move into a contrast trend from the previous one (Gumanti 2009). In the Price Momentum situation, investors buy stocks without any consideration of basic principal of Economy of Supply and Demand that they must have known about, or usually called as herd behavior.

The Result of the research from (Wang & Zhang 2015) about the Limited Attention did by the individual investors towards Stock Performance in ChiNext stock market, it is found



that Limited Attention has a significant effect on the Performance in the capital market with a positive way, and this condition happens for a short term period. This research also explains that Investors that have non-trading days, have a significant effect to the price gap in the next week opening price. A further research about the Stock Performance from Wang & Zhang (2015) about do Individual investors able to increase the valuation of Company performance ? The source of the data is the Individuals that do trading in NYSE ReTrac EOD from 15 March 2014 till 31 December 2011 for about 8.645 Individuals, and The results show that Individual Investors are able to increase the Value of a company as it is shown by an increasing in The stock price.

## **Methodology**

### **1. Data Collection**

The Data used in this research are primary data by using questionnaire instrument. The Sampling Technique is Purposive sampling with these criteria : (1) The Investors still actively trade the common stock in the capital market, (2) have been involved in capital market as investor for at least two years, (3) The Investors do not directly involved in the government strategic decision making or as government official. The analytical unit of this research is individual investor. The data collection period is three months (March-May 2016). The data collecting technique uses questionnaires, and then make an interview appointment. The number of Valid investors is 100 investors.

### **2. Variable Measurement**

#### **A. Cognitive**

The Investor Psychological aspect in other previous researches is cognitive aspect (Kahneman & Riepe 1998); (Kodia & Said 2009);(Burnside et al. 2015). The Cognitive aspect in this research leads to the knowledge about the capital market (Bayar 2013). The variable measurement uses six indicators which are, to understand the terminologies in the Stock Trading, give an opportunity to invest, have an interest to buy stock rather than any other instruments, satisfied with the stock trading system in Indonesia Stock Exchange, keep up with newest information, and keep investing by adding more capital. These variables are measured by using Five Likert Scale from 1 (Strongly Disagree) till 5 (Strongly Agree).

## **B. Cognitive**

Cognitive Variable reflects the Target and Risk faced by the Investor. The measurement of this variable uses five indicators, including: Having a relation with capital market, having advantage on easiness of doing transaction, a self-determined Target Return, reading recent news every day to get the newest information to determine the Return, and having an adequate flexibility in managing their own capital. This Variable measurement refers to (Bayar 2013). The level of respondents answer is categorized into five likert scale which means, 1 (Strongly Disagree) till 5 (Strongly Agree).

## **C. Confidence in stock market**

Investor will be more confidence in investing in the capital market by knowing the eagerness of Information collecting. This variable is reflected in three indicators, which is, Accounting and Financial Information, Media Information, and Friend's Recommendation. Confidence shows the Investor Happiness (Merkle et al. 2015). Consistency in the Investor Confidence in the capital market investment is shown by some other researchers in their previous researches (Daniel et al. 1998); (Goel & Thakor 2008); (Bayar 2013); (Lepori 2015) dan (Merkle et al. 2015). The responses will be measured with five likert scale, start from 1 (Strongly Disagree) to 5 (Strongly Agree).

## **D. Performance**

Stock Performance is shown by two things, whether Investor gets the capital gain or Investor receives the Dividend (Bayar 2013). Stock Performance will make Investor to be more happy (Merkle et al. 2015) and the increasing of performances will keep investors in doing trading (Wang et al. 2006) and Investor's behavior in doing trade will show their response towards the Market Performance (Qawi 2010; Linnainmaa 2010). Investor's responses in this variable will be measured with Five Likert Scale, start from 1 (Strongly Disagree) till 5 (Strongly Agree).

## **3. Data Analysis**

The Data are analyzed using descriptive statistic and inferential. The Descriptive gives empirical view of the collected data during the research (Ferdinand 2011). Table 2 shows that the average Cognitive is 3.59 with 0.55 Standard Deviation, a 3.72 Cognitive average shows that The Information about the capital market is an important factor before buying and selling stocks, while Confidence and Performance Variable get a good review from the investors during this research.

[insert table 2 here]

Inferential statistic is used in answering the Hypothesis of the research. The analytical Technique used is Partial Least Squares (PLS), to test the structural equation of Research model. The reasons why PLS is used in this research are (1) a recursive way of relation, (2) The latent research variable, (3) can be used for a smaller sample size (Solimun 2010). The PLS Data analysis includes the measurement and structure model.

[insert table 3 here]

Model Measurement using PLS consists of two things which is, Outer Loading and Outer Model t Statistic. Outer Loading shows that all indicators are valid to be used with critical t 1.96. Cognitive variable is shown by dominant indicator of KK5 (Investor follows the newest information from BEI) means that knowledge and news about IDX are monitored by the investor. The Cognitive that is related with the target return is shown by

Investor psychology about the satisfactory level of investor in reading the most recent information every day (KO4) with the outer loading value of 0.825 meanwhile, Reflected level of trust CF2 is 0.873, it shows that the most valid and quickest information comes from Media. Stock performance variable which is reflected in FM2 is the amount of dividend that should be received by investors.

Evaluation of research instrument in PLS can be seen from Average Variance Extracted (AVE), with the condition, if AVE is bigger than 0.5 (Solimun 2010); (Jogiyanto & Abdillah 2009); (Ghozali 2011). Reliability test which uses Tucker and Lewi's is used to evaluate the reliability of each point that shows Consistency of Respondent's responses. The Composite value of Reliability shows that the Instrument is reliable. Moreover, Cronbach's alpha value with 0.7, even that 0.5 is still can be accepted, then it can be declared that the Research Instrument is reliable.

[insert table 4 here]

The measurement of validity of PLS uses Discriminant validity that shows correlation among variables. The Value of Discriminant validity that can be accepted if correlation among variables is high. Shown in the table 5, the relation among variables is related, so that the research instrument can be declared as valid.

Further, we may use  $R^2$  to know about the specification of model structure, because this model has two dependent variables, which are Confidence and Performance, so it can be computed the Total determination coefficient ( $Q^2$ ) that shows how this specific research model can be used to predict performance. Table 6 shows the result, and we find that it is 0.481 which means, this model can be categorized and good enough to predict the performance, but doesn't entirely able to be used for prediction, it means, other variable outside the model will impact more in predicting performance.

[insert table 6 here]

## Findings

The Result of the research with PLS (see Table 7) shows that the relation between Investor Psychology Cognitive and Confidence is not significant. Based on this findings, so H1 is rejected or it can also be considered that investor cognitive behavior in Palembang City doesn't give any evidence about Confidence in buying and selling stock. This empirical findings are supported by the demography of the respondent that 83% of the Investors have a Bachelor degree, and 77% of them are in the mature age of 31-35 years, so that it will be easier for them to understand about the Trading system.

The Findings of cognitive variable towards the performance is significantly positive (H3 accepted). This research proves that Palembang Investors which have a high cognitive psychology are able to predict the stock which will make a positive return and receive dividend. According to (Barber & Odean 2008), Investors will be limited by logic and rationalization in buying and selling stocks because of limited information. Temporary Limitation creates cognitive psychology in stock transaction. The result also tells that Investor likes the Stock Buying more than Stock Selling (Barber & Odean 2008).

Financial Cognitive Dissonance tells that Human will feel the internal pressure, doubt, and fear when faced with differences in beliefs, so Individual investors will lessen the internal conflict within themselves. This theory can be used in Investors that always try

to rationalize all the available Investment choices. In the end, this theory will lead to individual cognitive psychology which is a study about the empirical process about the information and this thing is related in the Human behavior (Kodia & Said 2009).

Cognitive Psychology shows a significantly positive effect (H2 Accepted). This research is able to give the empirical evidence that Palembang Investors in doing Buying or Selling Stocks have criteria for target return and risk that should be avoided. Cognitive Psychology in this research is reflected in five indicators, which is the dominant indicator is Investors regularly read the newest information (see Table 3). The Significantly positive research finding shows that Cognitive Psychology that is owned by the Research Respondents is able to increase the confidence level that keeps investor Invests in Stock by adding more capital. This research finding is consistent with the previous research (Bayar 2013; Phan & Zhou 2014), that the psychology factor for determining the target return and risk has a significant impact on the Investor behavior in stock investment.

The next finding for the Hypothesis is the Cognitive Psychology towards the Performance that is reflected in dividend paid, doesn't have enough accepted evidence (H4 Rejected). This finding means that The Cognitive behavior of individual investor in Palembang doesn't have effect on the capital gain performance and Dividend policy. This finding is possible because of the number of Investors in Palembang which have the strategy in stock investment for a long term, so that the orientation to watch the momentum of Price increasing in stock is not too considered. Some respondents' reasons in stock investment can be seen in Table 1. From the table, we can find that 32 % of the reasons is fund development, so it means that the Cognitive psychology orientation for Stock Investment activity is for the long term.

The fifth hypothesis about the Confidence will affect the Performance is significantly positive (see Table 7) so this research is able to deliver a correct evidence that the individual investors in Palembang are confident enough so that the individual performance also arises. Based on Overconfidence theory, Individual investor has a belief that sometimes is exaggerating in predicting the stock performance and the successful tendency. This finding is consistent with the previous research from (Barber & Odean 2001; Barber & Odean 2008). Refers to (Cabrera-Paniagua et al. 2015), there is high correlation between the investors in NYSE that make the Stock investment decision and The Emotional level in decision making.

### **Conclusion and future studies**

Bases on the analysis above, this research finds that Investor Psychology consists of Cognitive and Cognitive Psychology that is able to make a contribution towards the Confidence level, in which in the end will step-up the Common Stock Investment performance in IDX. The further research can be done by elaborating the other psychological factors such as mood and happiness, and also tries to evaluate the insignificant finding of the hypothesis. On the analysis about Indonesian Stock Exchange that is categorized as emerging market, it will need to be compared with other emerging market countries.

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Appendix

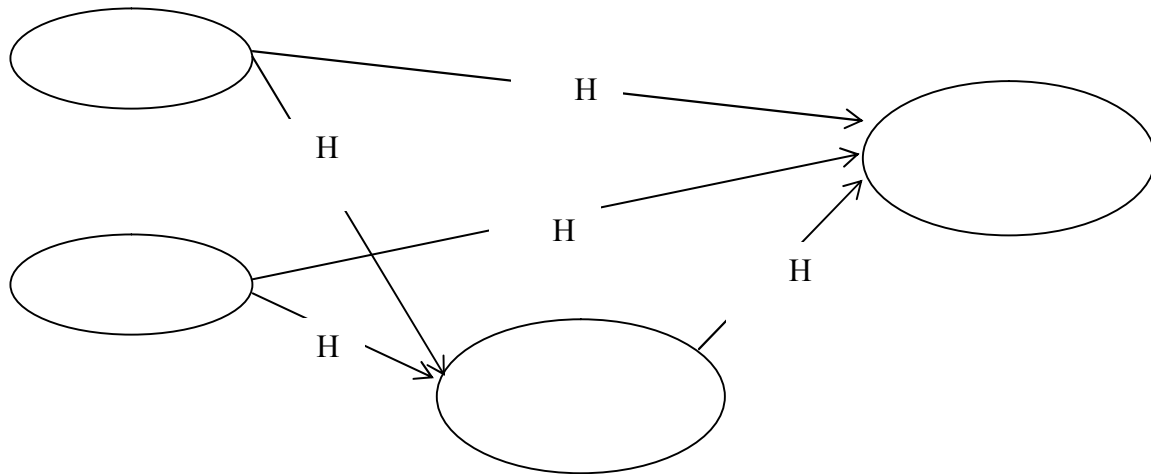
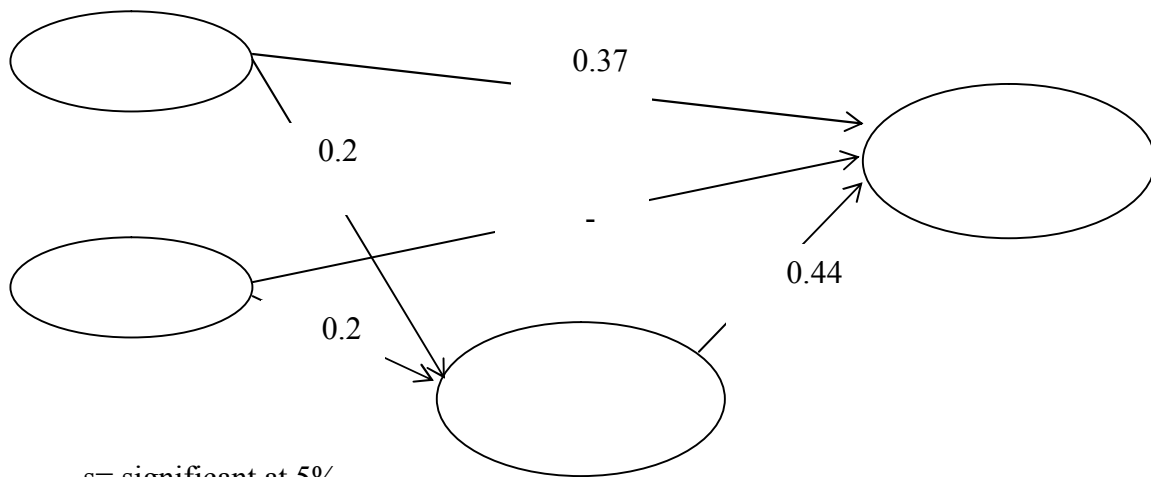


Figure 1: Conceptual Framework: Investor psychology, confidence and performance



s= significant at 5%  
ns=non significant at 5%

Figure 2: PLS model with significant path coefficients

**Table 1: Demographic information of survey respondent**

		N	Valid (%)	Cumulative (%)
Gender	Men	63	63.0	63.0
	Women	37	37.0	100.0
Age	<20-25	35	35.0	35.0
	26-30	31	31.0	66.0
	31-35	11	11.0	77.0
	36->40	23	23.0	100.0
Job	Civil servant	2	2.0	2.0
	Private employees	31	31.0	33.0
	Privatized employees	47	47.0	80.0
	Housewife	2	2.0	82.0
	Entrepreneur	7	7.0	89.0
	Collagen student	4	4.0	93.0
	The other	7	7.0	100
Revenue/month	1-3 million	23	23.0	23.0
	3.1 – 6 million	30	30.0	53.0
	>6 million	47	47.0	100
Education	<Diploma	6	6.0	6.0
	Bachelor	77	77.0	83.0
	Magister	17	17.0	100.0
Marital status	Married	38	38.0	38.0
	single	62	62.0	100.0
Frequency trading	Every day	27	27.0	27.0
	Every week	28	28.0	55.0
	Each month	25	25.0	80.0
	Do not do	20	20.0	100.0
Long become an investor (month)	<12-18	55	55.0	55.0
	19-24	16	16.0	71.0
	25-30	3	3.0	74.0
	>30	26	26.0	100.0
Reasoning to investment stock	Deposit	30	30	30.0
	Manage money	22	22	52.0
	Development funding	32	32	84.0
	Additional capital	4	4	88.0
	Increase revenue	11	11	99.0
	The other	1	1	100.0



**Table 2: Descriptive statistic of the variables in the study (N=100)**

Variables	Minimum	Maximum	Mean	Std. Deviation
Cognitive	2	5	3.59	0.55
Cognitive	1	5	3.72	0.66
Confidence	1	5	3.32	0.65
Performance	2	5	3.70	0.63

**Table 3: Outer Loading and Outer Model T Statistic for cognitive, cognitive, confidence and performance**

No	Variables	Indicators	Outer Loading	Outer Model T Statistic*
1	Cognitive	KK1	0.628	6.816
		KK2	0.790	14.874
		KK3	0.661	7.300
		KK4	0.522	3.687
		KK5	0.746	11.438
		KK6	0.606	5.151
2	Cognitive	KO1	0.758	10.516
		KO2	0.756	8.147
		KO3	0.733	7.604
		KO4	0.825	16.315
		KO5	0.751	8.663
3	Confidence	CF1	0.814	17.818
		CF2	0.873	24.587
		CF3	0.650	6.587
4	Performance	FM1	0.610	3.856
		FM2	0.787	11.502
		FM3	0.753	7.198

\*Critical t: 1,96

**Table 4: AVE, composite reliability and Cronbach's alpha**

Variables	AVE	Composite reliability	Cronbach's alpha
Cognitive	0.443	0.824	0.747
Cognitive	0.586	0.876	0.834
Confidence	0.616	0.826	0.692
Performance	0.519	0.762	0.539

**Table 5: Discriminant validity of latent variables correlation**

Variables	Correlation			
	Confidence	Cognitive	Confidence	Performance
Confidence	1.000			
Cognitive	0.465	1.000		
Cognitive	0.453	0.708	1.000	
Performance	0.495	0.218	0.394	1.000

**Table 6: Result of PLS structural model with R<sup>2</sup> and determination total (Q<sup>2</sup>)**

Dependent variables	R Square	Q <sup>2</sup>
Confidence	0.247	0.481
Performance	0.311	

**Table 7: Result of PLS structural model: path coefficient, t-statistic and decision for hypothesis**

	Original Samples	T Statistics ( O/STERR )	Decision for hypothesis
Cognitive → Confidence	0.249	1.963	H1 Rejected
Cognitive → Confidence	0.288	2.396	H2 Accepted
Cognitive → Performance	0.370	3.390	H3 Accepted
Cognitive → Performance	-0.250	1.638	H4 Rejected
Confidence → Performance	0.443	3.437	H5 Accepted

## MEASURING OPTIMALIZATION OF ZAKAT DISTRIBUTION AT LEMBAGA AMIL ZAKAT USING VARIABLE MEASUREMENT OF ECONOMY

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### Abstract

**The aim** of this research conduct is to optimize the zakat distribution using measurement of economy variable. **Design / Methodology.** The Quantitative Research Method is used to analyse financial data, with Optimize Model as Z variable design, Measurement of Economy as Y variable and Obyektive Output as X variable, using AMOS program and SEM as tool analysis to confirm that the model can be used as a measurement tool. **Research result.** Using some indicators to every analyzed variable, obtaining output and objective result, influence optimalization of measurement of economy. **In conclusion.** The measurement of optimalization of zakat distribution using measurement of economy variable, with independent variable / output exogenous and obyekive, can be used as a model to measure lembaga amil zakat performance. Furthermore, this reserach is need to have some indicators' development especially in the area of obyekive variable.

**Key words:** *output, objective, measurement of economy, distribution optimalization, Zakat*

### Introduction

#### 1. Background

A development in a coutry in general is identified with its economic growth, that seems being pumped-up to meet general national stability, especially in third world countries. Those third world or developing countries usually regarded as poor and weak. Indonesia is in the group of third world or developing countries. Eventhough in Indonesia the economic growth is encouraged, unfortunately its distribution is uneven with a big number of *gini ratio*.

Some obstacles are: (1) development imbalance; (2) Java centrist development; (3) uncontroable foreign investment; (4) low-trust mentality of local Indonesians; (4) the weak of government intervention to control its internal economic stability, regarded as the cause of uneven welfare distribution of Indonesian people so far. Furthermore, the character of Indonesian development by its government is allegedly as never been supporting the sustainable developemnt as a whole. Very often, Indonesians are indentified as people that are: (1) crashing mentality; (2) less confidence; (3) less discipline; and (4) less responsibility (Arief Budiman; 1995:21)

There are already many supporters from government as well as NGO (non-governemnet organization) to encourage the low society of people to become interpreneuers. Unfortunately, there are still more demands than supply to evercome its problems. Actually, to meet its requirements could be solved by a mechanism named ZIS (zakat, infak, and *adaqah*). There are some Islamic Financial Instrument Models to guarantee its welfare that managed by Islamic Financial Public Organization. Zakat in Islamic financial system is an obligatory, some others like infak, sadaqah, and waqaf are

recomendatory. Many countries in this entire world are already employing the Islamic financial system.

Unfortunately in Indonesia, eventhough *zakat, infak, sadaqoh and waqaf* already have its regulation, but for its distribution implementation have not yet been carried.

Indonesia already has amil zakat state agency or BAZNAS (Badan Amil Zakat Nasional) as well as BAZDA (Badan Amil Zakat Daerah), unfortunately its distribution to *ummah* has not yet optimized.

Since UU No 38 tahun 1999 pertaining to Zakat Management, and collectively enacted in entire Indonesia, extensively establish many OPZ (Organisasi Pengelola Zakat). Until the end of 2009, the number of Indonesia zakat management organizations could be seen at Table 1.1 as follow:

**Table. 1.1**  
**Indonesian zakat management organizations**

No	Type of Organization	Amount
1	BAZNAS	1
2	BAZDA Province	33
3	BAZDA Regency / City	434
4	BAZDA District	4800
5	BAZDA <i>Kelurahan</i>	24000
6	LAZNAS	18
7	LAZNAS Province	16
8	LAZNAS Regency / City	31
9	UPZ	8680
	Total	38013

Source: Kemenag, FOZ, be treated

The numbers of Indonesian OPZ are not the whole amount of Indonesia zakat potency absorbed reflection. Regarding to RAC (2002) the less optimally of Indonesia zakat potency absorbed was on many *Muzakki* perceptions upon distrusted amil zakat availability.

Zakat concept has the capability to empower communities, to meet the requirements to enhance economic distribution of the poor. To meet the social welfare standard, transforming from the low society of people to become middle class families. Allegedly, Islamic community economy empowerment through zakat practice facing some obstacles that come from some other Muslim fellows.

The awareness of zakat implementation among Muslim Indonesians, has not yet followed by level of sufficient understanding toward it. More especially when comparing to other Islamic obligatory worships, such as sholat and Ramadhan fasting. The less understanding toward the obligatory type of zakat and its payment mechanism as guided by the Islamic law causes dependency on every individual worship only. (Lukman Mohammad Baga, 2007).

Regarding to Yusuf Wibisono in his paper-work that delivered on BAZNAS – Dompot Dhuafa FGD (Focus Group Discussion) with “*Tolok Ukur dan Strategi Mengefektifkan Impact Pemberdayaan Zakat Menuju Sistem Ekonomi Berkeadilan*”, on March 14<sup>th</sup>, 2007 in Jakarta, uttered that:

Zakat has the potency to empower those poor people from the low society through some distribution network, such as:

- a. Poverty Reduction

Zakat allocation specifically has been determined by the Islamic law (QS 9: 60) dedicated to those eight categories or *ashnaf* only, as follows: (1) *fakir*; (2) the poor; (3) *amil zakat/zakat manager*; (4) *mu'alaf*; (5) slave; those who trapped in debt; (6) *jihad fi sabilillah*; (7) *ibnu sabil*. *Jumhur ulama* agreed that others than those categories, are forbidden to get zakat. Zakat inherently has pro-poor and self-targeted character.

b. Income Distribution Improvement

Zakat has only taken from the rich and given to the poor. Therefore, zakat distribute social welfare from the rich to the poor as well. Income distribution has two types, as follows: (i) functional distribution that refer to production factor; and (ii) welfare distribution through payment transfer.

c. Job Field Creation

Islamic moral value supports job field creation through partnership approach that forbid *riba* and support zakat implementation. Islamic financial resources banned fixed rent and support idle financial resources that stricken by zakat penalty.

d. Social Protection Network

In the Islamic moral value, social protection to the poor is layers. First protection come from family and close relatives (Q.S 2:233); second protection come from Muslim fellows collectively (QS 51:19); and third protection come from zakat fund (QS 9: 60).

Unfortunately, national zakat funding is still far from optimal, based on BAZNAS, (IPB) Institut Pertanian Bogor, and IDB (Bank Pembangunan Islam) research, the 2013 national zakat potency was as big as Rp217 trillion,-, comprises of: (1) *maal zakat*; (2) company *zakat*; (3) saving deposit *sharia* banking zakat.

BAZNAS revealed that Indonesian zakat only Rp2.73 trillion - or around one percent of zakat potency only in general had absorbed. BAZNAS projected that from national zakat accumulation through national zakat institution that regulated by constitution could reach Rp3 trillion- in 2013 or grow 42.85% compared to previous years.

## 2. Objective

Based on some previous study backgrounds and formulation of the problems, the objective of this research are, as follows: To measure the optimization of Zakat funding and lending using Measurement of Economy variable.

## Literature Study

### 1. Zakat

#### A. The definition of Zakat

*Zakat* is a must- do activity for all moslems. Every year, they have to spend their income in the form of *zakat* as proof of their faith towards Allah. *Zakat* is not only serve as soul and worth (as in property owned) purifier, but also serve as the form of care to others.

Islam states the minimum limit to someone to spend *zakat*, it's when the property he holds amounts to 20 Dinar (about 85 gr of pure gold) or 200 Dirham (about 672 gr of pure silver) in a year. If we trace it back deeper, actually the essence of *zakat* could serve to elevate the state of economy because *zakat* in only given to the poor and weak, for example: the indigents, man full of debts, and many more. On the other hand, the *zakat* givers are the one who hold wealth and property in their hands. Therefore, the *zakat* which is give to *mustahik* (people who have the rights to receive *zakat*) could be viewed as a support which helps the *mustahik* economically and hope to become more productive so that in the following year, his position could shift to become *muzakki* (People wo gives *zakat*).

The teachings of *zakat* in Islam normatively has a social spirit which is not simple. What was written in *Al-Quran* were god's guide towards the stability of people's welfare. Through distribution in proportional order, *zakat* becomes the solution to share the wealth according to the proportional portion.

Allah SWT guide the moslem deeply until the operational section. Who is the main target (According to *At-Taubah: 60* in the *Quran*), how much should a *muzakki* gives to the *mustahik*, everything is being explained completely. *Mustahik*, which is the people who possess rights to receive *zakat*, are divided into 8 category (called *asnaf*): they were indigents, the poor, *amillin*, *muallaf* (as in people who had just become moslem), *riqab*, *gharim*, *fisabilillah*, and *ibnu sabil*.

This stipulation was explained in *Al-Quran* in *At-Taubah: 60*, which is: "Indeed, the *zakat*, is only for the indigents, the poor, the cartaker of *zakat*, the *muallaf* whose heart is opened, the slaves which got free, men full of debts, in the name of Allah, the travellers, as an order issued by Allah. As Allah the most knowing and the wisest". (*Al-Quran At-Taubah:60*)

Looking at the explanation about *mustahik*, this is where *zakat* serve as a changer and as the elevator of economy and their standard of living. Those who have the potential will find their potential being developed. Those who don't have the potential but still got the skill for work, will even got the resources they need to develop their skill. (Hasan Muhammad, 2011: 73, 87)

Perhaps for these reasons that *zakat* is always the main attention since the times of the prophet Muhammad SAW and his comrade. It was shown in our neighborhood that, at least for the last 10 years, *zakat* and its institutions have never stopped being the hot topic.

## B. Types of *Zakat*

*Zakat* is divided into 2 categories, which is *zakat fitrah* and *zakat maal* (property and wealth)

### 1. *Zakat Fitrah*.

*Zakat Fitrah* is the type of *zakat* which is spend out by the moslem as the purifier of one self and becomes his responsibility, apart from being the sealer of the fasting skip done in the month of *Ramadhan* (Al-Qaradhawi, 1993).

### 2. *Zakat Maal* (property and wealth).

According to Al-Qaradhawi (1993, h 167), the definition of *Maal* (wealth) is everything that the humankind desires to have or to possess and keep it. According to *Syar'a*, wealth is everything that can be possessed and used following the *ghalib* (norm).

*Zakat Maal* is the type of *zakat* which is inflicted upon the wealth possessed by the individual or the institution with prequisitions that have been stated by the law (*syar'a*). *Maal* comes from the Arabic language which means wealth. It includes traded goods, farm goods, mining goods, marine goods, livestock goods, founded treasure, gold and silver, also the salary of a working man, and the *zakat* for market stock and obligations. Each of them have their own calculation to be done.

In detail, *zakat maal* categories are:

#### a. *Zakat* of Livestocks

*Zakat* of Livestocks includes the products of stockbreeding of large animals (cows or camels), medium-sized animals (goats or sheeps) and small animals (chickens, etc). The calculation for each type of animal categories differs according to the *nisab* (law) and the quantity, and has multi-layered characteristics. The age restriction, however, must at least reach a year.

#### b. *Zakat* of Farming Goods

Rice paddy is one of the farming products which is being made for *zakat*. The *Zakat* of Farming includes the plantation products or economical plants like seeds, roots (as in potato, etc.), vegetables, fruits, decoration plants, and leaves (as in medicinal or herbal leaves).

c. *Zakat* of Gold and Silver

A moslem who is in possession of golds and silvers, has an obligation to spend a *zakat* if he had reached the *nisab* and *haul* according to the statement of *syariah*.

d. *Zakat* of Traded Goods

*Zakat* of Traded Goods is a *zakat* which is spent as proof of ownership of the goods that are being traded. This *zakat* is inflicted upon both personal trading business and group trading business (CV, PT, Union, etc). The *Hadits* which basing this *zakat* is: "The Prophet Muhammad SAW orders us to spend this *zakat* from all goods that we trade" (HR. Abu Dawud).

e. *Zakat* of Mining Goods

*Zakat* of Mining Goods is a *zakat* which is spent from all mining goods in which Allah SWT (God) had prepared and it has its worth, for example bronze, iron, etc. The goods of *makdin* (mining) which consist of iron, steel, bronze, brass, copper, oil, charcoal, etc in Indonesia was controlled and regulated by the country itself. On the other hand, the ones if form of stones (mineral stones), gold, and silver, by the regulation of the government, the people can mine it freely.

f. *Zakat* of Founded Treasure

*Zakat* of Founded Treasure (*Rikaz*) is a must spent *zakat* upon the items found buried underground, usually called treasure. The *Zakat* of Founded Treasure didn't state the *haul* (the duration of burial) and the *nisab* (minimum quantity for it to be inflicted for *zakat*), though the quantity is indeed 1/5 or 20% from the quantity of the founded item(s). So everytime an item is founded, it is must to spend the *zakat* about 1/5 or 20% of the original quantity.

g. *Zakat* of Profession (the salary of a man)

The *Zakat* of Profession is a *zakat* which is spend from the salary of one's work it it already reach the *nisab*. The list of professions includes civil employees, consultants, doctors, notaries, accountants, artsts, and entrepreneurs. Different from the income from farming, breeding, and trading, the income from profession is not much known in the previous generations. That's why the discussion regarding the *Zakat* of Profession cannot be compared with similiar detail with other types of *zakat*. It's because *zakat* is indeed the collection of one's own wealth to be shared with those that needs it.

In details, the calculation of *zakat* in above's explanations can be viewed in the table below:

**Table 2.1**  
**Types of *zakat*, *haul*, *nisab*, and the quantity**

<b>Types of <i>zakat</i></b>	<b><i>Haul</i></b>	<b><i>Nisab</i></b>	<b>Quantity</b>
<i>Zakat</i> of Livestocks	Every year	40 Goats / 30 Cows	1
<i>Zakat</i> of Farming Goods	Every farming season	About the same as 520 gr of rice	5 -10%
<i>Zakat</i> of Golds	Every year	About the same as 85 gr of gold	2,5%
<i>Zakat</i> of Traded Goods	Every year	About the same as 85 gr of gold	2,5%
<i>Zakat</i> of Mining Goods	Every year	About the same as 85 gr of gold	2,5%
<i>Zakat</i> of Founded Treasure	Every finding	-	10%
<i>Zakat</i> of Profession	Everytime he / she receives	About the same as 85 gr of gold	2,5%

Source: BAZIS

In the practice, the distribution of *zakat* could be consumptive and productive. *Zakat* that is consumptive includes staple food, clothes, etc. On the other hand, the productive *zakat* includes the resources for starting a business. This productive *zakat* is the one that was supposed to push the poor to struggle independently so that they may escaped the poverty line.

The productive *zakat* isn't baseless, seeing this happens in the time of Rasulullah SAW. Taken for the *Hadits* of Imam Muslim from Salim Bin Abdillah Bin Umar and from his father, that Rasulullah had given him *zakat* in hope that it was being developed and then spent as another *zakat*. In realtion to this productive *zakat*, an interesting statement coming from Syekh Yusuf Qardhawi, in his phenomenal book, *Fiqh Zakat*, taht Islamic government may build factories or companies using money earn through *zakat* as long as the focus is still the poor's welfare. For now, the role of government regarding the regulation of *zakat* had shifted to The Institution of Amil Zakat (BAZ or LAZ) (Amirah 2010, h 4)

According to K.H. Didin Hafidhuddin, M.Sc., BAZ or LAZ, when giving productive *zakat*, it should be accompanied by the guidance to the *mustahik* so that the business could thrive. Apart from giving the proper guidance towards the *mustahik*, BAZ and LAZ also has the role of spiritual guidance so that their religious faith didn't fade. This distribution of productive *zakat* was meant so that the people in Indonesia could become independent and lessen their tendency to depend on others. This could result in the decreasing of the poor families in Indonesia (Amirah 2010, h 4).

### **C. The Institution of *Amil Zakat***

The optimalization measurement of *zakat* distribution from the Islamic-based organization is important to keep the mutual trust between moslem and the organizations, as said by Abdul Quddus Suhaib (2009), which emphasize that the ideal institutions or organizations of *zakat* must have synchronize with the collection and the distribution of every *zakat* that they received. Shirazi (1996 & 2006) points that the main purpose of *zakat* institutions is to facilitate the moslem to pay and spend *zakat* and distribute them efficiently towards the rightful receiver. However, if these institutions are proved not able to distribute efficiently the *zakat*, it could bring doubts among the moslem especially those who pay the *zakat*.



Therefore, the payers will distribute their *zakat* directly to the receivers without using any institutions that are run by the government. In other words, The *zakat* organizations must give the appropriate example of efficiency to the moslem in any way like the ration of distribution according to the collective, the ability to reduce the poor in Islam, and the efficient handling towards the receivers. So it's important to measure the performance of these institutions by viewing how they work their role. Simply, the measurement of performance through optimalization of *zakat* distribution is the key element in the success of Islamic Organization to fulfill their role in facilitating the moslem pay their *zakat* (Abdul Halim Mohd Noor, 2012).

A few group gave their negative perception towards the distribution of *zakat*, so if it doesn't get handled effectively, will have an effect towards the development of these *zakat* institutions (Hairunizam, Sanep & Radiah 2008). *Zakat* organizations have the role to ensure the people that not only the distribution of *zakat* is handled perfectly but the regulation and maintaining is handled professionally and efficiently (Ismail Ibrahim, 2006). The failures to reach that goal will reduce the public trust and the collecting of *zakat* will went down greatly because they will find another alternative to fulfill their *zakat* payment. The ability of *zakat* organizations to show a good performance is important to maintain the trust. It isn't a choice, it's a requirement for the existency of the organization (Abd. Halim Mohd Noor, 2012).

As was explained before, the performance is about doing the work and the result they reached. Also in Islam-based organizations, the performance is the result of work to form a strongest relation for an organization in accordance with strategic goal (ex. *Syariah* obedience), the satisfaction of customers, and the contribution in economy. In relation with the dimension of economy from *zakat*, this serve to reach the effect which satisfied several dimension like aggregate consumption, savings and investment, the offer of aggregate workers and resources, decreasing the poor, and elevation of economy (Abd Halim Mohd Noor, 2012).

#### D. Optimalization

There're several definition of optimalization according to the views of experts:

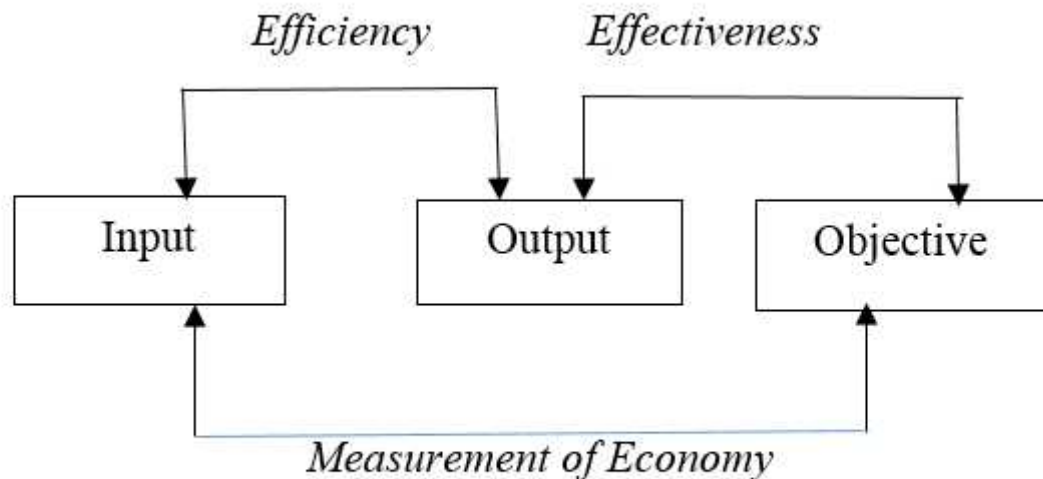
- a. Optimum is a condition of quantity, degree, or something else in which is a favorite, can be reached in a few conditions (Herilarium, wordpress.com). Optimum isn't maximum, because optimum considers the limitaiton factors or constant. Optimum refers to quality not quantity, means the best not the largest.
- b. Optimum is struggling to maximize something which is desired (Sisdjiatmo: 1983: 266)

Lastly, the definition of optimalization is a search of the best value from the functions given to a context (octavita.com).

#### E. Measurement of Optimalization

The Institution of Amil Zakat (LAZ) as the non-profit organization needs effectivity and efficiency in performance. If in profit organization the measurement of effectivity and efficiency can be viewed in the profit (ex. ROI, EPS), then in non-profit organization the numbers that can reflect such things are not present (Joeliani, 1994).

According to Wise (2001), the 3E (*economy*, *efficiency*, and *effectiveness*) of performance is a useful element in doing assessment for non-profit organization. The relation between organizational goals with the input that are used is a measurement of economy. The relation between input and output is the size of efficiency of organization, but the relation between output and organizational goal is the size of effectivity.



Source: [Sulaeman](#) (2009) <modded data>

Image 2.1

### Previous Studies

The result of the survey reveals that there are research which have relevancy with this research, those research are as follows:

- The research of Arief Budi Santoso which titled “*The Management of Zakat PKPU of Central Java in the Perspective of Islamic Law*”. Faculty of Syar’iah, 2007. This research has two focus of issues to tackle:

- 1) How is the execution of empowerment of *zakat* in PKPU Central Java?
- 2) How Islamic law views the execution of empowerment of *zakat* in PKPU Central Java?

The result of this research is first, in empowering of *zakat*, PKPU Central Java enforce the modern management which include the accumulation, regulation, and utilization management of *zakat*. The Utilization of *zakat* in PKPU Central Java brings forward to the effort of building independency of *mustahik* through elevation in work productivity.

The second is the Utilization of *zakat* in PKPU Central Java is proved to have implement the element of *Al-Quran* and *Hadits*. Although, There still need a re-evaluation towards the policy of giving *zakat* in the form of capital resources, like *qrdhul hasan* apart from *hibah*, so it would not be counter-productive with public policy about *zakat*.

- The research of Devi Hidayah Fajar S. Syaban, which titled “*The Utilization of Productive Zakat in the Perspective of Islamic Law (Study of the case in The Institution of Amil Zakat Assalaam, Solo, Central Java)*”. Faculty of Syari’ah, UMS, 2008. This research has two focus of issues to tackle:

- 1) How is the management of productive *zakat* in L-ZIS Assalaam?
- 2) How is the development of economy of the *mustahik* which given the productive *zakat* from L-ZIS Assalaam?

The result of this research is first, discussing about the management of *zakat* but more focus on the regulation which is productive also researching the development level of the people (*mustahik*) guided by L-ZIS Assalaam which are given the productive *zakat*.

The second is enforcing the method of distribution of productive *zakat*, especially towards certain *mustahik* or usually called L\_ZIS Assalaam guided people, the *zakat* was given to the rightful ones with *qardhul hasan* as the resources for business, in hope that these guided people might able to have the relation based on *ukhuwah islamiyah* towards other. The method chosen is deductive inductive analyst.

- The research of Arif, which titled “*The Management of Productive Zakat as Means of Reduction of The Poor (Study of a case in management zakat distribution by BAZIS in Tarukan Village, Candi Village, Bandungan District, Semarang District)*”. Faculty of Syari’ah, STAIN Salatiga, 2012.

This research was a qualitative research. The result of this research is a study of a case in management zakat distribution by BAZIS in Tarukan Village, Candi Village, Bandungan District, Semarang District. At first, the collective of *zakat* consist of money and staple food collected by BAZIS in Tarukan Village was distributed to the *mustahik*. The management system was considered to be ineffective to the state of economy of the *mustahik*, until in 2008 there’s an idea of productive *zakat*. The distribution of the *zakat* takes the form of a goat as the alternative of reducing the poor. It was considered a success seeing as almost all of the *mustahik* were able to manage the goats and breeding them.

- The research of Mila Sartika, which titled “*The Effect of Utilization Productive Zakat Towards Mustahik Utilization on LAZ, Solo Commitee for Care of Surakarta*” UMS, 2008.

Mila Sartika stated in her research discussing about the utilization of economy, that the research which explains the effective utilization to reduce the poor was not only used as the fulfilment for productive needs, education support, and the efforts to create more workfield but reducing the rate of jobless people. Mila Sartika’s research also explains that *zakat* should not only be consumptive, so the idea is to turn *zakat* as the source of people’s income. The use of *zakat* as something consumptive should be done only in times of emergency. Means, that whenever a *mustahik* who is almost impossible to guide or nurtured to have his own business, then the use of consumptive may be done.

- The research of Laila Karimatun Nisa’, which titled “*The Analyst Study Towards the Strategy of Dompot Dhuafa Lectures of Republika Papers in Helping To Reduce Semarang Poor People*”, Faculty of Lecture, 2003.

This research reveals how the strategy and the results of Dompot Dhuafa lecture in helping to reduce Semarang poor people. The strategy used are:

1. Giving business resources through the way of creditting to the poor people supervised by BMT without any guarantee at all.
  2. Giving the means of business to the family of street kids in collaboration with the boarding home of Semarang.
  3. Giving the help to the people involved in the natural disaster, such as flood, drought, landslide, etc.
  4. Giving the means of education to the students unable to attend elementary up to the middle high.
- The research of Lia Qatifah, which titled “*The Role of Dompot Peduli Umat Daarut Tauhid Through The Program of Microfinance Syari’ah Basing on The Misykat People in Utilizing the Member’s Economy (Study of a case of National LAZ DPU-DT, Semarang)*”, Faculty of Lecture, 2009.

The result of this research is that the program of microfinance syari’ah based on Misykat people instilled by DPU-DT have the role of a lecture.

First of all, the building of side character as the *da'i* (lecturer) who has flair of Islamic knowledge and personality. Second, an incentive guidance towards the Misykat people in every role using the means of *halaqah*. Third, the shifting of fund towards the Misykat people based on the principle of borrowing without interest. The principle enforced here was the form of Islamiyah Lecture. Another point is the fund used for the program was taken from *zakat*, *infaq*, and *shadaqah*. Overall, this program was the application of economic lecture, which is part of the method of *al hikmah bil lisan al hal*.

## Methodology

### 1. Data

The source of the data used in this research is the source of primary data and secondary data sources. In this study, researchers conducted a number of ways to get the data including the following:

1. The research literature (library research )
2. Field Research (field research )

### 2. Operational Variables

#### A. Output

The output is an products or directly from the findings of program activity and usually in measure to volume of the successful work (Hatry, 1996) . Diverge with prifit organization, Institute Amil Zakat that the measured output is zakat, infaq, shadaqah , and other funds that successful in store to Posted Institute of zakat .

The variables in this research has the operational output variable as a variable Exogenous

#### B. Objective

Diverged with the others organization that collecting and channeling funds (social organization), the organization of Zakat ( LAZ ,BAZ ,OPZ ) variables used objective is the poverty alleviation in circle of human/ *umat* called *Mustahik* ( entitled to receive *zakat*, *sodaqoh* or *infak* ) in accordance with the basic commands. Zakat specific allocation has been determined by the *Shari'a* (Qur'an 9: 60 ) where the charity is only for 8 groups, are : (*ashnaf*), namely : *fakir*, *miskin*, *amil zakat*, *mu'allaf*, slaves, those who having a depth , *jihad fi sabilillah*, and *Ibn sabil*. *Jumhur* scholars agree that in addition to these groups, unclean receive zakat. Thus, charity is inherently pro -poor and self – targeted.

However, in the implementation of distribution, OPZ do it with the through a number of programs that can accommodate the perceived purpose of Zakat itself. The variables in this research as a variable operational objectives has exogenous variables.

**Table: 3.1**  
**Variable of Operational Research**

Indicators	Symbols	rationalization Indicators	operational Variables
<b>Output :</b> The amount of incoming funds from zakat The amount coming from donations and sadaqoh Number of non ZIS funds	X1 X2 X3	Overall report measures provide an indication of the results of the program	Latent Variables Exogenous

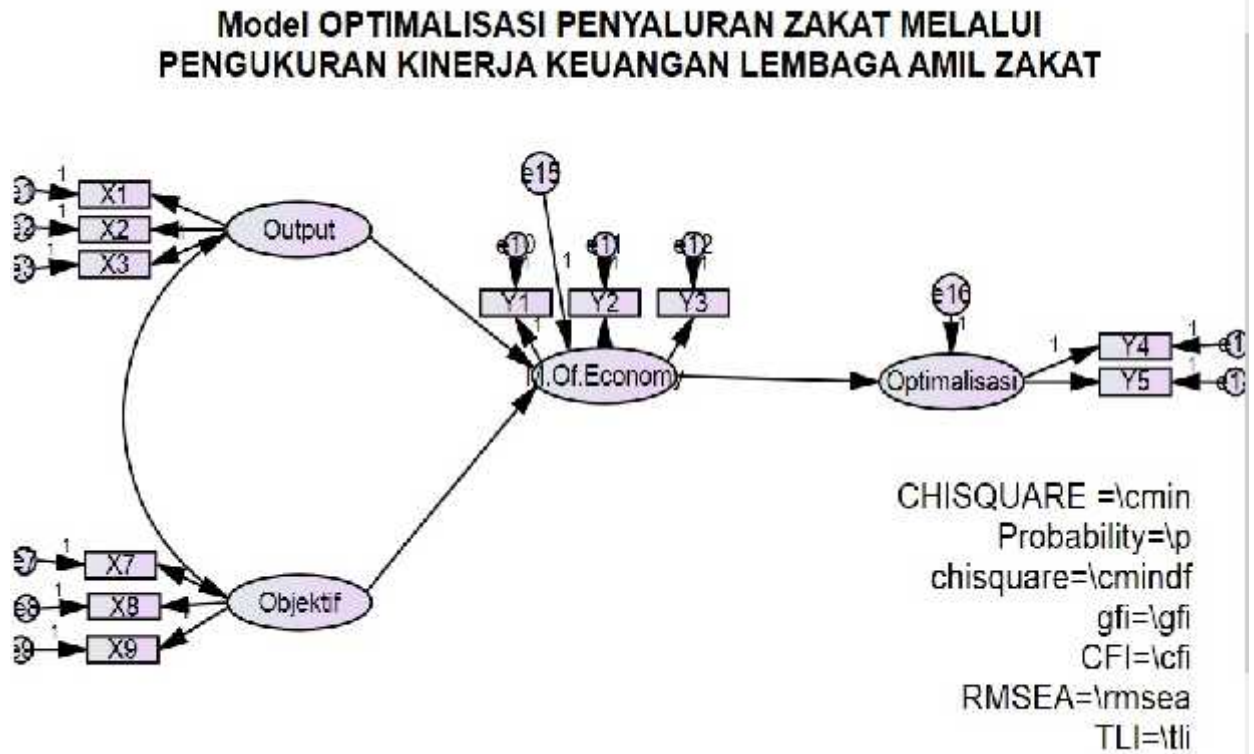
<p><b>Objective :</b>                  The amount of funds distributed into 8 groups, namely</p> <ol style="list-style-type: none"> <li>1. <i>Fakir and Miskin</i></li> <li>2. <i>Amil Zakat</i></li> <li>3. <i>Fi sabilillah</i></li> </ol>	<p>X4 X5 X6</p>	<p>Measure the fit between total Zakat funds collected by the class are eligible to receive zakat</p>	<p>Latent Variables Exogenous</p>
<p><b>Measurement/sosial Of Economy :</b>  <u>Obyective</u>                  Total output X 100 %</p> <ol style="list-style-type: none"> <li>1. Percentage of funds for <i>Fakir and Miskin</i></li> <li>2. Percentage of funds to <i>amil zakat</i></li> <li>3. Percentage of funds to <i>fi sabilillah</i></li> </ol>	<p>Y1 Y2 Y3</p>	<p>An indicator of the size of the economy on OPZ is the collection of zakat ( output ) has been distributed proportionally in accordance with the purpose of zakat command and presence that OPZ for 8 classes ( <i>asnaf / mustahik</i> )</p>	<p>Latent Variable endogenous</p>
<p>Optimization                  Proportion to 3 <i>asnaf</i>                  Proportion</p>	<p>Z1 Z2</p>		

Source: processed

### 3. Research Model

Based on the operationalization of the variables that shown above in Table 3.1 can be described design research model as follows:

Representation 3.1. The plan of Research Model



Based on the analysis by the research of stripe model that exogenous latent variables are:

Output and Objective. And directly will be affect to endogenous latent variables by Measurement of Economy. Besides that, endogenous latent variables directly are too affect the optimization of endogenous latent variables.

Next in this diagram, the research of stripe model is will be exist an affect between endogenous latent variables are: Measurement Of Economy and Optimization

### 4. Hypothesis testing

#### Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
M. Of. Economy	<--	Output	1.420	1.093	1.299	.024	par_8
M. Of. Economy	<--	Objective	-.707	.998	-.708	.479	par_9
Optimization	<--	M. Of. Economy	-1.514	.116	13.078	.032	par_10
X3	<--	Output	1.000				
X2	<--	Output	.830	.061	13.604	**	par_1

			Estimate	S.E.	C.R.	P	Label
X1	<-- -	Output	.948	.064	14.80 7	** *	par_2
X6	<-- -	Objective	1.000				
X5	<-- -	Objective	.720	.056	12.75 4	** *	par_3
X4	<-- -	Objective	.737	.059	12.40 1	** *	par_4
Y1	<-- -	M. Of. Economy	1.000				
Y2	<-- -	M. Of. Economy	1.257	.102	12.35 1	** *	par_5
Y3	<-- -	M. Of. Economy	1.890	.111	16.98 6	** *	par_6
Y4	<-- -	Optimizati on	1.000				
Y5	<-- -	Optimizati on	1.029	.064	16.09 4	** *	par_7

Based on the probability value output with M.Of Economy indicated by the value of 0.024, was under  $\alpha$  (5 % = 0.05). It states there is influence with M.Of Economy Output.

Based on the probability value Objective with M.Of Economy indicated by the value of 0.479, was above  $\alpha$  (5 % = 0.05). It states there is no influence Objective with M.Of Economy

Based on probability Value M. Of Economy indicated by Optimizing Value 0.032, was under  $\alpha$  (5 % = 0.05). It states there is an influences with M. Of Economy by Optimization.

## Conclusion and recommendation

### 1. Conclusion

The optimized measuring of *zakat* distribution using the measurement of economy variable which is independent / exogen both in output and objective, can be used as a media to measure the *amil zakat* institution. However, it is in need of correction in the indicator used in this research, particularly the indicator of objective variable.

### 2. Recommendation

Ignoring the faults, hopefully this result of this research is able to be the base, which of course needs some improvement, to measure the performance of *amil zakat* institution especially the optimization of *zakat* distribution.

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## MODEL OF BUILDING MICRO AND SMALL ENTERPRISE'S (MSE) TRUST ON BAITUL MAAL WAT TAMWIL IN INDONESIA

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### Abstract

Abstract: The existence of BMT is one of solutions for micro and small enterprises in Indonesia, who have limited banking access. But in fact, there are still many of those who donor trust either existence or capability of BMT in serving customers' sharia-based financial needs. This study aimed to know affecting factors of MSE's trust on BMT sharia-based financial products. Qualitative approach was used in this study by analyzing several of literatures. Study reveals that role of knowledge, linkage program, technology application and reference group are critical factors that may increase MSE's trust for using BMT financial products.

**Keywords:** *BMT, Trust, Knowledge, Linkage, Technology and Reference Group*

### Introduction

Micro and Small Enterprises' (MSE's) economic role is highly significant in Indonesia. More than 99% Indonesian business players come from MSE's (Gustina, 2013). But the majority of MSE's have not optimally utilized financial institutions (Irmawati, *et. al.*, 2013). As a result, MSE's face obstacles to access banking capital, so many of them then rely on informal financing because of its flexibility and speed (Muhammad & Kusuma, 2014). The weakness is in the lack of MSE's capacity in the financial administration system, the lack of collaterals as well as low competitiveness, so most of MSE's are classified of non-bankable (Irmawati, *et. al.*, 2013). This is very common in developing countries - including Indonesia – so, relatively, the impact of microfinance is more significant in developing countries (Hassan, *et. al.*, 2013).

One of growing microfinance institutions in Indonesia is BMT (Baitul Maal wat Tamwil). BMT have advantages over conventional financial institutions. Collateral flexibility and the speed of administrative process are some of BMT's advantages. Additionally, Islamic-based business principles become its differentiation compared to conventional microfinance institution. Thus, the existence of BMT will be much easier to help the development of MSE's in Indonesia. In addition, not only provides financing, BMT also provides assistance and guidance to its members (Sakai & Marijan, 2008).

Although the quantity of BMT continue to grow throughout Indonesia, but many of them have technically been bankrupt. It is still difficult to obtain accurate data on the growth of BMT in Indonesia, because the data of each BMT association have not been integrated yet. According to PINBUK (Small Business Incubation Centre) estimation, in 2006 alone, there were approximately 3,200 units of BMT (Alma & Priansa, 2009) and served approximately 3 million people. In 2009 it increased slightly to 3,300 units (Muljadi, *et. al.*, 2014). Then at the end of 2010 grew into 5,200 BMT that served 10 million people. Nevertheless, the distribution of BMT in Indonesia is more concentrated in West Java, East Java and Central Java (Sakti, 2013). In most other provinces in Indonesia is relatively less massive growth of BMT, even though Muslim is the majority of the population.

Among those BMT, many of them are now inactive. For instance is what happened in Pekanbaru, which is the center of Melayu culture in Indonesia and Muslim majority. Based on data from the year 2012, PINBUK noted that from 8 listed BMT in Pekanbaru, only 5 were known active, while three others were non-active (Hamzah, et., al., 2013). The similar fact also occurs in many other regions in Indonesia. It reflects a concerned fact that Indonesia Muslim community is still not fully believing in the existence of BMT as a lawful (halal) solution to overcome MSE's financial problems. This allegation is in line with research findings of Sakai & Marijan (2008), that generally, Indonesian people still do not understand and less trusting Islamic products. Moreover, many microfinance institutions - including BMT - do not apply the marketing orientation in providing services (Insaideoo and Ahiakpor, 2011). Whereas in the financial business, trust is essential for the emergence of loyalty (Asiyah, et. al., 2014) and only by the loyalty, BMT can run its sustainable business.

Therefore, a study to understand the marketing approach model of increasing public trust on BMT is indispensable. Based on this idea, this study was conducted to answer the crucial issue regarding to what factors that could affect the MSE's trust to BMT's Islamic financial products in Indonesia.

### **Research Gap and Objectives**

Most research and existing literature merely discuss about how to increase customer's intention, decision and loyalty to BMT and make trust, therein, as one of the important predictors. But specific study about trust predictors is still rare, particularly in the objects of BMT in Indonesia.

Besides to fill a void of literature so that it can be a reference for stakeholders in order to develop BMT in the future, the existence of this research aimed to find out the factors that can increase MSE's trust in BMT financial products. In addition, the output of the study will yield a proposed model that can be used as a reference for other researchers to conduct empirical testing of MSE's trust predictors.

### **Methodology**

Study was based on literature studies, covering a wide range of theoretical and empirical results that relevant to BMT and microfinance operation. Expected output was an effective model of MSE's trust building in BMT financial products based on the following determinant factors and their indicators.

## **Literature Review**

### **1. Brief History and Concept of BMT**

Baitul Maal is a financial model based on religion and social which was first introduced in the time of Prophet Muhammad SAW. This institution represented the wealth management (treasury) and served the financial needs of the state and society. Sources of funds came from the zakat collected and distributed for the benefit of the people. Along with the development, these institutions produced many product innovations, where the Baitul Maal was no longer just a religious social institution but also the finance department for the state to collect taxes, state assets management and so forth. In Indonesia, the Baitul Maal termed as Baitul Maal wat Tamwil (BMT) and in line with the modern times, BMT now operate in a different manner and role compared to the time of the Prophet Muhammad and his companions (Hamzah, et., al., 2013).

According to Huda & Heykal (2010), BMT is an institution that consists of two terms, i.e., Baitul Maal and Baitul Tamwil. Baitul Maal is a fund-raising institution and

charitable and social nature of fund distribution such as *zakat*, *infaq* and *saddaqoh*. While Baitul Tamwil is rather to the collection and disbursement of commercial funds or an intermediary function as commonly applicable in conventional banking but it has a sharia principle.

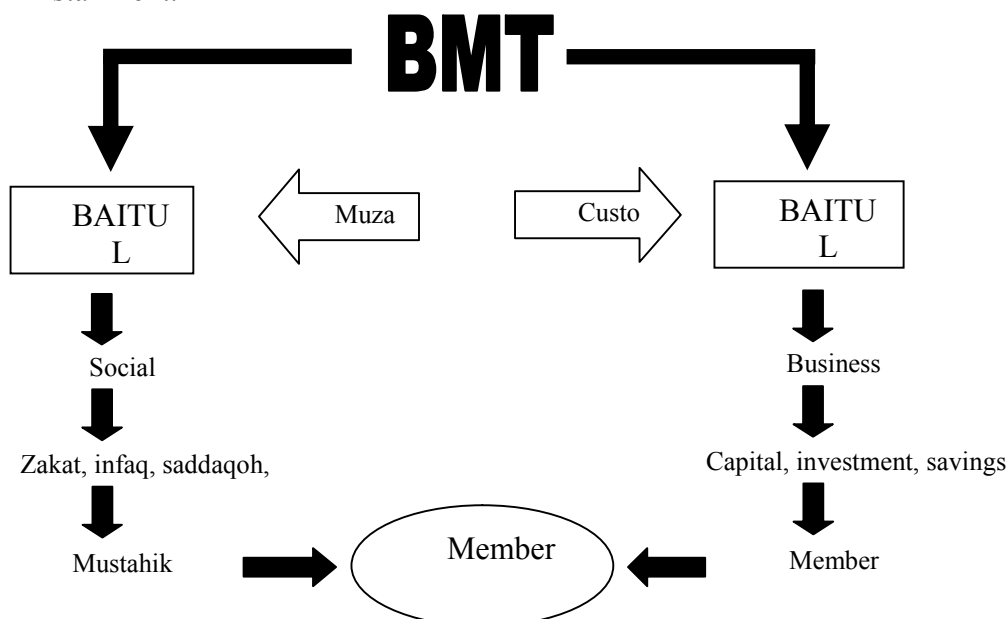
According to Small Business Incubation Center (PINBUK), BMT is an integrated independent business that basically consists of bay al-mal wa al-tamwil with activities to develop productive ventures and investment in improving the quality of economic activities of MSE, which include encouraging saving and their financial support. It also receives deposits of *zakat*, *infaq*, *saddaqoh* (alms) and distributes it in accordance with the rules (Yuningrum, 2012).

## 2. BMT Business Principles

BMT is part of the Micro Finance Institutions (MFIs) in Indonesia, operates based on Islamic principles. BMT is not merely business-oriented institution, but also a society-based where wealth is evenly and fairly distributed. BMT is operated by the principle of Profit and Loss Sharing (PLS). They are obliged to foster small and micro businesses in defending the interests of poor communities. They were grown on the initiative and start-up capital from local community leaders on the basis of justice (Hosen in Gustina, 2013). Therefore BMT become the community's hope, who is engaged in micro and small business, to have their business financed.

In its operation, BMT has 3 basic principles for each financial product, such as (Gustina, 2013):

- a. Profit and Loss Sharing (PLS) Principle  
 Is a system that includes procedures for sharing the yield between the fund owner (Shohibul maal) with the fund manager (mudharib). The sharing amount is predetermined result in a contract/*aqad*.
- b. Non Profit Principle  
 This principle is virtue, more social and not profit oriented. The product form is soft loan for micro / small enterprises. BMT member or partner does not need to share the profits to BMT, but obliged to simply return it on time, so that the fund can be redistributed to the other members who need financing.
- c. Selling Plus Margin Principle  
 BMT sell goods to customer with cost plus margin terms and it is usually carried out in installment.



**Figure 1. Function of Baitul Maal wat Tamwil (Febriana, 2013)**

### **3. BMT's Business Types**

Legally, BMT status is a cooperative, which means BMT is subjected to the Act No. 17 Year 2012 About Cooperative and SME's and is specifically stipulated in the Decree of the State Minister of Cooperatives and SMEs No. 91 / Kep. / M.KUKM / IX / 2004 concerning the Implementation Direction of Sharia Financial Service Cooperative (Amalia, 2009).

In its operation, BMT runs various type of business, either financial or non-financial. Types of BMT's business generally consist of (Yusrialis, 2013):

- a. *Baitul Maal* fund raising from zakat, *infaq* and *shoddaqoh* and distribute it to *mustahiq* (people are entitled to receive);
- b. Fund collection by fund mobilization and developing savings based on *mudharabah* and *wadi'ah* (deposit);
- c. Fund distribution by financing MSE in form of *mudharabah* (total financing based on PLS mechanism); *musyarakah* (join financing based on PLS mechanism); *murabahah* (financing of goods based on cost plus margin that should be paid at agreed due date); *bai'* (financing good based on installment mechanism); *bai' assalam* (advance financing given to enterprise due to incoming goods); *bai' al istishna* (financing by installment); *qard al-hasan* (soft loan with no additional return except administration fees).

## **Discussion**

### **1. Trust on BMT**

It is interesting what was written by one of Indonesia sharia expert, Muhammad Shafi Antonio (in Kartajaya & Sula, 2008) that the Islamic financial market is divided into two major segments, namely emotional segments and rational segments. Those who are emotional, highly concern about halal-haram but less concern about price and service quality. While rational ones, otherwise, concern about price, product variety, corporate reputation and of course the service quality. Rational segments will be pragmatic, where they can easily switch to conventional institutions, though they know it is contrary to their religion values.

However, both segments have one thing in common: they must be convinced that the Islamic financial institution is credible. Trusted is to maintain its business in accordance to halal (legitimate by religion) principle. On the other side, it is believable to serve customers satisfactorily and can afford by mainly BMT's target market that is micro and small enterprises. BMT should be able to embrace both these segments. Both large and small businesses to micro, all must implement Sustainable Marketing Enterprise framework where a company - regardless of its size - must be able to survive and succeed not only at present, but also in the future (Kartajaya & Sula, 2008). The key to survive from the high competitive industry is trust. Trust that BMT could be the right solution of Islamic financing but still able to serve its customers satisfactorily by implementing modern management.

Mowen and Minor (in Sangadji & Sopiah, 2013: 201) defines trust as all the consumer's knowledge and all the conclusions made by consumers about objects, attributes and benefits. Consumer's trust has three dimensions include the reliability, credibility and benevolence (Hasan, 2013). In the context of the financial institutions that are run by BMT, then reliability is attributed to the company's expertise - including employees - in providing Islamic financial products needed by consumers; credibility is

associated with expertise in performing job effectively and reliably and; benevolence is associated with sincere intent and motivation in serving consumers in accordance with the values of Islam.

Trust is an important essence of customer's loyalty. And to increase trust, BMT needs to assert its credibility as a financial institution that is able to maintain the purity of Islamic values in business (Asiyah, et al., 2014). For those reasons, BMT needs to understand all needed factors to gain customer's trust. This is very possible to do as Indonesia has wide opportunity since the majority of Indonesian people are Muslims and they are firmly taught that interest money is haram (illegitimate by religion) (Ginting & Sudarjat, 2014).

## **2. Role of Shariah-based Business Knowledge**

Although BMT is engaged in the financial sector, along with banking sector in general, but either principles or concepts of both sectors are certainly different. Managing BMT cannot use a profit oriented paradigm (Sakai & Marijan, 2008). BMT's main principle adheres to Islamic values and run the business based on sharia concept. The profit in the conventional financial institutions, is the main orientation regardless the aspect of justice and religious values therein. While in the Islamic business principles that embraced by BMT, profit is nothing more than a rational attempt to make the business survive so that they could continue helping economy justice and welfare of the people. It can be concluded that BMT is more oriented to the social aspect than the commercial side as applicable in conventional financial institutions. Additionally, it is clear that conventional microfinance is less in line with the belief system of the Muslim community (Hassan, et., al., 2013), especially in Indonesia which has the largest Muslim population around the world.

Because of those differences in business concepts and principles, the knowledge basis also differs fundamentally. Definitively, Sumarwan (in Adawiyah, 2010: 193) defines consumer knowledge as all information held by consumers on a wide range of products and services and other knowledge related to such products and services, and information related to its function. J. Paul Peter and Jerry C. Olson (in Yuliawan 2011) divide knowledge into three dimensions, i.e. knowledge of product/service characteristics or attributes; knowledge about the product/service benefits, and; knowledge about the satisfaction given by the product/service.

Sharia-based business management embraced by BMT certainly need knowledge and skill that specifically segmented to Islamic economy basis. The urgency of such knowledge becomes on consumer's trust predictor (Ferrinadewi, 2008). Unfortunately, here lies the problem. Many of BMT caretakers and employees have no relevant education background of sharia, and consequently they have lack of understanding of conducting sharia business (Muljadi, et al.,2014).

It is ironic that countries with Muslim majority, the knowledge and specific expertise in Islamic finance is minimal, as is also occurs in Yemen where the quality of staff and limited expertise and knowledge of Islamic economics becomes most crucial issue of microfinance institutions (Alshebami & Khandare, 2014). Then, hiring employees who have the skills, knowledge and experience in areas relevant to the sharia-based microfinance is a strategic marketing effort to do (Insaideoo & Ahiakpor, 2011)

Knowledge is one of the main aspects of the intellectual capital that can encourage the creation of products that are needed and desired by the community, and is a competitive tool for microfinance institutions to face the competition in the financial sector with conventional institutions (Puspita, 2014). Thus, it will be a differentiation strategy as well as competitive advantage that possessed by microfinance including BMT

therein. The same thought is also concluded by Hassan, et., al., (2013) that knowledge of human resources and experts on sharia is indispensable as effort to develop Islamic financial products, considering that the innovation of financial sharia products is still become one of the fundamental weaknesses of Islamic micro financial institutions (Hamzah, et., al., 2013). Innovating Islamic products will require a special understanding of the sharia concept considering that many current Islamic financial products are formed by developing one or more Islamic-based transactions in general (Zulkifli, 2007). Consumer knowledge is the main source for the company to offer new products and services (Allameh, et al., 2012).

If the board of caretakers and employees of BMT have the right knowledge of the sharia business concept, then they will be able to provide correct education and guidance to the lower class community, that mostly are the target market of BMT. The success of BMT has to be started from their qualified human resources, the board of caretakers that are free from moral hazard, where the understanding and adherence to Sharia law becomes absolutely necessary (Yusriasis, 2013). Moreover, there are still many of Indonesia people - which is actually Muslim majority - do not comprehend and less trusting Islamic products (Sakai & Marijan, 2008; Hamzah, et. al., 2013). In fact, there are often many cases where people are reluctant to repay their loans because they think such loans are a charitable or religious motif (Sakai & Marijan, 2008).

### **3. Role of Linkage Program with Islamic Banks**

In Islamic micro business empowerment, BMT has been experiencing lots of funding difficulties. Additional capital is a problem faced by many BMT to fulfill the demands from their customer (Sakai & Marijan, 2008; Hamzah, et. al., 2013; Yusriasis, 2013). For the sake of sustainability, BMT should creatively explore other sources of funding other than *zakat*, *waqaf*, *shaddaqaoh* and customer deposits (Nasution & Ahmed, 2015). One of the proper solutions is a linkage program with Islamic banking. Not only help increase capital, but the linkage program will be able to lift the BMT reputation up in the community and customers. Additionally, linkage program allows the transfer of knowledge from Islamic banking to BMT as its partner. If this occurs as expected, naturally trust in BMT will increase (Nasution & Ahmed, 2015).

Linkage program is one way of encouraging intermediary function by empowering Micro, Small and Medium Enterprises (SMEs). Linkage program is an effort to improve the competitiveness of financial institutions and at the same time it will enhance the efficiency of the Islamic Bank credit scheme implementation. Linkage program gives a mutual benefit to both Islamic Banking and non-bank microfinance institutions - in terms of lending to micro and small enterprises. The goal is to accelerate the achievement of the Islamic banking business plan to SMEs, as well as to overcome the limited network and human resources in reaching micro businesses directly. Meanwhile, for small and micro-finance institutions, the linkage program can overcome the difficulties of capital required in lending (Tanjung, 2010).

In line with above concepts, then BMT and Islamic banking should not be in competition, because BMT is basically a complementary partner to Islamic banking business (Puspita, 2014). Islamic banking, so far, has been criticized for not being able to finance micro businesses that are categorized as non-bankable. They are bound by prudence principle that obliged by Central Bank of Indonesia, so that the role of the customer's characteristic and collateral still become strict consideration that often impede the financing to micro and small businesses. Even many Islamic banks are replacing the sharing system into a sales-based financing schemes, plus the public's understanding on the sharing system is still relatively low (Nasution & Ahmed, 2015). On the contrary, BMT is more flexible in terms of requirements and collaterals as well as having direct access to the small traders.



Method of providing group loan conducted by BMT is a way to bridge the problem of customer's characteristic and collateral, in which the borrower's group or the group leaders will be charged to be the guarantor of their members' loan.

Because of that ideology similarity between Islamic banking and BMT then they should be able to work together through the linkage program. The program has been initiated by Central Bank of Indonesia as an Islamic banking supervisor and the Ministry of Cooperatives and SMEs as supervisor for BMT business. With this program, BMT can be the intermediary between the Islamic banking and customers. Linkages types can be done through executing method, channeling and joint financing (Nasution & Ahmed, 2015). In executing method, the role of Islamic banking only help filling the shortage of BMT funding, where the relationship with the end customer is still fully carried out by BMT alone. In the method of channeling, the role of BMT only receive fee as a mediator between the end customers and the Islamic banking. It means, Islamic banking has direct relationships to end customers. Joint financing method means joint in management and capital in financing certain customers or projects between BMT and Islamic banking (Nasution & Ahmed, 2015).

In Riau Province alone, the linkage programs have already been running by Bank Riau Kepri, Bank Muamalat and Bank Syariah Mandiri, but in fact have not reached all existing BMTs, because those banks merely concentrate to BMTs who have small risk (Nasution & Ahmed, 2015). Challenges are still faced in the linkage program since yet there is no strong support by local government. Many BMTs are still find difficulties accessing additional funding due to constraints of collateral requirements (Nasution & Ahmed, 2015). Central and local government support is needed to strengthen the linkage program in the form of guarantee from the state-owned enterprises or enterprises designated by the government such as Jamkrindo (Credit Guarantee Indonesia) or Jamkrida (Regional Credit Guarantee).

#### **4. Role of Information Technology Implementation**

BMT engaged in small-scale and micro with assets of less than Rp 50 million and a maximum sales omzet of less than Rp 300 million per year (Kuncoro, 2010). With such segments, it would be very difficult for BMT to compete with medium-sized and large financial institutions in terms of providing a sophisticated banking technology. Provision of ATM, online banking, mobile banking, integrated banking system and so on, would be very expensive and almost impossible to be met by BMT. It is in fact that the technology implementation is still a major problem for many BMT in Indonesia (Hamzah, et. al., 2013), even Ginting & Sudarjat (2014) concluded that the integrated technology system is the most important weakness in BMT's operation. Meanwhile, it has been widely proven that the use and acceptance of the technology are important factors that could affect the level of customer's trust (Pertiwi & Adhivinna, 2013). The weak handling of business processes and the technology-based sharia administration, according to Mohammed & Kusuma (2014), are needed to be boosted through IT solutions.

According to the Information Technology Association of America (ITAA) (in Pertiwi and Adhivinna, 2013), the definition of information technology is the study, design, development, implementation, support or management of computer-based information systems, particularly software applications and computer hardware, wherein, data are converted, processed, transmitted into information and guard it into protection of the information itself.

Application of information technology in the financial institutions sector includes three phases, namely information services, communications and financial transactions (Pertiwi & Adhivinna, 2013). In assessing the technology, Davis in 1989, introduced the term of Technology Acceptance Model (TAM), which is the theory of information systems that create a model of how users will receive and use technology, including use of

indicators in risk perception, perceived usefulness and perceived ease of using technology, where all three will affect the level of customer's trust (Pertwi & Adhivinna, 2013).

It must be admitted that very difficult for BMTs to meet the technological requirements with its own capital. Linkage program with Islamic banks is one solution that can be done to solve the problem. Cooperation with Islamic banking is not limited to the capital, but also beneficial for the knowledge transfer and technology sharing on the basis of mutual agreement. Islamic banks have the obligation to help the increase of Moslem community welfare, but obviously they could not directly enter the segment of small and micro enterprises which are non-bankable. At this point, Islamic banks urgently require synergies with BMT, because BMT has the flexibility and capacity to compensate the shortcoming of Islamic banks.

Because of this synergy is based on a noble mission for the sake of Moslem community, then there should be no reason for Islamic banks to refuse to share technology with BMTs to obtaining faster, accurate and comfortable service. Such technology sharing can be done by forming a unified technology platform among Islamic financial institutions (Choir, 2010). This kind of commitment has been actually done by Bank Panin Syariah in 2014 by signing an MoU with Inkosyah (Induk Koperasi Syariah) BMT in Yogyakarta in the form of capital assistance, network expansion, information technology and improving human resources (Anonymous, 2014). The pattern of this cooperation could be adopted more widely in Indonesia.

## 5. The Role of Group Reference

BMT's reputation as a corporate brand is still less known by the public. This causes Islamic financial products offered by BMT are also unpopular. According to Sakai & Marijan (2008) the condition was caused by the lack of promotion to the community. Whereas the use of marketing approaches and strategies for microfinance institutions in promoting its products, not only will attract new customers, but also will ensure the sustainability of the micro-finance institutions (Insaidoo & Ahiakpor, 2011).

The question then, what kind of promotion is most appropriate to socialize BMT? Using above the line approach such as television, print media and radio will be costly and create a commercial impression. Meanwhile BMT's image tends to religious social patterned that humble in its appearance and lifestyle.

Brand activation of BMT that is most appropriate to raise public confidence that BMT is indeed a financial solution for Moslems is social and religious approach. It is proven by Kapriani, et., al., (2014) that the value of religious and social factors are predictors for customer trust in Islamic financial products. Kotler and Keller (2007) stated that one of the elements of social factors is the reference group.

According to Solomon (in Hafidz, et. al., 2013) reference group is any person or group that is considered as a comparison and reference for someone in shaping the general or specific values. Reference groups are considered to have significant relevance to a person in terms of evaluating and providing aspiration in determining their behavior. In the implementation, according to Hafizet al., (2013), the power of reference is measured from the normative influence, information and expressions of shared value. Normative influence is the power possessed by the group through social norms that must be observed and followed. Power of information is the influence possessed by the reference group because of their knowledge and in-depth information about certain product /service. Influence of value expression occurs when consumers are trying to consume a product/service in order to be seen equal to the reference group.

Hafidz, et al., (2013) proved that the customer's information sources about the existence and BMT's products are mostly derived from acquaintances and also the

scholars. In fact, prevailing culture element in Indonesian society is still providing space for the role of religious leaders into public preference as a source of advice (Yandono, et. al., 2014). Unfortunately, the involvement and understanding of neither BMT nor Islamic financial products among the religious leaders are still low. As the results Hafidzet al. (2013) found that the role of the religious leaders is still less significant in attracting people to use BMT sharia products. Similarly, Hassanet al. (2013) concluded that the role of experts and opinion leaders is an important factor but not yet optimally developed to the benefit of socialization and the development of sharia microfinance products.

Therefore, proper trainings to religious leaders about BMT and sharia-based financial are crucially needed by establishing cooperation between the Islamic financial institutions, universities, and related institutions such as the Ministry of Religious Affairs and the Ministry of Cooperatives and SMEs. If the religious leaders already have a good capacity regarding Islamic financial products, then they can be empowered as a promotional medium or public relation on behalf of BMT to spread out economic Islamic values to larger Moslem community.

### **Conclusion**

Trust in the context of Islamic financial products offered BMT, covers reliability aspects that can be associated with company's expertise - including employees - in providing Islamic financial products that are needed by consumers; credibility is associated with expertise in performing job effectively and reliably and; benevolence is associated with sincere intent and motivation in serving consumers in accordance with the values of Islam. Trust certainly will not come by itself, but requires a number of predictors that can influence it.

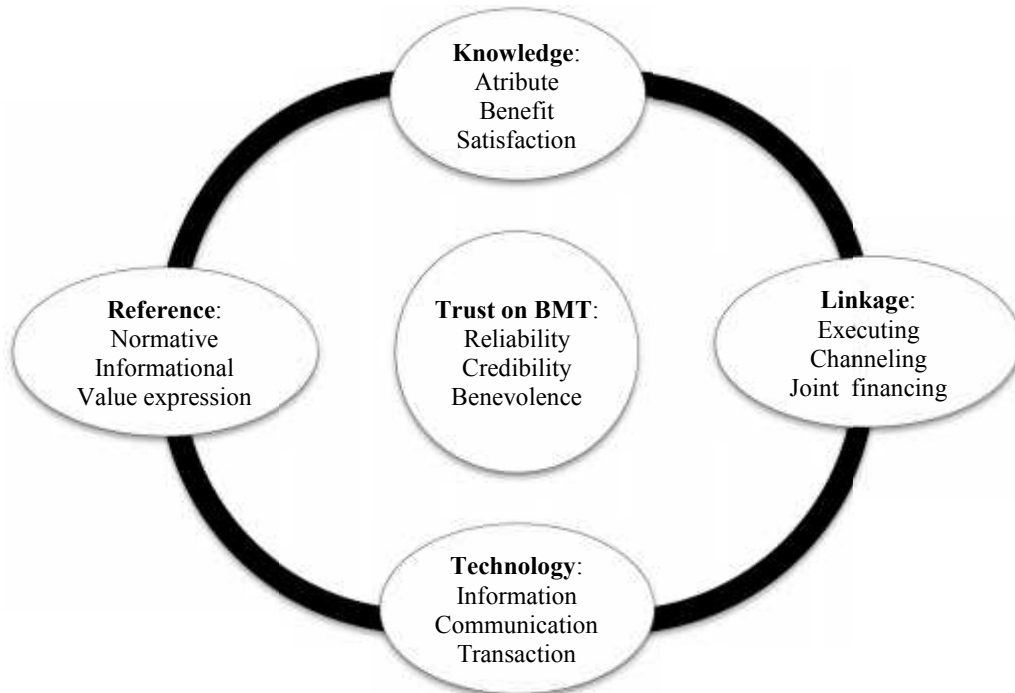
The knowledge and expertise at the concept of Islamic finance is needed to bring confidence to the community and the development of financial products that in line with Islamic values. Trust will appear when the BMT's caretakers and employees possess the knowledge of the product or service characteristics or attributes; knowledge about the benefits of the product /service, and; knowledge about the satisfaction provided by Islamic financial products / services for consumers.

Linkage program with Islamic banks is needed to strengthen BMT capital. With the availability of sufficient capital, BMT reputation will be more trusted by the public because by the support of Islamic banks, BMT would be able to meet the financing demand in a larger scale. Linkage programs can be implemented in the form of executing, channeling and joint financing.

Information technology that include information, communication and fast, safe and convenient transactions process will positively increase customer's trust in the performance of BMT. Sharing technology with Islamic banking could be a solution to anticipate the BMT's budget constraints for the provision of technology facilities.

Religious and strong social values on BMT business need the role of religious leaders as the most appropriate reference group to promote Islamic financial products. The group has a normative influence, information and capable of moving the value expression for his followers.

The four predictors turn to be crucial aspects that are needed to build MSE's trust on BMT Islamic financial products. Based on these conclusions, it can be described a proposed model of trust predictors in Islamic financial products BMT as shown below:



**Figure 2. Proposed Model of Trust Predictors in BMT**

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## MULTIDIMENSIONAL WORK ETHICS AND TASKS PERFORMANCE: MEDIATING ROLE OF AFFECTIVE COMMITMENT

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### Abstract

Education is a conscious and planned effort conducted to form a teaching and learning process, so that the students can develop their good spiritual, self-control, personality, intelligence, morals, and skills that are needed to improve the quality of students. To realize the objectives, lecturers with good work ethic, commitment, and performance are needed. This research aims to analysis the role of affective commitment as mediating variable in the influence of Multidimensional Work Ethic Profile/MWEP (centrality of work, delay of gratification, hard work, leisure, morality, self-reliance and wasted time) on the task performance of College lecturers. The population of this research was College lectures in Central Java. This research was conducted by giving questioners to 400 lecturers. The hypothesis test was conducted with Structural Equation Modeling (SEM) technique. The findings of this research are: 1) just only the hard work dimension has direct influence to task performance, 2) the centrality of work, delay of gratification, leisure and morality dimensions have influence to affective commitment 3) affective commitment has influence to task performance 4) affective commitment mediates the influence of centrality of work, delay of gratification, leisure and morality dimensions to task performance.

**Keywords:** *multidimensional work ethic, affective commitment, task performance*

### Introduction

Lecturer is one of the essential components in a College system. To be able to produce good quality, good character and ethical, a lecturer must have at least two important things. First, a lecturer must have good affective commitment and task performance, because the affective commitment and the task performance of lecturer are a reflection of the quality of the College (Awang 2010 and Shah, 2012). Second, the factors that must be owned by a lecturer are work ethic and professional ethics. Because a lecturer is not only to produce the students who are qualified and competent, but also must be able to build character and ethical of the students (Adenguga, 2013). In reality, there are still many issues regarding the ethics of a lecturer. For example is plagiarism from the student's thesis. Plagiarism cases conducted by the lecturer is unethical behavior happened in many countries including Universities in the USA (Standler, 2012). That condition illustrates the persistence of the gap between ideal condition and reality.

From the results of previous studies, it was found that work ethic, empirically, is very important in an organization (Meglino & Ravlin, 1998). Work ethic will affect various aspects of the behavior of human resources within the organization. The concept of work ethic, generally, based and associated with certain religious values, for example: Protestant Work Ethic/PWE (Furnham, 1982; Cokley et al. 2007); Islamic Work Ethic/IWE (Ali, 1987; Salem & Agil, 2012) and Catholic Work Ethic/CWE (Overell, 1981; Tropman, 1992). Beside the concept of work ethic based on religion, it has also developed the concept of work ethic that is not based on the value of a particular religion. This concept is called as the Multidimensional Work Ethic Profile (MWEP) which firstly introduced by Miller and Woehr in 1997. The concept of MWEP consists of seven dimensions, namely:

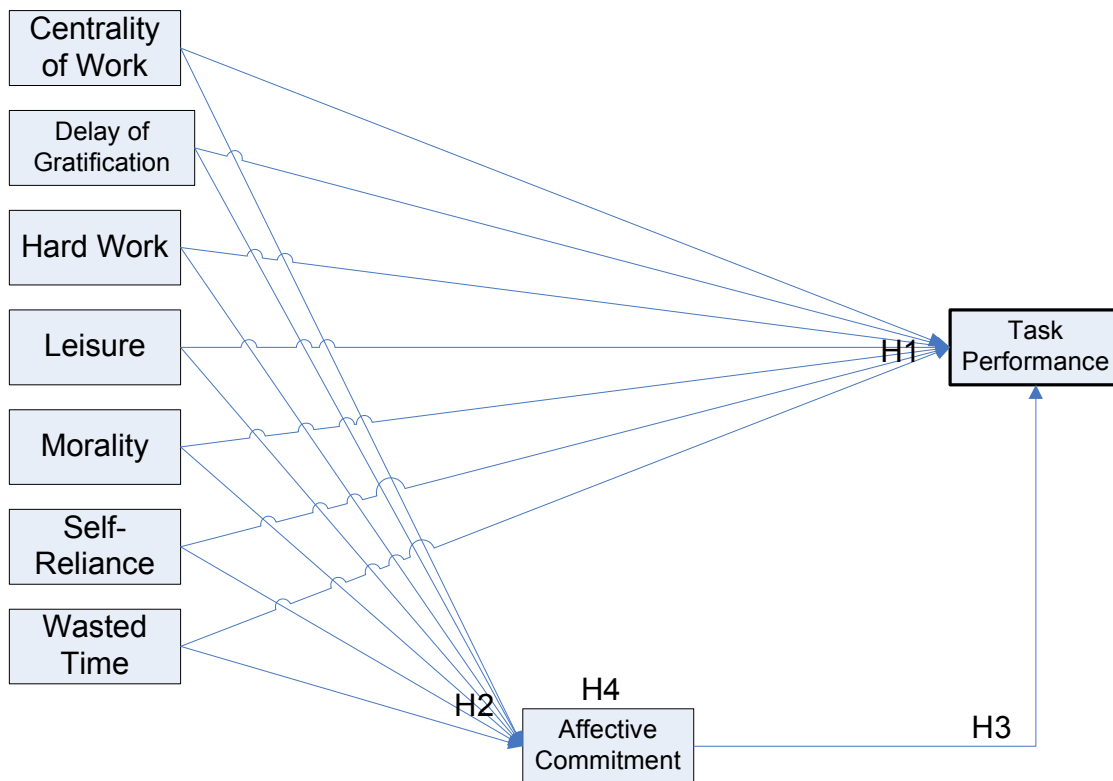
(1) centrality of work, (2) delay of gratification, (3) hard work, (4) leisure, (5) morality, (6) self-reliance and (7) wasted time. MWEP is developed by Miller with the premise that the construct of work ethics on the basis of religion precisely describes something that is secularist. Furthermore, according to Miller, work ethic is better if it is seen as an ethical general and universal (Miller et al. 2002). Based on the development of the concept of religion-based work ethic (PWE, IWE and CWE) with a work ethic that is not based on religion (MWEP) there have been theory gaps

Meanwhile, based on the results of investigation from various scientific journals, there have been found differences in the results of the research that explain the effect of the work ethic on the performance with the conclusions that work ethic does not have a significant effect on performance (Attwell, 1998), Maglino (1998), Sabir et al (2012). On the other research conducted by Enz (1988) and Amason (1996) in Maglino (1998) explains that there is no relationship between work ethics with employee performance. Besides, there is no research that explain a significant influence of MWEP on task performance. From those findings, it can be concluded that there have been research gaps. The purpose of this study is to develop a model that can explain the role of affective commitment in mediating the effect of Multidimensional Work Ethic Profile (MWEP) on the task performance of lecturers at the College. While the benefits of this research is to provide input to the leaders of College in establishing a work ethic that can increase affective commitment, which in turn can improve the task performance of lecturers.

### **Research Model**

The model in this study is based on the perspective of theory and previous research used to describe the relationship among Multidimensional Work Ethic Profile (MWEP) dimensions on the task performance, with affective commitment as a mediating variable. The research model presented in the figure below:





Picture. 1  
Research Model

## Literature Review and Hypothesis

### 1. Multidimensional Work Ethic and Task Performance

The results of the research conducted by Sparrow et al. (2010) explain that work ethic, which in that study is one of the dimensions of work value, has a significant effect on organizational citizenship behavior (OCB), but there is no significant effect on the task performance. In another study conducted by Meriac (2012), it can be concluded that some dimensions of Multidimensional Work Ethic Profile (MWEP) have an effect on academic performance.

The above description leads to the following hypothesis:

H1: The dimensions of MWEP (centrality of work, delay of gratification, hard work, leisure, morality, self-reliance, wasted time) have direct effect on the task performance of the lecturers at the College.

### 2. Multidimensional Work Ethics and Affective Commitment

Rokhman (2010) investigates the influence of Islamic work ethic on organizational commitment and employee's movement. In this study, it was found that the Islam work ethic has a positive effect on organizational commitment and does not affect the employee's movement. Meanwhile, Hudspets (2003), finds that parts of MWEP have an effect on organizational commitment. Obalola (2012) conducts a study on the relationship between corporate ethical values on organizational commitment. It is concluded that there is a positive influence on the company ethical values on organizational commitment. Saleem and Agil (2012) conduct a study on the relationship Islamic individual's ethic on organizational commitment. The results confirmed that there is a positive relationship between Islamic individual's ethics and three dimensions of commitment. Specifically,

normative commitment correlates highly with Islamic individuals' ethics than either affective and continuance commitment

The above description leads to the following hypothesis:

H2: The dimensions of MWEP (centrality of work, delay of gratification, hard work, leisure, morality, self-reliance, wasted time) have an effect on affective commitment of the lecturers at the College.

### 3. Affective Commitment and Tasks Performance

Organizational commitment is a person's level of strength to identify, to engage, and to adhere to the organization (Demirbag et al. 2012). Allen & Meyer (1990) distinguish organizational commitment into three components, namely: affective commitment, continuance commitment and normative commitment.

Angle and Lawson (1993) describe that affective commitment is emotional involvement in identifying, being involved in the organization, while the normative commitment is employees' obliged feeling to join the organization.

Khan et al. (2010) investigate the influence of organizational commitment on performance. In this study, it was used three components measuring organizational commitment from Allen & Meyer (1990). Those three components have a positive influence on employee performance.

Chen, et al. (2007) in their study mention that affective commitment has a positive effect on performance and affective commitment mediates the influence of human resource practices on performance.

Luthans (1996) states that many research results support the hypothesis that there is the influence of organizational commitment on performance, as well as the negative effect on the organizational commitment, the desire to move and work absent.

The above description leads to the following hypothesis:

H3: Affective commitment has an effect on the task performance of the lecturers at the College.

### 4. Mediation Role of Affective Commitment

Researches on the role of organizational commitment as mediator variables have been carried out by many researchers. One of them includes organizational commitment which mediates the influence of ethical supervisor leadership on OCB (Anwar, et al. 2012) and Islamic work ethics and attitude toward organizational change (Yousef, 2000c)

Based on Yousef's research (1998); and Rokhman (2010), it is explained that there is influence of work ethic on organizational commitment. While Khan, et al (2010) explain that there is influence of organizational commitment on job performance. Yu Tseng and Shyug Lee's research (2011) shows that organizational commitment mediates the influence of personality characteristics of employees on the task performance.

The above description leads to the following hypothesis:

H4: Affective commitment mediates the effect of the dimensions of MWEP (centrality of work, delay of gratification, hard work, leisure, morality, self-reliance, wasted time) on the task performance of lecturers at the College.

### Research Methods

The research was conducted for lecturers at the College in Central Java. In accordance with the purpose of research and formulation of the research problems, this research is the correlational research. It evaluates and reveals the influence of independent variables (MWEP) with the dependent variable (task performance) .

The population in this study was the tenured lecturers at 43 College in Central Java. Samples in this study, based on Likelihood Estimation (MLE) sample size guidelines, maximum is a sample of at least 200 sample respondents. If the response rate estimated at 50%, then the numbers of samples taken and used as respondents were 400 lecturers. From the 400 questionnaires distributed to College lecturers, only 304 lecturers have delivered to return questionnaires .

Working definitions of variables in this study are the following:

1. **The independent variables** are 7 (seven) dimension of MWEP that were developed by Miller et al. (2002) which consists of:
  - a). Centrality of work  
The definition of the centrality of work in this research is the orientation of the lecturers on the task or job. The indicators are as follows: a belief that in the work intended for the benefit of its work, satisfied feeling with the time spent working, the desire to keep working despite being rich, the desire to always keep working. the measurement of centrality of work dimensional measurements used 10 item questions developed by Miller et al. (2002)
  - b) Delay of gratification  
What is meant by delay of gratification in this study is the expectation of rewards or payment which will be acquired by the lecturers in the future as the implementation results of their duties. The indicators are as follows: the desire to realize something that is desired, future orientation in waiting for the payment. Delay of gratification dimensional measurements used 7 item questions developed by Miller et al. (2002).
  - c). Hard work  
The meaning of hard work in this study is a lecturer's sincerity in carrying out their duties. The indicator is the willingness to work hard, the belief that success can be achieved from a result of hard work. Hard work dimensional measurements used 10 items of questions developed by Miller et al. (2002).
  - d). Leisure  
The meaning of leisure in this study is lecturers' sparetime not to conduct their duty. The indicator is their behavior to prefer spare time. Considering important activity which is unrelated to work. Leisure dimensional measurements used 10 item questions developed by Miller et al. (2002).
  - e). Morality  
The definition of morality in this study is a conviction or belief that a teacher can raise awareness of the importance of morals or ethics in carrying out its mission. The indicators are as follows: a sense of responsibility, not taking something that is not their right, not judging before seeing fact, not lying, not stealing, treating others like themselves, fair and honest in interacting with others. Morality dimensional measurements used 10 item questions developed by Miller et al. (2002).
  - f). Self-reliance  
The definition of self-reliance in this study is lecturers' independence in completing the main task. The indicators are self-confidence, not depending on others, and relying on its own capabilities. Self-reliance dimensional measurements used 10 item questions developed by Miller et al. (2002).
  - g). Wasted time  
The definition of wasted time in this study is a lecturer with their willingness using the time to carry out their duties. The indicators are active and productive attitude in the use of time, always busy working and avoid wasted time. Wasted time dimensional measurements used 8 item questions developed by Miller et al. (2002).

## **2. Mediation variable in this research is affective commitment.**

The definition of affective commitment in this study is an attitude that shows the relationship between lecturers psychologically with the College, so a lecturer will be very loyal to the college and will try to involve deeply in the activity of college and professionally as a lecturer at that college. The indicators are as follows: feeling happy to have a career as a lecturer, feeling to be part and becoming a family at work, making the workplace gives importance meaning in his or her life, feeling they own workplace, there is emotional attachment to workplace. Measurement of affective commitment variable used 8 item questions developed by Allen & Meyer (1990).

## **3. The dependent variable in this study is the task performance**

The definition of task performance in this study is the assessment of skills or expertise of a lecturer as an official or as someone who has duty to carry out an activity which is formally known as part of the main task as a lecturer. The indicator is the fulfillment of the criteria of the competence and performance, able to complete the task based on his or her expertise and competence, achievement of the objectives set by his or her superiors, perform his or her duties well, responsible for his or her duties, able to be given a higher role. Task performance variable measurement used seven items of questions developed by Sparrow et al. (2010).

Technique of analysis data was conducted by using validity test with the technique of confirmatory factor analysis (CFA) and reliability tests with Cronbach alpha technique. Level of significance used in this research was 5%. After analysis data was done, assumption model test was conducted in the form of outlier evaluation, normality of the data, and multicollinearity evaluation. Further steps, hypothesis test was conducted using SEM (Structural Equation Modeling) analysis technique in the form of analysis of the conformity and analysis of path coefficients which were done by using software Amos.16.

## **Results and Discussion**

### **1. The Research Results of Instruments Test**

From the questionnaires, which were tested of its validity using software Amos.16.0, it was obtained that from 80 items of questions, 42 items declared valid question. The reliability test results show that all the variables declared reliable because it has cronbach alpha values  $\geq 0.6$ .

### **2. The Results of Descriptive Analysis**

The descriptive analysis of the results, it was found that viewed from types of gender, the majority of respondents are male. The age of the majority respondents are 34 up to 42 years, the majority of the marital status of the respondents are married and the last education level majority of respondents are Masters .

### **3. Hypothesis Test Results**

Hypothesis test results can be seen from the path coefficient analysis which shows the significant scale of regression weight. From the analysis, it is known that from 15 paths analyzed, there are 5 paths show a significant effect. It can be seen from the probability value ( $\rho$ ) which indicates the significance level of hypothesis test is smaller ( $<$ ) from 5% ( 0.05), while 10 other paths show no significant effect due to the probability value ( $p$ ) which indicates the significance level of hypothesis test is greater or equal to ( $\geq$ ) 5% (0.05). Path coefficient analysis results in more detail can be seen in Table 3 as follows:

**Table 3. Regression Weight**

Mediating and Dependent Variable	Independent and Mediating Variable	Estimate	SE	CR	P
Affective Commitment	Centrality of Work	.166	.127	1.318	.189
Affective Commitment	Delay of Gratification	.194	.084	2.314	.021
Affective Commitment	Hard Work	.180	.105	1.173	.087
Affective Commitment	Leisure	.182	.087	2.089	.037
Affective Commitment	Morality	.422	.082	2.319	.020
Affective Commitment	Self-Reliance	-.155	.077	-1.586	.113
Affective Commitment	Wasted Time	-.149	.073	-1.862	.069

Mediating and Dependent Variable	Independent and Mediating Variable	Estimate	SE	CR	P
Task Performance	Centrality of Work	-.110	.128	-.863	.388
Task Performance	Delay of Gratification	.037	.087	.423	.672
Task Performance	Hard Work	.230	.109	2.108	..035
Task Performance	Leisure	-.072	.088	-.819	.413
Task Performance	Morality	.070	.070	.413	.679
Task Performance	Self-Reliance	.037	.074	.502	.615
Task Performance	Wasted Time	.202	.078	1.131	.258

Task Performance	Affective	.251	.0	2.9	.0
	Commitment		8	45	0
			5		3

1. **The result of the hypothesis test 1:** Direct effect of MWEP dimensions on the task performance.

From the results of hypothesis testing 1, that is direct influence of MWEP dimensions on the task performance can be explained as follows:

- a. Centrality of work, delay of gratification, leisure, morality, self-reliance, and wasted time dimensions do not have direct effect on the task performance.

From the results of hypothesis test, it can be explained as follows:

- 1). The lecturer who has centrality of work does not always have a good performance. It can occur that someone who has orientation to work but the performance remains poor. In fact, according to Van Ness et al. (2010) and Meriac et al. (2012), centrality of work is more directly related to the organizational commitment. It is not related to the performance.
- 2). When a lecturer hopes to get reward or payment, it does not have direct effect on performance, but it will be preceded by how strongly the attitude of the lecturer's commitment to the institution Meriac et al. (2012)
- 3). The leisure dimension has a negative effect on the task performance. It means that the more time that is leisure by a lecturer, then the performance will decrease. Theoretically it can be understood, then according to the value of religious ethics, leisure is bad actions as suggested by Ali (1987). Also according to Miller et al (2002) attitude like leisure indicates that the lecturer does not like the job, so if ones does not like the job so that the task performance will be low.
- 4). A lecturer who has good morals and ethics is not always has a good task performance if the lecturer does not have the skills, working capability and good competency. According Meriac et al (2012), morality do not have a direct influence on task performance but have a direct influence on affective commitment and work motivation.
- 5). The performance of a teacher can be further increased if the lecturer is working as a team work because they could synergize all potential and capabilities with other lecturers so that it can be able to achieve maximum performance. A lecturer, who works independently, performs well initially but when the job is increasingly heavy so the performance will actually decrease. In contrast, if a lecturer worked as a team, they will motivate each other so as to keep the rhythm of work and performance.
- 6). Theoretically, well usage of the time by lecturers will improve their performance. It can happen if the lecturer has a target of achievement and good working capacity. Lecturers should understand design and duties of their job well so that there will not be so many mistakes in carrying out the work. Besides, the lecturer must quickly evaluate and give feedback on their work so that it can immediately improve their performance. This is suitable with Walker's opinion (1992) which calls that performance is as a behavioral view of performance, with the explanation that the performance is determined by four main factors, namely (1) the objectives to be achieved, (2) the capacity of individuals, (3) design work, and (4) feedback.

- b. From the results of hypothesis test, hard work dimension has direct and significant effect on the task performance. This result means that increasing the hard work of

lecturers in carrying out the tasks given by the leaders then also increases the task performance of the lecturers. The result of this hypothesis is supported by Furnham (1982) through PWE concept stating that hard work and perseverance is an attitude that must be realized in order to obtain maximum work. This is further reinforced by the concept of hard work in the CWE proposed by Overell (2005) which explains that in the CWE work hard is put as a kindness. In the CWE concept, people who work hard makes them have a high degree. Through hard-working, people can fulfill their rights and obligations. While Ali (1987) further strengthen the concept of IWE by stating that in the Qur'an, humans are recommended to have skills and technology, and will get a reward for anyone who works hard to fulfill their needs. The opinion is emphasized by Meriac, et al. (2012), which states that the hard work reflects a person's attempt to achieve the desired goal.

**2. The results of hypothesis testing 2:** The Effect of MWEP dimensions on affective commitment.

From the test results of hypothesis 2, the influence of MWEP dimensions toward affective commitment can be explained as follows:

Centrality of work, Delay of gratification, Leisure, and Morality dimensions have effect on affective commitment. From the results of hypothesis test, it can be explained as follows:

1). The high orientation at work of lecturers will not necessarily increase their affective commitment. This is in accordance with the opinion expressed by Van Ness et al. (2010) which states that centrality of work not yet showing one's commitment to the place where the individual works. Empirical conditions proves that if a lecturer increasingly focused on his duties as a lecturer, they are still possible out of the College where they work, due to the dissatisfaction income that the lecturers get so that they have many part-time jobs or activities outside their College. This condition illustrates the low commitment of the lecturers.

2). The waiting time will affect the commitment given. Wait for rewards often able to push the affective commitment. It is necessary for the manager of College not to delay too long for compensation financially and non-financially

3). The more time that is owned and used by lecturers for their productive works, they will demonstrate more affective commitment. This is in accordance with the opinion expressed by Meriac, et al. (2012) which states that the choice to keep working or enjoying leisure time indicates the level of one's leisure. A person with a high level of leisure who prefers to relieve themselves from work or come to work without preparation, their achievement result will be bad. Someone who has a high level of leisure will not be satisfied with their jobs and show low commitment.

The results are consistent also with various theories of work ethic, in the concept of PWE proposed by Weber (1958), it is explained that the attitude laziness is a negative attitude. In the concept of IWE, Ali (1987) explains that Islam is strongly opposed to be lazy .

4). There is an influence of morality dimension on affective commitment. The result is consistent with the results of research conducted by Koh & Boo (2004) which concludes that there is an influence of organizational ethics on organizational commitment. It is also consistent with the research result of Elizur (1996), Elizur & Koslowsky (2001) which show that there is influence of ethical values on organizational commitment. From the results of this hypothesis, it can be interpreted that the better morality of the lecturers can strength of their affective commitment. Theoretically, it means that someone who has ethical and moral values will show a good attitude and behavior as well. A lecturer who has good morals and ethics would carry out the duties



as a lecturer properly. The lecturer will refrain from unethical behavior, both related to personal and related to his job as a lecturer. Lecturers who want to do plagiarism in scientific papers, or any other ethical violations will result in bad image of the College.

b. Hard work, Self-reliance and Wasted time dimensions do not have effect on affective commitment.

From the results of hypothesis test, it can be explained as follows:

1). Theoretically, the lecturers' hard work can influence affective commitment, but the results of this study indicate different things. It could happen if the lecturer works hard for the benefit of himself and does not think any further for the sake of the College. It could even happen that a lecturer with his status as a faculty member in his College actually takes advantage of their College name for his personal benefit

2). The higher level of a lecturer's self-reliance in duty further demonstrates the high affective commitment of the lecturer. Besides, a lecturer who has high self-reliance demonstrates professionalism and competence in implementing the duties. Result of this analysis is supported by a variety of opinions and the results of a study conducted by (Meriac, et al., 2012) which explains that a person who has high level of self-reliance gives a strong belief that people should not rely on others. This opinion is also reinforced by (Van Ness et al., 2010) which suggests that self-reliance becomes important in individuals

3). Wasted time has two sides of the circumstances as presented by Vannes et al. (2010). Wasted time that refers to a continuum with one hand represent a high commitment in time management to maximize productivity and on the other side characterizes low commitment on the management of time when the time is not used with wisely. The more a person can prepare his time to work on the task at hand, then the person will be more productive and satisfied with the work (Miller et al., 2002). From the theory stated by Miller, then surely more wasted time has correlation with labor productivity and job satisfaction.

3. **The results of hypothesis testing 3:** Influence of affective commitment on the task performance.

Based on the results of hypothesis testing, it can be explained that the affective commitment has an effect on the task performance. From the hypothesis test result, it shows that affective commitment has effect on the task performance of the lecturers. The analysis results is different with the results of the study conducted by (Scotter, 2000), Muse & Stamper (2007) which states that there is no influence of affective commitment on the task performance. However, the hypothesis test results are consistent with the results of research Khan et al. (2010) who find that there is influence of affective commitment on the task performance. This finding is in line with the results of research conducted by Narimawati (2007) to the private College lecturers in Banten and West Java, which concludes that there is influence of organizational commitment on the performance of lecturers.

4. **The Result of hypothesis test 4:** The mediation role of affective commitment in the effect of MWEP dimensions on the task performance.

Theoretically if the independent variables influence on the mediating variables and the mediating variables influence on the dependent variable significantly, it means that the mediating variables can actually mediate the effect of independent variables on the dependent variables. If either not have significant effect, these variables will not mediate the effect of independent variables on the dependent variable (Baron & Kenny, 1986; Shaver, 2005).

From the hypothesis test results, it can be obtained that the affective commitment mediates the effect of MWEP dimensions partly on the task performance of the lecturers.

The results are consistent with the results of research conducted by Anwar, et al. (2012) which states that the affective commitment mediates the influence of supervisor's ethical leadership on citizenship behavior. This finding is in line with the results of research conducted by Yeh and Chien (2012) which states that organizational commitment mediates the influence of leadership type on job performance.

## **Conclusion, Suggestion, Limitation And recommendation**

### **1. Conclusion**

Lecturers need to continue to hard work in improving their competence in a way to equip themselves in the form of education and training, improve their academic level with follow-up studies, collect credit points for promotion and academic functional office so that it can improve the performance of their duties. Others, the lecturers need to use the time effectively to develop capabilities in the learning process, to conduct research and community service, to write textbooks, to write scientific articles on accredited scientific journals and a variety of activities that can improve competence and professionalism as a lecturer that will have an impact on improving the performance of their duties as a lecturer. The lecturers must prove their affective commitment to improve their task performance in the form of improving the quality of College. The longer the period of employment, it will be more productive in the guiding and teaching students, conducting research and community service.

### **2. Suggestion**

College head has to give the motivation to lecturers to have good work ethics so that can improve the affective commitment the lecturers and able to improve their performance.

### **3. Limitations and future Research**

Similar to any other empirical study, this research has its limitations. The first limitation that attitude measurement using a Likert scale submitted in the form of questionnaires will be possibility of response bias affecting. So that there is a possibility of the happening of diffraction between answer questionnaire and the reality.

### **4. Recommendations**

- a. The need for further research on ethical dimensions of work MWEP associated with various behavioral variables in addition to job satisfaction, affective commitment and task performance
- b. Need to increase the research intensity on the work ethic of the organization/institution. This is important because ethical problem is a fundamental problem in the life individually, organizational and social.

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## DETERMINANT OF INTENTION OF E-COMMERCE ADOPTION AND STRATEGIC ORIENTATION AS A MODERATING VARIABLE IN FAMILY BUSINESS

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### Abstract

This study examines and analyzes the determinant of intentions of e-commerce adoption, namely relative advantages, organizational readiness, and competitive pressures with strategic orientation as a moderating variable. The sample of this study is the family business Small and Medium-sized Enterprises (SMEs) performer in the Special Region of Yogyakarta (Daerah Istimewa Yogyakarta - DIY) area, which consist of 101 respondents. The sampling method used is nonprobability sampling, while the technique used is purposive sampling. The analysis of data is using moderated regression analysis. Based on the data analysis, the results are: 1) relative advantages, organizational readiness, and competitive pressures affecting on the intention of e-commerce adoption; 2) strategic orientation moderates the effect of competitive pressures toward the intention of e-commerce adoption.

**Keywords:** *TOE, E-Commerce, family business, SMEs*

### Introduction

The development of the technology, including the internet, becomes one of many strategic pathways in the process of industry revolution. This includes electronically business revolution or e-business (Amit and Zott, 2001). Several studies provide evidences that internet is suspected to be revolutionary modifier factor in the traditional small business practice (Daniel et al, 2002; Geiger and Martin 1999; Siu 2002; Levenburg and Magal 2004).

Based on the data obtained from Indonesian Internet Provider Association (APJI - Asosiasi Penyelenggara Jasa Internet Indonesia), on the 2013 the Indonesian internet user in business sector amounted to 66.77% (APJII, 2013). It provides information that more than half of business people have been using the internet technology. The industrial sectors consist of many sectors such as processing industry, hospitality and restaurant industry. Indonesian economic widely supported by the small and medium-sized enterprises (SMEs) which has more than 52 units in the year of 2011 and giving contribution to the Gross Domestic Product (GDP) in the amount of 60% (Syuhada and Gambetta, 2013). The number of contribution of SMEs shows that the developments of SMEs are very fundamental. However, there are many obstacles faced by the SMEs, among other are marketing weakness, pressures from foreign product, the lack of articulation of the existence of such products on the market (Syuhada, 2013)

One example of internet usage in conduction business is e-commerce. The definition of e-commerce has a lot variety, in this study referring to the definition of Turban *et al.*, (2008) e-commerce is a purchasing, selling or exchange of a product, information and services through the computer network, including the internet. It cannot be denied that e-commerce has changed many things in business operation. The changes mentioned are not only in the way of people selling, buying and doing an agreement with the consumer or suppliers, but also changed the perspective of business itself. The changes give a message that in order to survive in the new business model, business people has to be forced to adopt the technology (Rahayu and Day, 2015).

E-commerce is not a new technology. An adaptation of e-commerce by the business people have been started in the year of 1995 in the very simple form (Moertini, 2012). Based on APJII from the total numbers of companies that used internet, just 18% of them are SMEs, and from that amount there are family businesses. SMEs can be categorized into two types, based on the business type that is family business and non-family business (Gabrielsson and Huse, 2005). Family business is a company which its ownership is fully owned / managed by one or more family members. Meanwhile, non-family businesses are owned by two or more people, where among them there were not any kinship (Grabrilsson and Huse, 2005). Family business often to be criticized for failing to invest in the new business, often to avoid risk, and resisting changes especially in the technology utilization (Eddleston *et al.*, 2008). This case shows the need for further study regarding various issues that related with the adoption of the internet technology in the family business. Several researchers (Auger and Gallagher 1997; Thong and Yap 1995; Zank and Vokurka 2003) revealed that partly of family business are unwilling to do an adoption of e-business, whereas the rests are willing to do the adoption naturally. Then the question arises, why partly of family business choose to adopt e-commerce and the rests of it do not. Even though, they are facing relatively similar market challenge, thus, it still needs to be examined until now (Boumediene and Kawalek, 2008).

Based on the arguments above, this study is conducted with the aim to see the important factors that affect the intention of e-commerce adoption in family business SMEs. SMEs are interesting to be studied because the e-commerce adoption is usually carried out by large-scale enterprises, whereas SMEs are still reluctant to adopt it (Auger and Gallagher 1997; Thong and Yap 1995; Zank and Vokurka 2003). The benefits of the internet by providing location and time flexibility and ease of communication will help small companies to attain efficiency and cost saving. Previously, this only can be found on large scale enterprises (Iacovou *et al.* 1995; Longenecker *et al.* 1997). Therefore, with the existence of e-commerce, SMEs are also alleged to be able to enjoy its benefits.

Research about the adoption of e-commerce can be explained with the framework developed by Tornatzky and Fleischer (1990). The framework is known as Technology-Organization-Environment (TOE). TOE framework considered to be an integrative framework which provides a basic holistic theory and guidance in the study of information technology adoption / diffusion. In this framework, there are three aspects of the company which affect the adoption of technological innovations; technological aspects, organizational aspects, and environmental aspects. Technological aspects are related to technology that is relevant with the company. The organizational aspects are related to the resources of the company, which is indicated by the size of the company and the complexity of the managerial structure of the company. Afterwards, the environmental aspects refer to the other parties around the company, such as competitor, suppliers, and the government (Zhu *et al.*, 2002).

TOE theory has also been tested and validated by various studies (such as Ramdani *et al.* 2013, Olivera and Martins 2010, Zhu *et al.*, 2003, Premkumar and Robert 1999, Iacovou *et al.* 1995). Moreover, TOE framework is considered as a generic theory from the adoption / diffusion of technology (Zhu *et al.* 2003). The identification of the factors used in the TOE framework shows that there are several inconsistency, thus providing a gap for the further research. This inconsistency are 1) relative advantage effect toward the intention of the technology adoption, several studies showed that relative advantage has an effect towards the intention for technology adoption (Rahayu & Day, 2015; Wang & Ahmed, 2009; Iacovou *et al.*, 1995), but the research conducted by Huy *et al.*, (2012) shows that relative advantage has no effect toward the intention of technology adoption; 2) organizational readiness effect toward the intention for technology adoption, the research

conducted by Huy *et al.*, (2012), Ramdani *et al.*, (2013), and the research conducted by Iacovou *et al.*, (1995) shows that organizational readiness has an effect toward the intention for technology adoption, whereas the research conducted by Wang & Ahmed (2009) shows that organizational readiness has no effect toward the intention for technology adoption; 3) competitive pressure effect toward the intention for technology adoption, several researches show that competitive pressure has a significant effect toward the intention for technology adoption (Wang & Ahmed, 2009; Iacovou *et al.*, 1995), and several researches also showed an insignificant result (Jeon *et al.*, 2006; Ramdani *et al.*, 2009).

An argument that can be offered for the inconsistency in result finding is by adding another variable as the moderation (Mathieu & Zajac, 1990). The research conducted by Wang & Ahmed (2009) has found moderation factors in the context of the TOE framework that is the orientation of business strategy used by the person who running a family business. The orientation of strategy becoming a factor that needs to be considered because the characteristic of the family business that is idiosyncratic. The business orientation in the family business shows its uniqueness comparing with the companies that has value maximizing orientation in professional business management (Sharma *et al.*, 1996).

This study will be conducted by using SMEs in the Special Region of Yogyakarta (Daerah Istimewa Yogyakarta - DIY) area as a research object. SMEs in DIY is developing quite well. This is supported by the statement of Baswir (1998) who states that industrial enterprises in Yogyakarta area are mainly SMEs. The DIY Region is one of many cities with creative industries, thus this city is appropriate to be the research object. This business type has a high opportunity to adopt e-commerce.

## Literature Review and Hypothesis Development

### 1. TOE (Technology – Organisation - Environment)

TOE framework that developed by Tornatzy and Fleischer (1990) is considered as an integrative framework that gives holistic basic theory for researches in the adoption or diffusion of Information and Communication Technology (ICT). TOE, typically evaluates the various technology that is related with the organization and environmental factors that will simplify the process of adoption or diffusion (Ramdani *et al.*, 2013). TOE has been widely used to describe the process of adoption of several innovation including the organizational system (Mishra *et al.*, 2007), and *e-business* (Zhu *et al.*, 2006). A meta-analysis of 75 researches that has been done by Tornatzky and Klein (1982) provides 10 of the most frequently used characteristic that is related to adoption process, namely relative advantage, complexity, communicability, divisibility, cost, profitability, compatibility, social approval, triability and observability.

TOE framework is consistent with the opinion of Rogers (1983) that discuss about diffusion of innovation (DOI) theory. This theory is also focused on the characteristics of organization both internally and externally, as well as the characteristics of technology as the diffusion stimulant of new technology. Many studies that have been conducted identify technology as an important factor and key to achieve the successful adoption of information system (Crook and Kumar, 1998; Grover, 1993; Zhu et al. 2002; Shaw and Chang, 2005).

The assumption adopted in this study is technology is an adoption driver, thus, the competency of technology will positively affect the intention of e-commerce adoption process. The companies that have high capability will reflect company readiness to apply e-commerce adoption. Factor that identified as inconsistent in technology context is relative advantage. Rogers (1983) defines relative advantage as relative benefit from an

innovation which is considered as a better idea. In relation with technology, Rogers (1983) also provides an explanation that relative advantage is a degree where technological factor is perceived to generate greater benefit for company. The assumption of benefit refers to the return and possible benefits that will be earned from e-commerce adoption in organization (Tiago and Maria, 2010; Iacovou *et al.*, 1995). Several researchers use this variable and get significant result (Premkumar, G and Robert, M, 1999; Looi, 2005; To and Ngai, 2006; Al-qirim, 2007; Sparling *et al.*, 2007; Wang and Ahmed, 2009, Ramdani, *et al.*, 2009; Scupola, 2009; Oliveira and Martin, 2010; Ghobakhlo *et al.*, 2011; Gangwar *et al.*, 2015). From the analysis above, the hypothesis proposed is:

H<sub>1</sub>: relative advantage has a significant positive effect on the intention of e-commerce adoption in family business

In organization context, Zhu *et al.*, (2003) measure organizational readiness with firm scope and firm size. Firm scope strongly linked with company ability to invest in the information technology (Dewan *et al.*, 1998; Teece, 1997). Firm scope will encourage company to adopt e-business. This condition will place firm scope as predictor in the process of e-commerce adoption, with an assumption of, the more comprehensive the firm scope thus the company internal coordination expense will be more expensive (Gurbaxani and Whang, 1991), inventory and material expense also will be more expensive (Chopra and Meindl, 2001). Next assumption is related with e-commerce adoption, company with wider firm scope will have opportunity to get higher benefit with e-commerce adoption, compared to the traditional business process (Levenburg *et al.*, 2006). Company size (firm size) consistently known as a factor that influences e-commerce adoption (Damanpour, 1992). Related with e-commerce adoption, big companies have several benefits or advantages compared with small companies. The advantages are, big companies have more resource to simplify this adoption, more likely to achieve economies of scale, and it has bargaining power with business partner to adopt the technology. This is in line with the argument of Iacovou *et al.*, (1995) who states that organizational readiness is related with financial level and technological resources from company. Both factors are necessary to be considered because small companies tend to get lack and weak resources, which is needed for doing the adoption. This, in turn will restrict the capability to receive benefit from technology. Thus, the next hypothesis is:

H<sub>2</sub>: organization readiness has a significant positive effect on the intention of e-commerce adoption in family business

Furthermore in environment context, Zhu *et al.*, (2003) identify company's environmental aspect indicators that can affect e-commerce adoption that are consumer readiness, competitive pressure, and lack of trading partner readiness. In this research, a factor that will be tested is competitive pressure. This is due to the literature review result which shows that the result of previous research on this variable is remains inconsistent.

The level of competitive pressure is a condition of the level of competition that acts as the adoption driver (Crook and Kumar, 1998; Grover, 1993; Zhu *et al.*, 2003; Iacovou, *et al.*, 1995). This pressure is derived from competitors or companies' external factor, which drives companies to adopt new technology in order to survive in business. The next indicator is the lack of business partner readiness or trading partner readiness. According to Zhu *et al.*, (2003), company that decides to apply e-commerce adoption must be supported by business partner readiness in companies' value chain to apply such adoption too. Thus, the system that is developed by the companies will be compatible with its business partner's system. This provides a conception that the readiness or unreadiness of business partner will affect companies' e-commerce adoption process. Therefore, the next hypothesis is:



H<sub>3</sub>: competitive pressure has a significant positive effect on the intention of e-commerce adoption in family business

Family business' strategic orientation

The definition for strategic orientation is a company's strategy that aims for creating appropriate behavior in order to achieve excellent performance (Zhou *et al.*, 2005). Family business often shows idiosyncratic character due to the existence of family relationship and business (Sharma *et al.*, 1996). Idiosyncratic character will give different orientation of family business strategy compared to professionally managed company. Family business basically can be classified based on organizational value such as family-centered business or business-centered families (Singer and Donohu, 1992). Moreover, family business is more conservative and reluctant to change (Hall *et al.*, 2001). The classification of family business is also expressed by Birley *et al.*, (1999), that categorized into 3 different clusters: (1) Family rules group (family oriented business) where business decisions always linked with the existence of family, family possession protection and safeguarding the reputation of family becomes important thing, (2) The Family out group (business oriented company) that is opposite of Family rules group, where the focus of this family business focused on business activities. This type of orientation is concerned about emerging issues such as the adoption of new technology, business strategy growth, even opening up for external investors, and (3) The Family-Business Jugglers (company with balanced orientation), this orientation does not clearly articulate on which side of orientation the business lean on. The characters of these orientations are supposed to be the important factors that affect the decision taken by family business to apply the e-commerce adoption or not.

This company's strategy also gives a framework for decision making and it will affect the behavior that will have an impact on innovation (Miles and Snow, 1978). According to Auger *et al.*, (2003) entrepreneur companies who have a focus on the future, will have a more proactive and aggressive, passionate pursuit toward new opportunities, and more courageous to take a risk to find innovative solution in facing the challenges. In the literatures about SMEs, several study found that companies with the entrepreneur strategy will experience sales growth (Freel, 2000; Shirk, 2003), have more positive attitudes toward the development of internet, and will be a first mover in e-business (Auger *et al.*, 2003).

Strategic orientation on family business provides a probability to moderate relationship between relative advantage and e-commerce adoption intention. This is based on tendency towards companies' orientation. Based on the clustering such as proposed by Birley *et al.*, (1999), business-oriented companies will tend to prioritize some initiative affairs, which is related to the business. That initiative can be in the form of the technology utilization, with awareness that this adoption would give benefit for business. The benefits earned may include the reduction of transaction cost, cash flow improvement, inventory cost reduction, and so forth. Therefore it will create competitive advantage. On the contrary, family-oriented business, tend to prioritize family's welfare, while other problems that arises related to expense and other risk are ignored (Wang and Ahmed, 1999). Such orientation tends to make the adoption activity get delayed, until in a certain point where the owner is convinced about the benefit of technology's adoption.

There is also a probability that strategic orientation could interacts with organizational readiness variable in the adoption process. Business-oriented companies tend to have more support from organizational side. It starts with better employees support from the labor and managerial personnel. This is because right from the recruitment process employees are selected based on their ability and the conformity with the job, instead of family closeness. This orientation will simplify the development of technology.

In contrast, family-oriented companies will hire employee base on closeness of the family and not based on competency. Whereas, according to Grable and Lytton (1999) education level and competence become an important discriminant for business decision making.

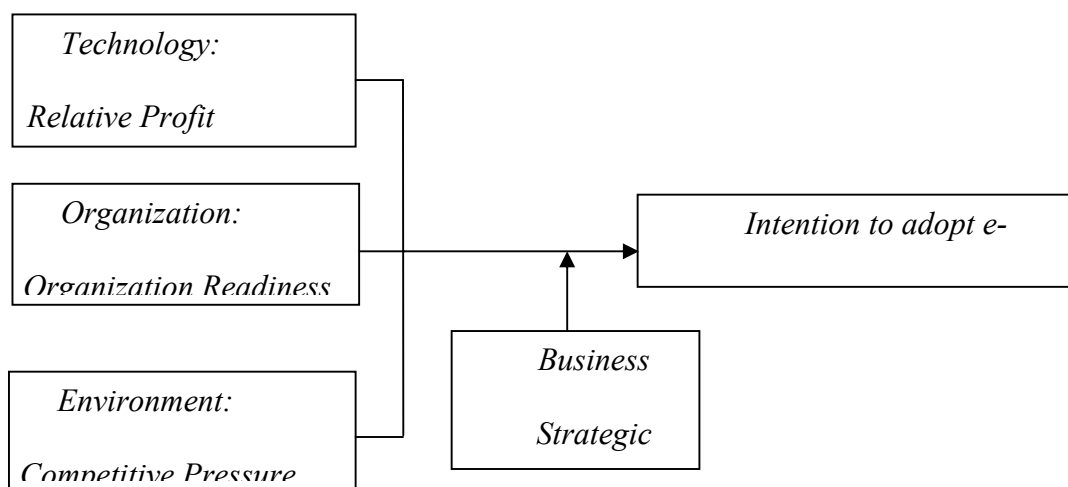
Competitive pressure can also interact with the strategic orientation of family business. Orientation that is centered toward family or business affects the ability to receive pressure from the outside party. Orientation that centered on family tends to have limited network and very centered on the owner (Wang et al., 2004). Concentration of ownership creates an information constraint that related with the limited and incomprehensive competitive pressure. Thus, the analysis taken to solve problems tends to be unsatisfied and centralistic toward the owner (Casson, 2005). This condition will create difficulty for the company to adopt new technology, although in fact there is external pressure that creates demand on the technological change. In contrast, company with business as its main orientation will give more priority for the transformation in order to maximize profit (Drozdow and Carrol, 1997).

With the explanations on the above theories' perspective, thus the proposed hypotheses are:

H<sub>4</sub>: strategic orientation of family business moderates the effect of relative advantages toward the intention of e-commerce adoption.

H<sub>5</sub>: strategic orientation of family business moderates the effect of organization readiness toward intention of e-commerce adoption.

H<sub>6</sub>: strategic orientation of family business moderates the effect of competitive pressure toward intention of e-commerce adoption.



**Figure 1. Research Design**

## Research Methods

### 1. Sample

The sample in this study are the owner of family businesses of Small Medium Enterprises in Yogyakarta, or 101 respondents.

### 2. Variable Measurement

#### a. Intention to adopt e-commerce adoption

Intention to adopt e-commerce is measured with 3 statements which are adopted from Ajzen (2006).

#### b. Relative Profit

The variable relative profit is measured using 4 items, which are adopted from Premkumar and Robert (1999).

**c. Organization Readiness**

The organization readiness is measured using 9 items, which are adopted from Wang and Ahmed (2009).

**d. Competitive Pressure**

Competitive Pressure is measured using 4 items which are adopted by Zhu et al. (2003) and Turban (2004).

**e. Strategic Orientation**

The measurement of Strategic Orientation is adopted from Wang and Ahmed (2009). The variable is measured by providing a simple statement about two companies condition. For example, A-is a Family-Oriented business and B-is a Business-Oriented firm. Respondents were asked to give a value distribution-of 100 points between A and B companies based on respondent's perspective on their company condition compared to the condition of company-A and B that had been described. It's prohibited to give a same value for company A and B. the measurement of Family-oriented business Strategy is performed using dummy, 0 for Family-Oriented business and 1 for Business-oriented firm.

**Result**

**1. Research Instrument Test**

Validity testing is performed to four main variables in this research, which are relative profit, organization readiness, competitive pressure, and intention to adopt e-commerce. Meanwhile the strategy orientation variable could not be tested because it is an "observe variable" not a "latent variable" which needs an indicator.

Based on the result of validity testing, there are 6 non-valid items that will be excluded from the analysis, 1 item from relative profit statement, 3 items from organization readiness statements, and 2 items from competitive pressure statements.

From the reliability testing, the results are: the reliability of relative profit is 0.610; the reliability of organization readiness is 0.796, the reliability of competitive pressure is 0.669, and the reliability of intention to adopt e-commerce is 0.707.

**Hypothesis Test**

This research uses moderated regression analysis method to test the hypotheses 1-6. Table 1 shows three regression models tested. Model 1 examines the influence of independent variable, Relative Profit, Organization Readiness, and competitive pressure on the intention to adopt e-commerce. Therefore, the first, second, and third hypothesis are supported. Model 2 shows the business strategic orientation as moderating variable has no significant effect on the intention adopt e-commerce. Model 3 shows business strategic orientation business only moderate the effect of competitive pressure on the intentions to adopt e-commerce, while the influence of relative advantages and Organization Readiness on the intention to adopt e-commerce is not moderated by business strategic orientation, according to the result the fourth and fifth hypothesis is not supported and sixth hypothesis is supported.

**Table 1. Result of Moderated Regression Analysis Test**

	Intention to Adopt E-Commerce Ad		
	Model 1 (t)	Model 2 (t)	Model 3 (t)
Relative Profit (RA)	2.712*	2.638*	3.030*

Organization Readiness (OR)	3.198*	3.298*	2.415*
Competitive Pressure (CP)	2.756*	2.658*	-
Strategic Oriented Business (OSB)		0.989	-0.284
RA x OSB			-
			1.330
OR x OSB			-0.284
CP x OSB			2,882*
$\Delta R^2$	0.283	0.007	0.066*
$R^2$	0.283	0.290	0.355
Adjusted $R^2$	0.260	0.260	0.307
F	12.731*	9.791*	7.321*

Source: Primary Data-Processed, 2016

\*  $p < 0.05$

### Discussion

The results show Relative Profit affects the intention to adopt e-commerce. Manager's perception regarding the benefits to be gained with the use of technology will enhance their intention to adopt the technology, including e-commerce. This is consistent with the findings of Premkumar, G and Robert, M (1999); Looi (2005); To and Ngai (2006); Al-qirim (2007); Sparling et al. (2007); Wang and Ahmed (2009), Ramdani, et al. (2009); Scupola (2009); Oliveira and Martin (2010); Ghobakhlo et al. (2011); and Gangwar et al. (2015) which shows that the Relative Advantage have a positive influence on the intention to adopt the technology.

The influence of organizational readiness in the adoption of e-commerce is supported in this study. This phenomenon can occur because the company that has sufficient resources, in terms of financial and human resources will be easier to adopt the technology, including e-commerce. Adoption of technologies by companies that have sufficient resources will be more likely to achieve economic scale and improve the bargaining power to the business partner for technology adoption. It supports research conducted by Huy et al., (2012), Ramdani et al., (2013), as well as Iacovou et al., (1995) which show that organization readiness affects the intention to adopt technology. However, this result is contradictory with the result of Wang and Ahmed (2009) study which does not support the influence of organization readiness in adopting e-commerce. This inconsistency is very likely to occur because organization readiness in preparing the appropriate technology and financial sources is different in each company.

The effect of competitive pressure on the intention to adopt e-commerce is supported in this study. This phenomenon takes place due to the existence of pressure from competitors to adopt new technology in order to continue their business. The result of this study support the study performed by Wang & Ahmed (2009) and Iacovou et al. (1995) which show that competitive pressure affects the intention to adopt technology. The fact shows that family business get more pressure from external parties to be able to execute transaction through internet or e-commerce, and the adoption is not performed due to manager's self awareness. This is in line with the argument of Rogers (1983) who states that family business rarely become an early adopter. Thus, when the pressure from external parties demanded changes and innovation, family business must take a decision whether the technology adoption will provide benefits, which in turn will leads to metamorphic changes.

This study result shows that business strategic orientation does not moderate the effect of relative profit and organization readiness on e-commerce adoption. This shows that business strategic orientation implemented by company, both family oriented or business oriented, do not clarify (strengthen or weaken) the effect of relative profit and organization readiness on the intention to adopt e-commerce. the result of this study also shows that business strategic orientation moderates the effect of competitive pressure on the intention to adopt e-commerce. The moderation effect is positive, which means that the effect of competitive pressure will be greater on the business oriented companies than family oriented companies. The family oriented companies tend to have narrower network and is highly centered on the owner (Wang et al., 2004). The concentration of power on the owner may lead to the emergence of information barrier in its relation with competitive pressure, thus the analysis of problem solving tend to be less satisfying and is centralistic in owner (Casson, 2005). This condition will makes company find difficulty in adopting the new technology even if the pressure from external parties demanded company to perform changes. Contrary, business oriented company will prioritized the changes to maximize their profits (Drozdow and Carrol, 1997).

### **Conclusion, limitation, and suggestion**

#### **1. Conclusion**

The conclusion of hypothesis testing result shows that relative profit, organization readiness, and competitive pressure have a significant effect on the intention to adopt e-commerce. The first, second, and third hypothesis is supported. Family-oriented business strategy as moderation variable does not have a significant effect on the intention to adopt e-commerce. Family-oriented business strategy only moderates the effect of competitive pressure in the intention to adopt e-commerce. While the effect of relative profit and organization readiness on the intention to adopt e-commerce is not moderated by business strategic orientation, it means that fourth and fifth hypothesis is not supported and sixth hypothesis is supported.

#### **2. Limitation and suggestion**

- a. This research only shows a few inconsistency in variables from the previous research. It is possible to get several factors which could be used for further research and to re-test the moderation factor used.
- b. This research only focused in Sleman, Bantul, and Yogyakarta areas. It's rather complicated to make a general conclusion in Yogyakarta province, researcher is suggested to consider about expanding region and distribution of sample research.
- c. Future research need to consider industry cluster in family business to generate a more accurate result.

- d. In testing the hypotheses, researchers need to consider the lost predictor items, especially in competitive pressure hypothesis.

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**PATHOLOGY OF SOCIAL ACCOUNTABILITY IN PARTICIPATORY LOCAL  
DEVELOPMENT BUDGETING (A CASE STUDY ON KELURAHAN  
DEVELOPMENT FUND IN SURAKARTA CITY, INDONESIA)**

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**Abstract**

This article explained why the biased-meaning symptom of social accountability practice occurs in Kelurahan Development Fund (thereafter called DPK) management, despite its management procedure through budgeting democratization process and participatory public budgeting. Development fund management by *kelurahan* (administrative village) and society was a manifestation of social accountability given by Surakarta City government. Its procedure was based on democratic elements including society representation, discussion to make decision and community group of village areas as beneficiary. The analysis on case study showed that civil society as the strength of social accountability enforcer was vulnerable to pathological contamination. Behind the apparently democratic procedure, the author found some things biased from substantive democratic value. The bias found in this study pertained to the elitist role composed of community representative. Another form was patron-client embryo incubation between community activist and government. Those two bias forms attenuated the accountee's social power among active citizens. Biased function symptom resulting in the abuse of social accountability substance value is called social accountability pathology. This pathological symptom occurred due to democratic process contaminated by co-modified culture. In this context, the exchange of power had occurred as commodity. This pathology impacted on the society's decreased trust in the active role of citizens and attenuated the public's awareness of public problems.

**Keywords:** *social accountability, public budgeting, pathology*

**Introduction**

This article discusses pathological trap found in the role of civil society as the power encouraging the organization of social accountability practice in participatory public budgeting process. Previous case studies proved that civil society can play its decisive role in requiring the public officials to be accountable, but its success is dependent on a number of favorable contexts and institutions (Grimes, 2013). This article shows that in certain context, the role of civil society is always in pathological trap attenuating social accountability substance. The case presented is pathological trap of civil society's role in participatory public budgeting process.

The involvement of citizens in traditional literature is encouraged by competitive external powers. The intended external power includes ruling politician, literate citizen, other governmental institution, legal organization, and professional organization. Previous studies found that the higher the external motivation of citizen participation to ask for budgeting process accountability, the higher is the quality of government's social accountability (Ruben, 2006; Sirker, 2007; Russell, 2011). The larger the number of citizen actors active and sensitive to government performance, the stronger is the demand for social accountability (Clarke and Missingham, 2009).

Public participation in social accountability of budget sector has been initiated since 1980 in Brazil. Activist encouraged an initiative to confront the community and its members (citizen) in the attempt of voting for budget priority. They submitted the result of meeting to government and urged the government inform the priority of public budget policy and its implementation. A study on public budgeting theory shows that public

budgeting is replete with interest contestation and negotiation process between budget actors. For that reason, public budgeting should be associated with a social accountability mechanism in the attempt of escorting the just government governance. Theoretically, the importance of accountability norm and transparency is well-established in public budgeting, but its implementation is often inconsistent (Morgan, 2002; Wildavsky and Caiden, 2012). Franklin and Raadschelders (2004) wrote that the next stage of budgeting approach as budget politics is democratic ethos approach. This approach views that public budgeting builds on equality, justice and constitutional value principles.

Democratic ethos presupposes that budgeting actor should explain budget information transparently to the public to prevent the certain group from coming in inappropriate action thereby in contradiction with the democratic principles of determining budget allocation. Democratic ethos aspect of public budgeting explains that public budgeting is not merely figures (numbers), but also political process. There is always a conflict of interest between interest groups in budgeting process, for example, the conflict between efficiency principle and program effectiveness, and political leadership aspiration, and the conflict concerning to which group responsiveness and accountability is prioritized. Interest contestation is inevitable so that a mechanism should be created that replaces this bargaining with arguing habit (Morgan, 2002; Rubin, 2006, Kelly & Rivenbark, 2011).

In certain environment condition, the transparency of budgeting information conditions the society to require more accountability as answerability rather than accountability as responsibility (Robin, 2006; Tembo 2013). This sample case occurs in Dekalp, when public officials give accountability information to citizen. The officials in Dekalb obligatorily explain the reason justifying the government's choice decision in public dialog so that they can support the government's decision. Dialogue space is made using mass media.

The political character of public budgeting results in critical room leading to social accountability pathology. Social accountability pathology means a condition disturbing the functioning of social accountability system substantively. Social accountability system can run procedurally, but substantively the dysfunction occurs, leading to an unaccountable condition. The finding above suggests that information transparency can prevent certain group from committing opportunistic action. This proposition is opposed by Jonathan A. Fox (2015) finding that information transparency alone cannot always activate the public's awareness of requiring social accountability. It leads the community-driven development to be captured frequently and socially by local elites (Mansuri and Rao, 2013). He also found that another trap of participatory program is no actual collective overseeing despite available participative mechanism. In addition, the trap of community's fear of voicing becomes an opportunity to stimulate the infertility of social accountability function.

Pathological trap within civil society results from the actor's opportunistic behavior tendency as suggested by agency theory that both agent and principal have hidden interest potentially resulting in opportunistic behavior (Mitnick, 2013). Civil society variable in social accountability refers to activity density of civil society group and the extent to which the public pressure is to ask for the government's accountability. Social accountability concept assumes that community group acts and is partial to community group it represents so that it can preclude public resource stealing for elite group. The fact shows that community group tends to behave opportunistically and to act unaccountably (Yang and Callahan, 2005 and Falaschetti, 2009). It is the paradox of civil society that potentially generates social accountability pathology.

A study on civil society shows that the character of relationship between civil society groups and between civil society and government is very decisive by power

interest and it can change any time (Ackman, 2012). Certain group can take anti-democratic stance by committing violence directly or indirectly (uncivilly), domination and marginalizing other groups. Such the activity will harm mutual interest value reciprocally (Chamber and Kopstein, 2001; Fung, 2003; Vitale, 2006; Cornwall and Coelho, 2007; Ackman, 2012; Hoppe and Kondrikova, 2012). The power of society group, in addition to potentially improving accountability, can result in pressure for other society group as well. Thus, such the pressure can reduce other groups' capability of influencing the ruling group. Government tends to refuse input from the suspected group and considers it as a harmful problem. The competition for domination among these society groups are often utilized as the opportunity of participating in political transaction interest in the name of public interest (Yang and Callahan, 2005).

In conclusion, the role of civil society of asking for social accountability (demand driven) and government's decision to involve the public (society) in participatory budgeting, in addition to potentially improving social accountability, likely generates democratic meaning deviation from the social accountability mechanism. What is the form of social accountability pathology in the case of Kelurahan Development Fund (DPK) implementation in Surakarta City, Central Java Province, Indonesia? Why does the pathology occur in the context of participatory public budgeting? The following section will address these problems.

## Result

The management of Kelurahan Development Fund or Kelurahan Grant thereafter called DPK represents the society's behavior of being accountable for public resource given to it. The committee of Kelurahan Development, thereafter called PPK, acting as accountant should be accountable socially to citizen and formally to city government. One pillar of social accountability is society's capability of understanding the accountability and acting accountably. The history of DPK policy release is the part of civil society activist's pressure to develop a democratic budgeting planning. This attempt is initiated by IPGI (*Indonesian Partnership on Local Governance Initiative*) in 2001 for *fiscal devolution* trial in the form of blockgrant for kelurahan. DPK is a miniature of social accountability for government budget democratization in the attempt of answering the public's questions: "What can we manage directly in our territory?" The management of DPK fund gives deliberation space within the society to determine budget allocation in its kelurahan scope. The members of society discuss from planning, writing activity proposal, executing the activity to writing responsibility report. Development is planned, implemented and overseen by the society itself. The utilization of DPK fund is facilitated by TP3K (*Tim Pengawal Perencanaan Pembangunan Kelurahan* = Kelurahan Development Planning Escort Team) and monitored by DPK's Monev (Monitoring and Evaluating) Team trained and facilitated by facilitator honorarium by Bappeda (Local Development Planning Agency). The members of TP3K and of Monev Team have legitimate assignment based on the Mayor's Decree.

The story of citizen forum cooptation symptom was obtained from a study on the implementation of DPK during 2009-2011 conducted by *Yayasan Solo Kota Kita* (YSKK) NGO.

The result of study shows the elite-biased implementation of DPK. Bias is indicated with activity inconsistent with planning (*musrenbang* = Development Planning Discussion). The percentage budget use for LMK (Kelurahan Society Institution)'s operation is substantial, more than 45 percents, so that the fund implemented to the society

is very small. Social accountability pathology in DPK case results from government and citizen forum. From the government side, DPK is given to citizen to accommodate some suggestion in *musrenbang kelurahan* that is not accommodated in RKPD (*Rencana Kerja Pemerintah Daerah/Annually local development planning*) as the strategy to reduce the citizen's disappointment. Giving the citizens the space to manage budget directly continuously is expected to make them support the government. The hierarchy of PPK is generally composed of society leaders close to government. It indirectly solidifies the cooptation structure of government over citizen forum. Mayor's regulation contains technical instruction of DPK use to be PPK controller as the government activity executive agency. The procedure of applying for grant proposal and report to government provides the government an administrative control space. In this way, unconsciously, the forum of territory citizen at kelurahan level experiences is co-opted by government. Citizen forum no longer debates the ideological reason of allocation accountability and budget use, but only becomes a routine executor of budget ration.

From society side, the representation of PPK as DPK manager reflects the domination structure of society elite. The citizens' less awareness of and submission to PPK confirms the emergence of elite domination pathology and forum co-modification. Although information on DPK fund amount and its use rule has been published, the transparency of information not always encourages the collective revival to look for social accountability or to act as social accountee. The presence of citizen in PPK becomes a commodifiable capital when it is needed to support legitimacy of proposed activity. PPK policy to modify the self-help contribution value of society facilitated by DPK is intended to relieve the society's burden of paying self-help money due. Substantively, however, this policy inherits corruption pathology in the form of budget data mark up despite an excuse that it is not forum's fault but it only makes regulation adjustment. This phenomenon reflects on buck passing (throwing the responsibility away) pathology, meaning that PPT states that it cannot be blamed for the policy it develops to relieve the citizen's burden. They only do their responsibility of securing the common duty. In addition, this practice also inherits the culture of dependency on government's gift thereby increasing cooptation opportunity and decreasing the community's critical power. Despite the design for budget democratization practice, in DPK management by PPK in Surakarta City, not all of RT/RWs (Neighborhood Community) hold discussion. Development discussion in environment level, called known *Musling* (*Musyawahar Lingkungan* = Neighbourhood General Meeting), is institutionalized as a social accountability forum. Social accountability principle assumes that this forum is established to debate and to dialogue problems and community need priority. In fact, however, this forum is not functioned as the social accountability confirming forum, but as the forum legitimating the proposal the RT/RWs have developed. Even some RT/RWs do not hold environment discussion; they only fill in the form of activity proposals to be brought into *musrenbang kelurahan*. Thus, the society representative plays its role as elite that dominates and co-opt the voice of society it represents.

The phenomena found in this DPK case confirms the relevance of agency theory's basic principle believed in, in which information and hidden interest between principal and agent bring about opportunistic behavior. Social accountability pathology in DPK case occurs when the link of supply driven and demand driven has been contaminated by personal interest motive tending to be opportunistic. Information asymmetry of budget becomes the source of information co-modification pathology. Community elite group in DPK case is PPK group understanding the budget that use information it has for personal interest or for power negotiation. The interaction of supply and demand driven in social

accountability institution contributes to resulting in a pseudo-social accountability forum, because it has been contaminated by pathology.

This pathology incidence shows that the accountability of budget decision maker is still oriented to the fulfillment of demand (accountability as responsibility). Normatively, the accountability of public budget is the government's and DPRD (Local Legislative Assembly)'s ability of answering/explaining to citizen as accountee (accountability as answerability). The *accountability as answerability* orientation is marginalized because of cooptation pathology and co-modification of social accountability forum.

In conclusion, the form of pathology found in DPK case in Surakarta City includes cooptation, elite domination, buck-passing, and co-modification. The form of pathology results because the power relation environment is dominated by patron-client relationship and co-modification is packaged in the format of formality culture and democratic procedure.

## 1. Conclusions

General conclusion that can be drawn from this DPK case is formulated in the following propositions. Firstly, pathology occurs due to the interaction between accountability social elements: accountant, accountee, and social accountability forum running in formality culture-oriented bureaucratic environment and co-modification-oriented civil society environment. Secondly, the representation of publics in a social accountability forum, co-opted by a procedural forum mechanism, results in elitist/exclusive/dominative accountability. Thirdly, supply-driven formality of social accountability institution creates forum cooptation thereby resulting in a pseudo-social accountability. Fourthly, contestation of civil society group interest triggers forum co-modification thereby accountee becomes infertile. Fifthly, elite domination, forum cooptation, forum co-modification, and infertile accountee contribute to generating a pseudo-social accountability. Sixthly, the intensity of social accountability mechanism in a democratic value-based budgeting planning process not automatically impacts on the improved accountable budgeting quality when its pathology is not reduced. Seventhly, social accountability pathology can be reduced when the quality of democratic system and bureaucratic environment is improved, from formal procedural-orientation to substantive orientation.

This study's findings recommend further researches to be conducted on the critical variables affecting the accountant and accountee's attitude oriented to accountability as answerability, rather than removing the obligation or co-modification of forum. Practical reformation policy of democratic and bureaucratic system oriented to the ability of answering/explaining argument uses evidence to the public (accountability as answerability). The internalization of accountability as answerability paradigm is recommended as the strategy of reducing the risk of democratic system and bureaucratic practice organization that is biased-responsibility in its patron/client/constituent's need so that the meaning of social accountability is dwarfed.

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## THE EFFECT OF PERCEIVED ORGANIZATIONAL SUPPORT FOR INNOVATION ON INNOVATIVE WORK BEHAVIOR WITH LEADER-MEMBER EXCHANGE MEDIATION ON THE LECTURER

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### Abstract

The purpose of this study aimed to find out the effect of Perceived Organizational Support (POS) for innovation on innovative work behavior. Leader-Member Exchange (hereinafter will mention as LMX) role as a mediator in the effect of POS for innovation on innovative work behavior was also investigated. The data analysis in this study used Partial Least Square (PLS). The samples of this study were 31 lecturers from Faculty of Civil and Planning Engineering Institute Teknologi Sepuluh Nopember. Particularly, the samples were taken from Architecture, Interior and Product Design Department. The result showed POS for innovation has significant positive effect on innovative work behavior and LMX. Whereas LMX has positive influence on innovative work behavior but not significant and the influence of POS for innovation on innovative work behavior was not mediated by LMX. Innovative work behavior is influenced by Perceived Organizational Support. The relationship quality between the department head and the lecturers mediate the effect of Perceived organizational Support to Innovation Work Behavior.

**Keyword:** *Innovative Work Behavior, POS for innovation, LMX*

### Introduction

Dynamic environment compel each organization to innovate in order to survive (Cefis & Marsili, 2005). Organizations which are always innovating will have better adaptation abilities in an increasingly tight competition environment since the people in the organization are accustomed to make changes. Generally, the organization fails to assess the innovative level of its member because the assessment was based on the organization's financial capability (Patterson, Kerrin, & Gatto-Roissard, 2009). That kind of appraisal was considered a failure since not all ideas will be implemented and will give financial benefit to the organization, while the unimplemented ideas will not count at all. This can be happened because of the organization will only benefited from its support to the member's innovation if the member's creative ideas can be implemented in the organization.

The innovation itself will never be created without the presence of innovative work behavior. Since the innovative work behavior not only needs analytical ability and creativity but also needs an ability to communicate, to persuade (persuasion), and consistency to create an innovation (Dorner, 2012). Innovative work behavior enables the employees' creative ideas give benefit to the company when the ideas can be realized. Innovative work behavior is considered important to investigate in this study since it can focus on the behavior that support the innovation formation and not only on the result of those innovations. Innovative work behavior construct encourage the organization to appreciate more on each member's participation in order to generate innovation in the organization even though in the end those ideas are not all implemented.

Innovative work behavior can be influenced by the leadership in the organization (Scott & Bruce, 1994). The role of a leader in the organization that can motivate and support the member's ideas is needed in encouraging the emergence of innovative work behavior. That is because in order to be able to innovate, the member of the organization should do actions that benefited organization in which those actions were not include in the job description but still within the scope of the member's role. Leadership in this study focused on LMX since LMX is the only concept in the leadership field that focused on the social reciprocal relationship between the leader and his member (Mapolisha & Kurasha, 2013). The good social reciprocal relationship will facilitate the communication between leader and his member. The easiness in communication can eliminate the gap that usually appeared between the leader and his member due to the differences in hierarchical position so that the member willing to give opinions.

Another factor that driving the emergence innovative work behavior is Perceived Organizational Support (hereinafter will call it POS). According to Jong and Zoetermeer (2007), the function of organization in creating innovations is as a facilitator. The organization can support the innovation formation by developing appropriate organizational and psychological climate (Scott & Bruce, 1994). Based on the research result that has been done by Scott and Bruce (1994) the organizational climate considered to be able to form a transactional relationship and POS for innovation as the only part the climate for innovation that has significant influence on innovative work behavior therefore POS for innovation has been selected as one of the variable in this study.

## 1. Basic Theory and Hypothesis Development

### a. The effect of LMX on Innovative work behavior

Research conducted by Scott and Bruce (1994) showed that there was significant influence of LMX on innovative work behavior. The research result from Scott and Bruce (1994) supported by the research result conducted by Denti (2011). Based on those previous researches the recent study wanted to prove the effect of LMX to innovative work behavior.

### b. The effect of POS for Innovation to LMX

The previous research conducted by Wayne, Shore, & Liden (1997) found out that there was relationship that influence reciprocally between POS and LMX. The finding could be used as the basic to develop a theory about the unidirectional influence from the POS to the LMX. The example of this relationship can be seen when there is good mark based on the employees' evaluation on the support given by organization. Hence, the supervisor as the organization representative who most frequently meets the employees will also be considered good so that the employees become more confident and feel free to develop good social relationship with their supervisor.

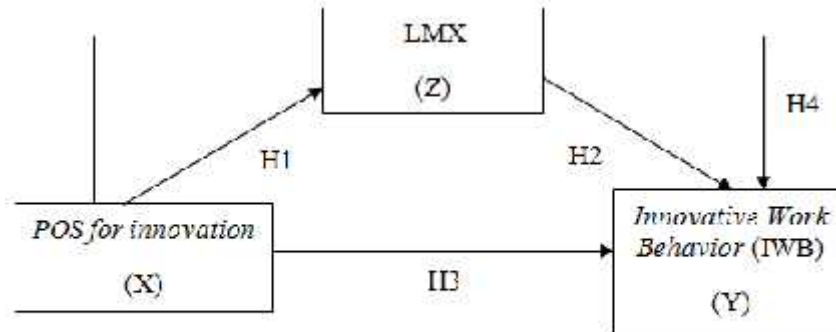
### c. The effect of the POS for Innovation to the Innovative Work Behavior

Pradesa, Setiawan, Djumahir, and Rahayu (2013) in their study found out that POS has positive effect on employees' positive behavior. The research conducted by Pradesa et.al. (2013) examined the effect of POS on employees' positive behavior, affective commitment and felt obligation as intervening variables. The present study tested whether POS has a direct influence to the employees' positive behavior in the workplace or innovative work behavior.

Based on the theoretical basis that has been mentioned above, therefore the hypothesis of present study formulated as below:

*H1: The POS for Innovative has direct and significant influence on the LMX.*

- H2: The LMX has direct and significant influence on the innovative work behavior.  
H3: The POS for innovation has direct and significant influence on the innovative work behavior.  
H4: The POS has significant influence on the innovative work behavior through LMX.



**Figure 1**  
**Conceptual Framework**

### Research Method

This study used quantitative approach that emphasizes in theory testing through the measurement of research variables using statistical procedure. This study aimed to prove the causality relationship between innovative work behavior, LMX and POS for innovation. The data used in this study are primary and secondary data. Primary data were obtained from questionnaire on research respondent which are lecturer of Interior and Product Design and Architecture Department, Faculty of Civil and Planning Engineering Institut Teknologi Sepuluh Nopember. The respondents are permanent lecturers that have at least five years of service. This study population was 74 lecturers with the condition that the respondents should have minimum rank III C; therefore the sample became 40 people. The questionnaires that returned and can be further processed were 31 questionnaires. Secondary data were obtained from books, journals and company documents related to the variables of the study.

There were three variables in this study, which are: POS for Innovation (X), Innovative work behavior (Y), Leader-Member Exchange (LMX) (Z). Indicators that included in Innovative work behavior in this research were the exploration, creation, championing and realization of ideas and new techniques that intentionally done by the lecturers in their roles as educators in order to improve students creativity and facilitate students to understand given lecture materials. This study measured Lecturers innovative work behavior using aspects stated by Jong and Hartog (2010), and then the questions posed in this study to measure the innovative work behavior are:

1. The frequency of the lecturers in caring things that do not belongs to their daily work.
2. The frequency of the lecturers in thinking the ways to improve something in body.
3. The frequency of the lecturers in trying to seek new techniques.
4. The frequency of the lecturers in finding new approach in doing their job.
5. The frequency of the lecturers in enhancing the member's enthusiasm to innovative ideas.

6. The frequency of the lecturers in encouraging the surrounding people to support innovative ideas.
7. The frequency of the lecturers in trying to implement innovative ideas in their work practice.
8. The frequency of the lecturers in contributing to the implementation of new ideas.
9. The frequency of the lecturers in developing new things.

POS for innovation in this research refers to the degree of assessment given by lecturers regarding to what extent faculty support to lecturers' creative ideas related to the improvement of effective teaching technique. The indicators developed by Scott and Bruce (1994) which is support for creativity and tolerance for differences were used to measure POS for innovation. The aspects that were used to measure POS for innovation in this study are:

1. The creativities of lecturers supported by the department.
2. The ability of lecturers to work creatively was appreciated by the department.
3. The lecturers allow solving the existing problems in teaching techniques using different ways.
4. The lecturers assumed that their faculty is flexible and constantly changing.
5. The department responsive to changes.

The definition of LMX in this study refers to the quality of social interrelationship between department head and lecturers which is based on their trust, respect, and professional responsibility. LMX measurements were done by investigating the indicators presented by Graen and Uhl-Bien (1995) in which they were modified. Accordingly, the questions used to measure LMX in this study are:

1. Are the lecturers aware of their position in the presence of each department head?
2. The lecturers' opinion about how likely each department head will provide assurance to their actions regardless of the formal authority differences.
3. The lecturers' opinion about how likely each department head will help them to solve the problem regardless of the formal authority differences.
4. Do the lecturers believe that the department heads know their potential?
5. Do the lecturers know when their department head satisfied with their performance?
6. The lecturers' opinion about to what extent the department head's understanding about lecturers needs to improve the effectiveness of teaching and learning process.

## **Result and Discussion**

### **1. Respondents Characteristic**

The numbers of returned questionnaires were 33 out of 40 distributed questionnaires. Two questionnaires were rejected because the related respondent had less than five years working experience therefore the questionnaire that can be processed would be 31 units.

### **2. Description of Respondents' Answers.**

The lecturers from designated department that has IIIC class in this study were five people (16,12%), III D class were twelve people (38,7%), IV A class were seven people, IV B class were five people (16,12%), and IV D class were two people (6,45%). The majority of the lecturers who became the respondent in this study have lectureship rank with III D class.

**3. Data Processing Result**

This section would explain the respondents' answer about POS for innovation (X), LMX (Z), and Innovative Work Behavior (Y). First, the average value of respondents' answer from each question will be calculated and will be categorized based on class interval. Class interval sought by using the class interval formula as follows:

$$\text{Class Interval} = \frac{\text{Highest Score} - \text{Lowest Score}}{\text{Total Class}} = \frac{5 - 1}{5} = 0,8$$

The criteria of the average respondents' answer was made based on class interval 0,8 that were presented in the table below:

**Table 4.1 The Criteria of the Average of Respondents' Answers**

Interval	Category
4,20 < a =< 5,00	Very High (VH)
3,40 < a =< 4,20	High (H)
2,60 < a =< 3,40	Medium (M)
1,80 < a =< 2,60	Low (L)
1,00 < a =< 1,80	Very Low (VL)

Source: Questionnaire data

**a. Perceived Organizational Support for Innovation.**

The average value of respondents' answers regarding POS for innovation is at 3, 61 which is included in high category. This result indicated that the lecturers in the Industrial product design, interior design, and architecture department value the support of their organization to lecturers' innovation is high. The flexibility of the department to their lecturers to conduct lecture in a different techniques from one lecture to another have the highest value which is 4, 22. The lowest value of 2, 64 described the department's expectation to the lecturers use the same teaching techniques.

**b. Leader Member Exchange**

The LMX relationship between the lecturers of Interior and Product Design and Architecture Department and their respective department's head was included in high category with a value of 3.72. The respondents' answers regarding LMX got the highest value of 4.09 which means that the LMX relationship between the lecturers and the head departments was dominated by respect. The lowest value was at 3.25 indicates that the department head has low courage to ensure the lecturers' action taken in their department.

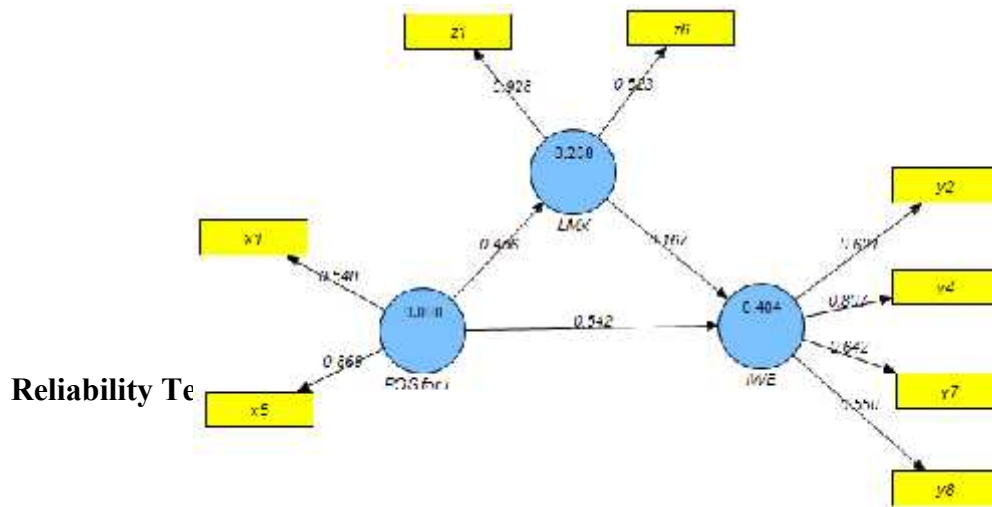
**c. Innovative Work Behavior**

The innovative work behavior that was owned by the lecturers of Interior and Product Design and Architecture Department belongs to the high category with a value of 3.66. The high level of innovative work behavior that they owned was dominated by the frequency of the lecturers in thinking the ways to improve the effectiveness of the existing teaching techniques at the moment. While the lowest value is at 2.38 showed the low frequency of the lecturers in working on to develop new teaching techniques to be more effective teaching.

**d. Model Analysis and Hypothesis Testing**

PLS techniques recognize two types of validity, which are, the convergent validity and the determinant validity. In the first stage, there are some indicators that do not

comply with the provision of outer loading value of more than 0.5. Therefore, the indicators that do not comply the condition should be reduced until generate this following model:



IWB	0.7485
LMX	0.709
POS for innovation	0.6776

Source: Data Process

Reliability testing can be done by using composite reliability. Based on Henseler, Ringle, and Sinkovics (2009), in order to meet the reliability testing, it should have composite reliability value of more than 0.6. Table 4.2 shows that each variable has composite reliability higher than 0.6. Therefore, it can be concluded that each variable was declared to have construct variable.

**R-Square Value**

The inner model evaluation is done by looking at the R-Square from endogenous variable. R-Square value indicates that the data variance can be explained by exogenous variable to endogenous variable. The PLS processing display the R-Square that can be seen on the table 4.3 below:

**Table 4.3 R-Square Value**

	R Square
IWB	0.4042
LMX	0.2079

Source: Data Process

LMX constructs have an R-Square of 0.2, which means that the LMX data variance can be explained by the POS for innovation variable is by 20%. The IWB constructs have an R-Square of 0.4 that means the IWB data variance that can be explained by POS for innovation and LMX is by 40%.

Goodness of fit in PLS was calculated using Q2 by referring to the table 4.3, Q2 value calculated as follow:

$$Q^2 \text{ Value} = 1 - (1 - 0,2) \times (1 - 0,4) = 0,52 \dots \dots \dots (1)$$

Q2 of 0.52 means that the structural model can explain 52% of the kinds of data in this study.

**Hypothesis Testing**

**Table 4.4. Path Coefficient and T-Calculation**

Hipotesis	Path Coefficient	t- calculation
POS <i>for innovation</i> -> LMX	0,45	6,3
LMX -> IWB	0,16	1,51
POS <i>for innovation</i> -> IWB	0,54	7,46

Source: Data Process

The coefficient path of the influence of POS for innovation to LMX was at 0.45 and the t-test was 6.3 means that POS for innovation has significant positive effect on LMX on lecturers of Design and Architecture department. The better the lecturers perception about departement's supports on innovation, the better the quality in mutual social relationship between lecturers and the department head. Based on the result, the first hypothesis in this studies that presumed that POS for innovation has direct and significant impact on the LMX was acceptable.

The LMX path coefficient of the influence of innovative work behavior was at 0.16 and t-test was at 1.51 showed that LMX has positive influence on innovative work behavior but it was not significant. It means that the mutual social relationship quality improvement between lecturers and respective departement heads will insignificantly improve the lecturers' innovative behavior. This result showed that the second hypothesis which presumed that LMX has direct and significant impact on the innovative work behavior was not fully accepted.

The path coefficient value of POS for innovation to innovative work behavior was at 0.54 and t-test was at 7.46. It showed that the department support to lecturers innovation has significant positive effect on innovative behavior of the lecturers. The better the lecturers perception about department's supports on innovation, the better the lecturers' innovative behavior. Based on the result, the third hypothesis which presumed that POS for innovation has direct and significant impact on innovative work behavior was accepted.

Path coefficient value of 0.072 indicates that POS for innovation influence the innovative work behavior through the LMX. Z-test value of 1.6 indicates that this effect was not significant. This is because the lecturers felt that the innovation that was produced comes from within themselves. Lecturers LMX value includes in the high category, however, the communication that was formed in the LMX relationship between the lecturers and their respective department heads led to the problem solving and resource allocation. The communication that was formed between the lecturers and the department head was not to be as an increase of lecturers confidence in their ability for creativity and innovation.

### Conclusion

Based on the result of data processing using Partial Least Square (PLS), the conclusion of this study are as follows. Firstly, POS for innovation has significant positive impact on the LMX of the lecturers of Design and Architecture department. Secondly, LMX has positive impact but not significant to the innovative work behavior of the lecturers of the Design and Architecture department. Thirdly, POS for innovation has significant positive impact on innovative work behavior of the lecturers of Design and Architecture department. Lastly, the effect of POS for innovation to innovative work behavior of the lecturers of the Interior and Product DEsign and Architecture Departement was partially mediate by LMX.

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## EFFECT OF STOCK BUYBACK TOWARDS FINANCIAL PERFORMANCE AND MARKET REACTION : STUDY OF LISTED COMPANIES IN INDONESIA STOCK EXCHANGE

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### Abstract

This research aims to obtain empirical evidence about the differentiation in financial performances of the companies listed in Indonesia Stock Exchange before and after conducting stock buyback. The samples were tested using match paired sample t-test to show the differences of several financial ratios before and after stock buyback. In addition, the research is also aimed to understand the effect of stock buyback announcement to the market reaction. The research use market model to find the expected with 61 days of event window period, consisting of 30 days before and after stock buyback announcement. The research samples were 17 different listed companies which perform 22 stock buyback actions from 2001-2014 in Indonesia Stock Exchange. We use sample t-test to analyze the effect towards financial performance ratios while difference in difference method is used to analyze the effect towards stock return caused by buyback announcement. The result state that there is significant difference in financial performance caused by stock buyback, while on the contrary the effect on stock return was significant.

**Keywords :** *stock buyback, financial performances, stock return, difference in difference*

### Introduction

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#### Background

There is an obligation for corporations which have gone public to open the information regarding capital structure policy, cash dividend, working capital, and other decisions. These information are becoming fundamental equipment for helping the investors to manage their portfolio in order to gain optimum return of their investments; one of these information is corporate actions towards their tradable stock in the secondary market. Corporate action is any event which brings material change to the company and its stakeholders.

A stock buyback is one form of corporate actions. In some parts of the globe; like in the United States for instance, stock buyback is booming (Yallapragada, 2014). It can be seen from the first half of 2011 when S&P 500 companies repurchased about \$200 billion of their stock followed by another \$ 500 billion stock buyback in the following year; this trend is followed by other countries around the world, including Indonesia. As mentioned by Coleman (2011), it happened because buyback program is often viewed as an efficient way to increase the value of shareholders. When the demand of a certain stock increase, the law of supply and demand go into effect; the price raise instantly. At the time when Indonesia had experienced exchange rate crisis and Jakarta Composite Index fall sharply on 2015 the Minister of State Owned Enterprises, Rini Soemarno decided to issue stock buyback program policy which being revealed on August, 24<sup>th</sup> 2015. The minister urges state owned enterprises to be more active in managing its stock in the market by conducting stock buyback. She mentioned there

would be 13 state owned enterprises from several sectors that execute buyback program with minimum total transaction of IDR 10 trillion. The Financial Service Agency (FSA) or *Otoritas Jasa Keuangan* in Indonesian language, has supported the stock buyback program policy to restore market condition by issuing circular letter No. 22/SEOJK.04/2015. This letter allow corporates to conduct sspecific amount of stock buyback without a general meeting of shareholders based on another Regulation No. 2/POJK.04/2013 issued by the same body. This action was expected to encourage corporations for conducting stock buyback program immediately.

### 1.1. Problem Definition

However, they were reacting differently. Despite all supports and deregulations taken for encouraging the buyback action, there were still doubts about how the market would react and the effectiveness of this action to company performance. Deputy Commissioner of Capital Market Supervisory mentioned there were 19 corporates who express their interest in conducting buyback program but only 3 of them managed to implement the program (Kontan, September 2015).

From theorotical point of view, there had been several kind of researches that investigate the impact of stock buyback towards company's financial and stock performances. The result reached by these researches isvarying. According to research conducted by Candra (2009) and Wronska-bukalska (2015), there is no difference of financial and stock performance before and after stock buyback. While Hirtle (2001) suggested that the higher level of share repurchase associated with higher profitability. In addition, Purnomo (2010) conclude that there is no significant difference in average abnormal return before and after buyback. On the other hand, Zunijar (2013) stated buyback announcement has significant influence and there was a difference in cumulative average abnormal return before and after the event.

### 1.2. Objectives

This research has three objectives. First, to identify whether stock buyback has an impact on company performance. Second, to identify whether stock buyback announcements influence the abnormal return of stock price. Third, to analyze the difference of stock return before and after stock buyback's announcement.

## 2. Theoretical Foundation

### 2.1. Stock Buyback

Stock buyback has become a common-yet-important phenomenon in stock market activities. According to Brigham and Ehrhardt (2002), there are 3 principals reasons for a corporation to buy back its stock, those are:

- When it has cash available for distribution to its stockholders, and it distributes this cash by repurchasing shares rather than by paying cash dividends.
- When it concludes that its capital structure is too heavily weighted with equity, and then it sells debt and uses the proceeds to buy back its stock.
- When it has issued options to employees and then uses open market repurchases to obtain stock for use when the options are exercised.

A stock buyback is a signal to investors that the firm's insiders believe their shares are being traded below fair value (McNally, 2002). Then, Rappaport and Mauboussin (2001) explain there are three methods of stock buyback which a corporation could choose. These methods are:

- Open market purchases where the company purchased its share from the open market.
- Dutch auction where management defines the number of shares it intends to buy and at a price range.
- Fixed-price tender offer where the management offers to repurchase a set number of shares at a fixed price.

From these methods, the open market purchase is the one that has been extensively use because it gives the corporations a flexibility to buy its stocks at any amount and time desired. Stonham (2002) explains that open market share repurchases are a blunt instrument by which the repurchasing can be flexible over timing, size and number of 'parcels'. However, the company would have less control over share price. In addition, large open market repurchases may work against the firm as they tend to push up the price simply through its own buying.

In Indonesia, stock buyback policy is being settled under the FSA Regulation. The 4<sup>th</sup> article on chapter II from this regulation states that the corporation could engage stock buyback without a general meeting of shareholders when market condition fluctuates significantly. Furthermore, the amount of stocks that can be repurchased is restricted by 5<sup>th</sup> article from the regulation; up to approximately 20% of its paid-up capital.

## 2.2. *Financial Performance*

Financial statement analysis is one effective process for reviewing possible risks, performance, financial state, or even future prospects of the company. Drake (2012) defines financial analysis of a company as "a process of selecting, evaluating, and interpreting financial data, along with other pertinent information, in order to formulate an assessment of the company's present and future financial condition and performance". It widely used to measure overall financial condition of a company over a period of time. Financial performance provides sufficient sort of information which declare how well the company conduct its business operation historically. Top managers or executives makeuse the of data stated in financial performancefor reassessing the direction of their company periodically; it helps the company to achieve optimum profit in aggregate. Many businesses have failed because of poor financial management or financial planning.

Financial statement analysis is one effective process for reviewing possible risks, performance, financial state, or even future prospects of the company.

Several methods of financial statement analysis have been developed to accommodate specific need of each stakeholder. Some of these methods to analyze financial data include DuPont analysis, pro forma analysis, horizontal and vertical analysis, and also a method which use various categories of financial ratios. Financial ratios are common analytical tool to perform number of quick analysis on financial statement. Basic data for conducting ratio analysis comes from company's balance sheet and income statement. It involves calculating and interpreting some financial ratios which eventually give better understanding to interest stakeholders regarding how well the company's performance is.

Ratio presents its universal attribute which gives unlimited scope in assessing the financial performance of the company. According to Joe Lan, ratios help link the three financial statements together and offer figures that are comparable between companies and across industries and sectors (2012).

Naga and Tabassum (2013) were evaluating the performance of the selected two banks based on the financial ratios from the perspective of pre and post merger. To analyze the impact of bank's merger, paired t-test was applied to the various financial ratios for before and after merger data. Same approach also had been used by Putra, Lahindah, and Rismadi (2014); paired sample t-test and Wilcoxon signed-rank test were applied to the profitability ratio, liquidity ratio, and market ratio of three companies before and after global financial crisis.

### 2.3. Abnormal Return

Term of abnormal return has been used to describe the return generated by certain financial asset or portfolio over period of time which is different from expected result. Abnormal return can be triggered by certain events like merger, acquisitions, or announcement. These events usually categorized as the information which has been unknown or predicted by all investors in the market; they are not ready for the events. Schweitzer (1989) had explained how to estimate abnormal return coherently through some methods which are mean-adjusted returns, market-adjusted returns, and market model.

#### Mean-Adjusted Returns

$$AR_{jt} = R_{jt} - \bar{R}_j \quad (1)$$

where  $AR_{jt}$  is the abnormal return of securities  $j$  in time period  $t$ . The result of abnormal return obtained from the difference between observed or actual return of securities  $j$  in time period  $t$  ( $R_{jt}$ ) and mean return for securities  $j$  over a given sample period ( $\bar{R}_j$ ). This method assumes the expected return is constant and similar with historical average return.

#### Market-Adjusted Returns

$$AR_{jt} = R_{jt} - R_{mt} \quad (2)$$

Through this method, abnormal return is obtained from the difference between observed or actual return of securities  $j$  in time period  $t$  ( $R_{jt}$ ) and the return of market portfolio in time period  $t$  ( $R_{mt}$ ). For this research, market portfolio is Jakarta Composite Index.

#### Market Model

First, this method required analyst to estimate normal return of securities  $j$  in time period  $t$  ( $\hat{R}_{jt}$ ) with the formula as follow:

$$\hat{R}_{jt} = \hat{\alpha} + \hat{\beta}R_{mt} + \varepsilon_{jt} \quad (3)$$

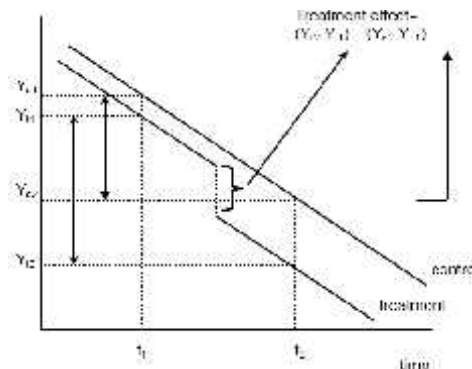
where  $\hat{\alpha}, \hat{\beta}$  are the estimated regression parameter and  $\epsilon_{jt}$  is the error term of securities  $j$  in time period  $t$ . Then, estimate normal return becomes one of the inputs in following formula:

$$AR_{jt} = R_{jt} - \hat{R}_{jt} \quad (4)$$

Abnormal return is the difference between observed or actual return of securities  $j$  in time period  $t$  and estimate normal return of securities  $j$  in time period  $t$ . The normal return presents supposed return if the events never occur.

## 2.4. Difference in Difference Method

The use of Difference in Difference has been widespread used as a tool in econometrics



and quantitative research. It estimates treatment effects by comparing pre- and post-event's outcome differences in both treatment group and control group.

Figure 1. Difference in Difference Graph

Yoshino and Abidhajaef (2015) had examined the nature and magnitude of the effects of railway infrastructure provision on regional economic performance. Difference in difference method linking the changes of growth rate of regional level economic outcome (growth of GDP) in affected area to the new railway connections in southern part of Uzbekistan, conditioned on the region's time-invariant individual effects, time-varying covariates, and evolving economic characteristics.

## 3. Methodology

### 3.1. Data Sampling and Collection

The research had identified number of public-listed companies which conduct stock buyback program from 2000 to 2013. The data classified as secondary data and collected from database of Indonesian Stock Exchange and Indonesian Capital Market Electronic Library. List of buyback programs are listed in table.

Table 1. List of Stock Buyback Program

No	Public-Listed Company	Ann. Date
1	HM Sampoerna, Tbk.	October, 16 2001
2	HM Sampoerna, Tbk.	September, 24 2004
3	Bank Central Asia Tbk	May, 26 2005
4	Telekomunikasi Indonesia (Persero), Tbk.	December, 21 2005
5	Bumi Resources, Tbk.	May, 17 2006
6	Kalbe Farma, Tbk.	February, 8 2007
7	Bank Central Asia, Tbk.	October, 11 2007
8	Telekomunikasi Indonesia (Persero), Tbk.	June, 20 2008
9	Adhi Karya, Tbk.	October, 13 2008
10	Indofood Sukses Makmur, Tbk.	October, 27 2008
11	Wijaya Karya (Persero) Tbk	October, 13 2009
12	MNC Investama Tbk	April, 14 2010
13	Elnusa Tbk	October, 13 2010
14	Jasa Marga (Persero) Tbk	October, 13 2011
15	Perusahaan Gas Negara (Persero) Tbk	October, 13 2012
16	Kimia Farma Tbk	October, 13 2013
17	Charoen Pokhpand Indonesia Tbk	January, 2 2012
18	Ciputra Property Tbk	November, 20 2012
19	Telekomunikasi Indonesia (Persero) Tbk	January 2013
20	Wijaya Karya (Persero) Tbk	September,3 2013
21	Surya Semesta Internusa Tbk	September, 11 2013
22	Salim Ivomas, Tbk.	June, 30 2014

Source : processed from ICAMEL and Indonesia Stock Exchange

### 3.2. Estimation Method for Ratio Analysis

In this step, four financial profitability ratios such as return on assets, return on equity, operating profit margin, and net profit is analyzed to measure the effect of stock buyback on financial ratios. The sequence of process are :

#### 3.2.1. Categorizing the data

Each ratio data is divided into 2 groups, one is the group consists of the ratio on two years before the event and another is the group consists of the ratio on two years after the event.

#### 3.2.2. Set the hypothesis

There are four hypotheses in this part of research. The hypothesis has been divided into four categories due to the amount of ratio measurement being used. The four hypotheses are:

H1: using return on equity, financial performance of company which conduct stock buyback one year before and after the event is significantly different.

H2: using return on assets, financial performance of company which conduct stock buyback one year before and after the event is significantly different.

H3: using operating profit margin, financial performance of company which conduct stock buyback one year before and after the event is significantly different.

H4: using net profit margin, financial performance of company which conduct stock buyback one year before and after the event is significantly different,

3.2.3. Processing the data

Following Putra et al. (2014), all categorized data then processed with SPSS software to perform paired sample t-test analysis. Paired sample t-test is used when the data are assuming normal distribution.

3.3. Estimation Method for Difference in Difference

For the next step, we compared the actual and expected daily stock return using difference in difference method to investigate the impact of stock buyback towards stock return. The phases of conducting this method are :

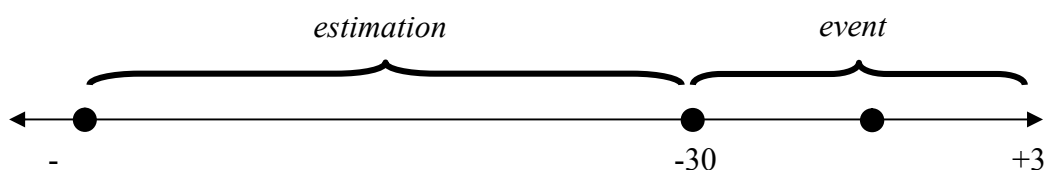
3.2.3. Making assumptions

Several numbers of assumptions assigned to become the base of this research. First, all investors in the market do not anticipated the information of stock buyback announcements before those announcement go public. Since the events are not anticipated, abnormal return is the result of investor reaction. In the period of event window, the return has only affected by the occurrence of buyback announcement by eliminating other factors.

3.3.2. Determine estimation period and event window

Estimation period is the period of time which no event has been occurred. This period is used to determine the “normal” stock return in the absence of the event. Event window is the relative short period of time which able to measure the impact of an event to stock returns. Election of the event date is crucial in event study. Less accurate prediction of event date results in less powerful result. We follow Ikram & Nugroho (2014) in determining estimation period and event window; -120 days to -31 days before the event had been chosen as estimation period. Then, period of event window is -30 days before and +30 days after the event date. Figure 2 illustrates estimation period and event window with informative timeline.

Figure 2. Estimation Period and Event Window Timeline





### 3.3.3. Calculating expected return

The research applied market model to estimate expected return for each stock throughout event window period if the occurrence of stock buyback assuming the absence of stock buyback event. The formula of market model. Calculation of the expected return use following formula :

$$\hat{R}_{jt} = \hat{\alpha} + \hat{\beta}R_{mt} + \varepsilon_{jt} \quad (5)$$

where  $R_{mt}$  is the return of market index (IHSG) in time period t and  $\varepsilon_{jt}$  is the error term of securities j in time period t. In finding intercept alpha  $\alpha$  and slope beta  $\beta$ , regression analysis had been conducted using actual return of each stock and corresponding daily return of IHSG during estimation period. Table 2 below shows the calculation result of alpha and beta for each stock using regression analysis.

Table 2. List of alpha and beta for each stock

No	Stock	Alpha	Beta
1	ADHI	-0,009	-0,569
2	BBCA I	-0,003	-0,344
3	BBCA II	0,001	-0,049
4	BHIT	0,019	0,593
5	BUMI	0,004	-0,406
6	CPIN	-0,020	-0,160
7	CTRP	0,000	0,032
8	ELSA	-0,006	0,244
9	HMSP I	0,030	-0,065
10	HMSP II	0,002	0,111
11	INDF	-0,001	0,086
12	JSMR	0,002	0,266
13	KAEF	-0,003	0,273
14	KLBF	0,002	-0,007
15	PGAS	0,001	0,014
16	SIMP	0,004	-0,309
17	SSIA	-0,005	0,598
18	WIKA I	-0,002	1,092
19	WIKA II	0,000	0,236
20	TLKM I	0,002	1,560
21	TLKM II	-0,002	0,257
22	TLKM III	0,004	-0,248

Source : Author

### 3.3.4. Comparing differences by Difference in Difference Method

Before using this method, the data were divided into two groups and separated again by two different time periods. These groups consists of treatment group which use actual return of each stock and control group which use expected return of each stock, resulted from the estimation of previous step. Differences for pre- and post-event of both groups were then examined by difference in difference method. There were 3 calculations of

difference in difference, starting with first week examination which take data from -5 days before the event and 5 days after the event, then followed by data from -10 days before and 10 days after, and at last data from -20 days before and 20 days after. Each of the data represents the result in first, second, and third week respectively. Difference in Difference estimation used regression model as follow:

$$y = \beta_0 + \beta_1 D^{Time} + \beta_2 D^{Tr} + \beta_3 D^{Time} D^{Tr} + \varepsilon \quad (6)$$

where  $y$  is the stock return,  $D^{Time}$  is dummy variable for the time period, it captures aggregate factors which cause a change in absence of buyback event (0 for pre-event and 1 for post-event),  $D^{Tr}$  is dummy variable for the treatment which captures possible differences between treatment after control group due to buyback influence (0 for control group and 1 for treatment group), while  $D^{Time} D^{Tr}$  is a dummy variable indicating two dummy variables equal to one. The implementation result was according to the regression framework below where lower right cell is the DID estimator:

Table 3. DID Regression Framework

Y	$D^{Time} = 0$ before treatment	$D^{Time} = 1$ after treatment
$D^{Tr} = 0$ control group	$\beta_0$	$\beta_0 + \beta_1$
$D^{Tr} = 1$ treatment group	$\beta_0 + \beta_2$	$\beta_0 + \beta_1 + \beta_2$ $+ \beta_3$

#### 4. Estimation Result and Data Analysis

##### 4.1. Financial Performance (Paired Sample T-Test)

Table 4. Paired Sample T-Test Result

If we look at Sig. (2-tailed) column from table 3, the calculation of 4 variables was greater than 0.05. ROE, ROA, OPM, and NPM give significance estimation of 0.76, 0.95, 0, 58, and 0.89 respectively. It suggest all four hypothesis are rejected. None of the return on equity, return on assets, operating profit margin, and net profit margin have insignificant change between the data from one year before and one year after the stock buyback occurrence. Overall, this result shows stock buyback did not affect the financial performance of a company from its profitability parameter.

4.2. Market Reaction (Difference in Difference)

Table 5. -5<sup>th</sup> and 5<sup>th</sup> day Difference in Difference Coefficients Outcome

Source	SS	df	MS	Number of Obs =	88
Model	0.04405506	3	0.01468502	F( 3, 84) =	2.58
Residual	0.17828196	84	0.00212252	Prob > F =	0.0601
				R-squared =	0.1988
				Adj R-squared =	0.1609
				Root MSE =	0.04618

y	Coef.	Std. Err.	t	P> t	95% Conf. Interval	Lower	Upper
DCr	0.0345727	0.0120272	2.74	0.008	0.0099003	0.0094622	0.0596832
DTime	-0.0218955	0.0126272	-1.71	0.091	-0.046708	0.0031161	0.0005749
did	0.0366318	0.0176675	2.18	0.033	0.001201	0.0741125	0.0000000
_cons	0.0288409	0.0089288	2.67	0.009	0.0061851	0.0414968	0.0000000

Table 5 shows difference in difference coefficient of 0.039 and p-value of 0.033. It means that conducting stock buyback caused around 3.9% higher stock return and statistically significant at 10% level.

Source	SS	df	MS	Number of Obs =	88
Model	0.07165368	3	0.02388456	F( 3, 84) =	3.545
Residual	0.24263195	84	0.002888476	Prob > F =	0.0000
				R-squared =	0.2587
				Adj R-squared =	0.2429
				Root MSE =	0.05374

y	Coef.	Std. Err.	t	P> t	95% Conf. Interval	Lower	Upper
Dir	-0.033136	0.0162046	-2.06	0.043	-0.065382	-0.001089	0.0000000
DTime	-0.0229909	0.0162046	-1.42	0.155	-0.0552158	0.0092240	0.0000000
did	-0.0229909	0.0229167	-1.00	0.318	-0.0711816	0.0252036	0.0000000
_cons	0.00305	0.0114564	0.27	0.790	-0.0199362	0.0268362	0.0000000

Table 6. -10<sup>th</sup> and 10<sup>th</sup> day Difference in Difference Coefficients Outcome

While the estimation which processed further time period of data (10 days prior and after event date) resulted in -0.212 difference in difference coefficient and 0.087 p-value. Contrast with previous estimation which use data of closer time period to event date, conducting stock buyback caused 2.1% lower stock return and statistically significant at 10% level.

Source	SS	df	MS	Number of obs =	88
Model	.004745657	3	.001581899	F( 3, 84) =	1.92
Residual	.069733817	84	.000824807	Prob > F =	0.1329
Total	.074479474	87	.000855694	R-squared =	0.0641
				Adj. R-squared =	0.0307
				Root MSE =	.02872

	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
Buy	.0072591	.0086552	0.84	0.404	-.0099608 .0244789
DTime	.0010318	.0086552	0.12	0.905	-.016188 .0182517
Buy	-.0212275	.012246	-1.73	0.087	-.0455758 .0031208
_cons	.0018727	.006123	0.31	0.755	-.0105035 .013844

Table 7. -20<sup>th</sup> and 20<sup>th</sup> day Difference in Difference Coefficients Outcome

From table above, the difference in difference coefficient of 20 days pre and post event data is -0.089 and the p-value of 0.000. Stock buyback leads to 8.9% fall in stock return and statistically significant at 10% level.

### 5. Conclusion

This research was inspired by growing attempt of conducting stock buyback in Indonesia. Inevitably, several number of questions are raised like: what are the reasonable motives behind stock buyback, how it affects financial performance of the company, and how investors at the capital market respond to this action. Based on profitability ratio analysis, this study has confirmed no difference on financial performance state significantly before and after buyback. In other hand, the market reacts differently compared to the financial performance. In the first week which the data taken from 5 days before and after the event, the stock return respon positively; the return increase around 3.9% but after this period the return start to decline. It shown by table 6 and table 7 which express 2.1% fall on week 2 and 8.9% fall on week 3.

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**A FORECASTING METHOD FOR INFLUENZA VACCINE DEMAND  
DURING HAJJ PERIOD  
CASE STUDY: A VACCINE MANUFACTURER IN INDONESIA**

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**Abstract**

An influenza vaccine could play a very significant role in reversing the influenza pandemic. For a vaccine to have such an impact, it must be widely available and adopted and taken up rapidly in the countries most affected. A demand forecasting model provides a valuable tool that can guide R&D spending decisions and identify policy actions to help achieve these goals. A vaccine manufacturer in Indonesia did not get their maximum profit because of inadequate demand forecast. The study aim to understand the most suitable demand forecast for the company. There are four demand forecasting method are used in this study, which are Moving Average, Exponential Smoothing, Holt's Model, and Winter's Model. The demand data from third quarter of 2010 until second quarter of 2016 are used in this study. One of those methods which have the lowest errors will be recommended to the company to implement. This study found that from these four methods, winter's Model is the most suitable method for the company because it gives fewer errors than other methods.

**Keywords:** *influenza vaccine, demand forecasting method, moving average, exponential smoothing, holt's model, winter's model*

**1. Introduction**

In 1933, viruses (influenza virus type A, B, and rarely C) cause influenza was discovered. Prior to 1933, a bacterium named *Haemophilus Influenza* was thought to cause the flu. In 1938, Jonas Salk and Thomas Francis developed the first vaccine against flu viruses. Vaccines modern world first break through in 1796, when Edward Jenner, a doctor from the UK, examines a journeyman hit smallpox, the cowpox immunized with light. He took some fluid from patients with cowpox sores and scratched on the surface of an 8 year old child's arm. Fourty eight (48) days later Jenner gave the name "vaccine" (Latin from Cow).

A vaccine manufacturer in Indonesia produce an influenza vaccine as one of their product, and Indonesian Hajj people become their main target. Because of that, the demand of influenza vaccine will raise drastically when Hajj nears. But, the company did not get maximum profit from this product because they have too much vaccine on their hand and it is because of inadequate demand forecast, which is personal judgement. There are millions of rupiah are wasted because the company should destroy the unuse vaccine, it is the same like what happened by the France-based pharmaceutical firm SanofiAventis in 2006, they had to destroy nearly 500 kilograms worth of starting material that would have made up more than 10 million tablets of the antimalarial drug artesunate (Dolgin, 2015). Because of that, establishing vaccine demand forecasts is important to facilitate supply and financial planning and to reduce risk of irregular vaccine supply (Zuber, et al., 2009).

Forecasting the demand become important because it gives some benefits for the company, these include enhanced profitability, supply chain improvement, organizational efficiency, and improved business planning (Dillman, 2014). But there is a difficulty to

forecast the demand of drug and vaccine, which is they are often based on unreliable epidemiologic data or expert surveys, rather than on-the-ground hand-outs of medicines (Dolgin, 2015).

The aim of this research is to determine the most suitable demand forecasting method for the company. The demand data from third quarter of 2010 until second quarter of 2016 are used in this study.

This paper is organized as follows: section 2 is concerned with the relevant literature review those about time-series forecasting and its methods. Section 3 illustrate the research methodology. Data analysis and the result is elucidating on section 4. And finally, the conclusion and recommendation will be explained on section 5.

## 2. Literature Review

### 2.1. Time Series Forecasting

Time series forecasting is a method that uses a set of historical values to predict a future outcome (Koppikar, et al., 2004), (Russell & Taylor, 2011). In pharmaceutical industry in Singapore, time series forecasting is the most popular than others method, these are market research, personal judgement, quantitative analysis, and pluck a number from the air (Choo, 2000). In this discussions, the demand time series forecasting is focused. A good demand forecasting can minimize cost and maximize profit. In this research, four method are used, these are moving average, exponential smoothing, Holt's Model, and Winter's Model. The things that affect the result are level, trend, and seasonal factor. The table 1 present the things that affect each method.

Table 7 Comparison of Demand Forecasting Method

Method	Level	Trend	Seasonal Factor
Moving Average		-	-
Exponential Smoothing		-	-
Holt's Model			-
Winter's Model			

### 2.2. Moving Average

Moving Average method is generally employed in a situation in which only level, i.e. deseasonalized demand is present and neither trend nor seasonality is observed (Singh & Das, 2010). Moving average method for forecasting time series is based on the following formula (Chopra & Meindl, 2013):

$$E_t = \frac{(E_t + E_{t-1} + E_{t-2} + \dots + E_{t-n+1})}{n}$$

### 2.3. Exponential Smoothing

Exponential Smoothing Method is a popular scheme to produce smoothed time series (Pyo & Choi, 2009). It is same as moving average which only level observed. However, it attempts to smoothen the fluctuations observed in demand data of different

periods through smoothing constant (alpha) (Singh & Das, 2010). Exponential smoothing method for forecasting time series is based on the following formula (Chopra & Meindl, 2013):

$$F_{t+1} = \alpha F_{t+1} + (1 - \alpha) F_t$$

#### 2.4. Holt's Model

Trend-corrected exponential smoothing (Holt's model) method is applicable in a situation, in which level and trend are observed in the demand data (Singh & Das, 2010). Holt's model method for forecasting time series is based on the following formula (Chopra & Meindl, 2013):

$$F_{t+1} = F_t + T_t$$

$$F_{t+1} = \alpha F_{t+1} + (1 - \alpha)(F_t + T_t)$$

$$T_{t+1} = \beta (F_{t+1} - F_t) + (1 - \beta) T_t$$

#### 2.5. Winter's Model

Trend-and seasonality-corrected exponential smoothing (Winter's Model) is generally employed in a situation in which all characteristic features of demand data, i.e. level, trend, and seasonality are observed (Singh & Das, 2010). Winter's model method for forecasting time series is based on the following formula (Chopra & Meindl, 2013):

$$F_{t+1} = (L_t + T_t) F_{t+1}$$

$$F_{t+1} = \alpha \left( \frac{D_{t+1}}{S_{t+1}} \right) + (1 - \alpha)(L_t + T_t)$$

$$L_{t+1} = \beta (F_{t+1} - T_t) + (1 - \beta) L_t$$

$$T_{t+1} = \gamma \left( \frac{D_{t+1}}{S_{t+1}} \right) + (1 - \gamma) T_t$$

#### 2.6. Forecast Error Measurement

The overall accuracy of any forecasting model, which are moving average, exponential smoothing, or other, can be determined by comparing the forecasted values with the actual or observed values (Heizer & Render, 2011). Forecast error for period t is given by  $E_t$ , where the following holds (Chopra & Meindl, 2013):

$$E_t = F_t - D_t$$

Several measures are used in practice to calculate the overall forecast error. Three of the most popular measures are mean absolute deviation (MAD), mean squared error (MSE), and mean absolute percent error (MAPE).

Mean absolute deviation (MAD) is computed by taking the sum of the absolute values of the individual forecast errors (deviations) and dividing by the number of periods of data (n):

$$MAD = \frac{1}{n} \sum_{t=1}^n |E_t|$$

The mean squared error (MSE) is the average of the squared differences between the forecasted and observed values. Its formula is:

$$MSE = \frac{1}{n} \sum_{t=1}^n E_t^2$$

A problem with both the MAD and MSE is that their values depend on the magnitude of the item being forecast. If the forecast item is measured in thousands, the MAD and MSE values can be very large. To avoid this problem, we can use the mean absolute percent error (MAPE). This is computed as the average of the absolute difference



between the forecasted and actual values, expressed as a percentage of the actual values. That is, if we have forecasted and actual values for  $n$  periods, the MAPE is calculated as:

$$MAPE = \frac{\sum_{t=1}^n \left| \frac{F_t - A_t}{A_t} \right|}{n} \times 100$$

### 3. Methodology

In this research, there are six phases of methodology, which are preliminary survey, problem identification, literature study, data collection, data processing and analysis, and conclusion and recommendation. The first is preliminary survey which is to find out the potential problems occurred in the company by doing interview with marketing, sales, and production division. Second is problem identification and found that the company forecast their influenza vaccine by using personal judgement method, which is cannot give appropriate result. This research used literature study to strengthen the findings and to find out how to solve the problem by take some theoretical basis from books, conference and journal articles, and other online resources. Next collect the data which is the demand data of influenza vaccine from third quarter of 2010 until second quarter 2016. After the data is collected, the next step is analyzing it to find the most suitable demand forecasting method for the company. Four methods are used in this study, these are moving average, exponential smoothing, Holt's Model, and Winter's Model. Finally after analyze it, there will be conclusion which is the most suitable demand forecasting method for the company and also recommendation for the company.

### 4. Data Analysis

This research uses the influenza vaccine demand of a vaccine manufacturer in Indonesia from third quarter of 2010 until second quarter of 2016. Figure 1 shows the quarterly historical demand for influenza vaccine from third quarter of 2010 until second quarter of 2016. The demand of the vaccine rises every year and increased drastically in the period when Hajj nears.

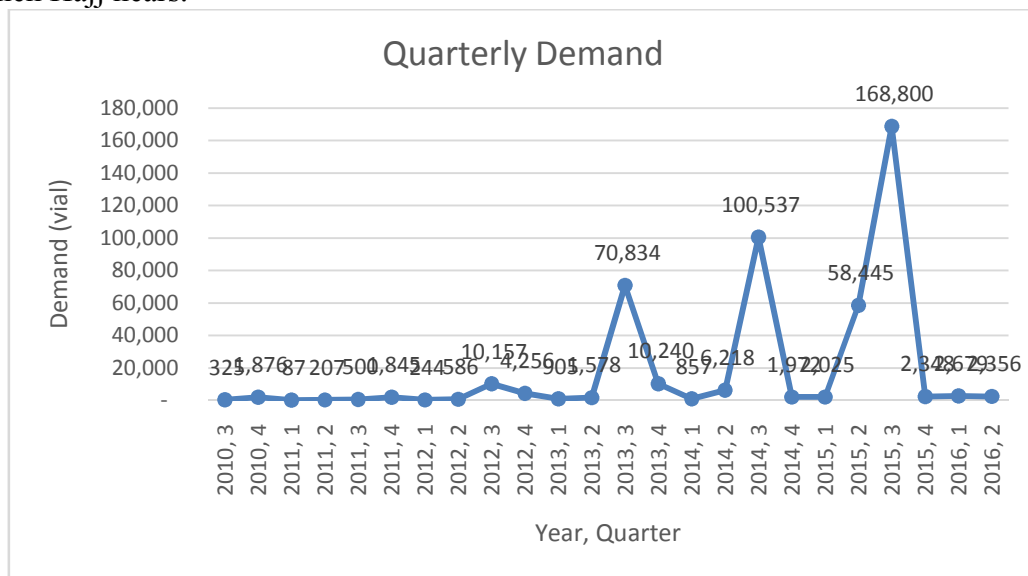


Figure 2 Historical Demand

The first method is Moving Average. The errors of this method are present by the number of MAD and MAPE, which are 29,229 and 663 %, respectively. The graph comparison between the actual demand and forecast demand based on moving average method is shown in figure 2.

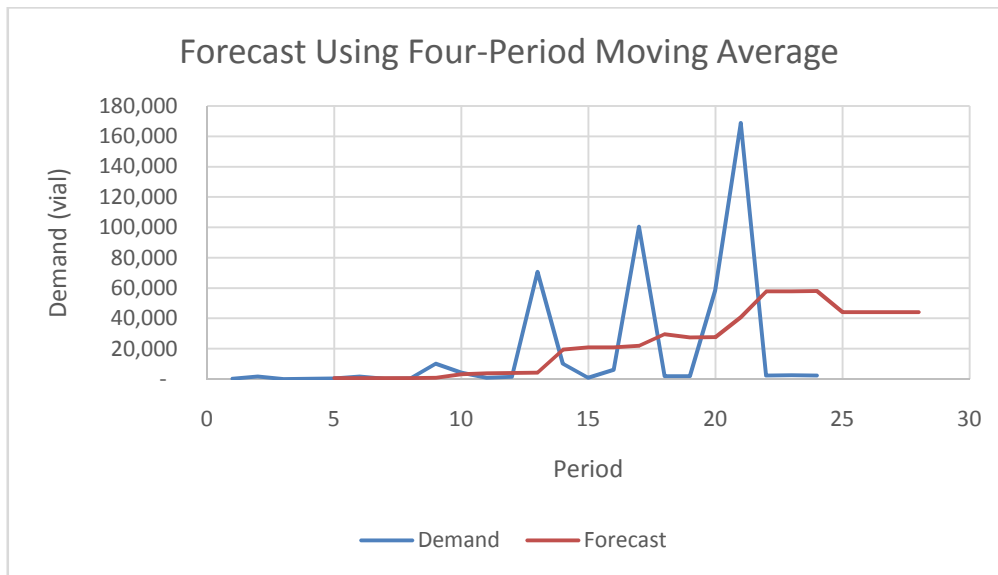


Figure 3 Actual vs Forecast Demand using Moving Average

Second method the used is Exponential Smoothing. This method could give vary result of forecast and also the errors depend on the value of alpha used. In this research, the number of alpha used is 0.1 ( $\alpha = 0.1$ ) because it give the best result which is the smallest errors. Based on the calculation, the resulting MAD and MAPE of influenza vaccine demand forecast using simple exponential smoothing method are 25,421 and 1,991%, respectively. The graph comparison between the actual demand and forecast demand based on simple exponential smoothing method is shown in figure 3.

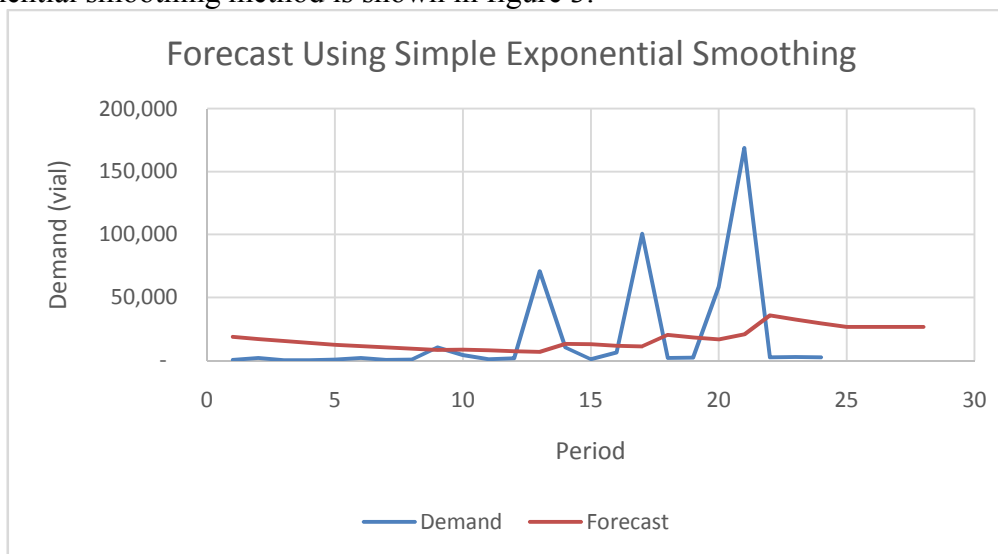


Figure 4 Actual vs Forecast Demand using Exponential Smoothing

Holt's Model is the third method that used in this research. Same as exponential smoothing, this method could give more than one result, but in this method the result is not only depend on the value alpha, but also the value of beta. The number of alpha and beta used are 0.1 and 0.1 ( $\alpha = 0.1$ ;  $\beta = 0.1$ ). 25,651 and 951% is the result of MAD and MAPE based on this calculation. The graph comparison between the actual demand and forecast demand based on Holt's Model method is shown in figure 4.

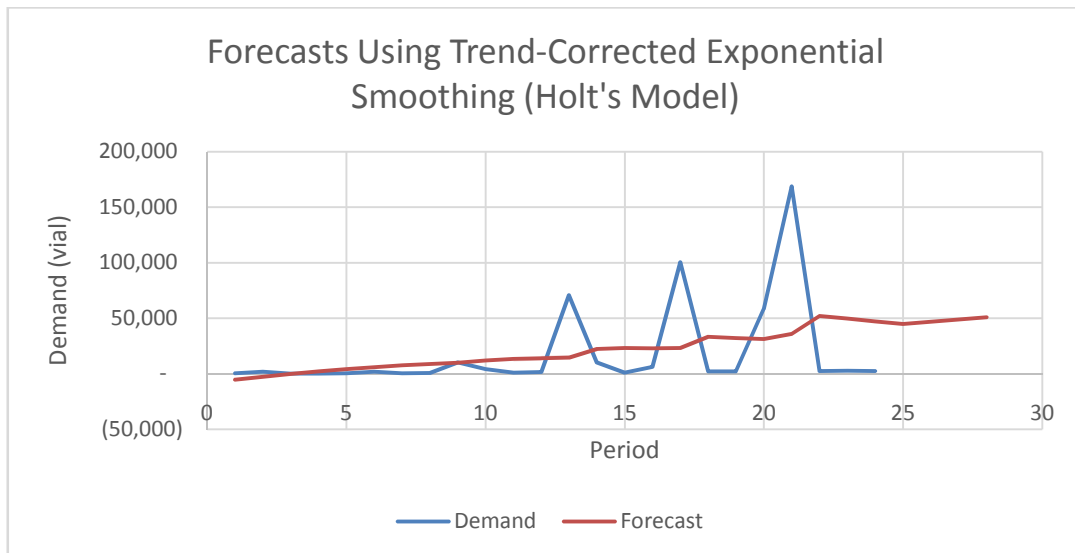


Figure 5 Actual vs Forecast Demand using Holt's Model

The fourth method is Winter's Model. The result of this method also depend on the value of alpha and beta, with gama as the additional. The alpha, beta, and gama used are the number which give the less errors ( $\alpha = 0.1$ ;  $\beta = 0.1$ ;  $\gamma = 0.9$ ). The resulting MAD and MAPE of influenza vaccine demand forecast using Winter's Model 12,886 and 2,271%, respectively. The graph comparison between the actual demand and forecast demand based on Winter's Model method is shown in figure 5.

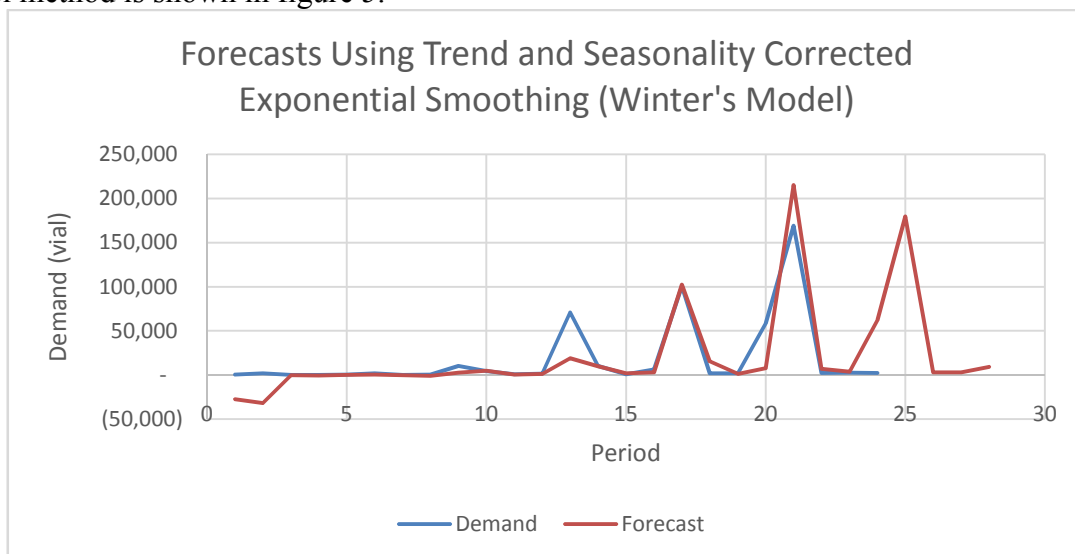


Figure 6 Actual vs Forecast Demand using Winter's Model

After the result of all method are got, now the MAD and MAPE which used to measure the errors are compared. The purpose of this comparison is to find the most suitable method, which based on the historical demand data. The method which has the smallest MAD and MAPE is chosen as the most suitable method for influenza vaccine in the company. The smallest error means there is only a small difference between the actual demand and forecast demand.

Figure 6 shows the comparison of MAD. As shown in the chart, Moving Average has the highest MAD while Winter's Model has the lowest MAD. The result shows that Winter's Model is the most suitable approach for the influenza vaccine forecasting.

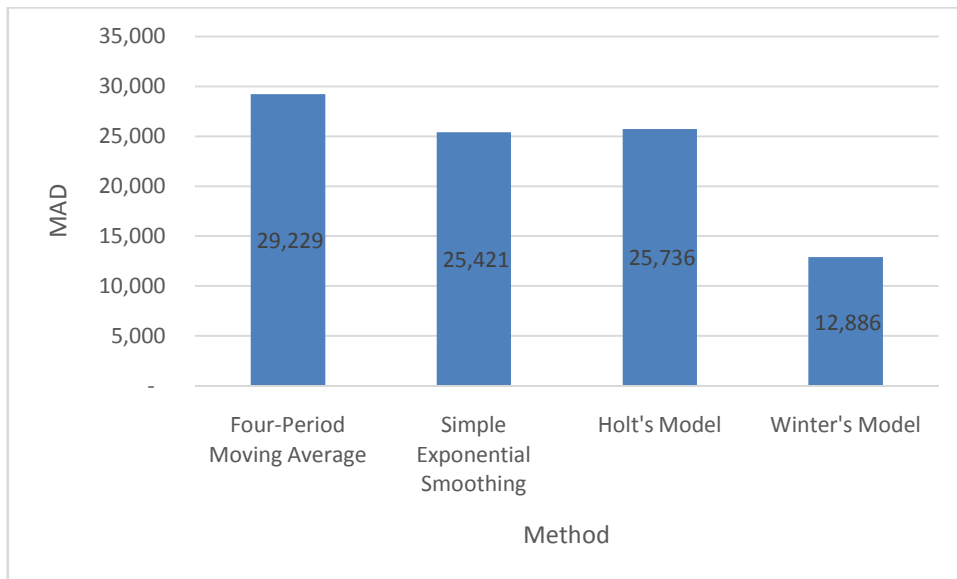


Figure 7 MAD Comparison of Demand Forecasting

Figure 7 shows the comparison of MAPE. As shown in the chart, Exponential Smoothing has the highest MAPE while Winter’s Model has the lowest MAPE. Based on the comparison, it shows that Winter’s Model is the most suitable approach for the influenza vaccine forecasting.

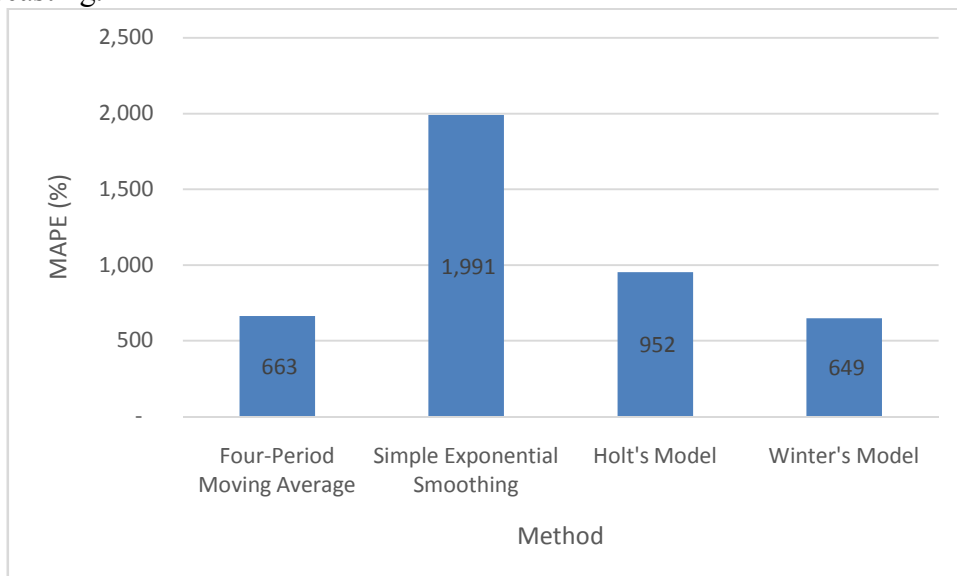


Figure 8 MAPE Comparison of Demand Forecasting

### 5. Conclusion

The present study has attempted to find out the most suitable demand forecasting method for influenza vaccine, the product from a vaccine manufacturer in Indonesia, by employing the four forecasting method, these are moving average, exponential smoothing, Holt’s Model, and Winter’s Model. The method which gives fewer errors, which is the lowest MAD and MAPE, is chosen as the most suitable method for the company.

This study found that Winter’s Model provides the best result in terms of MAD and MAPE because it has the lowest MAD and MAPE than the others demand forecasting method that chosen in this research. The lowest MAD and MAPE mean that Winter’s Model method has less errors and become most suitable demand forecasting method to the company.

The similar study, which also compares these four methods in forecasting the passenger traffic movement in Lufthansa Airlines, also found that Winter's Model gives best result (Singh & Das, 2010).

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**E-TRUST: ANTECEDENTS AND THEIR CONSEQUENCE****Diesyana Ajeng Pramesti**Muhammadiyah Magelang University, Marketing Management Department, Magelang,  
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**Abstract:** This study fills a gap in research that has been missed by the previous studies about factors that influence trust in connection with one's intentions to purchase. Research on the experience in the network associated with the purchase intention among other research says that trust in the network and purchase intentions is significantly affected by the experience in searching information through the Internet. The search process is repeated information that will foster a sense of trust for the site. With the difference in the results obtained, then it is the background of this study to examine the effect of experience as a variable in trust and purchase intentions. Second: empirical gap, trust is influenced by the perceived quality of the site and is endorsed by the brand personality of the site. This study will reveal whether brand personality can strengthen or weaken the relationship between the quality of sites that are perceived by the trust and know the brand personality as what will strengthen the relationship between the two variables. This study design uses quantitative methods to test the effect of independent variables on the dependent variable either no influence or no influence of moderator variables moderator variables. The variables that will be tested include the perceived quality of the website, the network experience, propensity to trust, purchase intention, and brand personality. This study proves the hypothesis being tested in seven items, five accepted items and two cannot be accepted. This study found different results with a previous study that the brand personality who serves as moderator weakens the relationship between perceived quality sites and trust. The experience and knowledge of a person in the use of shopping sites have a big impact as it can minimize the uncertainty and unfortunate events that happens in the purchase through shopping sites. While a sense of trust alone is not sufficient to make a purchase decision through the shopping site because there are the uncertainty factor that creates a feeling of doubt on the shopping site. Overall it can be concluded that the quality of the sites, experience, and propensity to trust have a direct impact on confidence in shopping sites and person's purchase intention on shopping sites.

**Keywords:** *Reaction Action Theory (TRA), e-trust, purchase intention*

**Introduction**

The Central Bureau of Statistics (2016) says that the number of Internet users has increased about 32% in 2016. The number of Internet users in Indonesia in 2014 reached 27 million, in 2015 to 37 million (CBS, 2015) and in 2016 increased to 82 million people. These put Indonesia ranked the eighth country in the world's largest Internet user. This means that every year in Indonesia there is significant increase in the number of internet users. Penetration increase in the number of Internet users reached 32%.

The intensity of buying and selling in a large network with an average growth of around 17-20%, making Indonesia the country with the largest growth network based store

and become the world business goals for the business development in the network (Koran Sindo; Markplus Insight; Marketeers, 2014). Businesses within the network can grow rapidly in Indonesia due to the lifestyle of a consumer society and the increasing number of per capita income to about \$ 3,000 per month in 2013, so that the average income of 3-5 million per month will increase the purchasing power of buying and selling within the network (Koran Sindo, 2014). The higher the amount of income received it will make people find the desired item in a way that is easy, fast, and efficient.

Trust becomes a critical component in building relationships between sellers and buyers (Speier et al., 1998). Trust is the main capital for buyers in the network (Cox, 1999; Levin, 2000; Westin and Maurici, 1998). Without it there will not be many transactions in the network (Cheskin and Sapient, 1999; Head and Hassanein, 2002). Anyone committing a transaction in the network must have a risk of uncertainty over something unexpected and unfavorable throughout the transaction process. To reduce the risk of uncertainty then there are 2 strategies of trust (McKnight et al., 2002), the association of the portal and customer testimonials. The strategy is a strategy associated portal confidence by seeing the site's reputation, while the strategy of customer testimonials done by testimonials from customers about the experience of buying and selling transactions on the site.

The lack of a sense of trust in a company that is doing business of buying and selling in the network will lead to no transaction (Dolatabadi and Ebrahimi, 2010). The importance of the trust that is built in a transaction in the underlying network of many studies about the factors influences trust. According to Mohammed (2014), trust in the network is affected by risks and experience. The risk in question is a risk to security, privacy and fraud crimes, as well as product quality expectations.

With that experience accessible goods and services can be varied (Hargittai, 2010). In contrast to the opinion of Habibi et al. (2014), influenced by the trust on the electronic sites perceived quality and personality of the brand itself. The quality of the site in question is a form of design and usability attributes of the site (Aladwani and Palvia, 2002). While the brand personality associated with products and services that affect consumer behavior.

According Dolatabadi and Ebrahimi (2010), an electronic trust is influenced by a company's reputation, security and privacy of the site as well as the risks and benefits of the site. In addition to the risks and perceived quality of the site, trust is influenced by the amount of inclination to believe (Teo and Liu, 2007). In the transaction within the network, the trust can be built through the display on the site (Lohse and Spiller, 1998).

If someone has a good experience of the transaction in the network and are confident then transaction will be made, that someone will have a higher intention to conduct transactions in the network (Mohammed, 2014). In addition, if a person has had a good experience and high confidence against the seller in the network, usually he would recommend to the nearby such as family, friends, and others.

This study fills a gap in research that has been missed by the previous studies about factors that influence trust in connection with one's intentions to purchase. First: an empirical gap; research on the experience in the network associated with the purchase intention among other research Smith (1997); George (2002); Hargittai (2010) says that trust in the network and purchase intentions is significantly affected by the experience in searching information through the Internet. The search process is repeated information that will foster a sense of trust for the site. Mohammed (2014) examined the experience and risk variables as independent variables that affect the trust and intent to purchase. The results showed that the experience have no significant effect on trust and intent to purchase. With the difference in the results obtained, then it is the background of this study to examine the effect of experience as a variable in trust and purchase intentions.

Second: empirical gap, Research Habibi et al. (2014) says that trust is influenced by the perceived quality of the site and is endorsed by the brand personality of the site. Thus, this study will reveal whether brand personality can strengthen or weaken the relationship between the quality of sites that are perceived by the trust and know the brand personality as what will strengthen the relationship between the two variables.

Theory of reasoned action defines the relationship between beliefs, attitudes, norms, intentions, and behavior of individuals. The theory describe the behavior of a person is determined by behavioral intention to perform the behavior. Intention itself is determined by the attitude of the people towards behavior and subjective norms.

In this study specifically addresses the belief that with trust as a confidence buyer on Internet sites, although there is the possibility of errors in the transaction but remains hopeful that the site can make transactions on the desired product (Mayer et al., 1995; Lim et al., 2006), there are 2 of beliefs and intentions in electronic trust (McKnight et al., 1998; Lim et al., 2006). The concept of a confident is confident that the store in the network is correct, competent, honest, or predictable. While the intention means the buyer is willing to expose himself about the possibility of failures and errors in a transaction in the network.

### **Research Design**

This study design uses quantitative methods to test the effect of independent variables on the dependent variable either no influence or no influence of moderator variables. The variables that will be tested include the perceived quality of the website, the network experience, trust, intentions to purchase, propensity to buy, and brand personality.

### **Operational Definition**

Trust is a positive belief, personal nature, action, situational features, and social structures on something (Hosmer, 1995; Sitkin and Roth, 1993 in Das and Teng, 2004). A list of question items about trust is adopted from research by Doney and Cannon (1997); Gefen (2000); Gefen and Straub (2004); Jarvenpaa et al. (2000); Jarvenpaa and Tractinsky (1999); Macintosh and Lockshin (1997).

Quality sites are perceived is how do you view someone on shopping sites according to specific criteria such as the details of the products and services offered, how the rules of privacy in such sites, and any other specific information given (Aladwani and Palvia 2002 in Habibi et al ., 2014; Kim and Lennon, 2013). A list of the question items of perceived quality sites adopted from research by Gregg and Walczak (2010); Kim and Lennon (2013); Aladwani and Palvia (2002).

Experience is the activity of customers in evaluating product information, payment methods, services, navigation, a personalized shopping site (Ling et al., 2010). A list of question items about the experience adopted from research by Dholakia et al. (2000); van Dolen and Ruyter (2002); Johnson and Mathews (1997); Ling et al. (2010).

Propensity to buy is the tendency of individuals to believe in someone, especially in important decisions and something new related to shopping sites (Gefen, 2000). A list of question items about the tendency to believe adopted from research by Gefen (2000) in Teo and Liu (2007).

Brand personality is the identification of potential products or services that influence consumer behavior (and Lombart Louis, 2010). A list of question items about the brand personality adopted from research by Kim et al (2001); Muller and Chandon (2003).

Purchase intention is the desire of consumers to buy a product at a particular shopping site is reliable. Behavioral intentions are considered direct antecedents of the actual behavior (Ajzen, 1991). The list of questions related to the intention of the



transaction referred to a study by Habibi et.al (2014); Teo and Liu (2007); and Gregg and Walczak (2010).

### **Population And Design Decision Sampel**

Samples are respondents who have the following characteristics: (1) never do a search on information related to goods bought and sold on a shopping site. (2) Knowing one of the most popular shopping sites is used as research objects. Samples used amounted to 180.

### **Hypothesis Testing**

To get the data in a preliminary test (pilot test), researchers distribute questionnaires to fifty respondents, consisting of students, and professionals. Distribution of questionnaires carried out directly in Yogyakarta in October 2015

The whole construct has Cronbach alpha values above 0.7, which means the entire construct reliable. In a preliminary test the validity is more focused on the value factor loading of each item statement and not on any item mengumpulnya statement in the same construct in the same matrix. Thus, in this preliminary test matrix layout statement items are ignored. KMO value is generated by 0.527 and the significance resulting from Bartlett's Test of Sphericity 0,000. Values are already eligible to be  $> 0.5$  with a significance of 0.05. So from the reliability and validity of test results above, it can be said that the construct and the sample used to allow for further analysis.

### **Discussion**

Hypothesis 1 states that "The quality of the sites perceived positive effect on trust". Can be seen the value of probability and critical ratio of variable quality at variable sites perceived trust of 0.007 and 2.706,. It can be interpreted that the influence of variable quality at variable sites perceived trust and significant positive so HA1 accepted. First impressions were seen consumers on shopping sites are the quality that includes the display contents, information, and others. That's the impression that over time will form a perception that foster a sense of trust in the shopping sites. The increasing perception of the quality of the sites also contributes in increasing confidence in the site although the effect is very small. Differences may occur because of one study with other studies that have different research settings. Background residence, cultural, social, and others created the perception of a person's thinking. The similarity of the results obtained in the study Habibi et al. (2014) and this study is the similarity in setting the respondents, Malaysia and Indonesia. The two countries have similar cultural and social backgrounds. Besides the perception that each person have is different with others.

Hypothesis 2 states that "brand personality moderate the relationship between perceived quality sites with confidence" can be seen the value of probability and critical ratio of 0,960 and -, 050. This may imply that the HA2 not approved. That the brand personality variables do not moderate the relationship between perceived quality variable sites with variable confidence. Because the t-statistic was negative and insignificant with their brand personality variables will weaken the relationship between perceived quality variable sites with confidence variable. Weaken Moderation can be described if the shopping site has a display that is less imaginative, simple, less attractive, less unique, even to strengthen a sense of trust and confidence in shopping sites. So with a specific brand personality will actually decrease the sense of trust and confidence in one's shopping site.

Muller and Chandon (2003) in Habibi et al. (2014) suggested that the effects of brand personality can strengthen or weaken the relationship between perception of quality

shopping sites and trust. It can also be affected by the type of items to be purchased on the shopping site. If the goods to be purchased are luxury goods, clothing, food, cleaning products, the brand personality of the shopping sites will strengthen the relationship. But if the goods to be purchased include functional items and household items such as household appliances, the electricity appliance brand personality is not important. This is because consumers typically prefer the functionality and usability of goods compared with the characteristics of the shopping site. In the context of Indonesian society, they are more trusting to standard shopping site with good the quality than shopping sites that feature different character. In addition the average purchase goods through shopping sites in Indonesia are mostly functional items, so that the results of this study found that brand personality trait moderation weaken the relationship between perceived quality sites with confidence. In addition Ferrandi et al. (1999) in the Habibi et al. (2014) say that the specific character of a site will be a strong influence on trust. It can be interpreted that if the character of a shopping site specific enough in the eyes of consumers, it will not reduce the influence on confidence in shopping sites.

Hypothesis 3 states that "The propensity to trust moderate the relationship between perceived quality sites with trust" can be seen the value of probability and critical ratio of 0.209 and -1.256. This means there is no moderating influence in tendency to believe variable with the relationship between perceived sites quality variable in the trust variable, indicated by the value of t-statistic of negative and insignificant. That is HA3 not accepted. This shows that with the moderation of propensity to trust variable in the relationship between perceived sites quality variable with variable trust is weakening. In other words those by their sense of trust in others and trust on other people's views on a shopping site it will affect the perception of the quality of the site and would probably weaken a sense of confidence in the site.

Hypothesis 4 states that "The propensity to trust the positive effect on trust" can be seen the value of probability and critical ratio of 0.150 and 1.441. Meaning no variables influence the propensity to trust in the positive trust variable and not significant, so HA4 accepted. Inclination to trust usually associated with the selection of goods that have a long economic time and used for the long term. It is also due on individual experience and perception or view a trusted person about the goods. In the end it is to build a trust (Teo and Liu, 2007).

Hypothesis 5 states that "Experience has a positive effect on trust" can be seen by the value of probability and critical ratio of 0.003 and 2.924 which means that the effect of variables on the trust variable and experience is positive and significant, so HA5 is accepted. In other words, the more experience user related to internet use and knowledge of the shopping sites then trust in these sites are also getting bigger. Experience in the use of internet information search significantly affects a person's trust to the shopping sites in the network.

Hypothesis 6 states that "Trust has positive influence on purchase intention" to see the value of probability and critical ratio of 0.000 and 4.218. This means that the effect on the variable trust and purchase intentions are positive and significant, so HA6 is accepted. In other words that it is not always the higher sense of confidence in the shopping site will be followed by the intention to make purchases on shopping sites. Trust is a very important factor in order to get and keep customers (Mohammed, 2014). Trust also needed in generating the intention or desire to buy on unknown sites (Gregg and Walczak, 2010).

Hypothesis 7 states that experience have a positive influence on purchase intention" to see the value of probability and critical ratio of 0.010 and 2.590. This means that the effect of variables in the experiences variable is positive and have a significant correlation with purchase intention, so HA7 is accepted, in other words the more

experience related to internet use and knowledge of the shopping sites then it is likely to have the intention of making a purchase through shopping sites are also getting bigger. With their previous experience on shopping sites or in search of information will strengthen the desire or intention to make a purchase of goods on the trusted site. With the experience to minimize uncertainty and unfortunate things that happen related to the purchase through shopping sites.

### Conclusion

This study proves the hypothesis being tested in seven items, five accepted items and two cannot be accepted. This study found different results with a previous study that the brand personality who serves as moderator weakens the relationship between perceived quality sites and trust. The experience and knowledge of a person in the use of shopping sites have a big impact as it can minimize the uncertainty and unfortunate events that happens in the purchase through shopping sites. While a sense of trust alone is not sufficient to make a purchase decision through the shopping site because there are the uncertainty factor that creates a feeling of doubt on the shopping site. Overall it can be concluded that the quality of the sites, experience, and a propensity to trust have a direct impact on confidence in shopping sites and person's purchase intention on shopping sites.

### Future Research And Research Limitations

There are time limitations to the study, so the measurement process for brand personality variables in this study only using survey methods. Perceptions of quality shopping sites and a person's experience associated with the existing shopping sites based on the process takes time. Most research on trust in the network is only done in countries with many Internet users. The study only focused on the perception of the shopping site in general, does not classify the types of shopping sites based on traded goods as well as any items commonly purchased by consumers in the network. For future research can be carried out in a sustainable environment because of perceptions about quality shopping sites and a person's experiences takes time. In regards to digging deeper into the perception of the quality of the shopping site and brand personality other than using survey methods experimental methods can be use. The focus of this research is only in the perception of the shopping site in general, does not classify the types of shopping sites based on traded goods as well as what items commonly purchased by consumers in the network, then for further research, researcher are expected to be more specific to research shopping sites by classifying each shopping site based on the type of goods bought and sold, or based on the goods purchased by consumers.

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## INNOVATION OF THE SALAM FINANCING PRODUCT (A CASE STUDY IN BUMI RINJANI PROBOLINGGO SRB)

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### Abstract

This paper aims to analyze how the system of salam financing at Bumi Rinjani Probolinggo SRB, studying the factors of salam financing distribution's problems; exploring what innovations are needed to increase the implementation of the salam contract; and examining the innovation applied on salam accounting. This type of research is qualitative constructive. The unit of analysis in this study is Bumi Rinjani Probolinggo SRB as the sharia rural bank that provides salam financing. The results showed that Bumi Rinjani SRB are motivated to implement salam financing due to the needs of farmers to purchase the production's needs and the short financing period, so that salam financing is the correct type of financing. The financing applied is a single salam contract. Because the items purchased by the SRB are items such as rice, potatoes, maize, with no intention to make such items as inventory, then the SRB entrust the goods to the bai salam customer for reselling by wakalah. There are several factors that become obstacles for SRB related with salam financing, are; 1) The bad character of bai salam customers; 2) Failed harvests; 3) The fluctuative market prices; 4) The provisions of supervisors that the SRB should have a Warehouse. The comprehensive efforts to resolve the problems are; 1) Salam bil wakalah financing; 2) Salam bil Mudharabah financing.

**Keyword:** *salam financing, salam accounting, product innovation, wakalah, mudharabah*

### 1. Introduction

Islamic bank is a solution to obtain capital without any loan interest. It seemed to be a fresh idea in breaking the impasse among the entrepreneurs in Indonesia to obtain capital without having to engage in usury. The moves of customers from conventional banks to Islamic banks develops Islamic banking and motivates to improve the types of the transactions. These transactions become facilitator between Islamic banks and customers to avoid the elements of riba. In relation to this case, a transaction used is definitely following the rules of Islamic principles.

Islamic banking industry is an industry that is now growing rapidly in the world. In Indonesia, the Islamic banking industry has developed quite well (Wardayati and Wulandari, 2014). The growth rapid increasing of Islamic banking should also be followed by the development of products and the variation of the contract in accordance with Islamic principles. Based on statistical data of Islamic Banking, since 2002 until early 2015, in the last 13 years, financing with contract salam in Islamic Banks as well as Sharia does not exist at all. as we know salam contract with the down payment purchase system is good to be applied as one of banking products in the sectors of agriculture industries and other industrial sectors e.g. garment, by this contract, the two parties are able to get profits without elements of usury, deception or gharar (speculation) (Antonio, 2015).

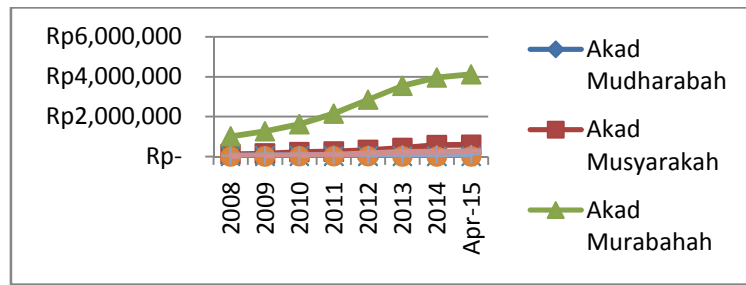


Figure 1. Composition of the financing provided Shariah Rural Bank (In Million Rupiah) Obtained and processed from source: Islamic Banking Statistical Data 2008 - April 2015, the FSA

In other case, Shariah Rural Bank (SRB) implements salam financing with salam contract. There are SRB that implement financing with salam contract such as PT. Dana Mulia Surakarta in 2010 and PT. Syariah BPR Bumi Rinjani Probolinggo in 2012. PT. Probolinggo Syariah BPR Bumi Rinjani is one of the banks where the operational activities are based on Islamic principles. In Figure 1 we can see that the trend of salam financing under salam contract as one of the contract with sale and purchase principle continues to decline. From Figure 1 it can be concluded that financing with murabaha is a contract with the principle of trading that dominates. In 2008 salam financing agreement is Rp. 38 million, these numbers fluctuate every year. In April 2015 the composition of financing with salam contract decreased about 58% i.e. to Rp. 16 million, -. However, it must be appreciated because microfinance institutions are still willing to distribute financing with salam contract.

The factor that causes the failure and boost the success of salam financing contract lies in the difficulty of the crop marketing (Roziq, 2014). Another factor that led to the avoidance of salam contract implementation is a lack of understanding of banking practitioners about the application of salam contract (Devi, 2009; Affandi, 2013), the lack of socialization to the public concerning the financing of salam contract (Roziq, 2014; Devi, 2009; Affandi, 2013), high cost (Devi, 2009; Adams and Fitchett, 1992 in Kaleem and Wajid, 2009; Muneeza, et al, 2011) as well as the risk inherent in financing under the salam contract (Roziq, 2014; Adi, 2012; Devi, 2009; Ashari, 2005; Affandi, 2013; Adams and Fitchett, 1992 in Kaleem and Wajid, 2009; Muneeza, et al, 2011).

The reason to conduct this research at PT. BPR Bumi Rinjani Probolinggo with salam financing topics among 162 SRB in Indonesia, is due to the fact that SRB Bumi Rinjani Probolinggo is the last SRB that applied salam financing contract and among the products applied, the trend of financing products with salam contract continues to decline. Based on these background, this study analyze the system of salam financing contract at the SRB Bumi Rinjani Probolinggo, investigate the factors that become obstacles in the distribution of salam financing contract at SRB Bumi Rinjani Probolinggo; explore what innovation efforts that are needed to improve the application of salam contract at the SRB Bumi Rinjani Probolinggo; and examine how the implications of the funding system inovation with salam contract to the salam accounting treatment.

## 2. Literature Review

### 2.1 Definition of the Salam Contract

Definition of salam in the PSAK 103 is a contract of sale of ordered goods (muslam fiih) with the later day delivery by the seller (muslam illaihi) and the repayment made by the buyer at the time the contract was made in accordance with certain



conditions. Salam definition in the DSN No. 05 / DSN-MUI / IV / 2000, stated that the sale of goods by way of reservation with payment in advanced with certain conditions, called as salam.

Definition of Salam by Muhammad Ibn Ahmad Ibn Muhammad Ibn Rushd (1988), namely Bai 'As-Salam means the purchase of the goods delivered in the future, whereas the payment made in advanced (Antonio, 2015). Bai 'as-salam is the type of transaction which the payment made at the time of the contract, but the goods are given later with a predetermined time (Roziq, 2014). Salam s a transaction which deliver of ordered good is deferred while the payment is paid in cash at the begining of the transaction by obtaining certain condition (Ningsih, Wiwik F., dan Wardayati, Siti M., 2016)

## 2.2 Legal Basis of Salam Purchase

Salam transaction is allowed in Islam, it is based on the theorem of al-Quran and al-Hadith including:

### a. Al-Qur'an

The theorem that explains the permission of salam financing is in Surah al-Baqarah verse 282:

يا أيها الذين آمنوا إذا تداينتم بدين إلى أجل مسمى فاكتبوه

In accordance with the Sura al-Baqarah verse 282, Ibn Abbas explain the relevance of that paragraph to the transaction of bai 'as-salam. It is clearly understood from his statement that, "I testify that the Salaf (salam) that is guaranteed for a specified period has made lawful by Allah in His Book and is allowed by Him." He then read the preceding verse (Antonio, 2015).

### b. Al-Hadith

Ibn Abbas narrated that the Messenger of Allah, Muhammad, Comes to Medina where the residents do Salaf (salam) in fruits (for a period) one, two and three years. He said, "Whoever did the Salaf (salam), should he do with a clear measurement and clear scales anyway, for the knowm period of time." Suhaib ra, that the Messenger of Allah. said, "Three things which have blessing: tough buying and selling, muqaradhah (mudaraba), and mixing wheat flour for domestic use and not for sale." (Reported by Ibn Majah)

## 2.3 Pillars and provisions of Bai 'As-Salam

Bai 'as-salam requirements should meet a number of pillars and the provisions of sharia (Wasilah, 2011). Below are the pillar along with conditions that must be met in each pillar:

### 1) doer (performer)

Performers consists of the seller (muslam illaihi) and buyers (al muslam). Sharia provisions for contract actors are capable of law and mature. Trading activities done with people who are in common sense disorder becomes invalid and trading with children is considered valid as long as it goes with the permission of their guardians.

### 2) The object of the contract

The object of the contract is in the form of goods that will be delivered (muslam fiih) and capital salam (salam maalis ra'su). Sharia provisions related to the goods of salam (Al-Muslam feehi) are; The identified goods, have clear specifications and characteristics such as quality, type, size, and others; The goods must be quantified or weighed; time of delivery of the goods must be clear and there should be at a predetermined time; if the goods did not delivered at the specified time the contract becomes fasakh / damaged and the buyer can choose whether to wait until the goods are available or cancel the contract; if the goods ordered are defective or not in accordance with that agreed in the contract, then

the buyer should undertake *Khiar* (choose to accept or reject); place of delivery, the contracting parties must assign it to an agreed place where the goods must be submitted, if both parties do not specify the place of delivery, the goods must be sent to a place that became a habit, for example, the warehouse of the seller. The scholars prohibit *muslam feehi* to be replaced with other goods. Exchange or replacement of goods *as-salam* is not allowed, because although it has not been submitted, the goods are no longer owned by the *muslam* (*fidz-dzimah*). If the goods have the same specifications and quality, although the source is different from the scholars allow it.

Sharia provisions related to capital transactions *bai 'as-salam* including; capital needs to know the type and amount; *salam* capital in the form of money, goods or benefits. The scholars differ in the permission of payment in the form of trading assets. Some scholars allow it; capital *salam* is delivered at the time the contract took place. This is to prevent the practice of usury through the mechanism of *salam*.

### 3) Agreement / *sighat*

*Sighat* is statements and expressions of one another's pleasure or willingness between the parties done verbally, written, correspondence or using means of modern communication.

## 2.4 Type of Salam Contract

There are two types of *salam* contract, namely *salam* and *parallel salam*. Here is a scheme and the explanation of the two types of contract.

### 1) Salam

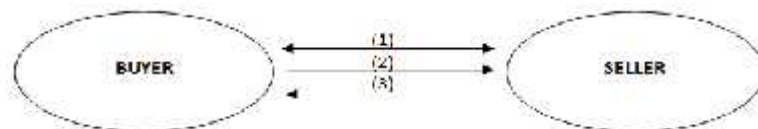


Figure 2. Schematic Salam

Source: *Wasilah 2011*

Caption:

1. Buyer and seller agree on the *salam* contract
2. The buyer pays to the seller
3. The seller delivers the goods

Once the buyer and seller agree on buying and selling ordered goods with a condition that has been set in advance by using *salam* contract, then the buyer pay in full cash amount of money as the price has been agreed. After ordered goods are processed and completed then the seller delivers the goods to the buyer where the location has been set at the beginning. According DSN No. 05 / DSN-MUI / IV / 2000 cancellation of the *salam* contract is basically permissible, as long as it does not harm both parties. If there found a dispute between two parties, then the problem is solved through Sharia Arbitration Board after no agreement was reached by consensus.

### 2) Parallel Salam

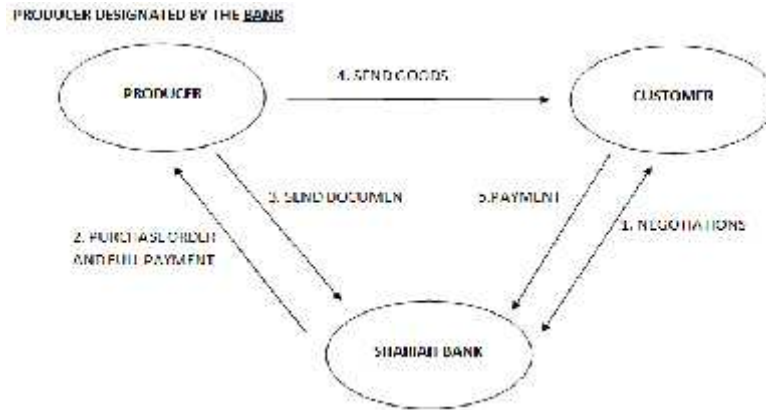


Figure 3. Schematic Parallel Salam

Source: Antonio, 2015

Caption:

1. Customer and Bank negotiate concerning the criteria of the ordered goods.
2. Bank ordered customers to the producer and pay in full in advance.
3. Producer send documents to the bank
4. Producer send the goods to the bank
5. Customers pay to the bank

Procedures of parallel salam is similar with salam contract, but the differences is the involvement of a third party (Wasilah, 2011). Parallel salam in AAOIFI (1999) means executing two bai 'as-salam transactions between banks and customers, and between banks and suppliers or other third parties simultaneously. This happens because the seller does not have the ordered goods and make an order to others to provide ordered goods (Antonio, 2015). According to Ziauddin (1985) The supervisory board of sharia Rajhi Banking & investment corporation has set a fatwa that allows the practice of parallel salam with one condition that the implementation of the second salam does not depend on the implementation of the first contract. Interdependent or ta'alluq will result in non-fulfillment of the pillars (Wasilah, 2011). According to Ziauddin Ahmad (1985) some contemporary scholars leave a note on the transaction of parallel salam, especially if trade and transactions are performed continuously. Such thing is expected to lead to riba (Antonio, 2015).

Parallel Salam is the salam that run simultaneously. For example the first transaction between the buyer and Islamic banks (as sellers), and the second transaction between Islamic banks (as the buyer) with the producer as the seller (Antonio, 2015). The implementation of Parallel salam in banking can be illustrated as follows:

- 1) Customers require an item to be manufactured in advance
- 2) Customers contacted the bank
- 3) Bank undertakes to pay for the goods reservations
- 4) Bank ordered goods to the manufacturer as what customer demand
- 5) The selling price of goods is agreed in advance and is not changed until the goods made
- 6) The length of time for producing goods is agreed by banks, manufacturers and customers
- 7) Customer promised to buy goods after completion
- 8) Customers can pay most of the selling price of goods at the beginning of the contract and repay the remainder of the sale price before the goods are received
- 9) After the goods are made, then it is delivered to the customer

## 2.5 Application of Bai'Al-Salam financing in Islamic Banking in Indonesia

Bay 'al salam (usually used in financing for farmers with a relatively short period of time, ie 2-6 months. Because of what is purchased by the bank are items such as rice, corn, and peppers and the bank does not intend to make such items as deposits or inventory, then do the second contract bay 'ss-salam, for example, to Bulog, the market traders and wholesalers. This is what is known in Islamic banking as parallelsalam (Antonio, 2015). To ensure conformity sharia minimum standards by banks to launch an Islamic banking activities. Bank Indonesia issued a regulation that aims to standardize contract of Islamic banks that are commonly used in Indonesia. The standardized contracts becomes the guidelines for Islamic banks in Indonesia as the principle of its operations (Ascarya, 2006).

The table below is salam and parallel salam financing Stages that have been standardized by Bank Indonesia

Table 1. Stages of salam and the salam parallel financing

No.	Stages
1	Notice the product to the customer thoroughly
2	Transactions / contract
3	Full payment in advance
Followed by second salam (parallel)	
4	Transactions / contract
5	Full payment in advance
6	Delivery of ordered items

Source: Ascarya 2006

### Explanantion:

1. The first stage, the bank at least get the information about salam's products and parallel salan banks including the essence of salam and parallel salam, definitions, terminology, typical conditions of bank, object of salam's characteristic, payment methods, and terms and conditions.
2. In the second stage (and stage 4, if it is parallel), particularly in the agreement contract at least contained the type of contract that is being conducted; the parties involved in the transaction; salam object; objects salam prices; the rights and obligations of the parties; and other agreements.

## 2.6 Application of Bai' Al-Salam in Pakistan Islamic Banking

Pakistan is a republic state with Muslim majority that is 96.4% (Indrawan, 2015). Pakistan is a country that wants to implement Islamic economic system completely. At present, Pakistan is still at the stage of dual financial system (dual financial and banking system). With this system Sharia financial institution operates alongside conventional financial institutions. Islamic financial institutions are expected to become more dominant and become major financial institutions to the community in providing banking products and services (Ascarya, 2006).

Islamic banking in Pakistan apply various covenant for Islamic financial products and instruments offered to customers. The contract provided include wadiah and mudaraba are contract for funding; mudaraba, permanent musharaka, decreasing Musharaka, murabaha, salam, istishna, Ijara, IMBT, akad- Istijrar are contract for financing; kafalah contract, wakalah, Ijara, Sharf, Ujr, Mudharabah muqayyadah are contract offered for banking services. But financing with salam and istishna is less used in Islamic banking in Pakistan (Ascarya, 2006).

Bai Salam covenant is a contract of trade or sale. Bai salam contract provide advantages in agricultural finance. Bai salam give cash at the beginning when needed (eg during sowing, fertilizing, or before harvest). Bai salam contract are fully accepted by the Islamic banking and underused (Ascarya, 2006). There are doubts that banks would prefer to deal with money rather than commodities. So there is no financial institution in Pakistan that offer agricultural loans under the principles of Islam (Kaleem and Wajid, 2009).

Here is an operational basis of Salam financing in Pakistan which has been standardized by the Commission for Transformation of Financial System (CTFs) and approved by the SBP Shariah Board (State Bank's Shariah Board) (Ascarya,2006);

- 1) Salam (payment in advance with delivery of goods) is a form of selling when the seller carry out the supply of certain goods to the buyer at the time that will come with the full payment paid at the time the contract made.
- 2) Buyers must pay the full amount to the seller at the time of purchase contracts executed. If not so, this would be similar to the sale of debt with debt, which is clearly prohibited in Shariah.
- 3) Specification, quality, and quantity of the commodity to be set to avoid the confusion that can be a source of dispute.
- 4) Date and place of delivery must be agreed by the two parties, but it can be changed with the agreement of both parties.
- 5) Salam can be done to the goods "Dhawatul-Amthal" or "Fungible goods" that reflects a commodity with a unit that has the characteristics of homogeneous and traded with the count, size, or weight per the usage and commercial custom. Therefore, items such as precious stones, cattle, and so can not be sold through salam contract, for any rock or any individual animals are generally different from each other.
- 6) Commodity that becomes the object of salam contracts are generally expected to be available at the time of delivery.
- 7) Salam is not possible for goods that is delivered on the spot. For example the exchange between gold with silver; Among flour with wheat, in sharia the exchange of both should be performed simultaneously.
- 8) Salam can not be attributed to the production of the rice field, or a particular tree.
- 9) In salam transactions, the buyer can not bind the seller to buy back the commodity to be delivered by the seller to the buyer. However, after the handover is done, the seller and the buyer can buy and sell independently on the basis of their own accord.
- 10) In salam transaction, the buyer is not allowed, before gaining control of (actual or constructive) of the goods, to sell or transfer ownership of the goods to another person.
- 11) Bank (Purchaser in salam) can perform parallel salam contract without any requirement or contractual relationship with the first salam.
- 12) In order to make sure that the seller will deliver a commodity at the agreed date, the bank may ask for a security guarantee to the seller.
- 13) In the case of more than one commodity, quantity and delivery period for each time should be set differently.
- 14) Fines can be agreed ab initio in the salam contract to the delays in delivery of goods by the client or the seller. In that case, the client shall be liable to pay a penalty calculated as a percent per day / year agreed. However, these funds should be used for charity. Banks also can go to court for compensation of damage, at the discretion of the court, which should be established under the direct and indirect

costs incurred, in addition to the opportunity cost (opportunity cost). Also, the guarantee can be sold by the bank (buyer) without itervensi of court.

## 2.7 Accounting Treatment For Transaction Salam

As mentioned in SFAS No.103, that salam is a contract of sale of goods with the suspension order delivery by the seller and the repayment is done immediately by the buyer before the ordered goods are received with certain conditions. The following is the recognition, measurement, presentation and disclosure of related to salam transactions both the buyer and for the seller.

### 2.7.1 Recognition and Measurement

#### Accounting for buyer

Receivables are recognized when salam business capital are paid or transferred to the seller. salam Capital can be cash and non-cash assets. Salam capital in the form of cash are measured with the amount paid, while salam capital in the form of non-cash assets are measured at fair value. The difference between the fair value and the carrying value of non-cash working capital transferred is recognized as a gain or loss upon the transfer of the business capital.

Acceptance of the ordered goods are recognized and measured as follows: If ordered goods are in accordance with the contract, then is assessed in accordance with the agreed value; If the ordered goods are different in quality, then received ordered goods is measured according to the value of the contract, if the fair value of the received ordered goods' value are equal to or higher than the value of goods specified in the contract; received ordered goods is measured in accordance with the fair value when it is received and the difference is recognized as a loss, if the fair value of received ordered goods are lower than the value of ordered goods listed in the contract; If the buyer does not receive some or all of the items ordered by the due date of delivery, then: If the delivery date is extended, then the value is taken as salam receivable as much as that have not been fulfilled in accordance with the value specified in the contract; If the salam contract is canceled wholly or partly, then receivable salam turned into a salam receivable accounts that should be paid by the seller as a part that can not be met; and If the salam contract is canceled partly or wholly and buyers have the guarantee of the ordered goods as well as the results of collateral is less than the value of the receivables salam, then the difference between the carrying amount of receivable accounts and the sale of salam is recognized as a guarantee of receivables to the seller. Conversely, if the result of collateral is greater than the carrying value of receivables salam then the difference is the right of the salam's seller.

Fines received by the buyer are recognized as part of the charity fund. Buyers can impose a fine to the seller, penalties can only be imposed on sellers who are able to complete the obligations, but deliberately did not do it. This does not apply to sellers who are not able to fulfill the obligations due to force majeure. Fines are applied if the seller fails in performing the obligations under the contract, and the penalty is recognized as part of the charity fund.

Received ordered goods are recognized as inventory. At the end of the financial reporting period, inventories acquired through salam transaction measured at the lower of cost or net realizable value. If the net realizable value is lower than acquisition cost, the difference is recognized as a loss.

#### Accounting for sellers

Salam obligations are recognized when the seller receives salam venture capital as much as received salam venture capital. Received salam venture capital can be in form of cash and non-cash assets. Capital salam in the form of cash measured by the number of items received, while salam venture capital in the form of non-cash assets are measured at fair value. The liabilities of salam is derecognized when the goods sent to the buyer. If the seller does parallel salam transaction, the difference between the amount paid by the last buyer and the acquisition cost of the ordered goods is recognized as a gain or loss on the delivery of ordered goods by the seller to the final buyer.

#### 2.7.2 Presentation

Statement of financial accounting standards No. 103 concerning the presentation related to salam transactions disclosed that the buyer presents salam venture capital given as salam receivables. Receivables which must be repaid because the seller can not fulfill its obligations in salam transactions are presented separately from the receivables salam. Sellers serves received salam venture capital as salam liability.

#### 2.7.3 Disclosure

Buyer in the salam transaction reveals the amount of salam venture capital, either self-financed or group financed; type and quantity of ordered items; and Other disclosures in accordance with SFAS 101: Presentation of Sharia Financial Statements. Seller in salam transaction express salam receivable account to the manufacturer (in parallel salam), which has a special relationship; Type and quantity of ordered items; and other disclosures in accordance with SFAS 101: Presentation of Sharia. Financial Statements.

### 3. Research Method

This type of research is constructive qualitative. Constructive qualitative approach used to build the statement of knowledge based on constructive perspective (eg meanings derived from individual experiences) (Creswell, 2003). Constructive qualitative approach is used to explain how the financing system of salam contract that has been applied by the SRB Bumi Rinjani Probolinggo, factors that causes obstacles in the distribution of funding by the salam contract at the SRB Bumi Rinjani Probolinggo, to build innovation systems is necessary in financing of salam and explain how implications for the salam financing innovation to the accounting treatment of salam. The unit of analysis is the source of information about the variables processed in the data analysis. The unit of analysis may be individuals, groups, or organizations. The unit of analysis in this study is the SRB Bumi Rinjani Probolinggo as one of the banks that implement salam financing.

Data analysis techniques used in this research is to follow the concept given by Miles and Huberman. The steps performed in the process of data analysis as follows: 1) Data collection is data that has been obtained through interview and documentation techniques collected to credible data, 2) Data reduction is the electoral process, focusing on the simplification of the raw data from the records obtained. By summarizing, classifying, directing the data, and discard irrelevant data to get conclusion. If problems are found to be growing the coding for any information obtained will be done. 3) Presentation of data is the process when the required data has been ready to use. The form of the data presentation can be a narrative text, charts, graphs or matrices. 4) Efforts of conclusion is done continuously. The more data is acquired and processed the conclusions obtained will be more detailed and strong.

### 4. Results

#### 4.1 Implementation of Salam financing system on SRB Bumi Rinjani Probolinggo

SRB Bumi Rinjani is motivated to implement salam financing because the needs of farmers for the purchase of the business production needs and due to the short financing period, in accordance with the needs of production process which takes two to six months, so that salam financing agreement is the appropriate that of financing. The kind of salam financing applied by the SRB is a single salam contract. Bai salam is used in financing with the principle of trading, especially for farmers with a relatively short period of time, the period given by the SRB is six months. Because the items purchased by the SRB are items such as rice, potatoes, and maize, while the SRB does not plan to make such items as a inventory, then the SRB entrust the goods to the bai salam customer for resaling along with the crops of bai salam clients. The storage process of goods for resaling is done with wakalah system. where Bai salam customers are willing to sell the goods belonging to SRB with competitive prices following the markets.

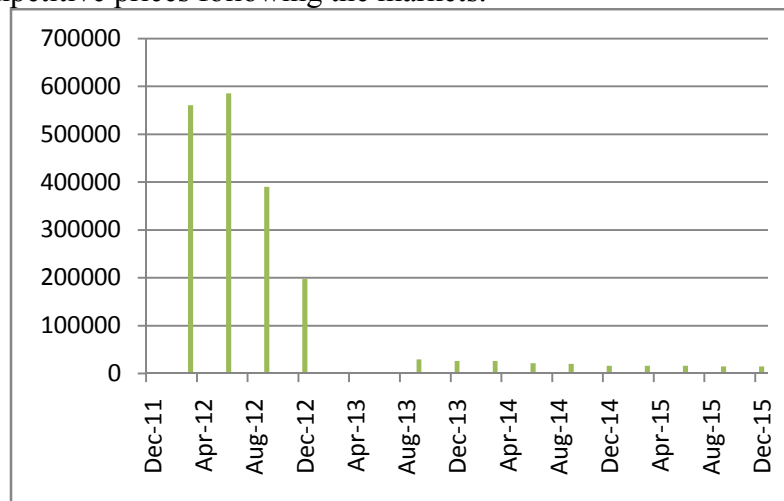


Figure 4. Composition of Financing Salam given SRB Bumi Rinjani Probolinggo (In Thousand Rupiah)

Source: Financial reports quarterly publication SRB Bumi Rinjani Probolinggo on 2011-2015 years

In 2012, SRB Bumi Rinjani Probolinggo implements salam financing. As in Figure 2, which gives an idea of the composition of salam financing given by the SRB. Salam financing distribution is done in 2012, on March 2013 and on June 2013 the data is not available. The composition of the highest salam financing distribution occurred in June 2012, amounting IDR 585.350.000, -But the distribution of salam financing contract is terminated due to the request of supervision regulation (Supervisory Board of the FSA) asking the SRB to make the place / warehouse as a place of supplies. The final composition of salam financing in December 2015 amounted to IDR 15.000.000, -. Below is a scheme of salam financing implementation on the SRB Bumi Rinjani Probolinggo;



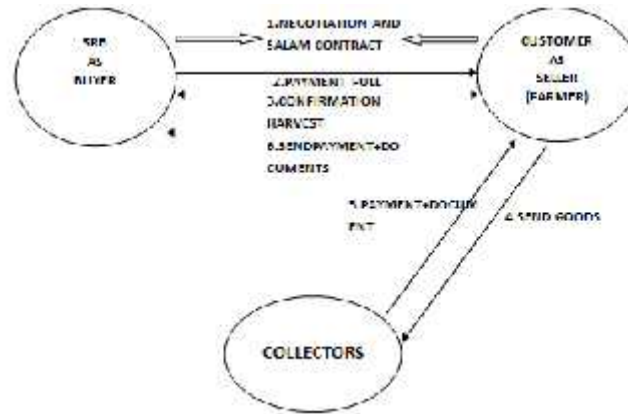


Figure 5 . Financing Scheme Salam on the SRB

Source: processed data (2016)

Explanation:

1. SRB and customers negotiate and agreed the salam contract
2. SRB pays in full payment to customers
3. Customers confirm the harvest
4. Customers send their harvest to collectors
5. Collectors pay in full payment to farmers
6. Farmers handed over the selling results to the SRB

Figure 5 is an overview of salam financing on SRB Bumi Rinjani Probolinggo based on the interviews with Mr. Catur Ariyanto as Directors. So after the proposed salam is approved by the SRB, then SRB hand over amounts of money as previously agreed. The funds are used by farmers to cultivate their fields. After harvest, farmers contacted SRB by phone or come directly to the office of the SRB to confirm that the farmer, as the customer, has harvested. After the harvest meets the agreement, salam financing ended and the goods belonging to SRB are entrusted to farmers for resaling by using wakalah system. After selling the goods, the farmer should transfer the selling output completed with the selling bills to the SRB.

As noticed by Mr. Edy Supriyantoni as Head. Marketing and Mr. Catur Ariyanto as the Board of Directors of SRB Bumi Rinjani Probolinggo that salam financing is actually more effective to meet to the needs of society, especially farmers and still able to protect the SRB in the process of buying and selling, so that innovation is necessary related to received goods as repayment process in salam financing. In this case the SRB does not have to make the inventory, but should present a clear record of the stock inventory and sales reports completed with evidence of the bill of sale. The received goods as payment of financing salam is recorded in the inventory account, but the goods are entrusted to bai salam customers using wakalah system.

The goods belonging to SRB are entrusted to bai salam customers for reselling to the collectors or rice mill using wakalah system which means the handover of power by one party to another in the represented thing, in this case the bank gives over the goods (assets salam) to bai salam customers for resale. With this kind of system, SRB parties can avoid the costs for example transportation costs, labor costs, maintenance costs, and others. In addition, obtained goods in salam financing is a type of perishable goods that should be sold quickly for the safety of the goods. After the item is sold, then the bai salam customer collect the money from the sale completed with the bill of sale. So the SRB can confirm the price of the goods to the buyer.

4.2 Factors of the obstacles in salam financing distribution on SRB Bumi Rinjani probolinggo

There are several factors that become obstacles for SRB associated with salam financing. These factors are;

1) Default or bad character of bai salam customers

Not all customers and prospective customers have good faith in applying for financing. Bad faith is difficult to be known and analyzed by the bank, because it concerns with the matter of morals or character of customer. Salam financing is given by the maximum allotted time of six months to bai Salam customers especially to farmers without knowing what type of crops are grown, for example Salam financing of the corn farmers. If at harvest time, the market prices is high and or the quality of crops is beyond expectation, then there will be possibilities for farmers to sell their crops to corn collectors to reap maximum benefit and ignore the repayment process on the SRB immediately.

2) Crop failure

Crop failure is not desirable and could be the challenge for both farmers and the SRB. There are some things that cause crop failures, including the treatment process and the incorrect way of farming, the high price of fertilizer, lack of subsidized and non-subsidized fertilizer supply, water shortage, imprecision in choosing the growing season, pests, wind factor and extreme weather, natural disasters, and so on. Crop failures that occur due to natural disasters ( force majeure) is given the extension of financing. It has ever happened because the eruption of Mount Bromo in the year 2010 - 2012, the impact of the eruption of Mount Bromo is harmful to farming so that farmers experience crop failure at that time.

3) Fluctuating market prices

Production factors influenced by the weather causes the rising price of rice and other agricultural products such as rice, the harvest usually starts from February to May, but due to raining the harvest is taking longer time about 30 to 45 days, a retreated period of plant makes the harvest retreated so that the supply of rice decreases and affect the increasing of price. Decreasing of supply while the demand of goods are stable, it will lead to the price rising, whereas when supply is plentiful and the demand stands still, it results in the decreasing of price.

4) The rule of the Supervisory Board that the SRB should have a warehouse / storage of goods

One of the factors that becomes a constraint related to the financing of salam is the regulatory oversight (i.e. the Supervisory Board of the FSA) require that the SRB which implements financing with Salam contract needs to have a place / warehouse to store the inventory. Whereas to build a warehouse costs much fund, therefore SRB stop the application of financing with Salam contract. Owning a warehouse gives impact to funding e.g. transportation, employee, maintenance, and so on.

#### 4.3 Innovation Products of Salam Financing at SRB Bumi Rinjani Probolinggo

Based on the research results, to overcome the problems of salam contract financing, a comprehensive innovation of Salam financing can be made, such as; salam financing bil wakalah and salam financing bil mudaraba . Both innovations of Salam financing focuses on the treatment of salam assets after the expiration of salam contract. In the implementation of this contract, the bank acts as buyer without taking the goods to be inventory, therefore the bank needs a strategy to resell the Salam assets.

1) Salam Bil Wakalah Financing

Salam bil wakalah financing is financing where reselling Salam assets uses wakalah system. In this salam financing, customers who contacted the bank is the customer whose profession is farmer / producer. Therefore, in this case the bank acts as a buyer, if the banks agreed to finance it. But the bank's goals in buying asset of salam is not

to be used as inventory, then the banks resell the assets salam using wakalah system by giving the authority over assets of Salam to the bai salam customer for resale. The implementation of Salam bil wakalah financing is guided in the DSN No.05/DSN-MUI/IV/2000 about the terms of buying and selling of salam and DSN No. 10 / DSN-MUI / IV / 2000 about wakalah. The following is salam bil wakalah financing scheme;

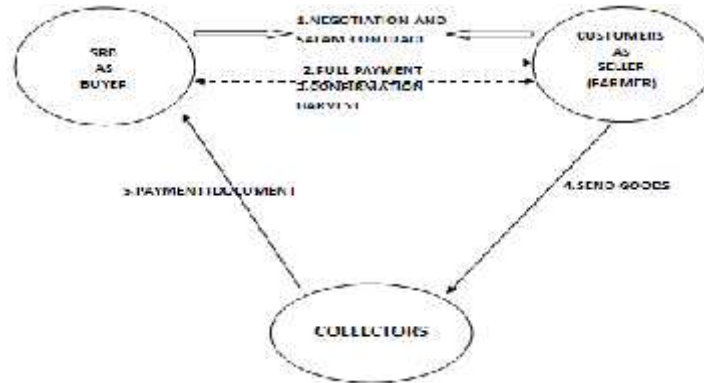


Figure 6. Scheme financing salam bil wakalah

Source: Researcher, processed data (2016)

Explanation:

1. SRB and customers negotiate and agreed the salam contract
2. SRB pays in full payment to customers
3. Customers confirm the harvest
4. Customers send their harvest to collectors
5. Collectors pay in full payment to farmers

Figure 6 shows Salam bil wakalah financing scheme implemented by SRB Bumi Rinjani Probolinggo (see Figure 5 ). However salam bil wakalah financing meant is different from salam bil wakalah applied by SRB Bumi Rinjani Probolinggo. The difference is in the process of delivery of money and documents of the sale belonging to SRB. So, the payment of salam assets is made directly between buyers / collectors with the SRB.

The end of the salam ccontract is when bai salam customers harvest and the crop is in accordance with the agreement. After harvesting bai salam customers have to contact the bank for repayment process in accordance with the agreement at the beginning. If the goods met the agreement, then harvests owned by the bank entrusted to bai salam customers for reselling using wakalah system. In addition, the bank should have a clear record of the assets completed with the bil of the sale. After the assets are successfully sold the bai salam customer confirms to the bank about the buyer. The money rom the sale of assets completed with the bil of sale of buyer and handed over directly to the SRB in certain place and time. By this way, the banks do not have to own a warehouse or storage salam assets.

The most important thing to consider in salam bil wakalah financing is a point of agreement should be separated, but should be reinforced with wa'd. This wa'd is in accordance with DSN No.85 / DSN-MUI / XII / 2012 that promise (wa'd) is often used in financial transactions and business that are single, parallel and / or in a multi-contract transactions (al- 'Uqud al-murakkabah). As has been stated by Mr. Achmad Zaky as Chairman of Islamic Finance and Accounting Studies (IFAS), University of Brawijaya that salam bil wakalah financing model is vulnerable or at risk for ta'alluq or hielah, the vulnerability is where salam contract took place, for example, the beginning of contract

starts when the salam contract is happening. Therefore, those contracts should be separated and wa'ad is needed as other solutions. Though Mr. Achmad Zaky noted that the appearance of the DSN No.85 might cause 'chaos' and lead to the practice of ta'alluq, this case is related to Fiqh and Ijtihad, Mr. Achmad Zaky assumes that DSN has been announced and it is halal.

The advantage of using salam bil wakalah financing is that the bank do not need to have warehouse or storage for salam assets so the banks can avoid the some costs, e.g. labor costs, transportations, maintenance, and so on. The bank does not need to have a warehouse or storage assets salam, so the banks can avoid the costs, eg labor costs, transportation costs for transporting goods, maintenance costs, and others. The weakness is the default or negligence, the customer is negligent in keeping salam assets deposited by the bank, that affect the decreasing of salam assets value; side streaming that is bai salam customer uses salam capital different from the mentioned contract result in those salam asset value falls; side stream that customers using the bai salam salam capital is not as mentioned in contact.

## 2) Salam Bil Mudharabah Financing

Financing of salam bil mudaraba is salam funding system, which the asset of salam salam are delivered to a dealer who has been appointed by the bank, where the contract used between the agent and the bank is mudharabah. So before their salam financing transaction, the bank has been working with the supplier in the Mudharabah contract. By using mudharabah means the owner of the funds in this case is the bank who is doing a partnership contract with the agency to carry out business activities, the profit is divided based on nisbah, sharing profits for the agreement of both parties.

While, the financial loss would be taken by the fund owner unless caused by misconduct, negligence, or violation by the fund manager. Financing of salam bil mudharabah are two separate contracts. Where financing of salam bil mudharabah referred in this concept is implemented in accordance with the DSN No. 05 / DSN-MUI / IV / 2000, which contains the terms of buying and selling salam and DSN No. 07 / DSN-MUI / IV / 2000 on the financing is (Qiradh ). in simple terms, financing of salam bil mudharabah can be illustrated as the following scheme:

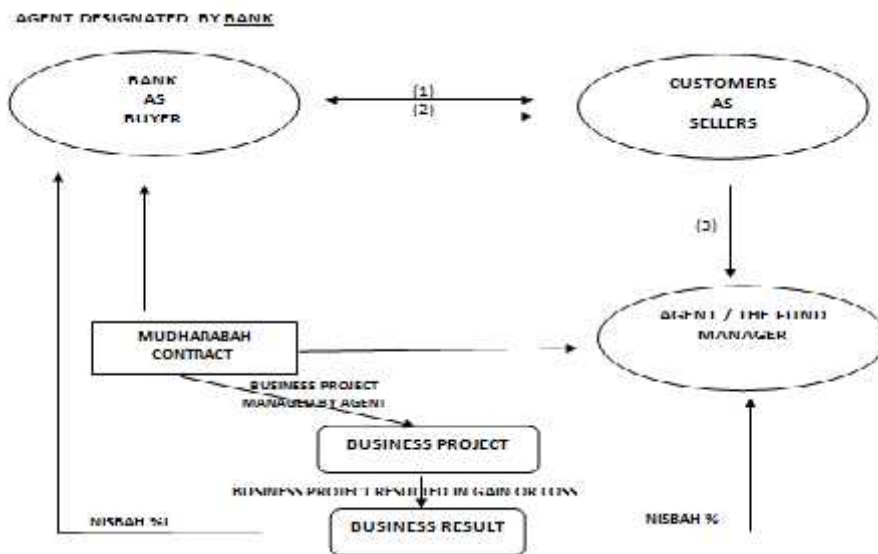


Figure 7. Scheme Financing Salam Bil Mudharabah

Source: processed data (2016)

Caption:

1. The bank and the customer agreed to have salam contract.
2. Bank pay in full payment to customers
3. Customers submit their products to an agent who has been appointed by the bank

Figure 7 shows the scheme of in which the bank salam bil mudharabah financing where banks do mudharabah contract with salam assets manager who acted as sales agent. The sales agent acts as the mediator, which resells the assets of salam to merchants or consumers directly. If the projects generate profits then the profits are divided according to a predetermined ratio, e.g. bank and the agent with a ratio of 60:40. If it experiences financial loss then it is taken by the owner of the funds (ie bank). Furthermore, if a customer submits salam financing, the bank performs salam contract to customers, and the bank handed salam capital in full at the beginning with the terms of price, quality, clear quantity, where the price is lower than the market price (the price of collectors). After bai salam customers will complete the payment, if the goods meets the criteria agreed at the beginning, then the bai salam customer transfer their production to sales agents who had been appointed earlier by the bank.

Salam bil mudharabah financing is two separated contract that should be free from ta'alluq. As what has been stated by Mr. Achmad Zaky that if salam bil mudharabah financing acts as one complete contract (concurrent transaction point) it does not meet the characteristic of the Islamic transactions provisions on KDPPLKS related to their gharar (uncertainty). So in salam bil mudaraba financing, the two contracts should be separated and should certainly avoid ta'alluq.

The advantage of using salam bil mudharabah is that the bank does not have to have a warehouse or storage of salam assets. therefore the banks can avoid the high costs, e.g labor costs, transportation, maintenance costs, and others; banks will get higher sharing when agent's sale profits increases; The weakness is the default or deliberate negligence by agents and customers of bai salam; side streaming that the customers use is different from what previously mentioned in the agreement; concealment of profits by the sales agent.

Salam financing product innovation is a product of Islamic banking which implement the Islamic law. According to researchers, globally both salam financing innovations, salam bil wakalah financing and salam bil mudharabah financing, fulfilled the Islamic principle. There are some good points in the Islamic principle, these are prohibiting the commercial elements of which the goods are proscribed; interest; gambling and deliberate speculation; vagueness and manipulative in the transaction (Antonio, 2001).

Similarly, according to Mr Abdul Wadud Nafis stated that the concept of salam bil wakalah and salam bil mudaraba is legal under the law of Islamic principle. Al-Imrani in the book *Al-Ukud AL-Maliyah Al-Murakkabah* define Hybird Contract is an agreement of two parties to carry out a contract that includes two or more contracts, such as buying and selling of grants, wakalah, qardh, muzara'ah, sahrاف, shirkah , mudaraba, and others. The majority of scholars Hanafiyah, Malikiyah Shafi'iyah, and Hanbali argue that Hybird Contract is valid and permissible according to Islamic Shari'a. Scholars who argued that the agreement is permissible and legitimate due to the the origin of the law is permissible and there found no law that forbids or cancel it. The most popular term of Hybird contract is al-ukud al-murakkabah and al-ukud al mutjami'ah.

Yet in another case, Mr. MN.Hosen, as treasurer of the National Islamic Council opine that in order to determine whether such innovation is in accordance with the Islamic principles or not, not globally, it needs to be dissected in detail about the scheme and any steps before or after the contract agreement, so if it is different from salam standard

contract set by the DSN of MU, it must be dissected one by one, whether or not there will be found an element of usury, gharar, maysir, and so on.

#### 4.4 Implications for innovation of salam financing system toward its accounting treatment

Salam financing product is the right solution for farmers who need capital to buy inputs to cultivate their fields, as salam financing products offered uses the principles of sharia and the beauty of sharia principles is felt by farmers to avoid elements of usury. However, based on research results, innovation on salam financing products as mentioned above is needed such salam bil wakalah and salam bil mudharabah.

According to some researchers, financing of salam bil wakalah is financing where the resale of salam assets with wakalah system has no implications on salam accounting treatment of how the recognition, measurement, presentation and disclosure are appropriate with what have been stated in SFAS No. 103. The difference of Salam financing and salam bil wakalah are in the process of full payment. Salam assets are resold by bai salam costumers' help which usually does not take a long time, because farmers have partnership of the agricultural production. Similarly, Mr. Achmad Zaky stated that Salam contract is more dominant than Salam financing bil wakalah at the transaction of Salam assets. In the transaction process, when Salam contract is used then it is called parallel Salam. But, in this case the transaction uses wakalah system and does not affect anything, due to its operational technique, exchange of ownership does not occur.

There are not found implication toward Salam accounting treatment in the product innovation of Salam bil mudharabah financing. Received Salam asset is resold by the agent determined by the bank (a bank and the agents previously do mudharabah contract) in this case the ownership exchanged, but had no implication for Salam accounting treatment (SFAS 103) according to Mr. Achmad Zaky, the payment of Salam bil mudharabah is two different contracts, so that the accounting treatment is also separated. At the time of assets transaction using Salam, the accounting treatment is regulated on SFAS No. 103, and owned Salam assets will be used as muharabah investment (non cash), therefore mudharabah contract uses noncash investment model whose accounting treatment regulated in SFAS No. 105. Here's an idea if the current salam assets received by the sales agent, if the goods is in accordance with the agreement, the SRB as buyers make a record of the transactions as follows;

(D) Salam Assets	xxx	
	(K) salam accounts receivable	xxx

Since the Salam asset is in accordance with the contract, it is then measured in accordance with the agreed value. Salam assets are invested and measured at fair value, so if the fair value is higher than the value of the salam assets, then are recorded as a credit side profits, and vice versa.

- a journal to record the mudharabah investment

(D) mudharabah investment	xxx	
	(K) salam assets	xxx

Mudharabah investments are measured at the fair value of salam assets. Mudharabah investment occur when the salam assets handed over by the bai salam customer to the agent pointed by the bank. Mudaraba investments are recorded under the provisions of SFAS 105.

## 5. Closing

From the discussion described is based on the problem and research objectives, it can be concluded as follows: 1) SRB Bumi Rinjani is motivated to implement salam financing for the needs of farmers to fulfill the production needs the business and the

relatively short financing period, in accordance with the need of production processes which takes two to six months, so that salam financing contract is the appropriate way. The salam financing implemented is a single salam contract. Since the goods purchased by the SRB are items such as rice, potatoes, and maize while the SRB does not plan to make such items as deposit. Therefore, the SRB entrusted those items to the bai salam customers to be resold using wakalah system 2) there are some factors that become the obstacle for SRB on salam financing, these are; a). Default or bad character of bai salam customers; b) Crop failure; c) Fluctuating market prices; d) The rule of the Supervisory Board that the SRB should have a warehouse/ storage of goods. To resolve the problems, some comprehensive innovations on Salam financing can be made, such as 1). Salam bil wakalah financing and 2) Salam bil mudharabah financing. Both innovations focus on Salam assets treatment after salam contract ends. In this Salam financing, the bank acts as the buyer and does not plan make Salam assets as inventory. Therefore, the bank needs strategy to resell Salam assets. Salam bil wakalah and Salam bil mudharabah financing do not implicate on the accounting treatment, since these two contracts are separated and so is the accounting treatment. The study identifies the obstacles in salam financing faced by SRB. Whereas the problems faced by bai Salam customers are not identified.

Based on the conclusions, the researchers provides and advice on some important matters as follows: 1) Development of Science. Development of salam financing products influenced by the dynamics of bai salam customers, where the customers' needs can be completed, so that a new model of salam financing to facilitate the changeable needs of customers is needed. Building model of Salam financing product is suggested for the development of science, especially in economic and Islamic finance for improving salam financing products better to meet the customers' needs. 2) the regulators and Nasional Sharia Council. The regulators (Bank Indonesia and the director of the Islamic Financial Institution in the FSA), or DSN is expected to consider the innovation of this product, and to understand it well since it is associated with hybrid contract. The Errors in making regulations will hinder the development of Islamic Financial Institutions. 3) Drafting of Sharia Financial Accounting Standards. Innovation of salam financing products proposed in this study is related to hybrid contract. Because there is more than one contract in a financial product. The composer of IAS Syariah is expected to analyze whether the innovation of financial products requires new more relevant SFAS. 4) The Islamic Banking, in particular the SRB. Salam bil wakalah and Salam bil Mudharabah financing are innovation concepts of Salam financing product that is expected to meet customers' needs, especially farmers. The product innovation is closely related to hybrid contract. The Islamic banks should understand the theory of hybrid contract to be superior and to compete with conventional banks. 5) Further Researchers. Further researchers are expected to identify the constraints faced by bai Salam customers, so that salam financing concept can meet the needs of its customers. Further researchers can dissect the concept of salam bil wakalah and salam bil mudharabah financing about the scheme and any steps before or after the contract, if it is different from the standard contract of salam regulated in DSN fatwa MUI then it must be dissected one by one, if there found the element of usury, gharar, maysir, and so on the concepts of salam financing products can be implemented.

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## ROLE OF STRATEGIC MANAGEMENT ACCOUNTING AND INTEGRATED PERFORMANCE IN HOTEL INDUSTRY

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### Abstract

This study examines the effect of role of accountants on the use of strategic management accounting, and the effect of role of accountants, use of strategic management accounting on integrated performance. This study uses primary data through surveys of General Manager (Leader of Hotel) star hotels in the region of Southern Sumatera. 134 questionnaires were submitted to the General Manager (Leader of Hotel). The questionnaire used in this study a number of 118 (88.06 %). Data were analyzed by Structural Equation Modeling (SEM) Partial Least Squares (PLS), using WarpPLS software version 5.0. The results indicate that the role of accountants has a positive effect on the use of strategic management accounting, the role of accountants and the use of strategic management accounting has a positive affects on integrated performance.

**Keywords:** *Role of Accountants, Use of Strategic Management Accounting, Integrated Performance, Hotel Industry, Region of Southern Sumatera*

### Introduction

Performance is the objective summary of organizational unity (March and Sutton, 1997). This means that the performance is a reflection of how the alignment of interest between management and employee groups are in a visible organization. According to management accounting, performance is a form of corporate accountability to stakeholders. Micheli and Mari (2014) stated that the organization was asked to conduct and communicate their achievements to key stakeholders. Performance as a reflection of the importance of the successful management of an organization led to the literature and practice of business performance measurement have develop (Hoque, 2004). In its development, the performance seen in two aspects, financial and non-financial aspects (Kaplan and Norton, 1996). Performance that integrates financial and non-financial aspects of directing the attention of managers to think and act long term (Chenhall, 2005)

The implementation of the integrated system performance can not be separated from the development of management accounting practices continuously. The development of practice follows the evolution of accounting role in businessworld. Coleman (1949) expresses that accounting practice has developed to respond the change in business economics. The evolution process of management accounting role in the business life turn out to have a relationship with the development of theory which becomes the basis of perspective of literature and research in the field of management accounting. Waweru (2010) shows the framework of the theory of management accounting development. The framework consists of four stages. The first stage, conventional policy, the second stage, Agency Theory, the third stage, Contingency Theory, the fourth stage, strategic management accounting.

The research in the contingency theory perspective has seen the relationship between the utilization of strategic management accounting and the performance. The utilization of strategic management accounting can be seen in the content of information supply (Choe, 2004), the system of performance measuring (Hynoven, 2007; Kholbacher and Gruenwald, 2011; Sakka *et al.* 2013). Macinati and Pessina (2014) concluded that the use of management accounting are positively related to performance. In general the result

of research can be conclude that the utilization of strategic management accounting can have a positive impact on business performance.

Based on several literature references of previous research, there is an interesting phenomenon that the research and practice in the field of especially in the theme of business integrated performance directing to strategic factors related to the management accounting involvement in the making of strategic decisions. The concept of strategic management accounting according to Cadez and Guilding (2008) tends to the understanding of strategic orientation on the accounting techniques and emphasis on the role of accountants in the business strategic decision making.

However concerning the relationship between the accountant's role in strategic decision making on corporate performance is still providing great results do not support. At least it is shown by the invention of Cadez and Guilding (2008). According to the reference of Cadez and Guilding (2008), when the strategic management accounting literature has got a lot of development, the research tending to the implementation of strategic management accounting is still rare. Therefore, this research will see how the role of strategic management accounting influence in achievement of integrated performance in the business context in Indonesia. Especially the business of hotel management in region of Southern Sumatera.

The choice of hotel business in region of Southern Sumatera is caused by the developed hotel industry, especially star hotel in South Sumatera, the data show that the growth of star hotel industry from year 2009 – 2014 or in the last five years, there has been an increase almost 100%, it is also relatively related with the degree of hotel occupancy in South Sumatera (Hutapea, 2015). These conditions will have an impact on competition in the hotel industry has become very dynamic region. To that end, the role of accounting management becomes very important, it is based on the conclusion of Collier and Gregory (1995) stating that financial function in the groups of hotel industry becomes more involved in the strategic management accounting both in the planning and in the evaluation of market conditions in analyzing the competition. Therefore, the research will be examines the effect of role of accountants on the use of strategic management accounting, and the effect of role of accountants, use of strategic management accounting on integrated performance, in hotel industry especially star hotel in region of Southern Sumatera.

### **Integrated Performance**

Kaplan and Norton (1996) has introduced the system of integrated performance measuring Balanced Scorecard integrating financial and non financial measurement. Integrated measurement directs the business to focus on external conditions and to produce wide information in connection with the business activities (Scott and Tiesen, 1999; Kaplan and Norton, 2011). This is related to the purpose of performance measurement system, which is to help allocate the company's resources, assess and communicate the company's progress toward strategic goals, and to evaluate managerial performance (Ittner and Larcker, 2003). The concept of measuring process of performance also enables the business to trace the present performance process and therefore the performance measuring process can support the improvement identification for the business (Siemieniuch and Sinclair, 2002). To achieve these goals, organizations can adopt performance measurement that includes the causal links that may exist between strategic goals, actions and results expected by the organization (Lee and Yang, 2011).

Further Lee and Yang (2011) explained that the combination of financial and non financial measurements allow the various functional departments to have a broad understanding of performance information in their units and help communicate the company's strategic objectives and control of operations on each layer. As a result of

integrated performance measuring, Itener and Larcker (2003) explain that either non financial performance or financial performance one is used to get comprehensive view for the organisation to see the performance. Some of these descriptions it is clear that the performance of the company is an important thing to comprehensively assess the success of the company. So the integrated performance either from financial or non financial aspect becomes the main objective that must be considered firm, comprehensive and integrated performance measurement is an important means to view it.

### **Strategic Management Accounting**

The early 1980 was an important period either in strategic management or in strategic management accounting (Nixon and Burns, 2012). Furthermore, Nixon and Burns (2012) explain that the concepts of strategic management accounting is introduced by Simmonds and it is defined as a determination and data analysis of management accounting about the business and the competitors, to be used to develop and monitor the business strategy. While traditionally, the management accounting is only used as a support for the process of financial decision making in organisational (Feeney and Pierce, 2007). Because of the weakness of traditional management accounting, it is suggested that the strategic management accounting be applied to the business operating in the competitive area by adopting sophisticated management accounting techniques (Shank 1989; Roslender 1995).

Based on the perspective of strategic management, Brouthers and Roozen (1999) shows that the strategic function of the accounting system ideally be seen within six points of view, namely as a tool for environmental analysis, generation of strategic alternatives, the selection of strategic alternatives, planning strategic implementation, the implementation of strategic plans, as well as strategic management control process. As a consequences, Brouthers and Roozen (1999) state that the necessary information to support the strategic system focuses on most of non financial information, focuses on either internal or external good future and information based on reliable projections about the future. To fulfil the strategic objectives and improve performance, organization designs more sophisticated accounting information system (Gil, 2004).

Cadez and Guilding (2008) states that there are two perspectives in the strategic management accounting, first as a set of accounting orienting on strategic technique and second, strategic management accounting which can be seen as the involvement of accountants in business in the process of taking strategic decision. Related to the role of accountants, Palmer (1992) expresses that in strategic management process accountants have a bigger and bigger role. This shows the important role of management accountants to give information to take decision and strategic control (Bromwich 1996). This supports the think that management accountants have been playing various double role for a long time. They are depicted as value guards, direct the attention in problem solving (Simon *et al.*, 1955). Friedman and Lyne (1997) revealed that, the fundamental reason of the changing role of the accountant relating to the innovation of management accounting oriented businesses, including also associated with strategic management accounting.

Scott and Tiessen (1999) state that strategic accountants are integral parts of the process of taking strategic decisions. Accountants also play an important role in cost characteristics and attribute possessed by production in strategic planning and structure modelling of competition cost (Bromwich, 1996). Based on the above description, it is clear that strategic management accounting is the result of the shift of accounting role in the competitive areas. Strategic management accounting can not be seen in the context of accounting techniques, but also need to look at the role of accountants in implementing strategic techniques for strategic decision making

### **The role of accountants in making strategic decisions affect the use of strategic management accounting systems**

Cadez and Guiding (2008) have succeeded in proving that the higher the participation of accountants in making strategic decisions will bring the more positive impacts to the use of strategic management accounting in business. This invention supports Oliver (1991) who states that there is a positive relation between participation and the taking of strategic decisions and the use of management accounting; therefore it appears natural when a bigger participation can be seen as a good motive for accountants to give more value in the process of making strategic decisions, so it can give influence to the design and implementation of strategic management accounting system of business. Therefore the hypothesis that can be formulated :

H1 : The role of accountants in making strategic decisions affects positively to the use of strategic management accounting system.

### **The role of accountants in making strategic decisions and the use of strategic management accounting system affects business integrated performance**

Hoque (2004) proves that the use of financial and non financial performance measuring is connected positively with the organisation performance. Choe (2004) finds out that the system of management accounting information can increase the production performance. Spencer *et al.* (2009) conclude that performance measuring system has connection with the increase of business performance. Haque (2011) conclude that the change of accounting and control system brings a relation between competition intensity and organisational. Cadez and Guiding (2008) find that the use of strategic management accounting has a positive connection with performance.

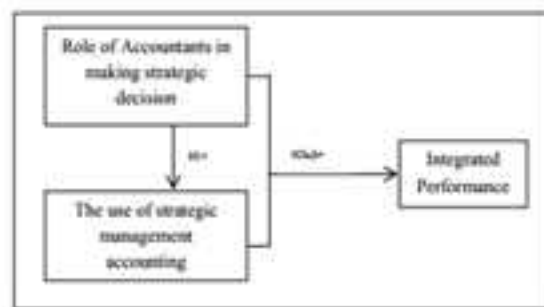
Baines and Langfield-Smith (2003), Rowe *et al.*, (2008) and Scott and Tiessen (1999) conclude that the increase of competition and the context of market uncertainly creates the team of inter departments to increase the velocity of organisation reaction to build the atmosphere to increase performance. Fowler (1999) finds out that the majority of management accountants has got a role in implementing the quality concept into area of business accounting. Wooldridge and Floyd (1990), de Haas and Kleingeld (1999) state that the increase of participative facility which is more effective on the managerial decision leads to the organisational performance increase.

From the above description, it appears that strategic management accounting has a role in the achievement of business performance, management accounting as medium of information and control has a role to assure the achievement of performance. While accountants has a more strategic role because they can be involved participatively in taking the strategic decisions. Based on the above facts, a hypothesis can be made in research :

H2a : The role of accountants in making strategic decisions affects positively on the increase of business integrated performance.

H2b : The use of strategic management accounting affects positively on the increase of business integrated performances

Figure. 1  
Research Model



## Research method

### Sampling

The sample in this research is business management, *i.e* General Manager (Leader of Hotel) of star hotel in region of Southern Sumatera. The design of the research sampling is using the techniques of nonprobability sampling convenience sample.

### Variable Measurement

#### Integrated Performance

Integrated performance is business performance which is measured from the financial and non financial aspect comprehensively. Integrated performance is measured using an instrument used by Cadez and Guilding (2008) which was modified by Hoque and James (2000). There are 7 points of performance demension. The respondents are required to identify their relative performance compered with the competitor's performance on the scale 6 point (1 under average, 6 over average). (Appendix 1).

#### The role of accountants

The role of accountans is an active role of accountant in their contribution to produce business strategic desicions. The measuring of accountans' participation uses 5 intruments used by Cadez and Guilding (2008) which is adopted from Wooldrige and Floyd's (1990). The answers use scale 6 points (1 has no role at all, 6 has a full role). (Appendix 2).

#### The use of strategic management accounting system

The use of strategic management accounting system is the use of sophisticated management accounting techiques to support the business operation activity. The use of strategic management accounting system uses 11 instrument used Cinquini and Tenueci (2008) adopted from Cades and Guilding (2008); Cravens and Guilding (2011); Guilding and McManus (2002). The respondent are required to give check list (√) of the management accounting implemented by the business, then to be given score. (Appendix 3).

#### The technique of data collection

This research uses the type of primary data. Data are colected using survey techniques by giving questionnaires as aresearch instrument directly to the research respondents General Manager (the head of the hotel business) hotel affairs in region of Southern Sumatera.

**Data analysis**

**Descriptive statistics**

The use of descriptive statistics is to give a illustration about the demography of respondent including age, level of education, working experience, gender, and description about the research variabels.

**Test of data quality**

The lest of data quality is carried ot by using the lest of realibility and validity.

**Test of hypothesis**

The testing of hypothesis is done by using analysis of Structural Equation Modeling (SEM) Partial Least Squares (PLS). Analysis SEM-PLS uses Warp PLS sofeware version 5.0 whit stage (1) The testing of model quality, (2) the testing of research hypotesis.

**Results**

**Descriptive statistics**

The survey was done at 134 hotels in region of Southern Sumatera, 12 hotels refused to be surveyed by giving vwith the research requirements various reasons, four hotels didn't give complete data accorduce. 118 hotels gave complete data. So this research is done based on the 118 questionnaire.From the aspect of gender, the Leaders involved as respondents are 87 men (73,7%), and 31 women (26,3%). It show that the role of men still dominant in the management and decision making in 2 business organisation especially in hotel affairs in region of Southern Sumatera.Respondents profile in their high level eduction. Respondents with the Diploma dominate the position as Leaders. There are 59 people (50%). There are 55 people with Strata 1 (46,6%) and four people (3,4%) with the Senior High School certificate. Based on the age, the average of them is 39,4 years old. The youngest is 32 years and the oldest is 65 yesras old. The average respondents have been involved in managing the hotels at least five years. The newest position is one year and the longest is 30 years.

**Table. 1 Variable Data Statistic**

Variabel	Theoritical Range	Actual Range	Mean	Deviation Standar
Integrated Performance	7 – 42	18 – 42	33,68	5,58
The Role of Accountans	5 – 30	5 – 30	23,66	5,44
The Use of SMA	1 – 11	3 – 11	9,04	1,8

Source: Primary data processing, 2015

The Tabel. 1 shows that the integrated performance average data of the hotels operating in region of Southern Sumatera are on the level of 33,68. The integrated performance data are seen in accordance with the conviction the hotel leaders in the achievement of financial and non financial performance. The average of integrated performance at 33,68 shows that the average integrated performance of hotel industry in the region of Southern Sumatera can be classified relatively high enough.

The data of accountans' role in the activity of hotel management in region of Shouthern Sumatera show the average 33,66. Based on theoritical range between 5 to 30, it can be concluded that the role of accountans in the activity of hotel management in region of SouthernSumateracan be classified in a high enough level. And so is the use of strategic management accounting. Acording to the theoritical range between 1 to 11, the average use of strategic management accounting by the hotels in region of Southern Sumatera is 9,04. It can also be concluded that the level of strategic management accounting use in region Southern Sumatera is high enough.

**Test of data quality**

The research data are collected through the surveys using questionnaires. There are two research variables measured by using several indicators of measuring tool, namely integrated performance variable and the role of accountants. To make sure that each indicators of measuring tool is valid and reliable to explain research variable, the testing of validity and reliability of data quality needs to be done. The following is the testing result of research data quality.

**Table 2 Testing Result of Data Validity**

Variables	r statistic	r table	Conclusion
<b>Integrated Performance</b>			
<i>Return on investment</i>	0,827	0,18	Valid
<i>Margin on sales</i>	0,859	09	Valid
<i>Capacity utilization</i>	0,806	0,18	Valid
<i>Customer satisfaction</i>	0,799	09	Valid
<i>Product quality</i>	0,838	0,18	Valid
<i>Development of new products</i>	0,752	09	Valid
<i>Market share</i>	0,798	0,18	Valid
<b>Accountants' Role</b>			
<i>Identifying problems and proposing objectives</i>	0,902	0,18	Valid
<i>Generating options</i>	0,965	09	Valid
<i>Evaluating options</i>	0,963	0,18	Valid
<i>Developing details about options</i>	0,960	09	Valid
<i>Taking the necessary actions to put changes into place</i>	0,958	0,18	Valid

Source: processed primary data, 2015

Table 2 shows the testing result of research data validity. Validity test is based on the value of corrected item total correlation (r statistic value). Based on the 118 samples, the criterion of critical r value is at degree of freedom  $n: 118 - 2 = 116$  at 5% two tail showing 0,1809. Therefore, all indicators of integrated performance variable and role of accountants are valid. It has been proved that all values of r statistic value of each variable indicators has a bigger numeral than r table 0,1809.

**Table 3 Test of Data Reliability**



Variable	Crombach Alpha	Critical Value	Conclusion
Integrated Performance	0,942	0,6	Reliabel
Role of accountans	0,983	0,6	Reliabel

Source: Processed primary data, 2015

Table 3 shows the testing result of reliability data research. Data reliability is based on the crombach alpha value of each research variable datum. The testing result of crombach alpha shows that all the tested variables, including integrated performance variable and role of accountans show the numeral above the required critical value (0,6). Therefore, it can be concluded that all of the tested variable data show reliable result, so that the data are proper for next research process.

**Test of Hypothesis**

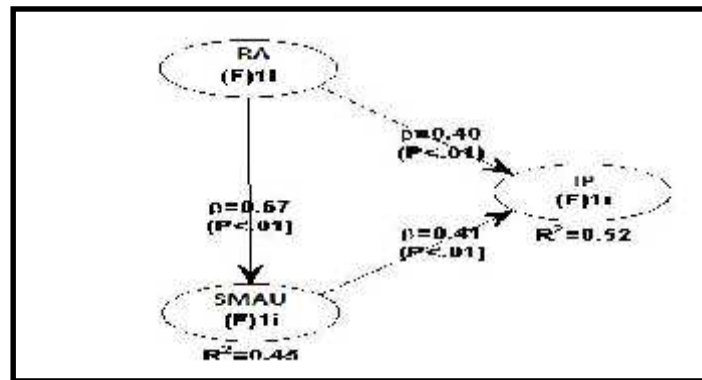
**Table 4 Model Fit and Quality Indices**

Item Model Fit	Value	Creteria	Conclusion
<i>Average path coefficient</i> (APC)	0,493 P<0,001	P < 0,05	fit
<i>Average R-squared</i> (ARS)	0,487 P<0,001	P < 0,05	fit
<i>Average block VIF</i> (AVIF)	1,585	AVIF < 5	fit

Source: Processed primary data, 2015

Based on table 4 model fit and quality indices the value of APC, ARS and AVIF, each of them shows proper values with the creteria. The significant value of APC < 0,001, and that of ARS < 0,001 is on the criteria under 5% (Sholihin and Ratmono, 2013). Value of AVIF 1,585 is on criteria under 5 (Sholihin and Ratmono, 2013). So it can be concluded that this research model is fit, so that this research model is fit to be used to do the next testing.

**Figure 2 Research Struktural Model**



**The role of accountants influences the use of strategic management accounting**

This part will prove wheter H1 indicating the role of accountants in making strategic decisions influences the use of strategic management accountaning system positively. From the testing result SEM-PLS on figure 1 it can be seen coefficient  $\beta$  variable the role of accountans to the use of strategic management accounting 0,67 with  $p$  value < 0.01 or under value a 5%. It can be concluded that the hypothesis stating the role of accountans in making decisions influences the use of the strategic management accounting is supported.

**The role of accountants and the use of strategic management accounting influence the business integrated performance**

This part will prove whether H2a stating the role of accountans making strategic decisions influences the increase of business integrated performance positively. H2b stating the use of strategic managemen accounting influences the increase of the supported business integrated performance. From the tasting result SEM-PLS on figure 2 it can be seen that the variable of accountans' role has a coefficient  $\beta$  0,40 with  $p$  value < 0,01, or less than value a 5%, and so does the variable of strategic management accounting having coefficient  $\beta$  0,41 with  $p$  value < 0,01 or less than a 5%. It proves that the role of accountans and the use of strategic management accounting influenss the business integrated performance increase.

**Discussion**

**The role of accountants in making strategic decisions influences the use of strategic management accounting system**

This research has also succeeded in proving that the level of the use of strategic management accounting techniques is much influenced by the high utilization of

accountant's role in a business. This research shows that most of hotel affairs in the region of South Sumatera has utilized the role of accountants in making decision maximally. The most hotel in the region of Southern Sumatera has also used more strategic management accounting techniques. The applied accounting techniques are not only used to get financial information but also to identify non financial information.

The result of this research at least has supported several previous research inventions among them Cadez and Guiding (2008); Oliver (1991); Chenhall and Langfield-Smith (1998), which conclude that the higher the role and participation of accountants in making strategic decisions the higher the effect of the innovation and utilization of the needed accounting techniques. It is done to get important information to support the creation of strategic decisions.

The result of this research also makes the function of management accounting in a business organisation clearer. It has been explained in the previous part that the function of accounting has been strategic nowadays. The function of accounting plays a great role in producing the choices of strategic decisions. The function of accounting plays a role in giving inputs and evaluation of strategic decisions and action carried out by the business. It is reasonable if the utilization of strategic accounting techniques become relevant to do. Sophisticated accounting tools will be very helpful for accountants in participating and playing a role in presenting useful information for management in making business strategic decisions. This has been the reason of this research invention that the more the role of accountants in making business strategic decisions, the higher the effect of utilization and use of strategic management accounting in a business.

### **The role of accountants in making strategic decisions and the use of strategic management accounting system influences the integrated performance**

Based on the testing result of hypothesis which has been done before the role of accountants influences business integrated performances positively. The result of this research supports the hypothesis of the role of accountants having a positive influence on achievement of business integrated performance in accordance with some inventions which one of them was done by Fowler (1999) who concluded that the majority of management accountants has played a role in implementing the concept of quality into the area of business accounting. And the invention is the same as the opinion of Wooldridge and Floyd (1990), De Haas and Kleingeld (1999) states that the increase of participative facility which is more effective on managerial decisions can have the effect on the organisational performance increase.

This is reasonable because in the competitive situation of industry, great ability to analyze and manage information is needed. Accountants as central function in managing information have become an important function in their contributions to make strategic decisions. The strategic decisions which are relevant to the need of creating superiority will cause the creation and market power to a business.

The support for the hypothesis stating that the use of strategic management accounting has a positive influence to the achievement of integrated performance also agrees with several previous inventions indicated by Haque (2011); Cadez and Guiding (2008) which essentially stating that the use of management accounting system can give positive contributions to the creation of business performance. This invention clarifies that the effectivity of the use of comprehensive accounting medium will contribute to the fulfilment of important information in taking strategic decision. The business facing strong competition atmosphere needs accurate and quick information very much. And this research shows the facts that the majority of hotel affairs in region of Southern Sumatera has utilized the level of strategic management accounting use which is relatively high.

And it is reasonable in the more a business utilized the use of strategic management accounting, the higher the effect on the performance creation will be.

### **Conclusion**

The result of research about the strategic management accounting and integrated performance at hotel industry in the region of Southern Sumatera concludes that the role of accountant give positive influence on the level of strategic management use. It means that the more of accountants play a role in making strategic decisions, the more requirements should be implemented to use strategic management accounting.

In connection with the decisive factor of integrated performance on hotel industry in the region of Southern Sumatera, the research concludes that the factor of accountant's role in making strategic decisions and the use of strategic management accounting become an important factor which can influence the performance achievement positively. It means that the qualitative aspect of the accountant's role can influence the strategic decision making of the business which can have an effect on the increase of the business performance. While the use of strategic management accounting will be the key in collecting resulting strategic information which is useful to direct the achievement of integrated performance. And it gives effect on more optimal performance achievement.

### **Implication**

The result of this research is expected to be beneficial for various parties, among other things this research has empirically proved that the strategic management accounting has a positive connection with the integrated performance. The implementation of strategic management accounting role give effects on the creation of business integrated performance. It is clear that the implementation of strategic management accounting has an important role in increasing business integrated performance. The result of this research also brings an implication to the hotel practitioners in region of Southern Sumatera. Hotel practitioners need to benefit the role of strategic management accounting optimally to support the integrated performance achievement.

### **Research Limitedness**

This research certainly still has limitedness with the hope can be improved and can be completed in the next research. This research was only done in the region of Southern Sumatera where this region has characteristics and aims of consumer which can be different from the characteristics of hotel industry in other regions. So this result of research can't be generalized for hotel industry in other region. Further research can be done in different regions were possible to have a different characteristic to refine the findings.

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### **Appendix**

1. Instrumen integrated performance
  - Return on investment
  - Margin on sales
  - Capacity utilization
  - Customer satisfaction
  - Product quality
  - Development of new products
  - Market share
2. Instrument the role of accountant
  - Identifying problems and proposing objectives
  - Generating options
  - Evaluating options
  - Developing details about options
  - Taking the necessary actions to put changes into place
3. Instrument the use of strategic management accounting system
  - activity based costing/management
  - life cycle costing
  - quality costing
  - target costing
  - value chain costing
  - customer accounting
  - competitive position monitoring
  - competitor cost assesment
  - competitor performance appraisal
  - benchmarking
  - integrated performance measurement.

## COMPREHENSIVE INTELLECTUAL CAPITAL MANAGEMENT (CICM) AND THE OPPORTUNITY FOR THE STRATEGIC MANAGEMENT ACCOUNTING (SMA)

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### **Abstract**

This research developed a new model of Comprehensive Intellectual Capital Management as an opportunity for the Strategic Management Accounting. The research was conducted qualitatively by applying interpretive accounting research (IAR) or interpretive research (IR) in management accounting. The informants were managers of pharmaceutical companies, former heads of the financial sections, and administration staff of pharmaceutical companies, intellectual capital (IC) researchers, and observers of pharmaceutical industry. The validity of the data was assured by conducting the credibility, transferability, dependent ability, and conformability tests. Data was analyzed by several phases, including data collection, data reduction, data display, and conclusion. The output of this study is a new model of CICM, that is the CICM plus (CICM +), which is the integration of CICM and ICM (Intellectual Capital Management). The other result of the study showed that CICM + can be used as a SMA technique because it fulfilled several SMA functions requirements, as stated by Lord (1996).

**Keywords:** *Comprehensive Intellectual Capital Management, Strategic Management Accounting, Interpretive Accounting Research.*

### **Introduction**

*Comprehensive Intellectual Capital Management (CICM)* is a developed concept of *Intellectual Capital (IC)*. Introduced for the first time by Ali (2003), the difference of CICM and other IC management concepts lies on the words “*Comprehensive*” (Hermawan, 2015). It is because CICM has three stages in IC management, they are knowledge management, innovation management, and intellectual property management. Each stage of CICM are also connected to three IC components, i.e. human capital (HC), structural capital (SC), and relational capital (RC) (Bontis et al. 2000). Operationally, IC can be defined as intellectual material which is formalized, gained, and managed to generate high valued assets (Brooking, 1997).

IC as intangible asset for the company has been proven to be able to improve performance and competitive advantage of the company, as well as welfare (Hermawan and Herlina, 2013; Hermawandkk, 2012; Mageza, 2004). However, Sampoerno (2007) said that Indonesian pharmaceutical companies have not been able to perform IC management and utilize it. It is proven by the fact that only 17 percent of pharmaceutical companies in Indonesia can compete in South East Asian export market. The other fact, which was proven by Hermawan et al (2012), was that managers of pharmaceutical companies have not sufficiently known, understood, known to measure and manage, their own IC components, either individually or in integrated way. Whereas, IC management is undoubtedly needed by Indonesian pharmaceutical companies. PT. Kimia Farma, Tbk, for example, acknowledged that their intangible assets have not been maintained and maximized to improve performance. There are a lot of hidden values that have not been



optimized. Their book value is still about 20 to 30 percent, while the remaining 70 percent was intangible value. In 2010, it is recorded that book value of PT. Kimia Farma, Tbk. was only Rp 3 trillion. In fact, the market value (because added with intangible value) could have reached Rp 9 Trillion. Intangible value management in the form of IC is believed to be able to improve performance and reach profit up to Rp 300 billion from Rp150 billion targeted in 2011 (Gema KAEF, 2011a). Thus, the IC management in pharmaceutical companies is a nonnegotiable requirement (Gema KAEF, 2011b). The need for IC management is not only felt by PT. Kimia Farma, Tbk but also by PT. Indofarma, Tbk (Oasis, 2009).

The evidence showed that IC management such as CICM is required, but instead of only by CICM, Intellectual Capital Management (ICM) produced by The MERITUM (2001) can be applied as well. The concept of ICM consists of three steps, they are intangible assets identification, measurement, and monitoring. It will be an absolutely interesting research review if both IC management concepts are integrated.

The other thing should be considered is Hermawan's (2013) recommendation, which stated that non-financial IC research will be very helpful for management accounting review and strategy management. If they are integrated, it will be strategic management accounting (SMA), which has started to grow since 1980. Nevertheless, Soljakova (2012) stated that SMA development is stagnant, so that there is not much change starts from the early development to the present, so the continuous and deep assessment are required to develop the SMA concept. Thus, the research questions are how the new model of CICM as a result of concept integration of CICM and ICM is, and how the development possibility of SMA is based on the new model of CICM. Based on those research questions, the purpose of this research is to arrange the new model of CICM and possibility for SMA development.

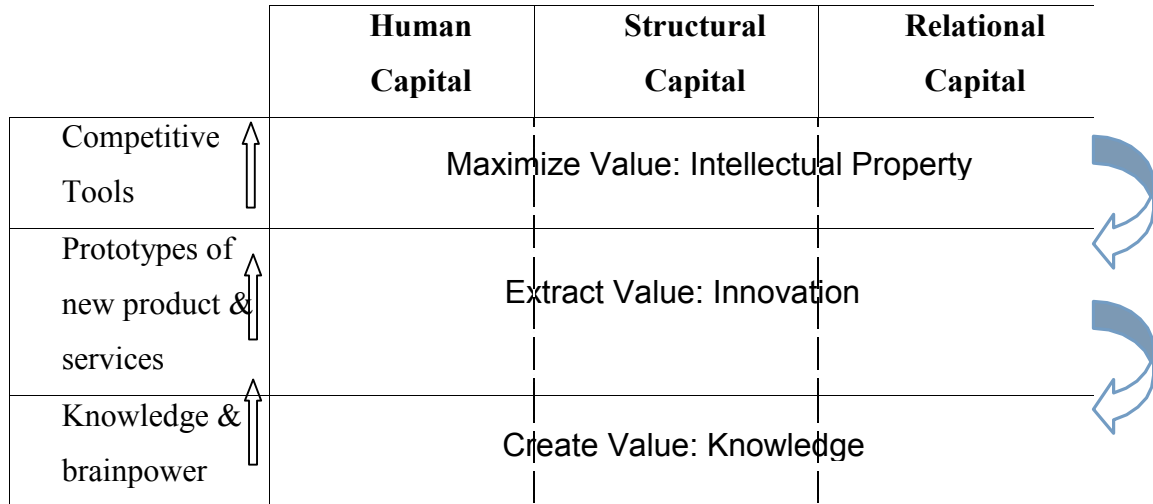
### **Theoretical Reviews**

As the basic theories, this research applied The Resource Based Theory (RBT) (Wernerfelt, 1984; Barney 1991) and The Intangible Perspective (Andriessen, 2004). The use of RBT as basic theory in IC research is commonly used for non-financial IC research (Hermawan, 2013). Meanwhile, the use of the intangible perspective as basic theory was because this research revealed and dug many intangible assets related to the activity and development of IC components, namely human capital (HC), structural capital (SC), and relational capital (RC).

RBT states that a company will obtain competitive advantage and superior financial performance when it is able to obtain, acquire, and uses its strategic resources, both tangible and intangible. But with the development of intangible resources in the era of "knowledge economy", the role of intangible assets becomes greater, not to mention the IC (Herman, 2015). Meanwhile, the "intangible perspective" is based on the resources that viewed economic or the individual company as a combination of "stocks, flows, and the transformation of resources". Perspectives of intangible resources focus on material resources and highlight the importance of "hidden wealth" in the economy and companies Hermawan (2014). It corresponds to the research, which explored and linked intangible resources and intangible activities with the company's strategic objectives and the development of IC in the framework of the Comprehensive Intellectual Capital Management (CICM).

**Comprehensive Intellectual Capital Management (CICM)**

Comprehensive Intellectual Capital Management (CICM), which was floored for the first time by Ali (2003), is the development of IC containing three activity stages, namely knowledge management, innovation management, and intellectual property management, as shown in Figure 1.



**Figure 1. CICM MODEL (Modified by the writer)  
 (Source: Ali, 2003)**

Based on Figure 1, it can be seen that CICM model consists of three stages starts from the bottom to top. The first stage is creating value in the stage of knowledge management upon knowledge and brainpower. This first stage will support the second stage, it is extract value, in the stage of innovation management upon prototypes of new products or services. The third stage is maximizing value in intellectual property management upon competitive tools (Hermawan, 2015).

Next, Table 1 gives an illustration in more details about CICM stages and existing resources in each stage and each component of HC, SC and RC.

**Table 1. Type and Stage of CICM Model-Based IC**

<b>IC Stage of Development</b>	<b>Human Capital</b>	<b>Customer Capital*</b>	<b>Structural Capital</b>
Intellectual Property Management Stage	Know-how, know-why	Brand identity, reputation, strategic alliances	Patents, trademark, copyrights, trade secrets
Innovation Stage	Ideas, product, concept, skills	Ideas, product, concept, feedback, relationship	Work systems, business processes
Knowledge Management Stage	Tacit knowledge, experience, brainpower, vision	Experience, knowledge, relations, networks	IT database, knowledge base, best practices, culture

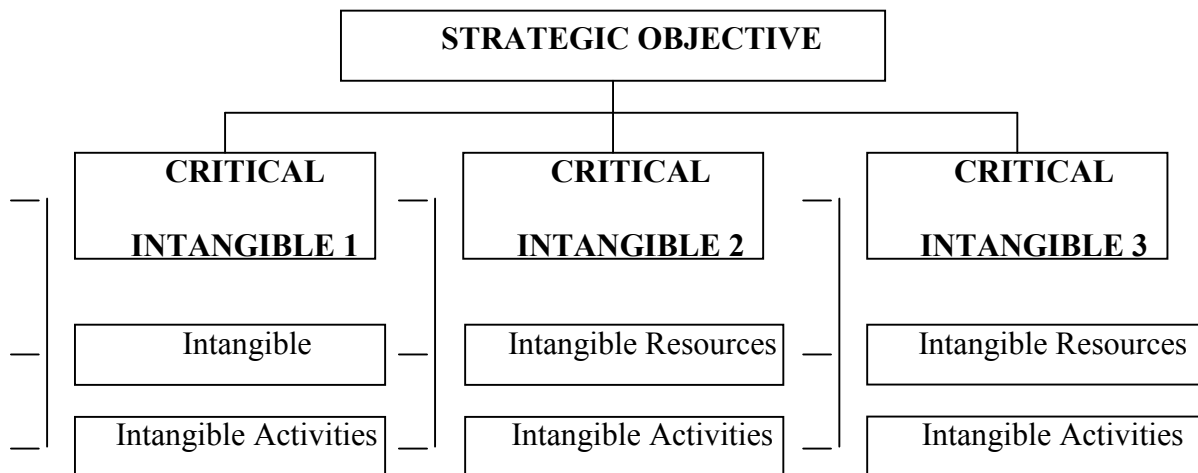
\*In this writing, Customer Capital has the same meaning as Relational Capital  
 Source: Ali (2003) (Modified by the writer)

Table 1 shows the existing resources in every stage of CICM and in every component, in HC, SC, and RC. Each of the components may own the same resources, but they are different in the context of its provision and development. Based on Figure 1 and Table 1, the writer will integrate between CICM with ICM (The MERITUM, 2001) to obtain new model of CICM.

**Intellectual Capital Management (ICM)**

There are many different ways of managing the IC from various literatures produced by experts. Apart from the CICM developed by Ali (2003), there is Intellectual Capital Management (ICM) developed by The MERITUM Project (2001). MERITUM stands for Measuring Intangibles to Understand and Improve Innovation Management (MERITUM). According to The MERITUM project (2001), ICM can be done in three stages, namely 1) identification of intangibles; 2) measurement; and 3) monitoring. When linked to the development of the IC through CICM models, each stages, including knowledge management, innovation management, or intellectual property management, should follow the steps namely identification of critical intangibles, measurement, and monitoring. Intangible referred by The MERITUM Guidelines is IC components namely HC, SC, and RC.

The first step is the identification of critical intangibles or the identification of the company's strategic objective, which is certainly related to the vision, mission, and strategic objectives of the company. If it has been set, the step is then followed by the identification of the related intangible resources and defining supporting activities that have an impact on these resources. As a final stage, the company must define the supporting activities that allow for monitoring and follow-up the activities and their impact on the intangible resources. To give a clearer illustration, the following diagram shows the network of intangibles, which gives an overview of the strategic objectives with the critical intangible, intangible resources and intangible activities.



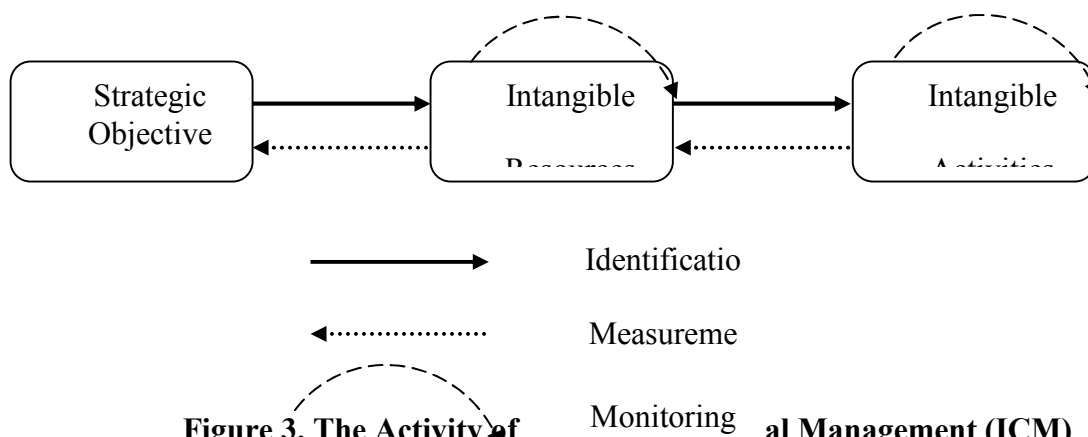
**Figure 2 Networks of Intangibles  
 (The MERIUM Project, 2001)**

The second step is the measurement, in which companies need to identify specific indicators that serve as a tool to measure the intangible activities. In general, performance measurement is based on achieving between the targets and realization. Determination of the initial target will certainly be compared to the final achievements of each activity

program for the components HC, SC, and RC. If there is any slack between the target and the realization, there will be a thorough evaluation of all components of the IC existing in the company. Measurements can also be made on measures of financial or non-financial. For example, the satisfaction of the customer on the company's products is the measure of non-financial or total cost of training per employee per year, which can be used as a measurement for intangible activities and intangible resources.

The third step is monitoring, in which an evaluation of impact of initial investment of intangible against the position of intangible in the company will be conducted. The monitoring result can be in the form of new intangible activity that can be developed and implemented. In this stage, the company shall evaluate the impact of intangible activities both by internal or external users.

The three types of intellectual capital management (ICM) activities can be summarized as Figure 3 as follows.



**Figure 3. The Activity of Intellectual Management (ICM)**  
 (Source: The MERITUM Project, 2001)

**Strategic Management Accounting (SMA)**

As stated by Hermawan (2013), the non-financial IC research will make a major contribution to the field of management accounting and strategic management since they are related to management of IC, digging for hidden assets, the flow of knowledge, and also helpful to improve performance and gain the competitive advantage of the companies. Thus there is a correlation between non-financial IC with management accounting and strategic management so that according to the writer, the Strategic Management Accounting (SMA) is a combination between management accounting activity and the strategic management. It is similar with Roslender and Hart's (2003) statement, that SMA is associated to the way of making management accounting more strategic. The more complete definition is delivered by Simmonds (1981), that SMA is a provision and data analysis of management accounting related to business and competition in order to develop and monitor business strategies, especially related to the level and trend of actual cost and price, volume, market share, the current cash, and the demand proportion of total resource of companies. Meanwhile Certified Institute for Management Accounting or CIMA (2005) explains that SMA is a form of management accounting emphasizing on information related to the entity external factors, as well as non-financial information and information generated internally.

Some experts and writers have tried to classify "SMA tools" that can assist in decision making and monitoring the strategic program. For example Alnawaiseh (2013) states that there are 12 "SMA tools", namely 1) Activity Based Costing (ABC); 2) Benchmarking; 3) Competitor Analysis; 4) Valuing Customers as An Assets; 5) Integrated

Performance Measurement (IPM); 6) Life Cycle Costing; 7) Cost of Quality; 8) Brand Value Monitoring, Managing, and Budgeting; 9) Strategic Price; 10) Target Costing; 11) Value Chain Costing; 12) Balanced ScoreCard (BSC). Meanwhile, Esmaily et al (2015) stated that the main focus of SMA is value creating or value creation. Thus with regard to value creating there are some issues that can be associated with SMA, namely 1) Intellectual Capital; 2) Human Capital; 2a) Structural Capital (organizational); 2b) Customer Capital (communicative); 3) Intellectual Capital Measuring and Reporting; 3a) Methods of Direct Intellectual Capital; 3b) Methods of Markets Investment; 3c) Methods of Assets Return; 3d) ScoreCard Methods; 4) Performance Evaluation; 4a) Performance Evaluation; 4b) Performance Evaluation Systems; 4c) Performance Indexes; 5) Balances ScoreCard (BSC).

### **Research Method**

Based on research objectives and activities, this research is a qualitative one (Cresswell et al, 2007) with the interpretive paradigm (Smith and Osborn, 2007). In particular, this interpretive qualitative research is included in the interpretive accounting research (IAR) (Lehman, 2011) or an interpretive research (IR) in management accounting (Lukka and Modell, 2010). This research is expressed as interpretive qualitative research because conducted more in-depth interviews, focus group discussion (FGD), interpreting the opinions of informants, and revealed the phenomenon of arranging development model of CICM associated with the company's strategic objectives as well as provide suggestions for SMA. Meanwhile, if associated with IAR in management accounting, this IC research is more related to the management of HC, SC, RC, evaluation and optimization of hidden assets develop strategies to improve non-financial performance of the companies that will ultimately improve the financial performance (Hermawan, 2013).

The focus of this research is to arrange development model of CICM related to the companies' strategic objectives and give development possibility suggestion for SMA. The arrangement of referred CICM development model is to integrate CICM concept (Ali, 2003) with ICM concept (The MERITUM, 2001) so that it can be a new CICM model or CICM plus. Meanwhile, giving the referred suggestion to SMA is based on the new CICM model, the researcher gives development suggestion for SMA.

This research was conducted on the companies included in the high IC intensive, i.e. pharmaceutical companies (Woodcock and Whiting (2009). Sharabati et al. (2010) and Chen et al. (2004) also recommended the same, that to study the IC better done at manufacturing solid knowledge level high research and innovation compared to other companies. This is consistent with the statement from Daum (2005), Boekestein (2006), Bramhandkar et al. (2007), and Kamath (2008) that the company pharmaceutical company that is suitable for IC research because they are knowledge-based, have lots of researches, sustainable innovation, knowledge, interaction between humans and technology, and relies on the IC as a source of renewal.

The unit of analysis of this research is the key informant's opinion about the development CICM model which is rooted from the CICM and ICM integration when linked with the strategic objectives of the company. CICM development model would then become a foothold to make a proposal for the development of the SMA. The key informant of this study is the manager of a pharmaceutical company (informant AP, KK, ER, IVP), former Head of finance at the pharmaceutical company (informant DDOR), administrative staff in pharmaceutical companies (informant RFA, YE), researcher IC (informant WH), and the pharmaceutical industry observers (informant DH). The use of key informant from various parties is for the holistic meaning of this qualitative study.

Determination of informants conducted with judgment and snowball both before and after being in the research object (Marshall, 1996).

The process of data collection in this study was conducted by in-depth interviews, focus groups (FGD), and documentation (Marshall, 1996). In depth interviews were conducted with the entire key informants. FGD conducted with several key informants chosen with a specific purpose (purposive sampling). Documentation was done by collecting data both in the documentation of pharmaceutical companies, GFPI East Java, and from internet sources. Meanwhile, the data validity was checked in four ways, namely test credibility, transferability, dependent ability, and test confirms ability (Senton, 2004). Credibility test was conducted by triangulation method, source triangulation, theory triangulation, and triangulation between researchers (Rahardjo, 2010; Hussien, 2009). Transferability was conducted by arranging a research report by parsimony, clear, detailed, systematic, and trustworthy so that readers understand the research process which is expected to transfer itself into the research that will be done. The dependentability test or auditability test was also conducted via examination by external parties. In this study, examinations were carried out during the research process by an independent party, they were Prof. TS, Prof SS, and Dr. BP. Meanwhile for confirmability test was conducted to confirm the results of research on another IC researchers, namely IU, SLWI, MBW, and SH. With the confirmability test is expected, the results will be more objective.

The process of data analysis was performed during the data collection process (Miles and Huberman, 1984) as a characteristic in qualitative research. The stages of data analysis in this study consisted of four stages, namely the data collection, data reduction, data display, and conclusion. Data was collected from a variety of data from the process of in-depth interviews, focus group discussions, and documentation, regardless of the data obtained in the process. The next step is the data reduction. At this stage, the data is grouped by themes and concepts. Irrelevant data had been discarded and so that the data really fit with the theme and purpose of the study. At this stage, the process of data coding was conducted. The results of the data reduction phase are data display. At the stage of the display data that researchers will present the results of research in the form of the same theme or concept and also quotations from the key informant interviews. This is to show the naturalness of qualitative research. The last stage was a conclusion, which means that the researcher drew conclusions from a variety of existing data.

## **Results And Discussion**

The researcher conducted several stages of research to get the results of research in accordance with its purpose. The first stage was gathering data and incorporating as well as to test the validity of research data, namely the credibility test with triangulation methods and sources triangulation. In this process, the writer collected data by using in-depth interviews, focus group discussions, and documentation. The process of cross-checking by triangulation was conducted by asking opinions on each other's interview result (asking opinion from source B about interview result of source A, then asking informant C's opinion, and vice versa). Likewise, the triangulation method is conducted by verifying the interview results truth through documentation check and also through the FGD. It is very possible for the researcher as a research instrument, as the peculiarities of qualitative research. In the process, the researchers also conducted triangulation theory by comparing the results with the resource-based theory (Wernerfelt, 1984; Barney, 1991) and the intangible perspective (Andriessen, 2004). The second stage is codification or coding based on the results of the first stage. This coding process was also a process of data analysis that is in the process of data reduction or decrease of data in accordance with the theme and purpose of the study. The results of the coding process is the same theme or

concept or relevant to the purpose of research. The research results of the same themes and concepts of the data analysis are as follow:

**Table 2**  
**The Same Concept of Pattern Resulting From Coding Process**

<i>Coding</i>	<i>The Same Theme or Concept</i>
<b>A</b>	<b>IC Development when being related to Company Strategic Objectives</b>
	A.1. Identification of Intangible Assets
	A.2. Measurement
	A.3. Monitoring
<b>B</b>	<b>Integration of CICM and ICM as the New CICM Model</b>
<b>C</b>	<b>CICM Plus (CICM+) and Opportunities for Strategic Management Accounting (SMA)</b>

**Source: Display Data Results of Coding and Data Reduction**

**A. IC Development when associated by Company Strategic Objectives**

IC development steps were required at the time the IC is associated with the company strategic objectives. IC as a company's strategic asset is associated with the intangibles asset by the MERITUM (2001). To gain this conclusion, the researchers conducted an analysis during the process of data collection, coding, data reduction, analysis, and interpretation associated with supporting theory, namely the resource based theory (Wernerfelt, 1984; Barney, 1991) and the intangible perspective (Andriessen, 2004). It is also intended as an attempt to test the credibility, especially on triangulation theory. Theory and this perspective focus on resources that are not material, and highlighting the growing importance of "hidden assets" within the company. When linked with this research, the resources based theory and the intangible perspective is in accordance with the measures for the linkages between IC empowerment with the strategic objectives of the company, which is critical intangible assets. This means that pharmaceutical companies should be able to identify their "hidden wealth" or intangible assets, including intangible resources and also intangible activities. The following are the steps of the linkages between IC development and the strategic objectives of the company.

Referring to the Intellectual Capital Management (ICM) developed by MERITUM (2003), there is a three-step operation of the company's strategic objectives, if it is associated with IC component. The first step is the identification of intangibles assets, second is the measurement, and the third is monitoring. Operational measures have also become the covered material during the in-depth interviews with key informants and the FGD.

The first step was conducted by identifying intangible assets. It means that the company should be able to do the identification of the essential components of HC, SC, and RC. Determination of the company's strategic objectives has to be followed by the identification of what important components should be prepared on HC, SC and RC aspects. This identification will be subdivided into several stages, namely critical intangibles, intangibles resources to create or to develop, intangibles activities to improve resources, and intangible activities to assess results. The first step is then discussed with the FGD participants. In general, these things have become accustomed done by informants in a pharmaceutical company that is when the company has a strategic goal to be achieved, the company will take steps ranging strategic to the technical implementation. This critical intangible is understood by informants as the establishment

of key performance indicator. Informants KK argue about the critical intangible such as KPI. This is the following opinion of informants KK:

"So, the critical intangible determination is similar to KPI (key performance indicator) sir. Every year, the company has the corporate goal. This year what do we want. From that desires or goals, each of them has the departments. There is director of marketing, the director of finance, director of human resources and so on. From that target each will count, which one we lack. Let's say an increase of 10% or 20% of that now exists. Then all will be counted whether its human resources are sufficient, whether the engine is sufficient, whether the marketing is also sufficient. It can already count them respectively. Marketing, for example, he would see about my team is not enough to reach targets like that, do I have to add a team member or its sales force or add its strategy, also include bonuses. If you can achieve the particular target then this is the bonus, this target can get this bonus. It is the same way in other division, sir, down to the lowest level. All will perform according to the target that has been set in accordance with the company's strategic objectives. So from the bottom moving up that ended up going towards goal or company's strategic objectives that has been set before" (*Opinion of KK at FGD*)

When being asked to explain more technical things associated with intangible resources and activities, informants KK argued as follows:

"Yes sir, starting from the top, is what the chairman wants to. Then, the level of director should be gathered, discussing the problem of companies. After the meeting, it is usually not too detailed, just about the want of the sales to be arisen, at the time so and so. Just like that. Then, it was passed to each department. If I want this, what do you want? So that subordinates also like that, if my boss want this then I have to do this, this, and this. For example, if the HR is less than it is conducted new recruitment. If the engine is less then I have to add to the machine, or so the shift-work system are changed. It also includes marketing strategies need to reform, that is it sir" (*Opinion KK at FGD*)

The second step of operationalization of strategic goals when associated with IC component is to perform the measurement on intangible resources and intangible activities. Here are the opinions of the informants about measurement which is usually conducted in pharmaceutical companies:

"We usually use Mr. Erwin's SMART, namely Specific, Measurable, Accountable, Reliable and Timeable" (*Opinion KK at FGD*)

Likewise with the opinion of the informant AP related to measurement is conducted for the marketing department. AP opinion is as follow:

"The marketing department is easy to measure, sir, just about they reach any target or not. How many percent can be achieved are clearly the consequences of each of them" (*Opinion AP at FGD*)

Almost the same opinions are submitted by DDOR, that the measurements were conducted by comparing between the target and realization. Here the DDOR opinion:

"Yes sir, so much more is measured from the target and realization. If from the financial side is almost the same. Usually we measure monthly, quarterly, semiannual, and annual. Each product can be known to their respective



contributions. On these data will be evaluated and what they should do what "(an excerpt of an interview with DDOR)

The third step in the operationalization of the strategic objectives with IC component is monitoring. Monitoring activity is done when activities are going or when the intangible activities are working in order to achieve the strategic goals of the company. According to the informant KK, monitoring was done based on the timeline.

"Any specified target, though, has its timeline. For example the first year or the first six months have to meet this target, this and this. The next six months should meet this target and this. How a company like that just to monitor this pack. So during the first quarter it was no problem between target and the realization in the quarter will be boosted what the problem is then solved together. Maybe its HRD need to recruit new employees." (*Opinion KK at FGD*)

Monitoring activity can also be done through the company database, such as the monitoring of consumer dissatisfaction which was measured by looking at the number of complaints from time to time. The following is ER's opinion:

"Yes for measurement or monitoring can be seen from two things Sir, namely from the sales or financial performance. If for non-financial consumer satisfaction, we normally see from the number of complaints that go on our products, Sir. Usually in the data already exists, remains to be seen over the years as to what, so pack (*ER's Opinion at FGD*)

Based on the comments and opinions of the FGD participants, the company's strategic objectives setting is commonly conducted and is strongly associated with the resources and activities that go with it. It means that the concept of the development of the IC can be accepted and have become usual routine performed by the company when associated with the strategic objectives of the company. Only the names and terms are different between the practice in the field and the theoretical study suggested by the researchers.

Similarly, the combining two existing theories, i.e., CICM by Ali (2003) with the concept of ICM by The MERITUM Project (2001) are acceptable. Merging the two theories would be very useful for pharmaceutical companies. CICM Theory which produces IC development at each stage (knowledge management, innovation management, and intellectual property management) will benefit, namely 1) the company can determine its position on the stage CICM which for the time being and 2) after knowing the position of the company will be able to develop HC, SC, and RC according to the stages CICM. By knowing the IC in accordance with the development stages that exist in theory CICM it will be easier to connect with the company's strategic objectives in accordance with ICM theory put forward by The MERITUM Project (2001).

## **B. CICM and ICM Integration as New CICM Model**

To gain the results of research related to the new model of CICM, there were several stages needed. The first phase was associating the IC with the company's strategic objectives. There were three steps needed concerning IC development with the strategic objectives of the company. The first step was the identification of intangibles assets, the second was the measurement, and the third was monitoring. The first step was the identification of intangible assets associated with the company's strategic objectives. At this stage, the company's strategic objectives determined in advance. Next, each department will review and analyze the company's strategic goal setting with the resources

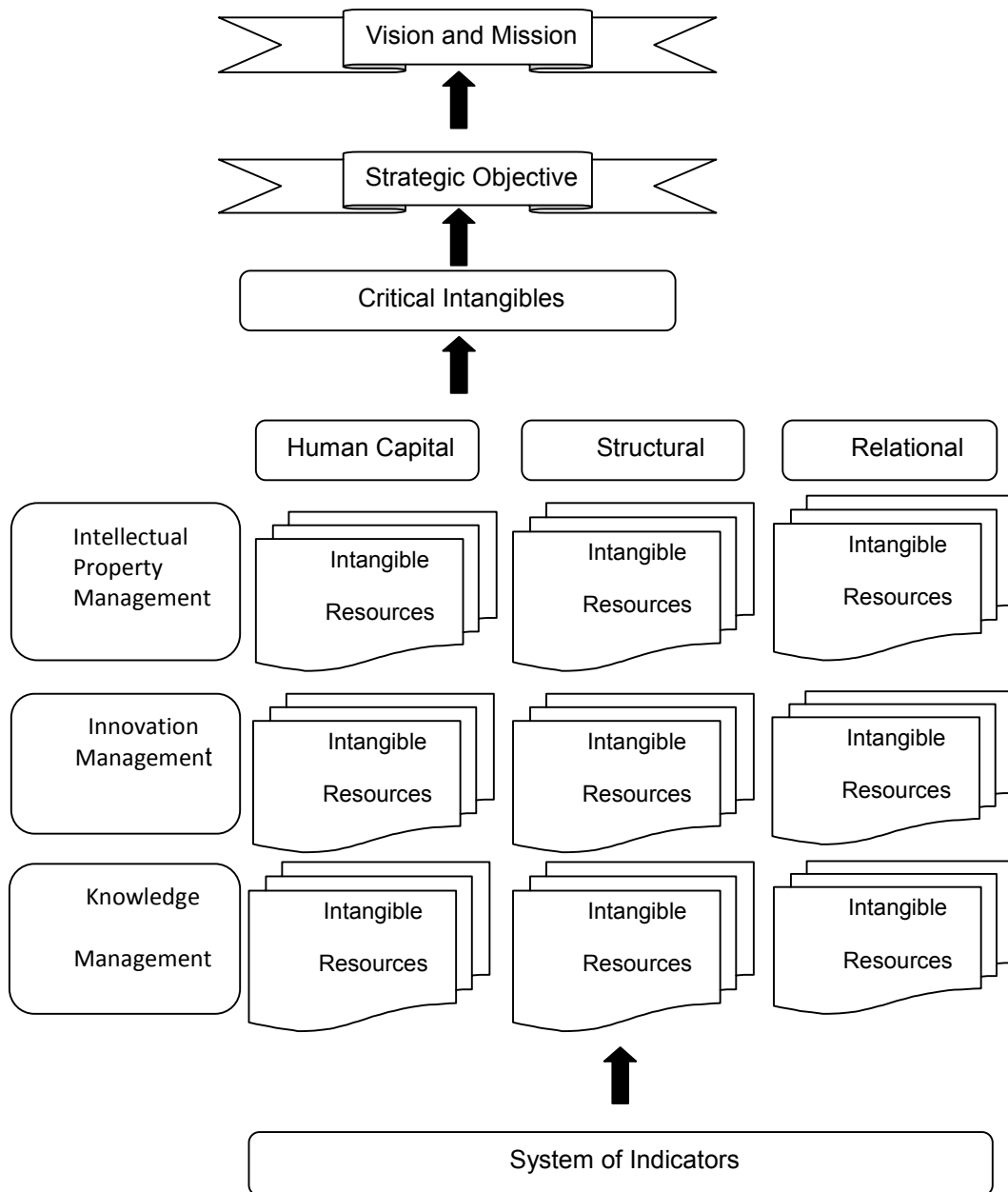
that are owned by their respective departments. If the resource is already known to exist, each department will determine the critical intangible assets that support the company's strategic goals. Determination of critical intangible assets is interpreted as well as key performance indicator (KPI), which has been done in several pharmaceutical companies. Determination of critical intangible assets can be performed on all components of the IC, both for HC, SC, and RC. When linked with the CICM, intangible assets critical determination can be done for a good three stages for knowledge management, innovation management, and intellectual property management. The critical determination of intangible assets will be followed by intangible resources and intangible activities.

The second step is operationalization of strategic goals. If it is associated with IC component, it is needed to perform the measurement on intangible resources and intangible activities. In general, the measurement is done by comparing the target and realization. The departments that clearly use such measurement are the marketing and sales. Performance measurement was also done on financial and non-financial aspects. To finance, for example due to strong sales of the company, while for non-financial is customer satisfaction survey or drug users. This measurement was conducted at the end of the work period or program.

The third step in the operationalization of the strategic objectives with IC component is monitoring. Activity monitoring is done when activities are ongoing or when the intangible activities are underway in order to achieve the strategic goals of the company. Monitoring can be done based on the database of the company, periodically. For example, the sales target must be achieved within six months, and then the monitoring can be done in a bi-monthly or monthly basis. At the time of monitoring strategic steps can be taken when reality does not show the results that being targeted.

Based on these results, the concept for the IC development is connected with the company's strategic objectives using THE MERITUM project (2001) recommendations. This means that this research combined the two existing theories, i.e., CICM by Ali (2003) with the concept of ICM by The MERITUM project (2001). Merging the two theories generate new CICM model or CICM plus (CICM+).

CICM Plus Model (CICM+) as Figure 4, begins with determining the indicator system or forming a key component of HC, SC, and RC. Next is the development of HC, SC, and RC components at every stages of CICM, namely knowledge management, innovation management, and intellectual property management. It means that in this CICM stage, pharmaceutical companies must recognize at what stage the company is located. Based on the characteristics that exist in every stage, the development of components HC, SC, and RC can be done. The IC development course should pay attention to intangible resources that exist and then manifested in the form of intangible activities which are effective in accordance critical intangible assets and corporate objectives that have been set. In the end, critical intangible assets and strategic objective is to be able to realize the vision and mission of the company. Figure 4 shows the CICM Plus models (CICM+)



**Figure 4**  
**CICM Model Plus (CICM+)**  
 (Source: Developed by researchers)

Meanwhile, the development of the research related to the development of the IC with the strategic objectives of the company is emphasized on each step in the pharmaceutical companies due to the fact that these measures have been implemented and are commonly used as part of the monitoring and evaluation work program. For example, in the first step, the emphasis is on the critical determination of intangible assets that must be conducted properly and appropriately. To do that, a complete data base that supports strategic decision making is needed, and so with the intangible resources and activities that follow the critical intangible assets. The accuracy in determining these three things and also how to run activities program becomes an important part in order to achieve the company strategic objectives. The second step is also important because it is associated with measurements carried out on a work program that has been set. Based on the research results, measurements made by pharmaceutical companies until now is

conducted by comparing the target and realization. Measurements are also more on financial measures, but there are also non-financial measures should also be considered by pharmaceutical companies. The third step, monitoring, is important to get attention from pharmaceutical companies as it relates to investments made in intangible resources and intangible activities. The results of this monitoring could be a new activity that will improve intangible resource is new one, and so on. These monitoring activities are carried out in internal intangible resource and also in internal intangible activities.

When linked with the theory, the results of this study correspond to the resource-based theory (Wernerfelt, 1984; Barney, 1991) and the intangible perspective (Andriessen, 2002). According to the resource-based theory, both tangible and intangible assets are the potential strategic assets. Therefore, companies must be able to obtain, acquire, and use those assets to improve performance and competitive advantage. In this study, the CICM plus (CICM+) model proved to be associated with the company's strategic objectives, vision and mission of the company and can explore the hidden activity in the form of intangible resources and activities. This makes the performance and increase competitive advantage if pharmaceutical companies can manage the IC because the IC qualification as a strategic asset lies in the potential relationship between IC with firm performance (Belkaoui, 2003).

Meanwhile, according to the intangible perspective, the IC owned by company is a huge intangible assets and financial contribution to the economy of the company. Company's IC, which consist of HC, SC, RC, is the main capital of the company in the management of intangible assets. When linked these results with the intangible perspective, it can be seen that IC owned by pharmaceutical company as a resource that can contribute to the economic and financial for the pharmaceutical companies. Thus, pharmaceutical companies must empower IC with digging more intangible resources of the company and do the intangible activities in order to support the achievement of strategic objectives company.

### **C. CICM Plus (CICM+) and Opportunities for Strategic Management Accounting (SMA).**

The new CICM model or CICM Plus (CICM+) is the result of a value creation process starting from the identification of intangible assets owned by the company. Further, it is necessary that the critical intangible assets be adjusted to the company's strategic objectives. The critical determination of intangible assets will be followed by intangible resources and intangible activities. The determination of the first step with a key indicator system of HC, SC, and RC components is also an important part of the CICM+ model. Similarly, the determination of intangible resources and activity in each stage of knowledge management, innovation management, and intellectual property management should also be adjusted with the HC, SC, and RC components. So we can say that at this stage, it is really a process that explores the hidden assets, the flow of knowledge, establishing targets, market share, and determine the other non-financial activity including financial activities such as determining the cost, volume, price, cash flow, and determining the adequacy of resources owned by company. Next, all the non-financial and financial activities that must be in accordance with the company's strategic objectives which must also be adapted to the vision of company. The latter two activities (strategic objective and vision and mission) are included as strategic activity that should take company's external factors consideration including competitor or competitor companies. Thus CICM+ model is a combination of internal activity (non-financial and financial) and external activities which also focuses how companies can compete with competitors.

By viewing and considering the CICM+ models, the opportunity for developing the SMA is opened. Within a period of 30 years since its emergence in the 1980s, SMA is still searching for its form (Soljakova, 2012). SMA development referred above is the opportunity of CICM+ model as SMA techniques. The purpose of SMA techniques is to provide for strategic decision making based on the information on the financial implications of business strategies based alternative (Juras, 2014). The use of CICM+ as SMA techniques is reasonable for several reasons:

1. CICM+ contains non-financial activities and financial activities including cost efficiency in taking decision.
2. CICM+ set routine activities and the development of business strategy and vision of company
3. CICM+ also set about customers, competitors, brand and relationship with the external
4. CICM+ identifies intangible assets, measurement, and monitoring.
5. CICM+ improves performance and competitive advantage through the identification of intangible resources and activities on the stage of knowledge management, innovation management, and intellectual property management.

The use of CICM+ as SMA is justified because the techniques are supported by Lord (1996) which states that the functions of SMA relates to 1) collecting information related to the competitors. 2) using accounting for strategic decision; 3) cutting costs on the basis of strategic decisions; 4) and, gaining competitive advantage through it.

### **Conclusions, Implications, And Limitations Of Research**

The conclusion of this study is that CICM as part of the development of the IC can be developed into a new model, the CICM plus (CICM+) which is the integration between the CICM with ICM. CICM+ contains a number of activities both financial and non-financial and strategic activities of the company. Identification activities of critical intangible assets, measurement, and monitoring are the activity of CICM+ in addition to the stages of knowledge management, innovation management, and intellectual property management. Having regard to the activity are such that the CICM+ is then very feasible if CICM+ is part of the development of SMA, namely the SMA techniques. This CICM+ will contribute to the development of SMA because it meets the SMA functional criteria, which is capable of collecting information about competitors, using accounting as a decision taking, using the load as a base of strategic decisions, and gain a competitive advantage through it.

The practical implications of this research are the company will gain more benefit by using CICM+ because not only the internal activities, the external activities of a strategic nature can also be obtained. Meanwhile, the theoretical implications derived from research is that CICM+ will further strengthen the role of the Resource Based Theory (RBT) in particular on the role of intangible assets and also in the intangible perspective. Another implication is that CICM+ develop further the concept of SMA and in particular on the subject of management accounting and management strategies.

The limitations of this study were that I did not using data collection techniques by participating observation that became part of the lives of informants at pharmaceutical companies. It was caused by the intensity of the preoccupations of the manager and also because the presence of the researcher will be disturbing for the company. However, further research by considering participating observation that became part of the lives of informants is still needed. Another limitation was that the study did not consider the origin of the informants (managers), whether the managers of large pharmaceutical companies,

medium, or small. Further studies need to involve the managers of several levels of the company.

Lastly, from this research, it is suggested that the organization develop its assets primarily on intangible assets or intangible assets by adopting various concepts IC management as well as models of CICM+. For other researchers focusing on the research of IC, there is still a wide-opened area to examine IC non-financial such as research and also developed various models of IC management as well as the CICM. For accounting courses, it is necessary to combine the two subjects between management accounting and management strategies into the management accounting course strategy.

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## DEPOSIT INSURANCE, FINANCING DECISION, LIQUIDITY OF BOND MARKET AND THEIR EFFECT ON MARKET DISCIPLINE IN INDONESIA

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### Abstract

Previous research about the existence of market discipline in Indonesia using third party's fund as the proxy concluded that Indonesia has the symptoms of market discipline although the effectiveness is still questionable. Therefore, the development of market discipline theory in U.S. said that market discipline can be achieved by subordinated debt investors as an alternative to enhance bank's supervision and prevent moral hazard. This study aims to prove the presence of the symptoms of market discipline performed by subordinated debt investors in relation to liquidity risk in bond and the reformation of deposit insurance policy from blanket guarantee to limited guarantee. Market discipline is proxied by the spread of the secondary price of subordinated debt, while liquidity risk is influenced by two factors; the bank's funding decision to issue subordinated debt (endogenous) and the bond market liquidity itself (exogenous).

Result showed that there are symptoms of market discipline on the subordinated bond investors in Indonesia through the bond market liquidity, while funding decisions and changes in deposit assurance do not have any significant effect. It can be caused by the funding decision models which cannot be fully implemented in Indonesia as well as the different assumptions of investors in assessing the risks of a deposit assurance.

**Keywords:** *Deposit Insurance, Market Discipline, Financing, Liquidity, Subordinated Bonds*

### Introduction

The domination of commercial banks in Indonesia in the banking industry influences their behavior in making decisions including financing decisions related to excessive risk taking. Risks faced by the banks along with the emergence of more complex product innovations supported by advances in technology become new challenges for the regulator and supervisor of the financial system (Mardanugraha and Hadad, 2006). The role of Pillar 1 (minimum capital requirements) and Pillar 2 (the process of reviewing surveillance) in the framework of Basel II seemed necessary to include the involvement of the market to assess and control the tendency of banks in excessive risk taking which could lead to moral hazard behaviors that can adverse the market. Therefore, Pillar 3 (market discipline) is expected to be effective to optimize the function of bank as a publicly trusted institution.

Several previous studies about market discipline in Indonesia is commonly measured by Third Party Fund (DPK) and interest rate. Until now, researchers have not agreed yet whether the depositor's role as the owner of DPK has been effective in running the discipline of the market in Indonesia. The concept of universal banking which the practice started in U.S. after the Gramm - Leach - Bliley Act (1999) makes the level of bank risk supervision needs to be improved, particularly those involving the market as part of bank supervisors. The Fed discovered the power of subordinated bonds as an instrument

that can play such role. These instruments have been selected for investors who are genuinely sensitive to risk considering that its existence is not guaranteed if the bank failure happened, yet with a limited return on the coupon.

In Indonesia, research on this area has not been conducted even though the bond market has developed quite rapidly after the merger of the Jakarta Stock Exchange and Surabaya Stock Exchange. Thus, many investors are now able to monitor their investment activities easily. Up to now, the role of the subordinated bond investors in Indonesian discipline market is still questionable.

Subordinated bond investors have limited information in assessing risk. So, they forced to use available common information only, such as bonds' price, coupons, financial statements, market and industry conditions and general economic conditions. These limitations can reduce the accuracy of risk assessments performed. Bichler and Hancock (2003) denied the claim and said that investors are already more sophisticated, some even have been able to access private information so that the price of the bond is no longer only influenced by financial risk. It triggered the writing of Covitz et al (2002) to consider the liquidity risk in bond prices, including the funding decisions as a variable which proxy the endogenous factors, and the liquidity of the bond market as an exogenous factor.

The behavior of banks in taking risks can also be intervened by government policies, such changes limit the deposit assurance. The greater the government guarantees customers' deposits, the further both banks and customers will lower the guard. In the long term and critical condition, this phenomenon will lead to bank failures systematically.

This study is aimed at finding out: (1) whether there is an effect of funding decisions through the issuance of subordinated bonds on market discipline as measured by the spread of the secondary price of the subordinated bonds in conventional commercial banks listed on the Indonesia Stock Exchange during the period 2003-2014; (2) whether there is an effect of the bond market liquidity on the market discipline as measured by the spread of the secondary price of the subordinated bonds in conventional commercial banks during the period 2003-2014; (3) whether there are significant changes in the deposit insurance from blanket guarantee to limited guarantee on the market discipline as measured by the spread of the secondary price of subordinated bonds in conventional commercial banks in 2003-2014.

## Literature Review

### 1. Market Discipline

Market discipline is generally understood as a situation where the other party (in this case is individuals as consumers) bears the costs associated positively with the risk of the bank's activities and reacts in accordance with the fee (Berger, 1991). For example, if the banks took excessive risks in their business activities, depositors would respond by withdrawing funds they saved there to avoid the impact of bank failure as a result of the excessively high risks, while investors and creditors will move or resell their instrument.

Conventionally, the potential presence of market discipline is measured by using the movement of the Third Party Funds' (DPK) volume compared to other variable factors, indicating that they could change market's behavior in assessing bank risk. The most common tools are deposit insurance or ratios depicting bank risks' profile such as Non Performing Loan (NPL), Capital Adequacy Ratio (CAR), Loan to Deposit ratio (LDR) and other ratios. In development, there are studies using other instruments as indicators of the occurrence of market discipline. One of them is subordinated debt/bond. Subordinated bonds have unique characteristics, namely the position (after the equity) is not guaranteed and will be lost if the bank fails, but the potential profit is limited to coupon agreed only,

as characteristics of debt in general. Therefore, Covitz, et al. (2002) stated that the investor's incentives for subordinated bond in keeping an eye on risk-taking banks are similar to the motives of the bank supervisors, but very different from the motives of equity investors in general.

Two spreads are intended in this study. First, Covitz, et al. (2002) used a derivative of each bond yield which is measured by the iteration method Newton - Raphson with yields' interpolation on government bonds that have the same maturities. Whilst, Esho, et al. (2005) stated specifically that the spread is the difference between the yield to maturity of bank bonds and the interpolation of the return of the two risk-free assets in a country. Research conducted by Bichler and Hancock (2003) takes precedence why market discipline model using spread of subordinated bond cannot be seen directly using the default risk in general. Therefore, referring to the research of Covitz, et al. (2002), the spread model used is as follows:

$$SPREAD_{it} = f(E[FC_{it}], BC_{it}, OF_{it}, FD_{it}, IC_{it})$$

Where FC (financial condition) is a measurement of the companies' condition represented by the bank risk's ratios, BC (business and the bond market condition) is general business conditions such as macroeconomic condition in a country and the condition of the bond market as bond trading place, OF (organization specific factors) is the condition of banks that may affect the overall activity of the bank such as bank size as measured by the natural logarithm of total assets, and FD (financial decision) is the probability of funding decisions by banks to issue subordinated bonds. FD is particularly created through a model which was converted into probability form by using the Inverse Mills Ratio from the probit estimation. IC (Instrument Characteristic) issued will also affect the liquidity, for instance: maturities, coupon frequency, call right and the issue size.

## 2. Financing Decision

The funding decision is strongly influenced by current financial condition and future prospect. Covitz et al. (2002) suggested the probability model of financing decision to issue companies' subordinated bonds is created through probit model by considering the financial condition of the banking organization, organization/banking specific factors, business and bond market conditions, and supervisory pressure.

## 3. Liquidity of Bond Market

Liquidity shows the ability to buy or sell certain securities quickly (marketability) and at a price that is not too different from the previous price (Sharpe, Alexander and Bailey, 2005:359). Liquidity is an important consideration for investors and public firm, because the illiquid market will cause the securities sold at a higher price to cover the liquidity premium. The price difference of the illiquid securities is called a liquidity premium, which is a premium of a security that is added in the selling price for such securities not easily converted. Therefore, Covitz, et al. (2002) concluded that the liquidity of the bond market had negative effect on bond spreads.

## 4. Deposit Insurance

Deposit insurance is one of the government's efforts to restore depositors' confidence in the banking system by guaranteeing some or whole deposits in the bank. Deposit insurance in Indonesia was first applied when public confidence in the domestic banking system decreased after the liquidation of 16 banks and difficult macroeconomic conditions in 1998's monetary crisis. Indonesia experienced bank runs, investment funds massively went out the country. To overcome this, the government issued a number of policies, one

of which is the whole deposits of bank's customers were being guaranteed, known as the blanket guarantee system. On the one hand, this system will quickly restore public confidence in the banking system, but on the other hand will lead to the presence of moral hazard in the behavior of banks in taking excessive risks (Binh, 2014).

**Hypothesis**

- H<sub>1</sub>: The funding decisions by issuing subordinated bonds negatively affect the spread of the secondary price of subordinated bonds.
- H<sub>2</sub>: Bond market liquidity negatively affects the spread of the secondary price of subordinated bonds.
- H<sub>3</sub>: Changes of deposit insurance from the blanket guarantee to limited guarantee positively affect the spread of the secondary price of subordinated bonds.

**Research Methods**

The research method used a descriptive and verification method. The object of this research is the market discipline of commercial banks listed on the Indonesia Stock Exchange and operates during the period 2003 to 2014. This study used spread of secondary prices that represent subordinated bonds market discipline as the dependent variable. The independent variables in this study are funding decisions, the liquidity of the bond market, and deposit insurance (backlog) as a dummy variable. In addition, this study also includes control variables such as the financial condition of the bank, the size of the bank, the amount of subordinated bonds, and excess return of the stock market.

Data processing techniques performed in this study is the use of Heckman Selection Model on a panel data set, the second phase using dummy variables for the backlog of the blanket guarantee and a limited guarantee period, with additional control variables that will enhance the model.

This study uses population of all banks operating in Indonesia. By using purposive sampling techniques, 14 commercial banks are acquired as sample. Criteria for the sample used in this study are:

1. The banking company registered in Bank Indonesia and the Financial Services Authority
2. The bank issuing continual quarterly financial statements in the period 2003 to 2014
3. Not Regional Development Banks
4. Not Rural Banks
5. Bank registered as participants in the Deposit Insurance Agency (LPS) since 2006
6. Bank which had issued bonds at least once between 2003 and 2014.

**Table 1. Operationalization of Variables**

Variable	Concept Variable	Indicator	Scale
Financing Decision (MILLS <sub>it</sub> )	Probability of issuing subordinated bonds in accordance of the financial condition, other bank-specific factors, business conditions and	<i>Inverse Mills Ratio</i> from the equation: $Prob(ISSUANCE_{it}=1) = \phi [ \beta_0 + \beta_{NPL}NPL_{it} + \beta_{LDR}LDR_{it} + \beta_{BOPO}BOPO_{it} + \beta_{CAR}CAR_{it} + \beta_{ROA}ROA_{it} + \beta_{SIZE}SIZE_{it} + \beta_{TETA}TETA_{it} + \beta_{AVGTAX}AVGTAX_{it} + \beta_{ER}ER_{it} + \beta_{TP}TP_{it} + \beta_{LNFREKUENSI}LNFREKUENSI_{it} ]$	Ratio

	the bond market as well as pressure on bank supervision		
Liquidity of Bond Market (LNFREKUENSI <sub>it</sub> )	Market conditions that support rapid bond transactions	Natural logarithm of the frequency of bond trading	Ratio
Deposit Insurance (DUMMYJS <sub>it</sub> )	Period of deposit insurance	D <sub>t</sub> = 0 : <i>blanket guarantee</i> D <sub>t</sub> = 1 : <i>limited guarantee</i>	Nominal
Market Discipline (SPREAD <sub>it</sub> )	The contribution of subordinated bond investors in supervising banks	<i>Spread</i> subordinated bond = <i>Yield to Maturity</i> subordinated bond – <i>Interpolation</i> SUN	Ratio
Bank Financial Condition*	Judging from the risks faced by banks; Non - Performing Loan (NPL <sub>it</sub> ), Loan to Deposit Ratio (LDR <sub>it</sub> ), return on Assets (ROA <sub>it</sub> ), Capital Adequacy Ratio (CAR <sub>it</sub> ) and Operating Expenses per Operating Income (BOPO <sub>it</sub> )		Ratio
Bank Size* (SIZE <sub>it</sub> )	Bank size that can affect the capital structure.	Bank size = ln (ASSET <sub>it</sub> )	Ratio
Size of Subordinated Bond Issued* (ISSUESIZE <sub>it</sub> )	Total bond issued may affect the liquidity of subordinated bonds	Natural logarithm of the value of the subordinated bonds issued	Ratio

<i>Stock Market Excess Return*</i> (ER <sub>it</sub> )	The risk premium which describes the market conditions	<i>Stock market excess return = R<sub>m</sub> – R<sub>f</sub></i> , R <sub>m</sub> is the return of IHSG and R <sub>f</sub> is a BI rate.	Ratio
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\*Control Variables

### Findings

Selection of the model estimation through Chow Test and Hausman - Lagrange Multiplier test indicates that it was done by the estimated regression common effect, or Pooled Ordinary Least Square (OLS). Data have passed the test classic assumptions of normality and multicollinearity. The problem of heteroscedasticity in the data will be handled using White's robust standard errors in the regression.

Hypothesis testing was performed by using the model of Heckman, the Two - Stage Model Selection is also called Type II Tobit. This model was chosen to suit the type of data that is censored, the variable Y (SPREAD) which, if done using the usual linear regression (OLS) will give biased results. When the bank decided not to issue subordinated bonds, SPREAD value will be 0, and this observation should not be included in the regression analysis. This indicates that the sample selection is not random, but through certain criteria, namely the time of bank issuing subordinated bonds.

This study has a total number of 168 observations (n =14, T = 12), but not all observations were considered as a value of 0 which is on SPREAD is not a real value, but it is a missing value. Heckit Model provides a solution for types of data which sets like this, namely through a two-stage regression. The first stage is a probit regression to generate the probability of banks in issuing subordinated bonds, then the second stage is Pooled OLS regression to include Inverse Mills ratio (MILLS) as independent variables representing funding decisions in the regression of the SPREAD.

### Probit Regression

$$Prob(ISSUANCE_{it}=1) = \phi [ \beta_0 + \beta_{NPL}NPL_{it} + \beta_{LDR}LDR_{it} + \beta_{BOPO}BOPO_{it} + \beta_{CAR}CAR_{it} + \beta_{ROA}ROA_{it} + \beta_{SIZE}SIZE_{it} + \beta_{TETA}TETA_{it} + \beta_{AVGTAX}AVGTAX_{it} + \beta_{ER}ER_{it} + \beta_{TP}TP_{it} + \beta_{LNFREKUENSI}LNFREKUENSI_{it} ]$$

log pseudolikelihood=			-77,3385	Number of obs	168
ISSUANCE				Wald chi <sup>2</sup>	11,6
ISSUANCE	Coef.	dF/dx (marginal effect)		Prob>chi <sup>2</sup>	0,3946
NPL	- 3,807556	-0,9881932	-1,38	Pseudo R <sup>2</sup>	0,0860
LDR	0,4111033	0,1066955	0,87	t-statistics	Expected Sign
BOPO	0,8840981	0,229454	1,22		-
CAR	3,820802	0,99163	0,97		+
ROA	- 10,70679	-0,2778781	-1,01		+

SIZE	0,0693638	0,0180023	0,74	+
TETA	-6,851847	-0,1778291	-1,31	+
AVGTAX	0,1994719	0,0517699	0,32	+
ER	5,835311	1,514465	1,38	+
TP	-15,8448	-4,112274	-0,63	-
LNFREKUE NSI	0,3582618	0,0929813	0,86	+
_cons	-6,394937		-0,99	

Based on the research results, the financing decision model initiated by Covitz et al. (2002) could not be fully implemented in Indonesia, pictured from the goodness of fit stating that the factors affecting funding decisions in Indonesia are not likely for the five factors mentioned above. It can be influenced by different regulations, industry conditions and prevailing banking system with U.S., the original research took place. However, eight of the 11 variables indicate a match against the expected sign. Only LDR, ROA, ROA and TETA are not in accordance with the expected sign.

#### Pooled Ordinary Least Squares Regression

			Number of obs	34
			Prob>F	0,0000
			R-squared	0,7647
SPREAD	Coef.	t-statistics	Expected Sign	Note
NPL	0,0956713	0,95	+	
LDR	0,014184	1,16	-	
BOPO	-0,0102543	-0,53	+	
CAR	-0,0592925	-0,81	-	
ROA	0,3108861	1,29	-	
SIZE	-0,0020173	-0,43	-	
ER	0,1005826	1,14	-	
<b>LNFREKUE NSI</b>	<b>-0,0283549</b>	<b>-1,90</b>	<b>-</b>	<b>H<sub>2</sub> is supported, Significant 10%</b>
ISSUESIZE	-0,0034789	-0,84	-	
<b>DUMMYJS</b>	<b>0,0117584</b>	<b>1,02</b>	<b>+</b>	<b>H<sub>3</sub> is rejected</b>
_cons	0,5288053	1,98		
<b>MILLS</b>	<b>-</b>	<b>-0,68</b>	<b>-</b>	<b>H<sub>1</sub> is</b>

(lambda)	<b>0,0115231</b> <b>3</b>			<b>rejected</b>
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The second table on testing this hypothesis is Pooled Ordinary Least Squares regression, with the addition of Inverse Mills ratio (MILLS) as independent variables. MILLS was obtained from the calculation already integrated with statistical software, and is used as a proxy for the financing decision. Beside being the new independent variable, MILLS also takes a role as a filter for uncensored variables. Thus, the number of observation decreased from 168 to 34 observations. Even with barely significant variables, through multiple correlation analysis, this model can be said to fit  $R^2$  values of 76.47 %. This result can be caused by the small numbers of eligible sample yet the high numbers of variables in this Covitz's replication model. Sometimes, too many variables could also distort the real model fitness.

Variable in bold is the independent variable in the study, while the other is a control variable. The use of control variables is consistent with research Covitz et al. (2002), Caldwell (2005) and Esho et al. (2005), to reduce the distortion in the results of the regression. Simultaneous test on the regression (F-Test) reject  $H_0$ , meaning that there is at least one independent variable which has a significant influence on the dependent variable.

The independent variable LNFREKUENSI which is the proxy of the market liquidity of bonds to yield significant results with signs of regression coefficients corresponding to the expected sign, while MILLS as the proxy of the funding decision also has signs in accordance with the expected sign, but the level of significance is so weak that  $H_0$  of the hypothesis is may not be rejected.

Dummy variable value equals to 1 in the period limited guarantee and 0 in the blanket guarantee. This regression has a positive coefficients and in accordance with the expected sign with a very weak significance. It means that the change of guarantee regime from blanket guarantee to a limited guarantee does not significantly increase market discipline (proxied by spread of the secondary price of subordinated bonds) so that the  $H_3$  is rejected.

Four of the eight control variables produce the appropriate sign with the expected sign, but nothing significant at the level of 10 %. According to previous similar studies, this may happen simply because it has been concluded by Bichler and Hancock (2003) that the spread of the secondary price of subordinated bonds is not directly affected by the financial ratios of banks.

## Discussions

In this study, the financing decision variables are represented by the ratio of Inverse Mills producing a negative regression coefficient, in accordance with the expected sign despite the very weak level of significance. The weak level of significance can be caused by the unfitness of this probit model in Indonesian research. Models that do not fit the funding decision is most likely caused by proxy selection factors. Most of the entire press release on the bank's official website that issued the subordinated bonds stated that the main factors why the manager funding issues this type of bond is to strengthen and maintain the capital structure of banks without increasing the risk for these types of bonds including unsecured assets. The benefit was for the bank as in accordance with Bank Indonesia Circular Letter No.26 / I / BPPP dated May 29, 1993, the sale of these bonds may be included in the calculation of lower level of supplementary capital (lower tier 2 capital) related to the Capital Adequacy Ratio (CAR). This ratio needs to be managed for being one of the requirements for business expansion, which is specifically performed by accelerating credit growth and optimizing lending nominal to customers.



Contrary to the logic of this study, that a large or small value of CAR does not trigger funding managers to issue subordinated bonds, but bond issuance is expected to strengthen the CAR of the bank. Moreover, the standard deviation value of the variable CAR indicating the number is relatively small, so statistically the value is quite dense. This causes the regression results on the research showed that the CAR had no effect on subordinated bonds.

In addition, funding manager is also likely to assess the condition of the economy in different ways. This study is only limited to use Unemployment Rate and the excess return of the stock market as a proxy for economic conditions. Those two things may indeed not affect the issuance of subordinated bonds because there are many other macroeconomic factors that may be used as alternative references, namely the value of the rupiah against the dollar, balance of payments, and others. Therefore, the new bond is not seen as an asset that is free from liquidity risk by investor and the consideration of purchase prorated the bonds previously published. Unattractiveness of these bonds causes no change of the frequency of bond trading, with prices and spreads which are also not affected by the issuance decisions.

Regression analysis states that the liquidity of the bond market significantly influences the spread of secondary price of subordinated bonds. Thus, investors are very careful in considering bond market conditions in deciding their investment strategy, thus the decrease of market liquidity will jack the liquidity premium up (liquidity risk) on the bonds. As previously explained, that the greater the liquidity premium, the more likely the spread increases.

In fact, the regression results of this study show that the decrease in the deposit insurance led to an increase in market discipline, albeit in a very weak level of significance. No significant results could be due to factors that influence investors' decision to buy or hold the bonds does not apply in general circumstances. On the opposite, investors can assume that the reduction in the backlog will increase awareness of the bank, so the bank is considered to improve the effectiveness of its internal risk management. Risk management would maintain or even improve the bank's ability to pay its liability to the bond investors. Moreover, the subordinated bond investors do not feel the benefits of this guarantee. It is directly due to the subordinated bonds which are unsecured instruments so that the effect of the changes does not make investors more cautious in bank supervision. The weakness of this correlation supports Taswan (2013)'s statement that there was no statistically significant difference in the change in backlog prevailing in Indonesia to market discipline. In many countries, several researches had been conducted to prove the same point, such as Forssbäck (2011), Demirgüç-Kunt and Huizinga (2004) and Imai (2006) in Japan. This study however has a particular aim to focus on the market discipline run by bond investors in Indonesia.

## **Conclusion**

From these results, it can be concluded that the funding decision to issue subordinated bonds did not significantly affect the subordinated bond spreads. That is, the newly issued bond investors are not seen as an asset that is free from liquidity risk and consideration of purchase prorated to the bonds previously published. Unattractiveness of these bonds causes no significant change of frequency trading, with prices and spreads which are also not affected by the issuance decisions.

In addition, the liquidity of the bond market significantly influence the price of secondary spread of subordinated bonds. In other words, investors are very careful in deciding their investment strategy by supervising bond's market conditions. Thus,

decreasing market liquidity will improve liquidity premium (liquidity risk) of the bonds, and spreads will increase.

While the decline in backlog does not increase market discipline. No significant results could be due to factors that influence investors' decision to buy or hold the bonds which does not apply in general. Moreover, the subordinated bond investors do not feel the benefits of this guarantee. It is directly due to the subordinated bonds which are unsecured instruments so that the effect of the changes did not make investors more cautious in supervising bank.

Although the results of this study stated symptoms discipline of the market in Indonesia which is still weak, these symptoms can be a reference for frequency trends bonds trading in the secondary market that is still and will continue to grow. U.S. and Mexico have taken advantage of this symptom as an academic support to submit proposals regarding the obligation of banks to issue subordinated bonds each year in a certain minimum amount, and has been implemented up to now. Development of this research is expected to be conducted primarily on the enhancement of financing decision model to submit a similar proposal in order to improve the discipline of the Indonesian banking market.

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## ANALYSIS OF FACTORS AFFECTING AUDITOR SWITCHING

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### Abstract

This study aims to determine the factors that affect the auditor switching, i.e. management turnover, the size of firm, financial distress, the size of company, audit fee, and ROA. By using purposive sampling, there are 17 samples of 85 banking companies listed in the Indonesia Stock Exchange with the observation period of 2009-2013. Data Processing and Hypothesis Testing in this study use logistic regression analysis. Partial test results show that only the turnover of management that significantly influences the auditor switching, while the size of the firm, financial distress, the size of the company, the audit fee and ROA do not significantly affect on the auditor switching. Simultaneous testing results show that all independent variables simultaneously affect the auditor switching.

**Keywords:** *Auditor Switching*

### Introduction

Company management has a responsibility to present the financial statements which are an overview of the performance achieved by the company in a particular accounting period. The financial statements prepared by the management of the company could potentially be influenced by personal interests (management). Therefore, it requires the services of an auditor as a third party of the company management that connects with parties outside the company and is responsible for providing assurance about the fairness of the financial statements presented by the company management. An auditor should be able to maintain the independence, integrity and objectivity in conducting the audit. Definition of independence is a mental attitude that is free from influence, not controlled by the other party and does not depend on others. The independence also means that the auditor must be honest in considering the facts as reality. It means that if the auditor finds fraud in the client's financial statements, the auditor shall dare to express an opinion free from client pressure or other parties who have interest to the financial statements (Aprilia, 2013).

Today, it begins to appear doubts about the independence of the auditor due to the emergence of cases of Eron and Arthur Anderson accounting firm in December 2001. One of the causes of the problem is the future independence of the audit engagement (audit tenure) between the client and the Certified Public Accountant (CPA). In Indonesia, the regulation of audit firm rotation is stipulated in the Regulation of Minister of Finance of the Republic of Indonesia Number 17/PMK 01/2008 on "Public Accountant Services". The changes made include the provision of audit services to six years in a row by the CPA to the same client and CPA may receive back an assignment after one year of closing book not providing audit services to clients.

But in reality there are still many companies that perform voluntary switch of auditors. Though the switch of auditors which too often can cause the cost higher, because the auditor requires higher start-up costs that can ultimately increase the audit fee. Start-up costs are high because the auditor who first conducts an audit of a client needs to understand the client's business environment and the risk of the client audit. In addition, the first assignment is proven to have high possibility of errors (Nasser et al, 2006).

## Research Framework

Figure 1 below presents the research framework. This figure shows the relationship between the independent variables of management turnover, the size of firm, financial distress, the size of company, audit fee, and ROA to auditor switching as dependent variable.

Companies tend to select the auditor of CPA with better quality to improve the quality of financial statements to enhance the company reputation. The big CPA (Big 4) is considered to be capable to produce higher quality audits than the small CPA. The bigger CPA or Big 4 is also considered to be more independent than the smaller CPA in terms of withstanding pressure from management. Therefore, for the first hypothesis is stated as follows:

### H<sub>1</sub>: Size of CPA affects the auditor switching

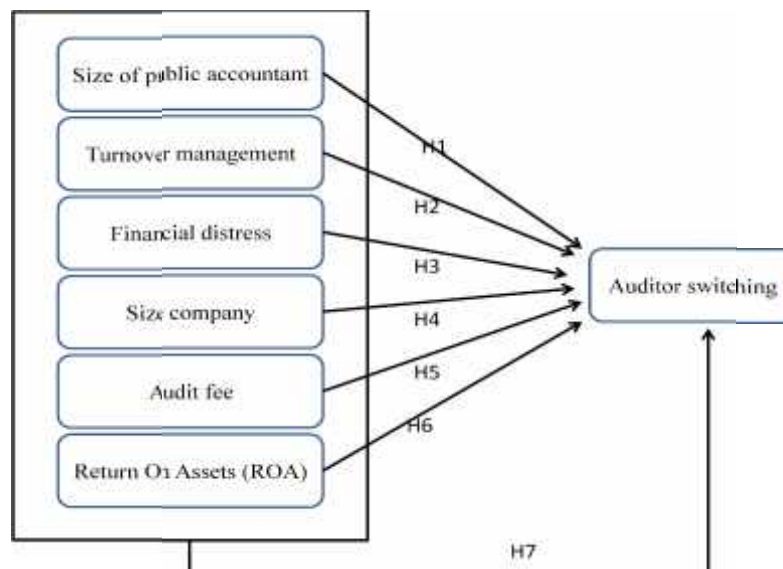


Figure 1. Research framework

Turnover of company management happens when the company changes the board of directors. Damayanti and Sudarma (2008) claimed that a change of management is the turn of the directors of the company that can be caused by a decision of general meeting of shareholders or the directors quit because of their own will. If a company changes its board of directors, the new directors or commissioners will lead to changes in company policy. Every management has leadership style and different purpose. Management turnover directly or indirectly encourages the auditor switching because the new management company will tend to seek the CPA which is in accordance with management policies. Therefore, the second hypothesis is stated as follows:

### H<sub>2</sub>: The turnover management affects the auditor switching

The financial condition of the client company may have a significant impact on the decision to retain or switch the CPA. Companies threatened with bankruptcy are more often switching CPA than the companies that are not threatened with bankruptcy. Uncertainty in the business of firms that are threatened with bankruptcy (financial trouble)

namely financial distress will tend to switch the CPA than the companies with good financial state. The third hypothesis is stated as follows:

**H<sub>3</sub>: Financial distress affects the auditor switching**

Selection of CPA can be attributed to the size of the client company and the type of service required. The greater the auditee faces the problem which is more complex, the more it requires a CPA that can reduce the agency cost (Watts and Zimmerman, 1986) in Nasser et al., (2006). Large sized companies make the principals difficult to monitor the actions of the agent that may tend to maximize personal gain rather than principal profit (Juliantari and Rasmini, 2013). Therefore, for the fourth hypothesis is stated as follows:

**H<sub>4</sub>: Size of company affects the auditor switching**

Audit fee is one consideration in choosing a CPA. When the audit fee exceed the tolerance limits set by the company, the company will seek CPA bidding lower audit fee even though they have to switch the auditor who usually audit the company's financial statements. They will try to do the auditor switching so that they can find better deals with the audit fee they offer. Therefore, for the fifth hypothesis is stated as follows:

**H<sub>5</sub>: Fee audit affects the auditor switching**

ROA (Return on Assets) is a proxy of the client reputation (Mardiyah, 2002). In addition ROA changes can also be used as an indicator of the company's financial condition to see the business prospects of the company. The higher the ROA value means the more effective management of assets owned by the company and the better the business prospects (Damayanti and Sudarma, 2008). Companies that have lower value of ROA tend to switch auditors because of decreased performance so that business prospects decline. In this case it means the company's financial condition declines resulting in management to tend to look for new auditors who are able to hide the state of the company. Therefore, for the sixth hypothesis is stated as follows:

**H<sub>6</sub>: ROA affects the auditor switching**

Together the independent variables of management turnover, the size of firm, financial distress, the size of company, audit fee, and ROA affect on auditor switching. Therefore, for the seventh hypothesis is stated as follows:

**H<sub>7</sub>. Management turnover, the size of firm, financial distress, the size of company, audit fee, and ROA simultaneously affect on auditor switching.**

## **Research Methodology**

The research data is the data of financial statements of banking companies listing on the Stock Exchange in 2008-2013 ([www.idx.co.id](http://www.idx.co.id)) using purposive sampling of a total population of 85 banking company, it is acquired only 17 banking companies eligible to condition predetermined that is being registered before 2008 and publishing the complete financial statements. Data analysis tools use logistic regression analysis with SPSS assistance.

Operational variables in this study consist of one dependent variable (Y) is the auditor switching and six independent variables (X) which is a size of CPA, management turnover, financial distress, the size of the company, the audit fee and ROA.

- Auditor switching referred to in this research is the switching of CPA conducted by the company voluntarily. Variables of auditor switching use dummy variables. Code 1 is given if the company switches CPA while the code 0 is given if it does not switch CPA.
- Company size was measured with a dummy. Code 1 is given if the company uses the Big Four accounting firm while the code 0 is given if it does not use the Big Four accounting firm.
- Financial distress was measured using:  

$$DER \text{ (Debt to Equity Ratio)} = (\text{Total Debt}) / (\text{Total equity}) \times 100\%$$
- Company size is measured using the natural logarithm of total assets.
- Audit Fee is measured using the natural logarithm of professional fees
- ROA is measured using  

$$\text{: Percentage change of ROA} = \frac{ROA_t - ROA_{t-1}}{ROA_{t-1}}$$

$Roat = \text{Return On Assets Period } t$   
 $Roat-1 = \text{Return On Assets Period } t-1$

## Results and Discussion

### 1. Result

The coefficient of determination used to determine how much the independent variables are able to explain the dependent variables. The coefficient of determination on the logistic regression can be seen in the value of Nagelkerke R Square. Value of Nagelkerke R Square can be interpreted as the value of R Square on multiple regressions (Ghozali, 2013).

**Table 1 Coefficient of determination (Nagelkerke R Square) Model Summary**

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	71,149 <sup>a</sup>	,178	,276

Source: data processing

Table 1 shows the value Nagelkerke R Square is 0.276, which means the dependent variable explained by the independent variable is 27.6% while the remaining 72.4% is explained by other variables outside the research.

Partial test in this study is to examine the effect between the independent variables which are size of CPA, management turnover, financial distress, the size of company, audit fee and ROA to auditor switching. In a logistic regression such influence can be seen in the table of variable in the equation. Wald value in the table can be analogized as t, while column B is the coefficients and constants. Using  $\alpha = 5\%$ , it is known that the management turnover (CEO) is the only variable that significantly affect the auditor switching (Table 2).

The regression model is obtained as follows:

$$SWITCH = 0,035 - 0,614KAP + 1,339CEO - 0,004DER - 0,223ASET + 0,225FEE + 0,759ROA$$

**Table 2**  
**Partial Test**

**Variables in the Equation**

	<b>B</b>	<b>S.E.</b>	<b>Wald</b>	<b>df</b>	<b>Sig.</b>	<b>Exp(B)</b>
KAP	-,614	,791	,602	1	,438	,541
CEO	1,339	,656	4,169	1	,041	3,817
DER	-,004	,058	,005	1	,942	,996
Step 1 <sup>a</sup> ASET	-,223	,387	,332	1	,565	,800
FEE	,225	,314	,515	1	,473	1,253
ROA	,759	,452	2,820	1	,093	2,136
Constant	,035	7,197	,000	1	,996	1,035

*Source: data processing*

**Table 3**  
**Simultaneously Test**  
**Omnibus Tests of Model Coefficients**

	<b>Chi-square</b>	<b>df</b>	<b>Sig.</b>
Step	16,619	6	,011
Step 1 Block	16,619	6	,011
Model	16,619	6	,011

*Source: data processing*

Onimbus test results obtained by Chi-Square coefficient of 16.619 with a significant level of 0,011 is smaller than alpha by 5% (0.05). It can be concluded that there is a significant relationship between size of CPA, management turnover, financial distress, the size of company, audit fee and ROA simultaneously (together) against the auditor switching.

**2. Discussion**

**a. The affect of size CPA on the auditor switching**

The affect of size CPA on the auditor switching show that the negative regression coefficient -0,614 with significant value of 0.438 is greater than  $\alpha = 5\%$  (0.05). This means that the size of CPA does not affect auditor switching. This study supports research conducted by Damayanti and Sudarman (2008) and Wijayanti (2010). But this research is contrary to research conducted by Nasser et al., (2006) and Sinarwati (2010).

Big Four CPA tends to have better skills in auditing and generate audit quality higher than non-Big Four CPA. So as to enhance the credibility of financial statements and to attract investors, the company will use the audit services of the big four CPA. This is the reason of companies who already used the big four CPA to not move to non big four CPA. While the companies that do not use the big four not to switch to the big four is more because of cozy relationship between the company and a CPA who already know the ins and outs of the company.



**b. The Affect of Management Turnover on The Auditor Switching**

The affect of management turnover on the auditor switching show that the positive regression coefficient of 1.339 with significant value of 0.041 is smaller than  $\alpha = 5\%$  (0.05). This means management turnover affects the auditor switching. This study supports the research conducted by Sinarwati (2010) and Susan and Estralita (2011). But this research is contrary to research conducted by Damayati and Sudarman (2008) and Prahartati (2013). Management turnover will directly or indirectly encourage the auditor switching because the new management of the company will likely seek CPA in harmony or in accordance with the desire of companies either in reporting or in accounting policies.

**c. The Affect of Financial Distress on The Auditor Switching**

The affect of Financial Distress on the auditor switching show that the negative regression coefficient of -0.004 with a significant value of 0.942 is greater than  $\alpha = 5\%$  (0.05). This means that financial distress does not affect the auditor switching. This study supports the research conducted by Sinarwati (2010) and Nasser et al., (2006). But this research is contrary to research conducted by Damayati and Sudarman (2008) and Susan and Estralita (2011).

Financial distress or financial hardship is not a barometer of a company's auditor to perform switching, because allegedly there are several factors: first, the company will consider seriously about switch of auditor as auditor issues for which they are using already know and understand the condition of the company. Second, the conflict of interest to auditors in performing audit tasks and provides consulting services. Conflicts of interests can interfere with the independence of auditors that will affect the audit opinion. The company feels it can give you an advantage, so companies are reluctant to do auditor switching.

**d. The Affect of Company Size on The Auditor Switching**

The affect of Company Size on the auditor switching show that the negative regression coefficient of -0.223 with significant value of 0.565 is greater than  $\alpha = 5\%$  (0.05). This means the size of the company does not affect the auditor switching. This study supports the research conducted by Prahartati (2013) and Rizkilah (2012). But this research is contrary to the research conducted by the Rev and Fatchan Vita (2014) and Wijayanti (2010). Large companies that use large-scale CPA likely will not switch CPA that describes compatibility between the size of CPA and the size of the company. Most of the samples in this study are companies with relatively large in total assets, which mean the size of the company is a company with a large scale. A large part of them have used the Big 4 CPA so that there is no tendency for the auditor switching.

**e. The Affect of Audit Fee on The Auditor Switching**

The affect of Audit Fee on the auditor switching show that the positive regression coefficient of 0.225 with significant value of 0,473 is greater than  $\alpha = 5\%$  (0.05). This means that the size of the audit fee does not affect the auditor switching. This study supports the research conducted by Damayanti and Sudarman (2008) and Wijayanti (2010). But it is contrary to the research conducted by Prihartati (2013) and Rizkilah (2012). If companies switched auditors, they would usually need a relatively high audit fee because new auditors at the time of initial assignment will carry a higher risk. In addition, the new auditors need to learn more about the new clients, thereby increasing the audit fee.

**f. The Affect of ROA on The Auditor Switching**

The affect of ROA on the auditor switching show that the positive regression coefficient of 0.759 with significant value of 0.093 is greater than  $\alpha = 5\%$  (0.05). This means that ROA does not affect the auditor switching. This study supports the research conducted by Susan and Estralita (2011) and Damayanti and Sudarman (2008).

The results of this study do not show that the change in the rise and fall of the percentage change of Return on Assets (ROA) which is a measure of the company's ability to use its assets to make profits is not followed by changes in company policy to conduct auditor switching. When the percentage of ROA declines, it indicates the company's performance deteriorates so the company has trouble paying for the new CPA that is costly. Therefore, the company retains the old CPA. Another reason is due to consideration of the management to maintain the company's reputation with regard to the size of the CPA in the eyes of shareholders.

**g. The effect of variables simultaneously**

The effect of variables simultaneously indicated by Chi-Square coefficient of 16.619 with a significant level of 0.011 is smaller than alpha of 5% (0.05). There is a significant relationship between the size of the CPA, turnover management, financial distress, the size of the company, audit fee and ROA simultaneously (together) against switching auditors.

**Conclusions, Implications And Limitations**

The conclusion that can be drawn from the partial test results shows that the management turnover significantly influences the auditor switching on banking companies listed on the Stock Exchanges of Indonesia in 2008-2013, while the size of firm, financial distress, the size of company, audit fee and ROA have no significant effect to the auditor switching. Simultaneous testing results show that all independent variables simultaneously affect the auditor switching.

The implications of this study suggest that the management turnover will be able to make decision to continue or switch the CPA. The company should follow the rules of auditor switching to maintain the credibility of the company in order not to harm the management and shareholders.

Limitation of this study is only using the samples of banking companies. It is less representative to the total population of companies in Indonesia. Based on this limitation, the authors suggest adding the objects of researchs or comparing with companies other than banks to reflect the influence of the factors mentioned above to the auditor switching.

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## INNOVATION STRATEGY IN INDUSTRIAL CITY: STRATEGIC PATH MEDIATES FOR COMPETITIVE ADVANTAGE

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### Abstracts

Innovation strategy is a way in which to achieve the goal through a set of new ideas and findings from a business as a proactive, reactive and defensive. Innovation strategy created value of product or service that has uniqueness and differentiation so beneficial for customers if compared to competitors. This study empirically investigates whether knowledge resources, dynamic capabilities, environmental turbulence have effects on innovation strategy and competitive advantage. The authors conducted a survey to test the hypotheses and design a SEM to analyze them. The results showed that dynamic capabilities have significant effect on innovation strategy. Knowledge resources and environmental turbulence have positive and direct effect on competitive advantage. Moreover, this study demonstrated that the effect of competitive advantage is mediated by innovation strategy. This finding integrates insights in innovation strategy framework into a generalization of the competitive advantage in industrial city. Furthermore, this research is expected to provide for management at industrial city have valuable suggestions for management practices to increase innovation strategy and achieved the manufacturing goals especially in competitive advantage.

**Keywords:** *competitive advantage innovation strategy; knowledge resources; dynamic capability; environmental turbulence; Indonesia.*

### Introduction

Competitive advantage and innovation are important forces in the global industrial competition for survival and continuity (Angelmar, 1990). Firms may gain a sustainable competitive advantage if they choose the right innovation strategy (Kuratko et al., 2005). In today's highly competitive environment, to be successful and to achieve world class manufacturing so organizations must possess effective manufacturing strategies (Jain & Ahuja, 2012). Competitive pressures in the global manufacturing environment are forcing manufacturing organizations to reengineer in order to become more competitive in the marketplace (Gomes et al., 2004). Function as organizational units for the integration of knowledge and innovative activities, providing continuous input for organizations involved in actual environmental protection work, and strengthening the effectiveness of the overall environmental protection system (Chao, 2014). Akman & Yilmaz (2008) believed that new activities of firms require a continual analysis activity because, today's business environment changes rapidly and continually. It is a main assumption in the resources-based view of the firm that only firms with certain resources, network links and characteristics will achieve competitive advantages through innovation and therefore achieve superior performance (Camisón & Villar-López, 2014). Principles of certain knowledge about how to do things better than the existing state of the art (Teece, 1986). Akman & Yilmaz (2008) said that firms must be prepared in advance for situations, opportunities and threats in the future and firms must have a long-term view to be successful and develop their capabilities in the future.

As today's dynamic and turbulent environment is maintained, the technical infrastructure as well as people's knowledge and experience in many different fields, intimate

conversations in the hallways of most people and staff in their knowledge of their exchange after a period of time that may be desired are not achieved, and technical or administrative units or design engineers as well as experts in other units may solve a specific problem or issue in relation to the roles they have assumed (Kaveh et al., 2015). Internal firm capabilities and resources have not been dynamic enough in the past to warrant the use of transient that too might change in the new business environment (Wang, 2014). There must be a focus on creating a competitive advantage by emphasizing cost, quality and on-time delivery (Chamsuk et al., 2015). Important implications for the managers of manufacturing can be drawn from the findings to help them to understand their environments as they move through the different stages in a cross country business context (Elbeltagiet al., 2016). Business to business provides many growth opportunities and benefits for firms, such as cost reductions, efficiency improvements, better supplier relationships, access to global markets, new customers and suppliers, productivity improvements, increased profits, and gains in competitive advantage (Fauska et al., 2013). The strategy aims to achieve best performance in manufacturing is therefore on sustaining the process of improving human well-being (Sarjana, 2015). The resources based view implies that such innovations can only contribute to competitive advantage when they cannot be easily duplicated by competitors who have access to the factor markets (Schroeder et al., 2002). The industrial policy implications for cities are subsequently explored in terms of building new industrial districts to developing high skill ecosystems and fostering multinational webs of cities, all with the aim of ensuring the conditions exist in cities for creativity and development to flourish, notably a diverse and democratic economic system (Bailey & Cowling, 2011). The city is emerging as the leader of transformation in terms of service sector development and attracting foreign direct investment (Drobniak&Skowronski, 2012). City development is related to industrial development, and industrial development is related to city development (Bailey & Cowling, 2011). The city has received an important contribution to its identity and improved its quality of life (Ertas&Ozdemir, 2013).

## Literature Review

### 1. Innovation Strategy

Lendel& Varmus (2011) defined the innovation strategy as an innovative guide for firms in order to select objectives, methods and ways to fully utilization and development of innovative capacity of the enterprise. Innovation strategy is the basis of success in innovation and performance improvement (Akhlagh et al., 2013). Innovation strategy is fundamental to the success of innovation in manufacturing industries and related firms (Guan et al., 2009). Innovation strategy is the extent to which a firm values and promotes innovation across the organization (Wei & Wang, 2011). Innovation strategy determines to what degree and in what way a firm attempts to use innovation to execute its business strategy and improve its performance (Gilbert, 1994). Innovation strategies could result in new technologies, products or processes that are intended to minimize the costs of the environmental impact of business activities and improve the efficiency in the usage of materials and energy (Mariadosset al., 2011). Complex innovation strategies affect the future productivity significantly and the results may trigger the attention of innovation policy toward more complex strategies, rather than commonly pursued simple ones (Karlsson&Tavassoli, 2015).

Innovation strategy could enhance business performance or reduce performance gap merging from changes in the market environment (Wei & Wang, 2011). Innovation strategy is a basic tool that determines the innovation direction of the business. Innovation strategy helps industries and firms to find new opportunities for their development and

growth (Lendel & Varmus, 2011; 2012). Creation, achievement, conversion and applying the knowledge are effective for the innovation process (Teymournazhad et al., 2013). The effects of innovation strategies such as aggressive, analyzer, futuristic, proactive, risk taking and defensive strategies on performance diversity and development were investigated and it was determined that the effects of these strategies on construction industry performance are very strong (Akhlagh et al., 2013). Adapting, integrating and reorienting their technological capabilities to gained, maintain and improve sustainable competitive advantages (Guan et al., 2009). Innovation strategy reflects industry's tendency to engage and support the new ideas, novelty, experimentation and creative processes that may result in new products, services or technological processes and finally performance improvement (Tamayo-Torres et al., 2010).

Innovation from a firm perspective be conceived as a complex process involving the development, transformation and application of new combinations of ideas, knowledge, technologies, capabilities and resources with the objective to develop a new idea or behavior with the potential to increase the profitability of a firm, reduce its production and distribution costs, and increasing the willingness of customers to buy and pay for their products (Therrien, et al., 2011). The firm's innovation process are guided by an explicit or implicit innovation strategy which provides direction toward specific resources and help focus the efforts of the entire organization on common innovation goals (Oke, 2007). Both theoretical and empirical studies have devoted minor attention to other innovation strategies than those related to technological innovation (Haned et al., 2014). Local environmental protection organizations are typically faced with inadequate innovative knowledge and techniques as well as a lack of external resources creating obstacles to organizational development (Chao, 2014). The capability to drive innovation processes depends on historical and current investments in several complementary factors including the knowledge and skills of the employees, R&D, management methods, firm culture, and internal & external networks (Feeny & Rogers, 2003). Various innovation strategy of firms on their future performance measured by labor productivity (Karlsson & Tavassoli, 2015). Dimension of innovation strategy by Gilbert (1994) is reactive and proactive strategy, however Miles & Snow (1978) have description as prospector, defender, analyzer and reactor. More complex innovation strategies are more demanding in terms of firm capabilities and argue that firms that are capable of implementing complex innovation strategies also will achieve a better performance (Gera & Gu, 2004). This will provide a much richer understanding of firms' choices of innovation strategies as well as of the effects of different simple and complex innovation strategies on firm performance (Le-Bas et al., 2015). Organizational innovations can contribute to productivity via a more rational organization of production but it can also contribute to improve the customers' perception of the firm's products for example by the way and where services related to the products are organized (Karlsson & Tavassoli, 2015). Innovation strategy is company's strategy to create value of product or service that has uniqueness and differentiation if compared to competitors. A ways in which to achieve the goal through a set of new ideas and findings from a business as a proactive, reactive and defensive is a definition of innovation strategy.

## 2. Competitive Advantage

Competitive advantages about how the company practices generic strategy included cost leadership or differentiation in their daily actions (Porter, 1985). Competitive advantages broadly covered in the literature in terms of cost reductions, differentiation, growth, and quality (Elbeltaiet al., 2016). Competitive advantage is obtained when an organization develops or acquires a set of attributes that allow it to outperform its competitors (Wang, 2014). Competitive advantage means that the firm can produce goods or services that their

customers are more valuable than the goods or services produced as a result of their competitors (Saloner et al., 2001). Roger (2010) describes the sources of the competitive advantage such as cost advantage, differentiation advantage and marketing advantage. Competitive advantage consists of capabilities that enable organizations to differentiate itself from its competitors and is the result of important management decisions (Daghfous, 2004). The greatest impact on competitive advantages a component of knowledge acquisition (Kavehet al., 2015). Quality as one of the components of competitive advantage, could be achieved in different areas of the organization, such as product and service quality, information quality, quality of relations with business partners (N'Da et al., 2008). Companies should strengthen their developmental and rational culture to attain and sustain competitive advantage (Adriansah & Afiff, 2015).

Competitive advantage to a firm's performance develops when it is higher than normal finds and which is more worth than the expected value resources (Barney, 1997). Sources of competitive advantage are cost advantage and the advantage of differences (Porter, 1985). A firm is said to have a sustained competitive advantage when it is implementing a value creating strategy not simultaneously being implemented by any current or potential competitor and when these other firms are unable to duplicate the benefits of this strategy (Barney, 1991). Dimension competitive advantage include cost, quality and delivery (Chamsuket al., 2015). Competitive advantage is universally accepted in strategic management courses and textbooks as an essential concept in strategy (Barney, 1997). Competitive advantages theories help explain competitive advantage has occupied the attention of the management community for the better part of half a century (Wang, 2014). Company can create and deliver more economic value than its competitors simultaneously by increasing the profit and offering the higher benefit to the consumers rather than to the competitors as following condition of competitive advantage (Reniat, 2016). Creating competitive advantage ex ante produces sustained superior performance (Powell, 2001). Ambitious companies should always be concerned with how to achieve and sustain a competitive advantage (Elbeltagi et al., 2016). Knowledge can be considered as a competitive advantage that organizations can hardly imitate its competitors (Kaveh et al., 2015). Product innovation and service innovation affect competitive advantage with competition in in foreign countries and needs to be a lifting capacity of supporting industries that can produce parts with quality, at a low cost which are delivered on time (Chamsuk et al., 2015). The way for current business environment has evolved, opportunities for leveraging competitive advantage are transient (Wang, 2014). Culture can only affect competitive advantage through absorptive capacity and innovation (Adriansah & Afiff, 2015). Competitive advantage defined is company's strategy to create value of product or service that has uniqueness and differentiation if compared to competitors.

### 3. Dynamic Capabilities

Dynamic capabilities is crucial for an enterprise to be able to cope with changes in the environment by delivering the right knowledge at the right time to the right person, as well as encourage knowledge sharing in order to achieve organizational goals and enhancing organizational performance (Quinn, 1999). Dynamic capabilities as a process related to organizations ability to reconfigure the basis of its resources in order to respond to more efficiently changes in a field of its activity (Masteika & Cepinskis, 2015). Dynamic capabilities are creating and utilizing organizational embedded resources for achieving a sustainable competitive advantage (Tseng & Lee, 2014). Dynamic capabilities are the ability of a firm to deploy new configurations of operational competencies relative to the competition by effectively sensing the environment, as well as absorptive, integrating, innovative activities (Hou, 2008). Dynamic capability is defined as an ability to create and

reconfigure the resources to adapt rapidly changing markets (Wang & Ahmad, 2007). Dynamic capabilities represent the ability of a firm to create new manufacturing processes and new products and services in order to rapidly respond to changing environments (Helfat et al., 2007). Dynamic capabilities also refer to a firm's ability to integrate, establish, and redeploy internal and external resources into the best configuration in order to be able to create and develop new capabilities and create new market opportunities (Eisenhardt & Martin, 2000; Wu, 2007). According to Pavlou & El-Sawy (2011), dynamic capabilities are usually embedded in organizational processes and routines that allow an enterprise to adapt to the changing market conditions in order to reconfigure its source base, enable morphing and adaptation, and eventually achieve an edge over competitors. Wu (2006) further found that dynamic capabilities is a crucial intervening variable that transforms resources into performance, which means that if enterprises can utilize dynamic capabilities, it is possible to manage internal and external resources to enhance organizational performance and gain high competitive advantage. Dynamic capabilities view is the latest perspective trying to explain and guide firms on how can achieve and sustain competitive advantage (Breznik & Lahovnik, 2014).

Wang & Ahmad (2007) defined dynamic capabilities as the firm orientation stable behavior to renew, integrate, recreate and reconfigure their capabilities and resources. Reconstructing and upgrading their core capabilities in response to the dynamic market are considered essential to sustain competitive advantage. If a firm with highly dynamic capabilities is able to quickly cope with the dramatic changes in the external environment, it can establish competitive advantage and increase their market value. However, it is difficult to build a new capability as it demands effective organizational processes for new learning (Liu & Hsu, 2011). Dynamic capabilities is defined as the orientation stable behavior of firms to renew and integrate their capabilities and resources upgrade their core capabilities in response to the dynamic market to sustain competitive advantage is used as moderating variable (Dadashinasab & Sofian, 2014). Pavlou & El-Sawy (2011) explain dynamic capabilities such as sensing, learning, integrating, and coordinating capabilities, as a sequential logic to reconfigure existing operational capabilities. Sensing capability is the ability to identify, interpret, and pursue opportunities in the environment, while learning capability is the ability to enhance existing operational capabilities with new knowledge. Integrating capability is the ability to assimilate individual knowledge with the unit's new operational capabilities, and coordinating capability is the ability to orchestrate and deploy tasks, resources, and activities in the new operational capabilities. There are three critical components of dynamic capabilities, which are capability possession that are having distinctive resources, capability deployment included allocating distinctive resources and capability upgrading included dynamic learning and building new capability (Luo, 2000).

The primary premise of the dynamic capabilities framework is that a firm has operational capabilities and resources that are directly involved in enterprise performance by converting inputs into outputs and dynamic capabilities that influence enterprise performance indirectly by updating, integrating and reconfiguring a firm's existing operational capabilities and resources (Teece et al., 1997). Dynamic capabilities emphasize the transforming of environmental characteristics and how the firms manage to adapt, integrate, and reconfigure the internal and external organizational resources to compete with the dynamic environmental conditions (Teece, 2007). Some capabilities act as both dynamic and operational capabilities and they are used to renew operational capabilities to simultaneously maintain a firm's current operations and to positively influence overall firm performance (Helfat & Winter, 2011). Dynamic capabilities creation processes are directly related with research and development (Hsu & Wang 2012). Manager's



perceptions of one particular situation are wrong this will trigger the wrong dynamic capabilities and the consequences could be fatal for a firm (Breznik&Lahovnik, 2016).

A firm that understands how a given dynamic capabilities is linked to its existing operational capabilities will be more successful at renewing its operational capabilities and gaining a competitive advantage than firms that lack such understanding (Gao&Tian, 2014). Two premises of the valuable dynamic capabilities are necessity and feasibility. Dynamic capabilities as a kind of organizational routine are source of transformation and stability which are consistent with organizational routine duality viewpoint. Based on the necessity of implement of dynamic capabilities, the adjustment time of the changes is needed (Tiantian et al., 2014). Firms should renew their resource base upon dynamic capabilities approach and which deploy relevant capabilities as dynamic capabilities hold the potential for a sustained competitive advantage especially in a turbulent environment (Breznik&Lahovnik, 2016). Dynamic capabilities defined is the ability and competence of the company to utilize its resources through the process of scanning, sensing, learning, integration and coordination in the face of global environmental change rapidly in order to create a competitive advantage.

#### 4. Environmental Turbulence

Environmental turbulence is defined as a combined measure of the changeability and predictability of the firm's environment (Ansoff, 1990). Environmental turbulence is one in which frequent and unpredictable market and or technical changes within the industry increase risk and uncertainty in the new product development strategic planning process (Calantone et al, 2003). Environmental turbulence is a dynamic, unpredictable, expanding, fluctuating environment. It is an environment in which the components are marked by change (Volberda& Van-Bruggen, 1997). A new approach to the division of the environment and divided the environment into five levels of turbulence: stable, reactive, anticipatory, exploring, and creative based on attributes such as the novelty, speed of change, complexity, and predictability of change in the business environment (Ansoff, 1979).

Environmental turbulence by itself does not lead to scanning activities unless the external events are perceived to be salient to decision makers (Liao, et. al, 2008). In specifically on environmental turbulence such as dynamism like an intensity of changes and frequency of changes, complexity that is number and relatedness of elements and predictability such as availability of information and predictability of changes as well as entrepreneurial orientation and innovation performance (Volberda& Van-Bruggen, 1997). Environmental turbulence in the context of innovation has the potential to extend the threat-rigidity thesis into the entrepreneurship domain (Ko& Tan, 2012). In general under turbulent environments the importance of social capital as a factor affecting firm innovative capability is lowered (Dutta& Paul, 2013). The higher the level of environmental turbulence the more firms turned to platform product design (Thomas, 2014).

A turbulent environment introduces an inability to forecast accurately, even within contingencies (Calantone et al, 2003). High levels of environmental turbulence arise not only due to the pace of actual change in objective characteristics of the environment but also due to differing levels of competitive action initiated (Smart &Vertinsky, 1984). In manufacturing industry, as market or technology turbulence increases so too does the level of platform design. The more turbulent the environment, the more manufacturing firms turn to platform-based product designs (Thomas, 2014). Non-linear relationship between social capital and innovative capability is further affected by the nature of the firm's environment, specifically the prevailing level of environmental turbulence. Environmental turbulence would further accentuate the already non-linear effect of social capital on firm innovative capability (Dutta& Paul, 2013). Declining firms are located in a more turbulent

environment, high level of demand instability (Abebe, 2010). Managers of the various subsections of the global business can be advised to align their functional strategies to their organizations global business environmental turbulence level to achieve maximum success (Johannesson&Palona, 2010). In the complex or turbulent environment, aggressive sales promotions and word of mouth advertising are effective, while in simple/stable environments image advertising and personal selling are more effective. In both environments public relations and sales promotions can be effective, but applied in different ways (Mason, 2014). Environmental turbulence defined is situation and condition of an environmental organization that is dynamic, complex and uncertainty in the face of global change.

#### 5. Knowledge Resources

A knowledge resource is characterized by completeness it contains all the necessary information elements, interpretations, connections, procedures, and sequences for effective application without further manipulation or analysis (Griffith, 2012). Knowledge resources enable an organization to understand what to do, how to do, and why things work the way they do (Davenport &Prusak, 2000). As a resource, knowledge can be accumulated, manipulated, disseminated, aggregated, and leveraged to achieve a variety of distinct purposes including either replication or creating increases in the general knowledge stock of an organization (Lengnick-Hall & Griffith, 2005). Knowledge is defined as an intangible resource that consists of interpreted information useful for creating strategic capability. Knowledge is a much richer construct than data or information (Davenport &Prusak, 2000). Intangible resources are non-physical resources that are typically embedded in routines and practices and have intrinsic productive value that has evolved over time to create distinctive organizational capabilities (Barney, 1995).

Knowledge resources are considered malleable if it is readily customized, interpreted, blended, analyzed, and manipulated to be useful for a variety of different applications. Knowledge resources have catalytic capacity if it triggers creativity, innovation, resourcefulness, and new insights (Griffith, 2012). Increasingly the business world's attention is migrating to resources and more specifically to knowledge resources (Grant & Baden-Fuller, 2004). Resource-based view of knowledge begins with an understanding of knowledge as a particular kind of asset and with a clear expectation of what we intend to do with that knowledge (Lengnick-Hall & Griffith, 2011). Knowledge resources vary in the extent to which they are valuable, rare, difficulty to imitate, hard to substitute, and require deliberate and specific actions to exploit effectively (Coyte et al, 2012).

Type of knowledge resources consists of knowledge about something (know-what) or how to do something (know-how) or an understanding of relationships (know-why) that is based on sound logic, repeated observation, and consistent results from careful implementation (Pfeffer& Sutton, 2006). To understand how knowledge can be a strategic resource it is important first to distinguish knowledge from data and information. Data comprise the discrete, objective facts about events that reveal very little about their importance or relevance (Davenport &Prusak, 2000). The firm's knowledge resources were developed in the active interactions between human capital in external and internal relationships and harvested to achieve additional sales, new product development and improvements in the efficiency of operational processes (Coyte et al, 2012). From a resource based view, knowledge resources can be simple or complex, tacit or explicit, codified or un-codified in varying combinations of the traditional ways that knowledge has been characterized conventionally (Lengnick-Hall & Griffith, 2005). Knowledge resources can be gained through the data, information and experiences through the process of accumulation, dissemination and utilization to achieve organizational goals and increase welfare.

## 6. Theoretical Framework & Hypotheses

Innovations involve to a varying degree and in varying combinations of scientific, technological, organizational, financial and commercial activities. When implemented they influence the behavior of economic agents and lead to the expansion of market segments as well as the introduction of new market segments (Karlsson&Tavassoli, 2015).Dynamic capabilities influence enterprise performance by renewing operational capabilities (Gao&Tian, 2014). Dynamic capability increases organizational performance and provides competitive advantages (Tseng & Lee, 2014). Wang & Ahmed (2007) explained that dynamic capabilities help enhance corporate performance, particularly when an enterprise has a synchronized development capacity and corporate strategy, which can lead to superior performance. The primary premise of the dynamic capabilities framework is that a firm has operational capabilities and resources (Teece et al., 1997). Firms with a stronger commitment to deploying dynamic capabilities are more successful and hold the potential for a sustained competitive advantage (Breznik&Lahovnik, 2014). The management of knowledge resources was partly governed by an explicit but informally managed organizational strategy (Coyte et al, 2012).Zheng et al. (2011) explained that a firm can continually renew their knowledge base through its dynamic capabilities so that it is possible to respond to changing environments. Know how, learning process, business secret, and reputation are examples of capabilities that create advantage to the firms as these capabilities are difficult to acquire from external business environments (Chen & Lee, 2009). Dynamic capabilities concept is extended from the resource base perspective. It is built based on the firm's ability to renew the resource base in form of intangible resources such as processes, skills, routines (Zaidi& Othman, 2014).

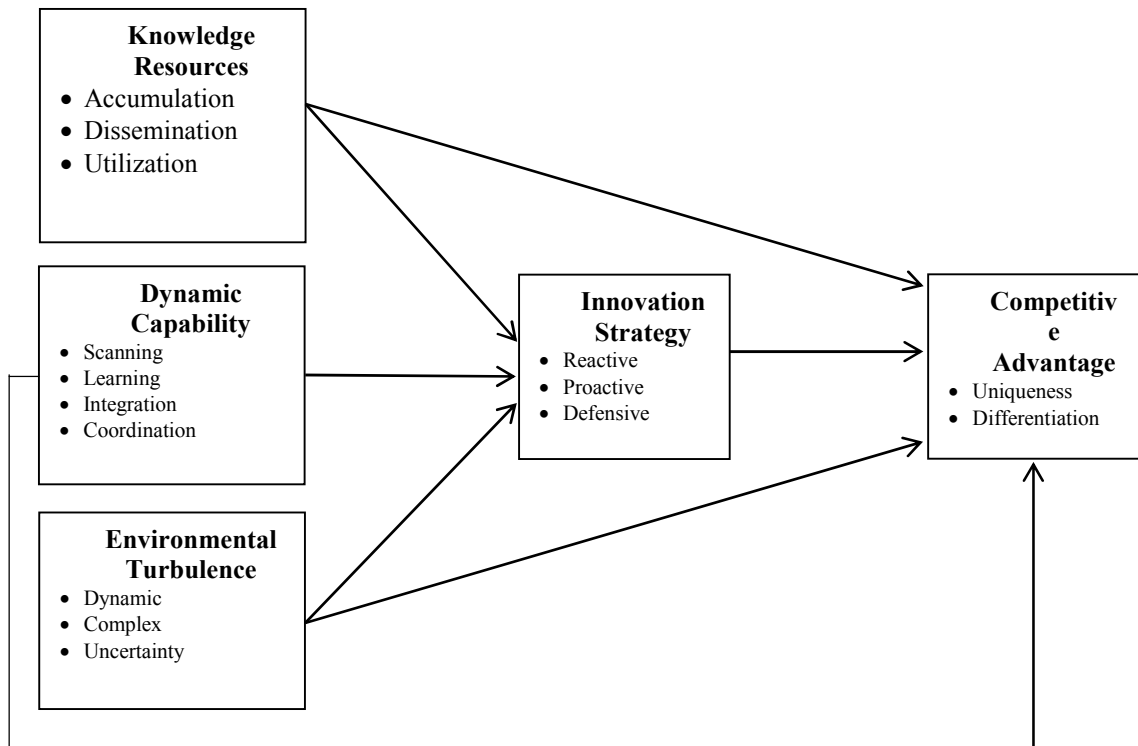
H<sub>1</sub>: Dynamic capabilities have positive direct effect on innovation strategy

H<sub>2</sub>: Knowledge resources have positive direct effect on competitive advantage

When operating in a turbulent environment, improving new product development can be achieved in several ways (Calantone et al., 2003). Their relationship is always changing together with continuous change of the environment that creates gaps between the firm current capabilities and the market needs (Grobler, 2007). Dynamic capabilities are focusing on modifying the firms' resources to match the changing environment (Bowman &Ambrosini, 2003).A right innovation strategy can help firms to overcome the problems they encounter concerning striving for a sustainable competitive advantage (Kuratko, et al., 2005).An innovation strategy guides decisions on how resources are to be used to meet a firm's objectives for innovation and, thereby deliver value and build competitive advantage (Dodgson et al., 2008).The relationship of industrial city on innovation strategy and competitive advantage has been theoretically proposed. The importance of knowing if such influence exists in practice and determining its magnitude is because of the fact that this effect would provide empirical support for the idea that sustainability is an important source of competitive advantage (Fombrun, 1996).

H<sub>3</sub>: Environmental turbulence has positive direct effect on competitive advantage

H<sub>4</sub>: Innovation strategy has positive direct effect on competitive advantage



**Figure 1 Research paradigm**

**Methodology**

The main objective of this research was to investigate the influence of knowledge resources, dynamic capability and environmental turbulence toward innovation strategy and implication on competitive advantage in industrial cities. This study was aimed in Indonesia that have implemented innovation strategy as a sampling frame. Researches have taken places in various industries such as manufacturing (Kylaheiko&Sandstrom, 2007). Data analysis for the research was conducted using Lisrel to assist in the analysis of the variables as well as the application of the structural equation modeling analysis of the causal relationship between variables.

Hair et al. (2010) has said that the size of the sample has to be large enough to be used in the data analysis by the application of the model equations with the structure and the distribution of data. Data was therefore collected from 200 manufacture engaged in industrial city by use of stratified sampling. Subsequently, simple random sampling was applied for each stratified random sample to the data collected from the surveyed population. Population consists of two industrial cities in Indonesia. The data was collected from manufacture managers through mailed questionnaires distributed through email and face to face conversations. From the target sample of questioners, 250 questioners were submitted, 50 were discarded as incomplete. Hence, the final response rate was 80 percent. Data were gathered during the month of April 2016 in the Bekasi&Karawang as an industrial city in Indonesia. The statistical results obtained from the questionnaire were analyzed. The final questionnaire comprised five parts included knowledge resources, dynamic capability, environmental turbulence, innovation strategy and competitive advantage. Finally, we decided to conduct our research more specifically in industries manufacturing sectors, for several reasons. First, it is a sector in which industrially responsible initiatives are developed and second, this research field helps us avoid the limitation of industrial experiments, since data are obtained in real condition of

use. The analyzed problems were solved with the use of mainly quantitative research methods.

### Analysis and Result

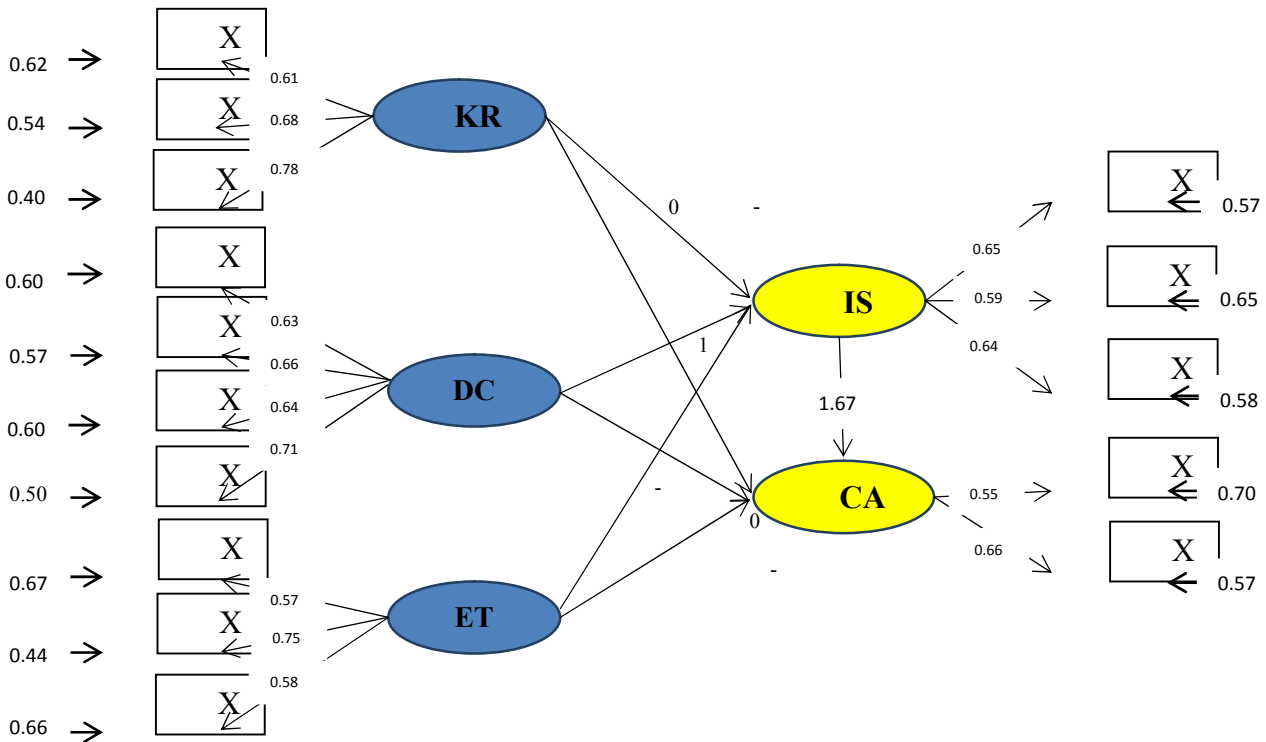
Table 1 shows that profile of respondents, the result reveals that 54.5% of the respondents have over than 10 years of existence. That implies that the majority of the respondents are long in operation. Based on location, Bekasi is majority respondent have 75% in research survey. In terms of ownership structure, 51% of respondents are joint venture manufacture and 38 % are partnerships business. That means that foreign investment very active in this business. With regard to the number of employee, 65.5% have big employee around 101-1000. Furthermore, 48% respondents have business background of automotive manufacturing as the most of respondents and have effect in survey.

**Table 1 Demographic respondents**

Demographics profile %	Category	No. of respondent	
Years of existence	Less 5 years	32	16
	5 – 10 years	59	29.5
	Over 10 years	109	54.5
Location	Bekasi	152	76
	Karawang	48	24
Ownership	Individual	19	9.5
	Partnerships	76	38
	Joint venture	102	51
	Others	3	1.5
No. of employees	Less 20	2	1
	21 – 100	48	24
	101 – 1000	131	65.5
	Over 1000	19	9.5
Background activities	Automotive	96	48
	Electronics	72	36
	Food & Beverages	16	8
	Logistics	13	6.5
	Others	3	1.5

Analysis model shows that research model fits the data. Further, testing the hypothesis indicates an analysis knowledge resources, dynamic capability, environmental turbulence have effect on innovation strategy and competitive advantage. Figure 2 shows the standardized coefficients for the structural relations tested. As can be seen, the goodness of fit indices for the structural model show a good fit and therefore it is feasible to test the proposed hypotheses. H<sub>1</sub> is supported  $\beta_1 = 1.02$ , as dynamic capability dimension in industrial city on innovation strategy. Dynamic capability has a positive direct effect on innovation strategy. H<sub>2</sub> and H<sub>3</sub> are confirmed ( $\beta_2 = 0.47$ ;  $\beta_3 = 0.96$ ) as the knowledge resources and environmental turbulence domain in industrial city. Knowledge resources and environmental turbulence has a positive direct effect on competitive advantage. These results give empirical support to the idea that the efforts made by manufacturing on industrial city will be rewarded by the projection of a positive innovation strategy that will

lead to increasing competitive advantage. Finally, H<sub>4</sub> expected that innovation strategy will have a positive direct effect on competitive advantage where is  $\beta_4 = 1.67$  is supported. Therefore, the proposed model is totally supported by the results.



**Figure 2 Structural model estimation**

The arrows from the factors to the variables represent linear regression coefficients or factor loadings (Awang, 2012). The model indicated a confirmatory factor analysis procedure to access all constructs involved in the study. The data are the score of 200 managers in industrial city on construct activities. The structural model result shows the achieved stable model fit estimation. The indicators of fit: Cmin/df = 1.868 (Cmin = 149.45, df = 80); GFI = 0.91; RMR= 0.22; NFI = 0.91; CFI = 0.96; RMSEA = 0.066. Figure 2 empirically shows that innovation strategy has significant effect ( $\beta=1.67$ ,  $p=.0000$ ) on competitive advantage. These indices suggested that the structural model provided a good fit to the data at hand and yielded a corroborating value for the good model fit.

**Table 2 SEM Result**

Hypotheses	Structural Relationship Contrast	Standard	Coefficient
H <sub>1</sub>	Dynamic capability → innovation strategy	1.02	Accepted
H <sub>2</sub>	Knowledge resources → competitive advantage	0.047	Accepted
H <sub>3</sub>	Environmental turbulence → competitive advantage	0.96	Accepted
H <sub>4</sub>	Innovation strategy → competitive advantage	1.67	Accepted
NFI = 0.91; NNFI = 0.95; CFI = 0.96 IFI = 0.96			
$\chi^2 = 143.91, df = 80, p = 0.000$			RMSEA = 0.066
Significant at $p < 0.05$			

### Discussions and Conclusions

Following the theoretical debate on the importance of industrial city when developing a competitive advantage, this study empirically investigates whether knowledge resource, dynamic capabilities, environmental turbulence have significant effect on innovation strategy and competitive advantage. The hypotheses suggest that dynamic capabilities have significant effect on innovation strategy. Hypotheses propose that knowledge resources and environmental turbulence are effective and direct effect on competitive advantage. Our empirical evidence supports all the proposed hypotheses. Moreover, this study demonstrated that effect of competitive advantage is mediated by innovation strategy. Innovation is one of the key factors for the success, sustainable competitive advantage and survival of firms (Jimenez & Sanz-Valle, 2011). Such findings are relevant since they add several contributions to the existing strategic management literature. First of all, they provide empirical evidence of industrial city effect on innovation strategy and competitive advantage. Since previous works have essentially focused on the role of sustainable manufacturing, this study adds to our understanding of the effect innovation strategy and competitive advantage. By providing relevant information to stakeholder about the industrial city, the identity of the city based on innovation strategy and competitive advantage. Second, we show that the principles of the differentiated industrial city of thought regarding the effect innovation strategy on competitive advantage are met in the research supporting recent studies.

The present study has a number of implications for strategic management practitioners. The most important implication for practitioners is that dynamic capabilities direct and positive effect on innovation strategy. Knowledge resources and environmental turbulence have direct and positive effect on competitive advantage. This should give industrial cities where need to justify the policy that are associated with sustainable city issues. However, industrial cities must become much more interested in the strategic management implications of their sustainable city policy and action, including knowledge resources, dynamic capabilities and environmental turbulence issues since this research demonstrated have effect of these aspects of innovation strategy or competitive advantage. The industrial cities are encouraged to explore how knowledge resources, dynamic capabilities, environmental turbulence, innovation strategy and competitive advantage activities could positively be managed jointly, since manufactures may manage these concepts in business. Finally, by involving stakeholders in defining the cities activities, it would be possible to

add legitimacy of how the notion of industrial city can be defined, measured and implemented within the region.

Finally, to refine the findings of this study, some limitation of this work are outlined below. Our findings suggest that knowledge resources, dynamic capabilities and environmental turbulence aspects are key components, richer, and in-depth views of this concepts between innovation strategy and competitive advantage. Dynamic capabilities influence firm performance indirectly by helping the firm renew its existing operations by updating, recombining and reconfiguring its existing operational capabilities (Gao&Tian, 2014). Entrialgo et al. (2000) believed that analysis is not only crucial to the performance development, but also a firm in a turbulent environment must continually be innovative and apply various methods to remain competitive, which requires extensive analysis to recognize and exploit environmental change. Innovation strategy could enhance firm performance (Talke et al., 2010).

Including this variable in our model, future studies would contribute to a superior explanatory power and to better understanding of the nature of innovation strategy and competitive advantage. In this sense, previous studies show that to have a more coherent and stable innovation strategy. Moreover, the current study has been conducted with consumers of industrial city in Indonesia and it is not clear in how far the findings can be generalized to other sectors, stakeholders or countries. Future research could extend this research by including different stakeholder expectations of another variable. Therefore, it would be interesting to replicate this study but considering various stakeholders to ensure that our results are extrapolated to all target cities such as arts, cultures, histories, commerce, religious, and agriculture.

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## AN ANALYSIS OF RECRUITMENT AND JOB TRAINING METHOD EFFECTIVENESS TO EMPLOYEE ENGAGEMENT IN BANDUNG CULINARY START-UP

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### Abstract

Employee engagement is one of the way to improve the startup performance in creating revenue growth. **Nonetheless, it seems difficult to be thought out since the fact tends to show the high number of employee turnover in culinary startup especially in Bandung.** Therefore, it's important to build the employee engagement **before they are an employee to avoid the employee turnover trend continuously happen which then impact to the startup growth stagnancy.** The emotional attachment and commitment among the employee and the company will be determined since the very first interaction with startup representative. **Therefore, effective recruitment and job training method should be developed to enhance the employee engagement through the company first impression.** The study will be conducted based on qualitative method in collecting and abstracting data. The general orientation and job-specific orientation as the employee initial basic knowledge would be the variables in predicting the employee engagement existence and developing the related effective method in human resource practice.

**Keywords:** *Recruitment; General Orientation, Job Specific Orientation; Employee Engagement*

### Introduction

In scaling up its business, a culinary startup should be able to formulate strategies to increase the company performance. There will be hundred ways and perspectives in exceeding the startup performance; one of them is by generating the employee engagement. Studies conducted by Markos (2010) have found positive relationship between employee engagement and organizational performance outcomes: employee retention, productivity, profitability, customer loyalty and safety. He also interpret the employee engagement existence will give positive impact into the company revenue growth since it is frequently found in double-digit companies. **In culinary startup case, the employee performance can be shown through specific competencies in its employee, however those requirements can be simply adjusted except the employee engagement; a startup must be needs the one who engage to the company, to it's up and down stage in running and scaling startup business with commitment, dedication, and willingness to learn. The fact tends to show the reverse condition; the high number of employee turnover in culinary startup especially in Bandung is proven to be true. From a research conducted by Universitas Pendidikan Indonesia (2013), the data shows the significant employee turnover happen in most restaurants located in Bandung.**

Related to the previous research, it is believed that the high employee turnover in culinary startup somehow result in the business growth stagnancy because of company disabilities in delegate another person in empty position which take crucial part in the startup daily operational. Gallup organization defines employee engagement

as the involvement with and enthusiasm for work. Gallup as cited by Demovsek (2008) likens employee engagement to a positive employees' emotional attachment and employees' commitment. **The 'linkage' supposed to be built since the very beginning; employee engagement starts before they are an employee. According to Baker (2013), the employee engagement would be initiated in the very beginning interaction with company representative. It starts when the candidate hears about the company profile, its track record, the news article and also the job opening. Baker stated that even the company keep in do everything right from the start, since the employee already has a negative impression of the company, the owner might have no chance to fix it. However, the first impressions are hard to manipulate even it seems simply arranged. Any negative experiences during the recruiting process so do the job training would hamper the employee engagement.**

**Hereafter the recruitment and job training method as the very first interaction bridging are predicted to have impact on building employee engagement. The effective recruitment and job training method should be developed to enhance the employee engagement.** This article limits itself to discuss about the employee engagement creation through developing the effective method of recruitment and job training based on general orientation and job-specific orientation variables. It explains and discuss about the employee engagement concept and human resource management practice.

## **Employee Engagement and Its Conceptual Concept**

### **A. Definition of Employee Engagement**

The employee engagement concept is still on research stage and ongoing exploration since there is no conscientious research has been done yet on this topic. So then below definitions were forwarded by some well-known researchers in human resource area. Below are the definitions:

Kahn (1990) focus on finding the engagement and disengagement behaviour differences based on the psychological experiences of self-in-role. Through inductive analysis, Kahn defined the experimental conditions which influenced the engagement and its absence by three psychological conditions emerged: meaningfulness, safety, and availability. These three conditions shaped how someone settled his or her roles. Reflecting to the real condition, the answer for these three conditions will determine whether someone desire to get engage or vice versa. Kahn mentioned definitely about the understanding in these three conditions: "Psychological meaningfulness was associated with work elements that created incentives or disincentives to personally engage. Psychological safety was associated with elements of social systems that created more or less nonthreatening, predictable, and consistent social situations in which to engage. Psychological availability was associated with individual distractions that preoccupied people to various degrees and left them more or fewer resources with which to engage in role performances."

The Kahn theories strongly relate to this article discussion, especially the used of three defined psychological conditions determining whether the employee engage or disengage to the company. Moreover, he applied the observation techniques and interviews to accomplish a qualitative research of individual engagements and disengagement at work of 16 counselors of a summer camp and 16 employees of an architectural firm. Aside this article also provides the similar approach in conducting its research.

Gallup Organization (2005) further defines employee engagement as the involvement with and enthusiasm for work. Demovsek (2008) enhance the Gallup definition by linking the employee engagement to a positive employees' emotional attachment and employees' commitment. Moreover, Gallup stated that employees will have its involvement and

enthusiasm in their workplaces since they have gain their basic needs met, given opportunity to contribute, sense of belonging, and opportunity to learn and grow. Gallup's Human Sigma website (2005) also likens employee engagement to the concept of customer engagement, which has the dimensions of confidence, integrity, pride and passion. Similar to Gallup's opinion, Harter et al stated that "the term employee engagement refers to the individual's involvement and satisfaction with as well as enthusiasm for work" (Harter *et al.*, 2002).

In addition, what Saks stated on his research support the acknowledgement about initial basic knowledge in initial human resource practice which strongly needed in this research. Saks (2006) addressed the employee engagement by incorporating the two types of employee engagement which are "Job Engagement, which is the level of employee's commitment and dedication to his job role and Organizational Engagement, which is the level of employee commitment and loyalty to their organization". The result of his study diverse clearly between job and organization engagements that connect the relationships between the antecedents and job satisfaction, organizational commitment, intentions to quit, and organizational citizenship behaviour.

### **B. Employee Engagement Strategies**

Employee engagement is crucial for any organization especially in startup case since the engaged employees contribute to the foundation line of any business which are operational matter and their engagement will be shown through their services to clients and customers. In the other words, engaged employees are helping to generate more customer's loyalty, then a highly engaged customer buys more products and services which impact to the company a huge profitability. Its strongly connected to what Markos (2010) stated in his research findings that "the more engaged employees are, the more likely their employer is to exceed the industry average in its revenue growth. Employee engagement is found to be higher in double-digit growth companies."

"In pursuing the employee engagement existence, effective recruitment and job training programs are becoming the first building blocks to be laid on the first day of the new employee. Furthermore, the newly hired employee should be given both **general orientation** which is related to the company mission, vision, values, policies and procedures and **job-specific orientation** such as his/her job duties, and responsibilities, goals and current priorities of the department to which the employee belongs in order to enable him/her to develop realistic job expectations and reduce role conflict that might arise in the future. After the hiring decision is made, the manager has to ensure role-talent fit when placing an employee in a certain position and exert all managerial efforts needed to retain that talent in the organization." (Markos, 2013).

### **Methodology**

The study will be conducted based on qualitative research method both in collecting and data abstraction. Qualitative method defined as "such findings are analyses of the social world that seek to preserve the natural form and dynamic state of social life studied" (Glaser & Strauss, 1967).

The general idea of this research is to measure the level of understanding in every the determined variables owned by the engaged employee. The general orientation and job-specific orientation as the employee initial basic knowledge would be the main variables in predict the employee engagement existence starts from the very first stage of hiring new employee. After the previous literature review, we found that the newly hired employee should be given both general orientation which is related to the company mission, vision, values, policies and procedures and job-specific orientation such as his/her job duties, and responsibilities, goals and current priorities of the department to which the employee



belongs in order to enable him/her to develop realistic job expectations and reduce role conflict that might arise in the future (Markos, 2013).

The engaged employee category will be determined by a preliminary study which would be an semi-structured interview among some culinary startup owners. In semi-structured interviews the researcher will have a list of themes and questions to be covered, although these may vary from interview to interview (Saunders, M.; Lewis, P.; Thornhill, A., 2007). This means that researcher may omit some questions in particular interviews, given a specific organisational context that is encountered in relation to the research topic. The order of questions may also be varied depending on the flow of the conversation. On the other hand, additional questions may be required to explore the research question and objectives given the nature of events within particular organisations. The culinary start-up owner will be chosen through non probability sampling which is purposive sampling or specifically use judgment sampling. "Judgment sampling is a non-probability sampling method and it occurs when "elements selected for the sample are chosen by the judgment of the researcher" (Black, 2010). The interview will mainly explore the engaged employee indicator according to the participant experience as the start-up owner. There will be 5 respondents for this preliminary study.

The indicator(s) found from this preliminary research would become the standard in collecting the respondent which are engaged employees. The informant number used for this research will be 10 engaged employees from diverse culinary startup. Purposive sampling method will be also used in this following phase of data collection to collect the informant. Purposive sampling represents a **group** of different **non-probability sampling techniques**. Also known as **judgmental, selective** or **subjective** sampling, purposive sampling relies on the **judgment** of the researcher when it comes to selecting the **units**. **The researcher consider to frequently used this method since** the main goal of purposive sampling is to focus on particular characteristics of a population that are of interest, which will best enable researcher to answer the research questions. The sample being studied is not representative of the population, but for researchers pursuing **qualitative research designs**, this is not considered to be a weakness.

The data collection approach will be semi-structured interview which the question lists will be arranged based on general orientation and job-specific orientation variables to those engaged employee informants. The semi-structured interviews will be used once again to measure different constructs (Huffcutt, Conway, Roth, & Stone, 2001) and predict different criteria (e.g., ethical behaviors, Hollwitz & Pawlowski, 1997; maximum and typical performance, Klehe & Latham, 2006). The nature of the questions and the ensuing discussion mean that data will be recorded by audio-recording the conversation or note taking. Moreover, the most dominant variable found later will be the study focus in developing the effective recruitment and job training method to enhance the employee engagement.

## **Result**

The qualitative research in semi-structured interview have been conducted among culinary startup owner had result in the facts discovery about the engaged employee criteria. However, the data found possibly similar to another industry beside the culinary industry; the difference might be found in the details and the application ways. Information about the acceptance requirement and the employee maintenance method have also found during the research. The way they recruit and train the candidates can be vary, but good attitude and passion in working for startup become the major consideration in choosing employee among available candidates. Moreover, the discussion moved to the

main topic of the preliminary research which is the culinary startup owner's version about engaged employee criteria, here they are:

- High initiative during work time
- Enjoy and comfort to their job and the owner itself
- Sense of belonging to the startup
- Honest

In addition, the discussion about how to maintain the engaged employee in culinary startup become another crucial topic after the previous discussion of having engaged employee. The ways can be vary one to another company, but mostly the startup owners do these following strategy:

- Provide favorable working condition
- Give wider space for their 'moves'
- Fulfill their needs well

After determining the engagement criteria, the researcher used them to predict the possible engaged employee and have them for the research informant. We successfully found enough number of informant and doing a semi-structured interview to know how deep their understanding about the general orientation and job-specific orientation. Research found that most employees in every culinary startup involved in this research have good understanding in:

- Job duties
- Employee's goals, and
- Current priorities of the department to which the employee belongs in order to enable him/her to develop realistic job expectations and reduce role conflict that might arise in the future.

## Discussion

The purpose of this research are to finding the effective method for recruitment and job training in culinary startup. The effectiveness itself would be strongly affected by the succession of the startup owner in running an effective organization. It can be predicted that the company who's the engaged employee mostly belong to is the company that attempt the organization effectiveness even not in the perfect way. The engagement criteria found in this research related to the organizational effectiveness model developed by Daniel Denison (1990).

The Denison model is based on four cultural traits of effective organizations that are described below;

- **Involvement.** *“Effective organizations empower their people, build their organizations around teams, and develop human capability at all levels”. The engaged employee starts from the one who are actively contribute to the company growth without frequently asking for additional compensation.*
- **Consistency.** *Organizations also tend to be effective because they have “strong” cultures that are highly consistent, well-coordinated, and well integrated (Davenport, 1993; Saffold, 1988). The culture ‘stability’ in the company is connected to the employee engagement maintenance way which is providing favorable working condition. The consistency does not simply related to the strict policy implementation, develop the smaller number of procedure and policy will create more favorable condition for employee.*
- **Adaptability.** *“The companies are continuously changing the system so that they are improving the organizations’ collective abilities to provide value for their customers” (Stalk, 1988). The engaged employee mostly can adapt the change*

*happen in the company since they have sense of belonging to the up and down stages in the company. They are should be supported to develop creatively by their own in the determined limitation.*

- **Mission.** *Successful organizations have a clear sense of purpose and direction that defines organizational goals and strategic objectives and expresses a vision of how the organization will look in the future (Mintzberg, 1987; 1994; Ohmae, 1982; Hamel & Prahalad, 1994). In the startup culinary case, the exact development probably more difficult to be predicted since it just in the beginning stage of business cycle. However, the goals itself should be determined already and communicate to the employee.*

As mentioned in the previous part of this paper, most of the engaged employee in the culinary start up have similar deeper understanding in these following orientation variables; job duties, employee's goals, and their employee's current priorities related to the job expectation. The impression about the job detail and the future career related to their personal life goals are have strongest impact in creating the employee engagement start from the very beginning of the employee entrance.

The results are strongly connected into what Gill (2007) found through his research with similar topics. The idea of Gill's was to establish the link between human resources practices which are employee recruitment and selection methods with an employee engagement model using Realistic Job Previews (RJP) and Role Play Assessments. The use of an RJP, in essence, improves the fit between the individual and the organization (Philips, 1998). In the other hand, the role play assessments will give the candidate an opportunity to experience the job through simulated environment so that they have insight about the job tasks itself.

The clear explanation about some variables in RJP or in this research case the Job Specific Orientation; which mostly discuss about their impressions of the selection system and recruitment process, whether they felt the information they were provided about the job and the company was accurate and if the selection method accurately represented the position; was proven had significant impact to the work engagement. In the other hand, the role play assessment or job training did not have direct connection into employee engagement.

### **Conclusion**

In conclusion, the research provides knowledge about the human resource practice in the culinary startup case which focused about its employee engagement creation through recruitment and job training method effectiveness. It's known that at first, the methods succession would be determined by the succession of the startup owner in running effective organization. Furthermore, the effective recruitment and job training method can be developed based on impression creation in Job Specific Orientation which are the job detail and the possible future career related to the employee personal life goals.

### **Recommendation**

The effective recruitment and job training method suggestions which can be developed by the startup culinary owner based on these research findings are:

- The media used to collect the employee candidates can be diverse based on which people segmentation needed
- Requirement of standard competency is the first, but not the priority for startup case. Prefer someone's attitude match to the startup culture to create better performance of effective organization
- Create nice impression by focusing the interaction into the job specification

discussion. Clearly describe everything to be worked for by the employee and the possible involvement created during their work. Exploring the reason of their working motivation will make it easier to meet the needs of employee and gain their respect. Explaining the possible future career path in the startup will also strengthen the employee intention for work.

Basically those recruitment and job training strategy can be applied for every startup ultimately in culinary industry. The way of human resource representative in communicating those points adapted to the candidate's personality will also contribute to the employee engagement creation succession.

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## CONCEPT OF EMPOWERMENT IN CORRELATION WITH QUALITY-BASED UNIVERSITY GOVERNANCE CHANGE

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### Abstract

Human resource of a university is one of essential components of educational systems in quality-based universities. It will surely work well if the empowerment is correct.

This study was aimed at examining how much the empowerment of human resource influenced the performance of governance at private universities in Wilayah Kopertis Wilayah II, including Bandar Lampung City, Palembang, Bengkulu and Bangka Belitung the southern part of Sumatera. The approach used in the study was qualitative using *survey* method. The population of the study was heads of 130 private universities in the Southern part of Sumatera –rev Sumbagsel. The subject of the study was head, lecturers and students. The data needed in the study was primary rev2 data obtained from closed questionnaire with already tested validity and reliability. The collected data was then analysed with descriptive analysis, while the hypothetical test used contingency coefficient analysis and *Chi-square*.

The result of the study showed that there was a positive and significant correlation between concept of empowerment and performance of governance in private universities. Therefore, it can be concluded that the empowerment of human resources is strategic factors to realize the governance of professional qualified human resources. The rev-3 suggestion is if head of faculty is willing to establish a good governance effect on the performance of professional human resources, he has to determine a correct model about empowerment and governance optimization change model.

**Key words :** *Empowerment, Governance, Contingency, Chi-Squire*

### Introduction

Empowerment is the process of building high dedication and commitment, so an organization will be very effective in achieving the goals with high quality (Margo no Slammed, 2009).

The empowerment of human resources is a crucial key to obtain the organizational quality. In high education human resources including lecturers, technicians, laboratory assistants, librarians, officials and employees, are key elements of the university that may improve or damage the quality of the university.

The empowerment of human resources is also a process intended to maintain and increase the competence, attitude, understanding, and performance as the manager and academic people at present and in the future. The empowerment is needed to improve the quality of the university's performance to cope with ever-changing challenges in establishing the mission of the university. Successful empowerment will promote competitive power of faculty in varied fields of study, technology and arts. It is also intended to accommodate interests to do self-development and improve career quality; therefore, personal interest is at least taken into planning and empowering implementation.

Qualified Human Resources will become the main capital of a nation if they have quality education. From the statement above, it can be said that it is very strategic and determining to set up a solid base to yield qualified human resources in the years of 2015-2035.

Quality-based university management basically includes three main aspects, namely: (1) *process*, (2) *content*, and (3) *resources*. If those aspects work integrated they will be able to reach the quality of the university optimally and independently. The **Process** aspect of the university is the process to do in accordance with the function of the university through Tri Dharma Perguruan Tinggi and it consists of 3 supporting elements, namely process connected to business function such as administration, finance, human resources, and marketing. The **Content** aspect of the university is an important activity, namely: curriculum, learning, researches, and scientific development; and the **Resources** aspect includes management of the whole human resources owned by the university, from human resources, structure and infra-structure, and funding.

If these aspects of management work integrated, it will reflect superior quality and competitive power of a university. It is connected to the achievement of those aspects of management as strategic management concept of outstanding university and competitiveness reflected on product types (service) fully yielded by the university, namely: Jasa Kurikuler (Curricular Service), Jasa Penelitian (Research Service), Jasa Pengabdian pada Masyarakat (Community Service), Jasa Administrasi (Administration service and Jasa Ekstrakurikuler (Extra-curricular Service, reflecting superiority and competition of the university. Referring to the integrated management toward the aspects mentioned before, universities in the era of globalization are demanded to adapt and respond to the challenges of civilization by designing, making and implementing the quality. It must be in accordance with the Standard of the National Higher Education as stated in the government regulation (Permendikbud no 49 tahun 2014)-rev-4.

It is along with the quality of universities in Indonesia stated in the national policy through Peraturan Pemerintah (government regulation) No. 19 in the year of 2005 about the National Educational Standard aimed at guarantying the quality of national education to brighten the people of the nation and form high civilization of the nation. In manifestation the role universities through their capabilities are demanded to make an adaptation in responding the civilization in the era of globalization through various methods, namely: designing, inspiring, and implementing the quality. A number of universities in Indonesia have formed a quality assurance agency institution. However, the roles of this institution in establishing the tasks and responsibility are not optimal, yet. In contrast, a university can determine its own policy in accordance with the guide and mission of the national education.

There are several concepts suggested for universities to give contribution optimally, namely pattern zing competence concepts of academic education program as responses of civilization challenges in line with the challenges of globalization era such as: (1) optimizing performances of university management; (2) determining quality policy; (3) establishing strategies to obtain the quality; (4) designing the quality policy; and (5) realizing the concepts of human resource empowerment at university.

One of the concepts, in this era of globalization, in line with the optimization of university's roles as the main focus is by organizing a concept of management's performance and realizing the improvement of quality-based human resource empowerment in a university. Optimizing the roles of a university through management performance by formulating the competence concept of academic education program as a reference of knowledge dimension expected to be able to apply the knowledge in productive activities in community service, to understand the roles and activities of knowledge development through researches,

And to anticipate any problems of expertise, to quickly adapt to the existing scientific environment, to improve community service through researches and development; to play the role in knowledge development activities through researches, to solve problems in

similar kinds of knowledge, to work independently without being reliant to the knowledge environment, to create a new concept in a specific field through researches, to lead a knowledge development through researches, to solve problems through inter-discipline approach; and to change the knowledge environment through the developed concepts as CONCEPT. This concept is led to activities of university to yield competence of graduates reflect on the element achievement of the graduate competition.

Optimization of roles of university will certainly be realized if there are good concepts of management changes as the human resources are fully employed (*full employment*). Therefore, a university, of kinds of organization, needs a concept of an effective human resources empowerment. A very fundamental change in distribution of management authority relying on commitments to give trusts to the Quality Assurance Institution at all levels in a university. Whereas, the change at level of formulation is determined by the performance of quality control department that plays the role in bridging the university and the faculties and majors or study programs. The Quality Assurance Agency as Quality Control cannot be relied to be the main determiner of the quality policy success due to limitation. This limitation becomes a new challenge to the new structure existence and cannot be known how big the competence of both Quality Assurance Institutions and Quality Control to support the achievement of quality increase to be reached.

Another obstacle in the Quality Assurance Unit is being unable to handle the problem quickly because all procedure and decisions must be acknowledged by the top management, and it also happens in allocating human resources (fund and human resources). The answer to how to overcome the obstacle is **empowerment**. As the most fundamental unit directly engaged with the main customers (students), the Quality Control and the Quality Assurance Agent get strengthening or empowerment.

The subject and the object of the research were private universities that belonged to Kopertis Wilayah II, including Palembang, Bengkulu, and Bangka Belitung. The choice of private universities in Kopertis Wilayah II was because it was urgent where its contribution to the national educational system especially as the representative of Sumatera was high enough. At present, the contribution to the education is reflected on the high quality of institution and human resources, as 208 private universities, 691 study programs; 12.630 lecturers (full time lecturers) and 173.396 students.

The subject and the object of the research were private universities within the region of Kopertis Wilayah II including Palembang, Bengkulu and Bangka Belitung. The reason for choosing private universities in Kopertis Wilayah II is because it gives a very urgent contribution to the national education system representing the regions of the southern part of Sumatera. At present, the contribution to the education was reflected on high quantity of institution and human resources where there were 208 private universities, 691 Study Programs, 12.630 lecturers ( 7.754 full time lecturers) and 173.396 students.

One of human resources of universities gets strengthening or empowerment is lecturers. Basically, lecturers are one of essential components of an educational system in universities. Roles and responsibly of lecturers are important to realize high quality human resources. Therefore, a lecturer is demanded to work optimally so that it can create a professional and high qualified lecturer. This lecturer plays a very strategic role in the advancement of the university. Lecturer is an professional educator that is able to make a decision for the students' needs based on his professional consideration, so it becomes a main determinant in maintaining and quarantining conducive condition for the institution.

In fact, the existence of lecturers determines the quality of the education and the graduates. If the performance and quality of the lecturers is good, the quality of the university will be good, too and vice versa. How high the quality is planned for will not make any sense



unless it is supported by the good performance of the lecturers and the lecturers' quality. Therefore, to establish a good education program it is urgent to have qualified lecturers. By having professional and high quality lecturers, universities can formulate programs and modern curriculum to guarantee and produce the superb and distinctively qualified graduates. Basically, the roles of the lecturers are very complex; it does not merely include Tri Dharma Perguruan Tinggi, further it may include more than it. This fact is supported by Tampubolon Tampublun (2001:174), stating that: the role of lecturers is multidimensional and graded into levels of education. Those multidimensional roles are: (1) educators/parents (2) educators/teachers (3) director/manager (4) producer/server (5) guide/facilitator (6) motivator/stimulator, and (7) researcher/resource. Begin 'graded' means the role is likely to decrease, increase or stays steady according to the level of the demand. The fact of the field proves that the performance of the lecturers as the spearhead to increase intelligence of nation life does not indicate an optimal performance. The key word is empowering the human resources as the solution. Based on several meanings, through the empowerment the management can give authority to others, so they will be able to act independently to accomplish the duties or tasks that will be discussed in the following chapter.

Based on the explanation above, in this research there will be found a concept of human resource empowerment in optimizing a quality-based human resources empowerment concept entitled, "**Concept of Empowerment in Correlation with the Change of Private Univeristy Governance in Southern Regions of Sumatera.**"

## **Theoretical Framework**

### **A. Quality Policy**

Referring to some Laws on higher education, namely: (1) Law No. 30/1990 about higher education, (2) PP No. 60/1999 regarding perguruan tinggi, 3) UU No. 25/2000 regarding program pembangunan Nasional, dan UU No. 20/2003 regarding sistem Pendidikan Nasional, (4) Government Regulations (PP) No.19 in the year of 2005 on National Education Standard No. 20 in the year of 2003 article no. 60 on accreditation and article no. 61 about certification directly connected to quality assurance, accreditation and certification as important parts of community accountability in the educational field, and Law No. 12 in the year of 2012 about Higher Education.

Badan Akreditasi Nasional Perguruan Tinggi (BAN-PT) is a accreditation institution acknowledged by the government of the Recommunity of Indonesia (Ministry of Education and Culture). The main duties of this institution are: (1) increasing the quality of higher education, (2) introducing and expanding "New Paradigm in University Governance", and (3) increasing relevance, academic atmosphere, institutional governance, efficiency and university continuity (Tadjudin, 2000).

BAN-PT was established in 1994, based on the Law Number 2 in the year of 1999 about National Educational System. BAN-PT as the sole accreditation institution acknowledged by the government BAN-PT has an authority to implement the accreditation system at higher education. It also involves in establishing accreditation to all higher education (either State universities, Private Universities, Religious Universities or Official Colleges; long-distant programs, collaboration programs with other domestic universities, which are offered by overseas universities (but foreign universities are legally not allowed to operate in Indonesia nowadays). In the Government Regulation No. 60 in the year of 1989 mentions that BAN-PT is an independent institution which is appointed and reports its duties to the minister of Education and Culture. The Government Regulation No. 59 in the year of 2005 about the National Education Standard. In the Government Regulation Article No. 4 states that the National Education Standard aimed at guaranteeing the quality

of National Education. Therefore, the fulfilment of the National Education Standard by a university means that the university guarantees the quality of the university and to become the quality standard in Indonesia that has to be fulfilled by every university. The Government Regulation No.19 in the year of 2005 about National Education Standard mandating that the minister of National Education revises and assists universities applying quality control.

The recent Law as the reference is Permendikbud No. 49 in the year of 2014 about the National Higher Education Standard.

### **B. Quality Achievement Standard**

In an approach Sharafat Khan (2007) offers an empowerment model to be developed by an organization to guarantee the success of the empowerment. According to Giersch & Davis (1997:174), quoted by Daulat in the book 'Perguruan Tinggi Bermutu' unites the meaning of participation (involvement) that is total *Employee Involvement and Empowerment (TELE)*, meaning that the empowerment of employees happens only when they actively participate in the thinking process and activities at every level of organization. Besides using Sharafat Khan and Giersch & Daviskita, we can also use participation model.

### **C. Empowerment**

**Edwen P. Hollander dan Lynn R. Offermann** defined empowerment as authority share, authority delegation with subordinates in an organization. Further, it is defined as giving authority to others, so they can act more independently to accomplish their duties/jobs. In addition, Daft adds that efforts to share authority in the context of empowerment are common matters, either in an organization with organic structure, work-team structure, or culture-oriented structure.

Empowerment, further, is cited by three experts: Bowen and Lawler III, Tannenbaum and Cooke, and Cameron and Ulrich. Bowen and Lawler III, as quoted by Daft, stating that there are two reasons employees need empowerment. First, it becomes a strategy required in increasing the work result, and second, it is used to establish an organization with excellent performance.

**Tannenbaum and Cooke**, quoted by Daft, elaborating that empowerment will increase total amount of empowerment in the organization. It is right to give the authority to subordinates because it will reduce the authority of the leader. On the contrast, if a leader shares some of his authority, there will be more authorities in the organization because everyone has his own authority. It is obvious that the real leader authority is derived from the subordinates who have commitment.

According to Cameron and Ulrich, the concept of empowerment is strongly linked to the efforts of changes. Both organizational experts define that the concept of empowerment is a part of principles that can promote to changes in universities. Those changes connected to the principles are: (1) promoting participation and disseminating information; (2) nurturing independency and awareness; (3) providing supports to the structure; (4) promoting team involvement; and (5) establish problem solving while handling conflicts.

According to **Sharafat Khan**, **empowerment** is an approach in building an organizational quality including these phases: *desire, trust, confidence, credibility, accountability, and communication*. **The first phase, desire** in the *empowerment* model is the desire from the management implementation to delegate and involve the employees. *Desire* includes the employees given opportunities to identify the developing problem, minimize *directive personality* and extend the insolvents of the employees, promoting a new perspective and considering working strategies, and developing team competence and train the employees about self-control. **The second phase, trust** is desire of management to do empowerment.

The next step is to build trust between the management and the employees. Trust within the organization members will yield a good condition to the exchange of information and opinions without any worry/ fear. *Thus* includes giving chances to employees to participate in policy making, making time and proper human resources to supporting employees to accomplish their jobs, providing sufficient training for the sake of job needs, and appreciating differences of point of view and respecting to success made by the employees, and providing sufficient information access. **The third phase, *Confident*** is about bringing about confidence among each other, delegating important tasks to employees, digging up ideas and suggestion from employees, extending tasks and building network between departments, and providing job instruction schedule and promoting a good problem solving. **The fourth phase, *Credibility*** involves: taking employees as strategic partners, increasing targets in every job field, introducing individual initiative to make changes through participation, helping to solve differences in determining the goal and priority. **The fifth phase, *Accountability*** involves: making use of training in evaluating employee's performance, giving clear tasks with clear measure, getting the employees involved in determining standard and measure, giving suggestions and assistance to employees in handling job burden, and providing period and time for feedback, and **the sixth phase, *Communication*** involves: deciding open-door policies, providing time to gain information and discussing problems openly, and creating opportunities for cross-training.

#### D. Good Governance

Good governance will run well if it is supported by academic atmosphere and conducive organizational culture, all gradually created. Academic atmosphere and conducive culture must be created by promoting *awareness* and high commitment from all doers in university. The paradigm of good university governance, today, becomes reliable choice to reach the success of an organization.

In general. Good governance is connected to the aspects of transparency, accountability, leadership, commitment and others. However, it seems to become a complicated problem if the demand of the good governance insists on changes and innovation of the system in reaching the vision and mission of a university. Good governance is a condition that guarantees the process of alignment, similarity, cohesion, and balance of role, and inter-control by related components.

Sutiono, (2004) describes that in the concept of good governance there are 6 indicators for the success of good governance, namely: (1) getting all involved; (2) being transparant and responsible; (3) being effective and fair; (4) guarantying law supremacy; (5) guaranteeing political, social and economical priority based on community consensus; (6) paying attention to the weakest in making a decision. To gain a good governance, it is sometimes required a movement of simultaneous organizational culture changes, changing weaknesses and organization powerlessness to more reliable and productive. Thus, it is sometimes needed to do reorganization. Therefore, with good governance it will reach the success of the organization as expected.

#### Hypotheses:

- H<sub>1</sub> : The Quality-based governance in university is differ significantly before and after the implementation of human resource empowerment model (HRM).
- H<sub>2</sub> : Empowerment concept has a positive relationship with quality based performance concept in private university. In number, if the computation result shows that H<sub>0</sub> : CC ≤ 0; and H<sub>a</sub> : CC > 0.

### Research method

This is a quantitative research using *survey* method. To keep validity of the data, the writer administered validity test and reliability test obtaining that the writer conducted triangulations: (1) comparing the observation result data to the data gained from the interview and the data mentioned in the document; (2) resource triangulation, comparing what was said by a resource about a similar thing mentioned by another resource and (3) material triangulation, comparing the interview result to the material mentioned in a relevant material.

### Data Collection and Sample Taking

The research population was the managers of university management as 208 private universities, connected to the governance in producing education service situated in the Southern Part of Sumatera. The selection of those managers and service production was based on the reason that those educational managers played an important role in making a decision, and had both superiors and subordinates. The sample as an analytical unit of the research was 130 private universities based on the data gained from Kopertis Wilayah II Southern regions of Sumatera. The number of sample was gained using Isaac & Michael's formula (Sukardi, 2008:49).

The sample data collection was done by sending questionnaire via mail (*mail survey*) to the educational managers in the regions of Bandar Lampung, Palembang, Bengkulu, and Bangka Belitung. Then, this survey was done to gain the data related to the observational focus on empowerment and governance variables. The data needed was primary data and secondary data gained from closed questionnaire that had validity and reliability tested. The subject of the research was universities leaders. To complete the additional data through questionnaire obtained from educational managers, lecturers, and students.

The data gained from the research result through survey method used *liker* scale-based questionnaire where it was sorted out according to the criteria determined by the researcher to become an ordinal data scale, which caused the contingency coefficient correlation technique to be not effective to implement. Therefore, to make the Contingency Coefficient correlation model remain effective to implement, it requires a data transformation from ordinal to interval. The data transformation procedure process that was selected or tabulated was transformed using Internal Succession Method or Acuan Angka Normal Baku Z.

### Data Analysis Metode:

To test the hypothesis in the research is used a linear analysis using Contingency Coefficient (CC). Besides, *Chi Square* is an integrated approach between data analysis and empowerment concept construction. The computing process was established by using SPSS 17.0 software. The *Chi-Square* formula is

$$X^2 = \sum_{i=1}^k \frac{(f_o - f_e)^2}{f_e}$$

Note:

$X^2$  = Chi Square;  $f_o$  = frequency not observed; and  $f_e$  = expected frequency. The formula for computing the expected frequency is:

$$f_e = \frac{(Total\ lines)\ (Total\ columns)}{Total\ Observation\ Score}$$

### Contingency Coefficient Formula:

$$CC = \sqrt{\frac{X^2}{X^2 + N}}$$

Procedure to do Contingency Coefficient:

(a) Make a tabulation in the form of line (r) and a column; (b) count the total of column score ( $\Sigma r_i$ ); (c) count the total of column score ( $\Sigma k_j$ ); and (d) count frequency score expected at every cell using  $(\Sigma r_i/n) \times (\Sigma k_j)$ . After obtaining the expected score, continue to count *Chi-square* value; (a) Transform  $X^2$  into contingency coefficient; (b) Compare *Chi-square* using *Chi-square* table with  $df = (\alpha, K-1)$ ; and (c) decision taking based on criteria: (1)  $H_0$  cannot be rejected if *Chi-square* count  $\leq$  *Chi-square* table; and (2)  $H_0$  is rejected if *Chi-square* count  $>$  *Chi-square* table.

### Analysis Result and Discussion

The result of the research consists of two main parts, namely: (1) the test result through *Chi-square* count approach  $>$  the value of *Chi-square* table or the level of significance  $<$  alpha, therefore there was a difference between governance changes before and after the implementation of human resources empowerment concept in private universities, and (2) there was a positive empowerment concept toward the governance changes toward the private university governance.

Below is the research observation result implementing the empowerment concept correlated with the performance of University governance. Based on table 2 it shows that of 130 university informers there were 25 informers with a high empowerment concept category towards the very high governance performance and the low empowerment concept toward an moderate governance performance.

**Table 1. Research Observation Result Data**

Empowerment Concept Category	Governance Performance			Total
	Very Good	Good	Enough	
High	25	15	6	46
Average	8	20	10	38
Low	7	14	25	46
<b>Total</b>	<b>40</b>	<b>49</b>	<b>41</b>	<b>130</b>

Source : processed Data

$$f_e = \frac{(Total\ lines) (Total\ colume)}{Total\ Observation\ Score}$$

Here is a comparison between the research observation result data and the research value result expected to the empowerment concept category and the quality-based university governance performance

**Table 2. Expected Research Value Result Data**

Empowerment Concept Category	Governance Performance			Total
	Very Good	Good	Enough	
High	11,08	13,57	11,35	36
Average	11,69	14,32	11,98	37,99
Low	14,15	17,34	14,51	46
<b>Total</b>	<b>36,92</b>	<b>45,23</b>	<b>37,84</b>	<b>119,99</b>

Source: Processed data

Based on the computation result showed in table 2, it is clear that each obtained expected frequency score ( $f_e$ )= 11,08; 13,57; 11,35; 11,69; 14,32; 11,98; 14,15; 17,34 dan 14,51. While total of the expected research data was 119,99.

**Test Criteria:**

$H_0$  cannot be rejected, if  $X^2_{count} \leq X^2_{table}$ , or Sig. > 0,05. While  $H_a$  is accepted, if  $X^{2count} > X^2_{table}$ , or Sig.  $\leq$  0,05

**Result of Hypothetical Test and Analysis**

There is a difference between quality-based university governance performance before and after the implementation of the empowerment concept.

**A. Result of Hypothetical Test**

The test result after the simulation result gained shows that the parameter classification of model difference conformity measure used computation of *Chi-square* value was fully obtained:

$$X^2 = \sum \frac{(f_o - f_e)^2}{f_e}$$

$$X^2 = \frac{(25-11,08)^2}{11,08} + \frac{(15-13,57)^2}{13,57} + \dots + \frac{(6-13,35)^2}{13,35} = 35,93$$

Based on a manual analysis result, it was obtained *Chi-square* count = 35,93 and *Chi-Square* tabel with  $Df=(\alpha; (k-1)(r-1)$  or 0,05;4 as 9,488, while the significance level as 0,000. because *Chi-square* count 35,93 > *Chi-square* table (9,488) or the significance level (0,000) < alpha (0,05), so the null hypothesis was rejected, so the hypothesis saying "there is a positive correlation between the Empowerment concept and the Private University Governance Changes" was **accepted**, while the computation result using SPSS program obtaining the *Chi Square* score as 35,93; *Likelihood Ratio* as 13,277; and *Linear-by-linear Association* as 6,635 where *N of Valid Cases* 130 (appendices: 1 dan 2).

## B. Correlation between Empowerment Concept and University Governance Performance

Contingency Coefficient is used to test the correlation between two variables, nominal data and category. The method used to count the contingency coefficient. Firstly count the *chi-square* K test sample to examine differences K sample inter-independent. After transforming X2 value, count **35.93** into contingency coefficient formula obtained the correlation between human resource empowerment concept and quality-based private university governance performance:

$$CC = \sqrt{\frac{X^2}{X^2 + N}}$$

$$CC = \sqrt{\frac{35,93^2}{35,93^2 + 130}}$$

So  $CC = 0,4647$  (0,46) or 64%.

Based on the computation there was a correlation between the empowerment concepts toward the governance changes. This correlation shows the dependence between the empowerment factor and the governance at private universities is strong enough as 0,46 (64%). Referring to the research result it shows that the governance factor really depends on the empowerment factor of private universities. It can be concluded that from the research finding, to realize the good governance requires: (1) strong commitment from the management elements; (2) for other elements at middle managerial level and low level managers and low level employees require consistent character building.

## Discussion

The result of the research shows that there is a correlation between empowerment concept and quality-based private university governance changes. The implication from these variables are reflected by the changes of performance of the Research Foundation and Community Service reflected by the level increase of a group of university research increase in Kopertis Wilayah II in the year of 2013 where all private universities were entitled 'Binaan' and after the empowerment of institution status in the year of 2014 increased to become a Madya group. The analysis to realize the good governance of a university needs a strong commitment from all elements especially educational managers, whereas, for other elements it requires consistent character building. Referring to the analysis above, the writer elaborates the analysis result from the empowerment concept implementation in order to support the quality-based university governance. The empowerment increase models at universities have three forms of empowerment toward

capability at a university, which is educational field empowerment & teaching, research, and community service. The three forms of the empowerment will be elaborated as follow. The head of faculty is hoped to help lecturers to increase their capability in the educational field. The lecturers have to master their field of science and follow the development in order to teach/ deliver the material well, correctly and shophisticatedly to the students. Therefor, they need to increase their knowledge in the specific science and relevant sciences continuously. The lecturers have to follow the development of sciences. These lecturers have to be able to transfer sciences /technology interestingly to the students and arouse their motivation to study the mastery of lecturers in learning techniques, including observation and learning result evaluation. The improvement of lecturers competence in educational management such as: program planning, observation, and evaluation. The extention of lecturers' insight in establishing education was done especially in their specific science such as by communicating/visiting to other universities, the lecturers' knowledge on rules and regulations on educational execution, either in faculty/university or national. The change of the empowerment in the effective governance changes had to be done by the educational managers to the outstanding human resource (lecturers) in the educational activity. The concept of empowerment to increase the total number of authority in an organization to the subordinates was considered not to decrease the authority of the leader, even vice versa, if the leader shared parts of his authority, there would be more authorities in that organization, because everyone has his own authority. Consequently, the authority of the leader is derived from subordinates who have commitment (*Tannenbaum and Cooke*).

This concept becomes a guidance for higher education managers especially for heads of faculties to support and help lecturers in these processes: (1) increasing knowledge of lecturers and relevant knowledge as reference to do researches, (2) increasing experiences in researches such as through training, training apprenticeship, active research activities , independent researches, (3) seeking information from varied sources about research opportunities, research proposal procedures, fund aids and facilities, (4) following current community action of the science to provide scientific journals by the faculties, (5) issuing the results of the research in the scientific journals, (6) actively participating in a seminar activity on research results in specific fields of science, scientific meeting, etc. (7) pioneering and nurturing cooperation with different parties in research activities, (8) communicating with researchers in the field, either in university scope or outside of the university, and (9) rewarding the outstanding lecturers in researcher activities.

Community Service is one of Tridharma Perguruan Tinggi, head of faculty necessarily support lecturers to be active in this activity: (1) explanation to all lecturers on the duty of university in community service and the reasons to accomplish by faculties/lecturers, (2) training for lecturers in the field of community service, (3) the information dissemination to lecturers on policy, rules/ regulations on community service and also about proposal procedure of this activity, and (4) rewarding outstanding lecturers/ students in community service.

The mechanism of human resource empowerment at universities through lecturer development on initiative and efforts of each lecturer supported and assisted by faculty/university; (1) new experiences;(2) improvement of academic competence; (3) improvement in teaching competence; 4) Competence improvement in community service; (5) improvement in governance competence; (6) knowledge on students affairs, and (7) expansion of association and general knowledge.

Planning and strategies in higher education human resource empowerment program have commitment to the continuous governance at least including these two aspects: (1) human resource empowerment planning, (2) strategies in human resource empowerment program



relevant to be empower connected to quality-based university change management. The empowerment planning has to be suited to the needs projection of lecturers, especially in varied kinds of competency required to carry out the mission of the faculty. For each lecturer it is needed to make an individual training plan relevant to the faculty development plan and to potential and interest. The individual development plan of the lecturers is directed to the specialization needed, then reviewed periodically according to the development of the faculty and the success and benefits of development efforts of former individual development. The empowerment of lecturers is needed to be connected to the development priority and the performance quality improvement of the faculty, and the empowerment strategies are: in empowerment program of lecturers relevant to be empowered connected to the changes of universities based on quality, namely: (1) program with, (2) big target, but starting from the small, (3) involving all lecturers in – planning empowerment activities, and (4) using varied methods, and (5) observing and evaluating the human resource empowerment activities

Empowerment in the quality-based university governance refers to the changes connected to the principles, namely: (1) promoting participation and dissemination of information; (2) nurturing independency and awareness; (3) providing supports to the structure; (4) supporting group involvement; and (5) establishing completion while avoiding conflicts. Concerning with efforts to overcome obstacles faced by new structure of Quality Control through empowerment can be said that the empowerment to the faculty/institution will be more optimal because their position is very important.

- **Governance Empowerment Changes Before and After Human Resource Empowerment**

Based on the result of the research there were differences before and after the implementation of empowerment concept and the differences of quality-based private university governance. One of the indicators of the differences in institutional areas through Lembaga Penelitian dan Pengabdian Masyarakat (LPPM) reflected on the increase of grade or members of university research institution in the region of Kopertis Wilayah II in the year of 2013 where all private universities belonged to Binaan Group and after the implementation of the institution status empowerment in 2014 it increased to be Madya Group The increase of the status occurred significantly from 0 (no universities) to become 4 private universities (IBI Darmajaya, Bandar Lampung University, Binadarma University Palembang). Based on the result of the research there was a positive correlation and difference before and after the implementation of empowerment concept and quality-base governance changes at private universities in the year of 2016, predicted to be increasing. This impact of the increase was the quality and quantity of research result and community service of university human resources also got increased, followed by the publication of the research result and manual journal management into e-journals as well.

- **Parties ready to share values on quality**

The parties ready to share values on quality in universities toward quality-based management changes based on these main factors: prior to the implementation of quality policy (a) Shared Vision about low quality, having tendency to take the quality according to their own interpretation, and (b) having tendency to prioritize individual interest. After the implementation of the quality policy referring to the Shared Vision about the same quality and quality indicator, and directed and leading to cohesive attitude and synergic in the team work in teamwork of expertise.

**Technology** before the implementation of quality policy is based on information technology based system implemented for Academic Information System, Human Resource/Employees and asset information and finance; while after the implementation of the quality policy the information resource unit plays a role in strengthening and promoting the development as the centre of knowledge and knowledge community based on information technology.

It also happens to the main factor in changes of technological policy based-management changes before the implementation of quality policy without updated computation of *web-site*, while after the implementation the quality policy about service quality management based on information and communication technologies (ICT) or information technology and communication well related to the process, usage of aids, manipulation in value service, financial access, research access and community service, new student registration and library service and public service, and information management as well. Before the implementation of the quality policy the quality changes were directed to continuous quality improvement strategy through Plan-Do-Check-Act (PDCA). Before the implementation of system quality policy based on information technology to the academic information system, the Human resources/employee affairs and asset information and finance. The main factor in the quality-based management changes are technology. Referring to the Decree about quality policy, about university regulation after the implementation of quality policy the direction of the changes becomes; (a) Information Human Resource Unit playing more important role in strengthening and helping the development as the centre of knowledge and knowledge community based on information technology; (b) the service quality management based on information and communication technologies (ICT) in value service, financial access, research access, research and community service, new student registration and library service as well as community service.

### **Conclusion**

The result of the research shows that there is a positive and significant correlation between the concept of empowerment and the private university governance change in the southern regions of Sumatera.

This research was established based on a strategy model realizing human resource empowerment in order to support a good governance. Theoretically, this research completed the former research examining the strategic empowerment on the governance. Besides, it also answers the challenge from Sabherwal and Chan (2001) and Camponovo and Pigneur (2004) in Yugianto stating that a research on a different object and time is still really required. There was a positive correlation between Human Resource Empowerment and the private university governance change before and after the implementation of the concept of human resource empowerment at private universities.

### **Limitation and Suggestion**

This research has some limitation assumed to cause obstacles to the obtained result of the research. This research assumed that the respondents had conducted the process of human resource empowerment at the reasonable level to be examined empirically. Ideally, the level and the phases of empowerment were gained from a research observation, but not from a perception gained from respondents.

The next research is hopefully able to develop a greater sample in order that the reliability score and the empowerment model can be improved. *Site visit* is also suggested since it enables the researcher to obtain in-depth information. *Site visit* done to the study

object using a quantitative approach is strongly recommended. The following research can also include the contingency factors such as attachment, trust, environmental and surrounding environmental factors, and using a qualitative approach such as a case study. The extension and development of the theory is hoped to give contribution to the theory or a practical contribution obtained more greatly and more beneficially.

### Implication

Based on the conducted research, it can be concluded that the decision on the concept of empowerment and the model of quality-based university governance should be taken carefully and thoughtfully, considering its unique characteristics, such as: strategic excellence and competitive excellence dare to be made quantitative, the benefit obtained in indirect, inseparable from other factors, and the available theories and techniques are not always in line with the comprehension and insight about the harmony of relevance model to be implemented at different conditions.

The decision on the concept of empowerment should be viewed as *hard-look* and *soft-look*. Even though empowerment is the core of varied education businesses, it should not be taken merely as a *cost centre*. The well managed empowerment of human resource will give competitive excellence. Otherwise, it will cause *liability* thorough cost escalation when it is not managed well. The resource investment should not be seen as *cost-focused* because the company will lose a great opportunity.

On the other side, executive education managers are also demanded to focus and commit to the human resource empowerment. When education managers (executives) have a strong focus and commitment, the payoff obtained will be greater. As a result, the alignment of the empowerment concept will give better contribution to the improvement of private university governance. Last but not least, the executives have to be ready to do *joint responsibility* with senior executives from other fields, considering the alignment of empowerment concept is to realize the governance gives a positive influence on the improvement of the human resource performance.

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**(APPENDICES)**

Appendix 1. Table 3 Empowerment Concept \* Changes in governance Crosstabulation

Count		Changes in Governance			
		Excellent	Good	Sufficient	Total
Concept Empowerment	High	25	15	6	46
	Medium	8	20	10	38
	Low	7	14	25	46
Total		40	49	41	130

Appendix 2. Table 4. Chi-Square Tests

	Value	df	Asymp.Siq.(2 sided)
Pearson Chi-Square	35,93 <sup>a</sup>	4	.000
Likelihood Rasio	13,277	4	.001
Linear-by-linear Association	6,635	1	.001
N of Valid Cases	130		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.50.

## THE CHANGE OF SCHOOL ORGANIZATION TOWARD ICT DEVELOPMENT: A REVIEW FROM LEWIS'S THEORETICAL PERSPECTIVE

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### Abstract

An organization should transform toward the development of ICT in this era. The problem existing is that to transform is not easy because organization will be faced with pros and cons. Organizational Change model theory used is Lewis's theory. This theory is used because it has some advantages compared with other theories. The objective of article was to evaluate whether or not school organization has transformed as Lewis suggested. In addition, this article aimed to identify the constraints the school encountered in transforming its organization. Finally, this article would recommend the school to transform organization effectively. Techniques of collecting data used were interview and observation. Technique of analysing data used was descriptive method with qualitative approach. The result of observation on article showed that considering the current condition of school, the school organization had not made change yet according to Lewis's theory. The constraints included human resource quality, infrastructure facility, and low desire to transform, so that the solutions were needed to make change according to Lewis's theory.

### Introduction

Recently, the development of ICT has expanded more widely and has implication to the organization's advance, one of which is school organization (Bertil Vilhelmson and Eva Thulin 2001, Kozma, Robert B 2005, Liaquat Hossainand Rolf T.Wigand 2004). For example, administration registration, admission test, learning media, learning outcome evaluation and job application after graduation can be done online thereby facilitating the students following teaching-learning process. The utilization of ICT development at school results in a very tight competition between schools in both obtaining student' input and producing graduates (alumni). In other words, school that can utilize technology advance will be more developed and developing than those cannot.

The problem is to transform is not easy because organization will be faced with pros and cons. Cons against the change may be due to organization accustomed with former condition thereby it is not easy to transform because it has felt comfortable. In addition, change also encounters cons because of human resource and infrastructure less supporting the change. The organization's ability of managing pros and cons will contribute to the organization ability of transforming (changing) itself corresponding to the existing development (Liaquat Hossainand Rolf T.Wigand 2004). To manage such the condition, a good mediation is required from the organization (Panos Constantinides and Michael Barrett 2006). Otherwise, when organization cannot manage pros and cons, it will not develop even will die later.

In rapid development condition of ICT, when the organization cannot follow the change it would be abandoned by the society, because ICT is very important for both administration and teaching-learning activity purposes (Lazarus Makewa, Jackson Meremo, Elizabeth Role and Jesse Role2013). It is true particularly for the organization constituting a public service such as school. School organization will lose the students' interest in studying in such the organization because of its ICT left behind other organization. It is because ICT

plays a very decisive role for an organization's quality (Yusuf Musibau Adeoye\*, Afolabi Festus Oluwole, Loto Antonia Blessing 2013). There are a variety of theories about organization change, including big 3 model, Mintzberg, Lewis, KooterSneider and Beatty, and Robbins's theories (1999:326 in Kusdi, 2009:207). Individual models offer the change an organization should make. This article uses Lewis' perspective because it is easier to do and appropriate to be applied to the organization to be observed. In addition, although Lewis's theory has been applied since 1950 and belongs to earlier theory, it is still relevant to organizational change in modern era (Bernard Burnes: 2004). Lewis' theory is the one used in planned way, in which change made should pass through 3 specified stages. The well-planned change will result in effective change (Edgar H. Schein; 1996) (the advantage of Lewis change).

The objective of research is to evaluate whether or not school organization has made organizational change as Lewis suggests. In addition, identifying the constraints the school encounters in making organizational change. Finally, this article will recommend the school to make organizational change effectively.

### **Method**

This research was taken place in Sukoharjo Regency including 2 SMK (Vocational Middle Schools) as the representation of SMKs existing in suburban and urban areas. In this research SMKs were selected because the development of SMK runs more rapidly than that of SMA (Senior High School) does, because SMK follows the development of work realm. The SMKs selected included SMK Saraswati Grogol for urban area and SMK Muhammadiyah Weru for suburban area. The author chose this location because the school had use ICT less optimally in both urban and suburban areas. Techniques of collecting data used were interview and observation. Techniques of analyzing data used were descriptive one with qualitative approach. In this article, organizational change (change) is defined as a discussion about why, when, and how organization makes change (Hatch, 1997: 350 in Kusdi, 2009:204). The procedure of organizational change, according to Lewis, is represented as involving 3 stages: firstly, the process of thawing from previous condition of organization; secondly, making the necessary change, and thirdly, refreezing it after the positive change has occurred.

### **Results**

The result of observation in this article shows that both schools becoming the representative have not made significant change according to Lewis's theory to follow the very rapid development of ICT. Such the organization has not developed yet. In Lewis's theory there are some factors affecting the organizational change. Organizational change does not occur so that school organization has not developed yet according to ICT development. The administrative service system is still manual, so is the learning process, as indicated with learning media and learning set still using old model. The two representative schools still have different reasons of why they have not developed yet and have not followed the existing ICT development. The representative school existing in urban area has not developed yet following the ICT development due to some factors. They are: human resource comfortable with previous condition, the one in which ICT development has not been maximized yet. Such the condition occurs in either administrative or teaching-learning process division. Administrative division has not made development yet because administrative human resource has been too long stagnant so that they are very comfortable with current condition and do not master the existing technology. Such the condition inhibits the organization development to adjust ICT development because human resources are not interested in changing and there should be a



good mediation or HR management. Teaching-learning process or educator division has not been able to follow the ICT development currently. It can be seen from non ICT-based learning media, learning model and learning set. This condition occurs because educators are less motivated to make development. In addition, such the condition occurs because there is no evaluation and reorganization within organization, so that organization tends to not developing and be monotonous. In addition, educators' ability of utilizing or using ICT is low, only some educators master some of ICT uses or utilization. The schools existing in urban area should be able to follow the ICT's rapid development because urban people of course really need ICT-based service to facilitate and to accelerate any administrative and teaching processes in school.

The condition of the second representative school shows no development in ICT area to follow the very rapid development of ICT. The second representative school is the one existing in suburban area. The school organization existing has not been able to follow ICT development in both administrative and teaching divisions. In administrative division, it can be seen that the service used has not been based on ICT. It is because of the same factor as that in urban area. Generally, the problems occurring concern the less supporting HR for development and the organization too comfortable with prior condition and its objection to change. The condition of learning or educator is the same as that in school organization in urban area. Generally, the problem concerns educator human resource comfortable with prior condition and inadequate evaluation on educators in relation to ICT development so that the educators are less motivated to change. One factor differentiating the suburban school from the urban school is infrastructure existing in the school. In urban school, the infrastructure has been adequate. So the problem remaining concern how the quality of HR in its utilization, while the infrastructure of organization in suburban area is still inadequate so that the infrastructure should be developed to follow the very rapid development of ICT. In addition, the factor differentiating the condition of urban school from that suburban one is different motivation. The urban organization is more motivated because its community wants ICT-based service that is of course better than non ICT-based service. There have been several ICT-based schools in urban area so that this organization should be motivated to develop in order to catch its retardation. Meanwhile, the school in suburban area is less motivated because they consider that the community they serve is urban community mastering poorly the technology use. The organization assumes that suburban community prefers usual service because it is easier.

The result shows that the school organization has not been able yet to make change corresponding Lewis' theory. The constraints encountered include human resource quality, infrastructure facility, and low desire to transform, so that the solutions were needed to make change according to Lewis's theory. Lewis's theory includes some stages. The first stage is thawing the previous condition of organization, this stage can be carried out through mediation and evaluation so that it can be found which part needs improvement. The second stage is making change after the thawing process has been completed and all divisions of organization agreed to change, the changing process is carried out referring to the evaluation made in thawing process, for example, by conducting organization education. The final one is refreezing stage, here after having been sure with the change made, it should be refroze, to make the organization no longer changing after the good change within organization, so that the organization can experience development toward ICT development.

### **Discussion**

The result of observation shows that organization has not been able to change yet because of some constraints. Those constraints are, among others: human resource quality, facility,

and low willingness to change. This finding is in line with Alekande J.O and Sofowora O.A's journal. The journal stated that the factors causing the low interest in following the development of ICT are low HR quality and inadequate facility.

Those constraints result in pros and cons to make change. The pros and cons lead to imbalance in making organizational change; it can support the organizational change using Lewis' theory (Kusdi, 2009). This imbalance condition can be anticipated with thawing process in Lewis' theory. It is in line with Alicia Kritsonis (2005). She stated that the first stage in making change according to Lewis' theory is to establish the balance between those agreeing for changing and those not agreeing. This balancing can be made by strengthening those agreeing and by weakening those not agreeing, for example by socializing the change made (Kusdi, 2009).

The result of observation shows that after the thawing process and organization having agreed to change, the changing process is carried out referring to result of evaluation in thawing stage. This change can be done by giving training or new management pattern (Kusdi, 2009). The training can be provided to administrative officers and educators. It is in line with Michael Barrett, David Grant, and Nick Wailes' study (2006). This study stated that individual change can occur in the presence of education or individual training. Organizational change will occur after the second stage has been conducted well. The next stage is freezing stage. This stage is the one to restore the existing condition corresponding to the change occurring. It is consistent with the journal written by Bahsar H.S. et al in 2013. The journal stated that freezing stage is the stage stabilizing the group in new balance pattern aiming to ensure that all individuals within group can follow the existing change.

### **Conclusion**

The conclusion of paper is that the two representative school organizations have not change toward the development of ICT with Lewis's change theory. Organization cannot change because of many factors. The constraints the urban organization encountered are human resource and management factors existing. Meanwhile, the factors inhibiting the suburban organization in making change are HR, management, infrastructure, and motivation factors. For the organization to be able to change based on Lewis' theory, three stages are needed: thawing, changing, and freezing. Thawing stage can be carried out by means of mediating and evaluating organization. Then, the changing process can be done consistent with the existing result of evaluation so that the change can be done appropriately. The third stage is freezing stage conducted to refreeze the condition of organization that has made change, so that it can experience the change toward ICT development based on Lewis' changing theory.

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## THE EFFECT OF ENTREPRENEURIAL MARKETING ON SMES PERFORMANCES

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### Abstract

This paper examines the effect of entrepreneurial marketing dimensions (pro activeness, opportunity focus, calculated risk taking, innovativeness, customer intensity, resource leveraging, and value creation) on the performance of SMEs. This research uses 201 samples of SMEs in Solo Raya, Central Java Indonesia. The hypothesis testing is carried out using multiple regressions linier. The result shows that pro activeness, calculated risk taking, innovativeness, customer intensity, resource leveraging, and value creation has a positive effect toward SMEs performance.

**Key Words:** *Entrepreneurial Marketing, SMEs Performance, SME*

### Introduction

Entrepreneurial marketing is a concept that was developed nearly thirty years ago between the science of marketing and entrepreneurship. Entrepreneurial marketing concept emerged as a response to several studies that show the discrepancy between traditional marketing theory and practice of marketing in small and medium enterprises - SMEs (Ioniță, 2012). Marketing plays a significant role in SMEs, which the loss or gain of a single customer can often determine firm survival (Becherer et al., 2012). Morris et al., (2002) defines the concept of entrepreneurial marketing is the proactive identification and exploitation of opportunities for acquiring and retaining profitable customer through innovative approaches to risk management, resource leveraging and value creation. Entrepreneurial marketing has seven dimensions, namely pro activeness, opportunity focus, calculated risk taking, innovativeness, customer intensity, resource leveraging, and value creation (Morris et al., 2002). Based on the idea that entrepreneurial marketing suitable for SMEs, the purpose of this study was to analyse the influence of entrepreneurial marketing dimensions on the performance of SMEs batik and furniture industries in Solo Raya.

### Literature Review and Hypothesis

Kraus *et al.*, (2010) has describe the concept of “Entrepreneurial Marketing” (EM) as the marketing activities on small and new ventures. EM represents an exploration of ways in which entrepreneurial attitudes and behaviours can be applied to the development of marketing strategy and tactics (Kurgun *et al.*, 2011). Morris *et al.*, (2002) study can be considered the first attempt to link between EM and performance outcomes, where EM practices are expected to affect both financial and non-financial outcomes. Miles and Darroch (2006) suggested that, markets which have enough freedom entrepreneurial marketing processes can be strategically employed to create superior value for the firm's customers and owners.

#### A. The Effect of the Proactiveness toward SMEs Performance

According to hamali (2015), business performance can be achieved from increased proactiveness. Analyses results revealed that proactiveness dimensions of entrepreneurial marketing are positively related with innovative performance (Hacioglu *et al.*, 2012).

Proactive as a part of EO conception is positively related to firm performance (Arief *et al.*, 2013). Sole (2013) stated by stressing proactiveness (along with creativity and innovation) to give marketing the push that it needs, it will help firms to capitalise on business opportunities to grow faster than their competitors. Based on the description above, the hypothesis can be stated as follows:

H<sub>1</sub>: Proactiveness has a positive effect towards SMEs performance.

### **B. The Effect of the Opportunity Focus toward SMEs Performance**

Opportunity driven is a sources of sustainable competitive advantage based on Fiore *et al.*, (2013). Opportunity oriented is an important part of Entrepreneurial decision making, and has a positive effect towards Entrepreneurial Marketing Outcome, such as performance (Hills & Hultman, 2011). The recognition and pursuit of opportunity is fundamental to entrepreneurship, and is a core dimension of EM because the marketer strives to expand the opportunity horizon beyond that dictated by current customers, products and business boundaries, in the process "escaping the tyranny of the served market" (Morris *et al.*, 2002). Based on the description above, the hypothesis can be stated as follows:

H<sub>2</sub>: Opportunity focus has a positive effect towards SMEs performance.

#### *a. The Effect of Calculated Risk Taking toward SMEs Performance*

According to Becherer, *et al.*, (2012), risk taking as dimensions Entrepreneurial Marketing related to outcomes, such as: financial success. Arief *et al.*, (2013) stated take risks as a part of EO conception is positively related to firm performance. Based on the description above, the hypothesis can be stated as follows:

H<sub>3</sub>: Calculated risk taking has a positive effect towards SMEs performance

#### *b. The Effect of Innovativeness toward SMEs Performance*

The potential for innovation, are factors that provide the conditions necessary for developing processes entrepreneurial marketing and increase business performance (Christina, 2011). Analyses results revealed that innovativeness, dimensions of entrepreneurial marketing are positively related with innovative performance. (Hacioglua *et al.*, 2012) by stressing innovation (along with creativity and proactiveness) to give marketing the push that it needs, it will help firms to capitalise on business opportunities; consequently, they are expected to grow faster than their competitors (Sole, 2013). Innovative as a part of EO conception is positively related to firm performance (Arief *et al.*, 2013). Based on the description above, the hypothesis can be stated as follows:

H<sub>4</sub>: Innovativeness has a positive effect towards SMEs performance

#### *c. The Effect of Customer Intensity toward SMEs Performance*

Customer intensity relating to customer success, and being innovative and leveraging resources to building a strong company. (Becherer, *et al.*, 2012). Customer intensity have significant relationship to business performance, in other words, business performance can be achieved from increased customer intensity (Hamali, 2015). Analyses results revealed that customer intensity, as a part of entrepreneurial marketing dimension are positively related with innovative performance (Hacioglua *et al.*, 2012). Based on the description above, the hypothesis can be stated as follows:

H<sub>5</sub>: Customer intensity has a positive effect towards SMEs performance

#### *d. The Effect of Resource Leveraging toward SMEs Performance*

Resource leveraging have significant relationship to business performance in small garment industry in Bandung (Hamali, 2015). Analyses results revealed that resource leveraging dimensions of entrepreneurial marketing are positively related with innovative performance (Hacioglua *et al.*, 2012). Based on the description above, the hypothesis can be stated as follows:

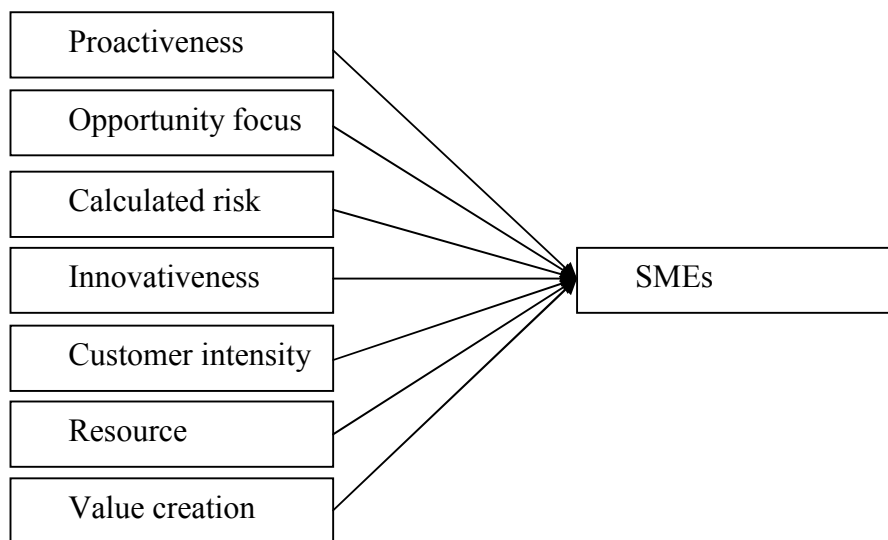
H<sub>6</sub>: Resource leveraging has a positive effect towards SMEs performance

e. *The Effect of Value Creation toward SMEs Performance*

The value-creation dimension stands out as an aspect of entrepreneurial marketing that affects not only financial performance but also growth, customer success, and generally building a strong sustainable company (Becherer, *et al.*, 2012). The results of test taken by Hamali (2015) show that value creation have significant relationship to business performance. Value creation encompasses the utilization of firm resources to incorporate strategies that better serve a firm's niche and develop sustained competitive advantage (Morris *et al.*, 2002). Based on the description above, the hypothesis can be stated as follows:

H<sub>7</sub>: Value creation has a positive effect towards SMEs performance

Based on the hypothesis established, we propose the conceptual research model as specified in Figure 1.



**Figure1. Research model**

**Research method**

**A. Population and sample**

The population for this research is all SMEs batik and furniture industries in Solo Raya, Central Java Indonesia. Thus, the sample of this research is SMEs batik and furniture industries in Solo Raya that has been established for at least 3 years, and the respondents for this research are SMEs' owners of batik and furniture industries in Solo Raya. A survey instrument was developed to collect the quantitative data needed for our conceptual model and hypotheses testing. A total of 300 questionnaires were distributed directly, 201 surveys were collected and used for analysis. Sample Characteristics are shown in Table 1.

**Table 1. Sample Characteristics**

	Characteristics	Sample (N=201)	%
Industry	Furniture	107	41
	Batik	94	37
Company's age (years)	3 – 13	113	56,2
	14 – 24	57	28,4
	25 – 35	18	8,9
	36 – 46	13	6,5
Companies size	Small	136	67,7
	Medium	65	32,3

**B. Operational definition and variable measurement**

All variables were measured on a 5-point Likert scale, ranging from “strongly disagree” to “strongly agree”, unless otherwise noted.

1. *Entrepreneurial Marketing*

Entrepreneurial marketing is divided into seven dimensions: proactiveness, opportunity focus, calculated risk taking, innovativeness, customer intensity, resource leveraging, dan value creation (Morris et al., 2002).

2. *Proactiveness*

Proactiveness is a business operator’s tendency to demonstrate leadership by initiating actions with the goal of affecting change in marketing practices. The measurement of proactiveness variable is carried out using 3 items statements based on Fiore et al., (2013).

3. *Opportunity focus*

Opportunity focus is a business operator’s tendency to identify unmet market needs and sources of sustainable competitive advantage. The measurement of opportunity focus variable is carried out using 3 items statements based on Fiore et al., (2013).

4. *Calculated risk taking*

Calculated risk taking is a business operator’s tendency to demonstrate a creative approach to mitigating risks that surround bold, new actions. The measurement of calculated risk taking variable is carried out using 3 items statements based on Fiore et al., (2013).

5. *Innovativeness*

Innovativeness is a business operator’s tendency to seek new marketing ideas from both within the firm and through external firm activities. The measurement of innovativeness variable is carried out using 3 items statements based on Fiore et al., (2013).

6. *Customer intensity*

Customer intensity is a business operator’s tendency to establish marketing relationships that address individual customer needs/desires/preferences and relate to customers on a more personal level. The measurement of customer intensity variable is carried out using 3 items statements based on Fiore et al., (2013).

7. *Resource leveraging*

Resource leveraging is a creative synergistic process to access resources so more can be done with less, often mitigating risk through a greater use of leveraging. The measurement of resource leveraging variable is carried out using 3 items statements based on Becheler et al., (2012).

8. *Value creation*

Value creation is a business operator’s tendency to use marketing efforts and resources to discover and deliver untapped sources of value for the customer. The measurement of

resource leveraging variable is carried out using 3 items statements based on Fiore et al., (2013).

9. *SMEs performance*

SMEs performance is measured by 3 items statements: respondents were asked to compare the return on capital employed, earnings per share, and sales growth of their own firm with those of their main competitors in the past three years; that are based on Wang (2008). Each item is measured by Likert scale with 5 alternative choices that are ranked from worse until better.

**Results**

**A. Research instrument test**

Validity test is conducted towards 8 main variables that are entrepreneurial marketing dimensions (proactiveness, opportunity focus, calculated risk taking, innovativeness, customer intensity, resource leveraging, and value creation) and SMEs performance. The result of validity test shows that all items are valid.

Reliability test results show that the amount for proactiveness is 0.789; opportunity focus is 0.735; calculated risk taking is 0.730; innovativeness is 0.785; customer intensity is 0.901; resource leveraging is 0.799; value creation is 0.707; and SMEs performance is 0.895.

**B. Hypothesis test**

In this study, multiple regression analysis is conducted to test the hypotheses. As seen in the Table 2, the adjusted R<sup>2</sup> is 44.6%, it means entrepreneurial marketing explains the 44.6% of the variance of the SMEs performance and also the six dimensions of the entrepreneurial marketing have significant effect on SMEs performance. Multiple regression analysis results support H<sub>1</sub>, H<sub>3</sub>, H<sub>4</sub>, H<sub>5</sub>, H<sub>6</sub>, and H<sub>7</sub>. On the other hand H<sub>2</sub> is not supported.

**Table 2. Result of Multiple Regression Analysis**

	SMEs Performance (β)
Proactiveness	0.384*
Opportunity focus	0.096
Calculated risk taking	0.162*
Innovativeness	0.126*
Customer intensity	0.126*
Resource leveraging	0.137*
Value creation	0.143*
R <sup>2</sup>	0.465
Adj.R <sup>2</sup>	0.446
F	23.970*

\*p<0.05

**Discussion**

Based on the analysis of the result using multiple regressions linier, we can conclude that: first, Six dimensions of entrepreneurial marketing (proactiveness, calculated risk taking, innovativeness, customer intensity, resource leveraging, and value creation) has an effect toward the SMEs performance. It's supported research from Hacıoglu *et al.*, (2012); Becherer, *et al.*, (2012); and Hamali (2015). Second, Opportunity focus does not have an effect on SMEs performance. According to Schmid (2012), Research results from recent studies have revealed that more than just recognizing the opportunities and possibilities in the



market is necessary. In fact, a change in market structure and behavior of market participants must be created in order to permanently influence the market (Stolper, 2007). In addition, recognizing market opportunities before the competitors do, leads customers into a new direction (Kraus *et al.*, 2008).

Based on these findings, both SMEs (both furniture and batik) is expected not only to rely on emerging opportunities in the market, but also capable of being proactive by creating their own business opportunities in the market. Both of SMEs can take advantage of the internet to draw inspiration developments related to the manufacture of product design (in context of batik design and the latest furniture models) to produce a new design with a strong differentiation and high value.

For furniture SMEs, is expected to create market opportunities in terms of product diversification. For example: bag-making by utilizing left over raw materials from furniture production. It's profitable, because the material needed is not too much compared to the full-production of furniture. It only takes the material that is needed is not too much compared to the production of furniture.

For batik SMEs, they can work together with other parties concerned to establish clusters or centers of batik artisans as a promotional event directly to the public and at the same time, to making educational tours to the public.

Further research is expected to specify the variable performance to become more specific performance measures as a form of achieving corporate goals. According to Becherer, *et al.*, (2012), there are a number of ways to measure goal achievement of the firm. One measure is how well a business performs in terms of goals related to growth in sales revenue, profit, or market share, as well as financial returns, goals relative to capital investment, or equity (Becherer, *et al.*, 2012). Even though traditional profit-motive outcomes are valid for entrepreneurs, there are a host of other reasons for starting a business that include being their own boss, pursuing their own ideas, and pursuing opportunities without regard to their current resources (Barringer & Ireland, 2010). Entrepreneurs also measure their success in ways other than pure goal achievement. They can focus on building a company that attains success in many ways, such as: a solid customer base or a strong company that can sustain itself and company employees for many years (Becherer, *et al.*, 2012).

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## IMPROVEMENT MODEL SELF-HELP GROUPS PERFORMANCE IN PERSPECTIVE PRODUCT VALUE AND FIRM VALUE (CASE STUDY OF SHG'S BATIK SURABAYA)

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### Abstract

This research is aim to increase the batik artisan in Self-Help Group (SHG's) Surabaya welfare through empowerment strategy. However, batik Surabaya generally have constraints in terms of the sustainability of the production process, the lack of available human resources, marketing and distribution that has not been created properly. This condition can be helped by empowering the SHG's Batik trough performance model based on the value of the company and the value of the products is the goal of this research in the effort to float SHG's batik Surabaya. This research used observation and in-depth interview method with total sample is 28 Self-Help Groups in Surabaya. The result found that in perspective product value obtained excellence product that is unique motifs and colors have a special series of Surabaya and a solid match between the colors, motifs and attractive packaging and in perspective firm value are selling rate, structure organization, book keeping and accounting.

**Keywords:** *Self-Help Groups, Batik Creative, Product Value, Firm Value*

### Background

Batik is one of the flagship products of every city including in Surabaya, which are mostly managed by SHG's. Batik has been known since the seventeenth century, and in 2009 has received recognition from the United Nations agency that is UNESCO as world heritage. Recognition of batik will add additional value to the development of batik in Indonesia. It is characterized by the increasing use of and demand for batik products. Such conditions make batik artisans gain to make them capable of improving economic conditions. One type of batik which is currently favored by consumers is batik Surabaya. Batik Surabaya believed to have uniqueness and distinctiveness that are not owned by the batik products from other regions in Indonesia.

Based on the preliminary survey of the craft of batik Surabaya generally have constraints in terms of the sustainability of the production process, the lack of available human resources, marketing and distribution that has not been created properly. Empowerment has been done so far has not been effectively implemented. Empowerment is still focused on the excavation of new crafters with counseling and training to make. But after the training is done, the artisans are no longer continues his efforts. This resulted in low productivity. On the other hand, batik Surabaya have limited access to market information, market reach, networking, and access to strategic business location. The craftsmen mostly only sell around Surabaya, and even then not in strategic locations, so that not many people of Surabaya know batik Surabaya well. In terms of capital as well as the problems facing SMEs in general Semarang batik makers are also facing the same problem. This can be demonstrated with the business scale is still relatively small with its own capital is relatively small. The linkage of production and business performance has not been made by craftsmen who will continuously the inefficient production and distributions are less good. Thus the need for assessment studies on the empowerment of SHG's Batik Surabaya so that the aim of promoting the dignity Surabaya batik art and

culture can be realized, so as to align batik Surabaya with other known and welfare for batik artisans Surabaya.

Welfare for batik artisans through empowerment strategy with a performance model based on the value of the company and the value of the products is the goal of this research in the effort to float SHG's batik Surabaya. Without the support of the right strategy, the company will be difficult to survive in the competitive (Knight, 2000). Start from here, the emerging demands of the company to be able to formulate a good strategy. Research on the performance of SMEs and SME programs creativity began to innovation, marketing and resource conjunction with the company's performance is not a new thing. The results of the study Frese et al (2002, p. 276) show that entrepreneurial orientation is key to improve the performance of the company. Companies whose leadership oriented entrepreneurial have clear vision and courage to face the risks so as to create a better performance.

Based on the background above, the problem in this research is to determine the performance model based on the value of the company and the value of the product, especially on SHG'S Batik Surabaya. In this study, the criteria of company value and the value of the product on SHG'S differ slightly with SMEs and even companies. Criteria value of the company at the top of SHG's in sales growth, organizational structure, bookkeeping, regular meetings, member savings and partnerships. Value of products consists of product excellence, ease of getting the product, purchase incentives and product modifications (Bapemas Surabaya, 2015).

## **Theoretical Framework and Design Model**

### ***Firm Value***

The company's goal generally is to maximize the value of the company (firm value). High firm value reflects a positive reflection on the performance of the company so as to attract investors to invest in the company. The company's value can be measured by the value defined by the market share price at the end of the year (Chen et al, 2011). The firm value is the price of a company that is willing to be paid by investors when sold (Husnan, 2005; Wiagustini, 2010). Furthermore Chandra (2003) provides an understanding of the company's value (value of the firm) is the measure of success in the management of a company running a business in the past operations and business prospects in the future to convince shareholders.

Criteria of firm value in SHG's consists of sales growth, organizational structure, bookkeeping, regular meetings, members' savings and partnership. Furthermore researchers described each of these criteria in this paper.

### ***Sales Growth***

Sales have more influence strategically for a company, sales made by the asset or assets and when sales increased then assets should be added (Weston and Brigham, 1998). Sales from a year earlier, the company can optimize its resources. Sales growth has an important role in the management of working capital. By knowing how big the sales growth is, the company can predict how much profit is obtained. Sales growth of SHG's creative batik Surabaya supported by the promotion of access to aid distribution Bapemas Surabaya city in the form of exhibitions in shopping malls, bazaars and in villages in the district.

Average sales growth of each SHG's since its stand quite a significant increase, in this study made the following formulation:

$$(\text{Sales in period } n + 1 - \text{Sales in period } n) / \text{Sales in period } n \times 100 \%$$

Table 1.  
 Average Sales Growth

Average Sales Growth	Score
Between 51-60%	7
Between 41-50 %	6
Between 31-40 %	5
Between 21-30 %	3
Between 20 %	2
Between 10%	1

### ***Organization Structure***

The organization is a collaboration tool used by some people who have the same vision and mission in order to achieve the same purpose. Understanding the organizational structure is the arrangement components units within the organization. The organizational structure shows the division of labor and show how the functions or activities that vary are integrated (coordination). Beside, the organizational structure also shows specializations jobs, command line and the submission of the report. So in the absence of an organizational structure and appropriate management the organization will be chaotic and will not run properly even these organizations can disband because there is no division in management (Alhamidi, 2013).

According to Tambunan (2009), medium-sized enterprises most of the business owners have been well educated, have access to government programs, and already employs professional managers. While SHG's Batik target should have a chairperson, treasurer and members, and each board have the duty and authority to manage the group in accordance with the vision and mission of SHG's.

### ***Accounting***

One of the main challenges faced by SHG's is associated with the management of funds. Good management of the funds is a key factor that can lead to the success or failure of SHG's. Although many other factors can affect SHG's but at SHG's issues typically arise from failure to manage the funds.

According Kurniawati (2012), a practical and effective method in the management of the fund is to implement accounting SHG's well. Thus, accounting makes SHG's can obtain a wide range of financial information that is important in business. The financial information that can be obtained SHG'S include enterprise performance information, calculating tax information, the position information of the company's funds, the information changes in owners' equity, cash income and expenditure information.

SHG's Batik book keeping was conducted on the sales, purchasing, inventory, cash-in, cash-out, fees and salaries. Accounting reporting is done merely for the sake of

business management. Most of the reports made by the manager of the business are sales reports, purchasing reports, inventory reports.

### ***Routine Meeting and Member Saving***

SHG'S regular meetings is how many meetings do SHG's, the meetings to discuss the activities of SHG'S in connection with products such as batik motif planned to be created, the marketing and sale of batik, bookkeeping of SHG's and development plans for the group. The more often the meeting showed the level of activity and productivity in the Batik group.

Savings member's shows how much savings of their members, including capital and cash held because when the founding group SHG's, most venture capital is the joint capital or capital grants should be accounted for together. The savings member's also indicate the productivity of the group in accordance with the mission and vision of SHG'S.

### ***Partnership***

Kuncoro et al (2003) said that developing partnership program can be reached by Father-Son Adopted system, upstream-downstream linkages (forward linkage), the downstream-upstream (backward linkage), venture capital, or subcontract. The partners who really want to help in developing a business SHG's stained with the seizure of partnerships or build new partnerships but also SHG's not interested in a partnership (Frank.2010; Purnomo, 2013).

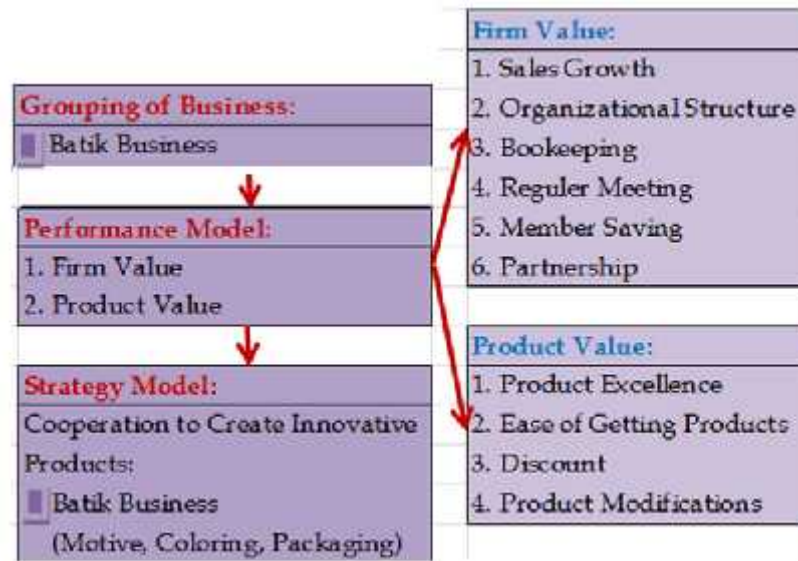
### **Research methods**

This research was conducted in the city of Surabaya. The data collection is done by in-depth interviews and observation. SHG'S is closely linked to the development of the batik industry in the city of Surabaya, batik artisans and entrepreneurs in the city of Surabaya, batik observer communities, officials from relevant agencies such as, Bapemas Surabaya and Surabaya Dekranasda board. Data analysis was conducted using qualitative methods.

### **Operational Method**

#### ***Flowchart Research***

This study was conducted over three years. The first year has been identifying the internal factors that affect the performance of SHG's and have identified external factors that affect performance SHG's. The second-year research effort designed to grouping SHG'S, the determination of the performance model based on standard firm value and the value of the product.



**Picture 1.**  
**Flowchart Research**

**Research sites**

Research was conducted on SHG’s Batik Surabaya are spread across several areas, among others: West Demak, Babadan, Kalimas Baru, Sidotopo, Medokan Utara, Banyu Urip, Kapas Baru, Ploso, Banjar Sugihan, Tenggilis, Krukah, Gunung Sari, Karangrejo, Pagesangan, Benowo, Wisma Tengger, Dukuh Kupang, Kedurus, Kedung Ruken dan Babatan.

**Population and Samples**

The population and sample of this research are total amount 28 SHG’s in Surabaya.

**Table 2.**  
**SHG’s Batik in Surabaya**

No	Self-Help Groups	Product	Address
1	Melati	Ikat celup	Babadan 4-2
2	Tugu	traditional Batik	Demak Timur No.35
3	Serasi	traditional Batik	Babadan masjid 25
4	Bougenvil 2	Ikat celup	Kalimas baru I/60
5	Cantik	Ikat celup	Wonokusumo jaya I/17
6	Safari	Ikat celup	Sidotopo gg 2
7	Anggrek	Ikat celup	Medokan utara 26/3
8	Pandan Duri	Membatik (batik	Kupang Krajan Lor I

No	Self-Help Groups	Product	Address
		tan)	
9	Warna Ayu	Ikat celup	Banyu Urip Kidul V/61
10	Kencana baru	traditional Batik	Kapas Baru II/11
11	Sekar wanita	traditional Batik	JL. Gersikan IV
12	Melati wangi	traditional Batik	Ploso 7/16 A
13	Anggun	Ikat celup	Banjar Sugihan No.20
14	Bougenvile	traditional Batik	Tenggilis Mulya RT
15	Jumput ngagelrejo	Membatik (batik tan)	Krukah Sel 12 B/7
16	Mandiri	Membatik (batik celup)	Gunung III/2 no 171
17	Kasih ibu	Membatik (batik tan)	Karangrejo VI/43
18	Rapi ayu	traditional Batik	Pagesangan RW.01
19	Batik semanggi	traditional Batik	Benowo
20	Batik tulip	traditional Batik	Wisma tengger V no.9
21	Batik teyeng	traditional Batik	Wisma tengger VI no.33
22	Batik elektrik	traditional Batik	Dukuh kupang gg lebar D
23	Kreasi	Ikat celup	Kedurus RW III
24	Sari karya	Batik celup	Kp Malang Tengah I/9
25	Lurink	Ikat celup	Kedung Rukem II/9
26	Charisma	Ikat celup	Kedung Klienter 7/25



No	Self-Help Groups	Product	Address
27	Gemati	traditional Batik	Jl. Babatan Pratama RH No.7
28	Jumputan	Traditional batik	Pagesangan RW.01

### ***Types and Sources of Data***

The data used in this study are primary data. Primary data refers to information obtained first hand by researchers associated with the variable interest for the specific purpose of study (Sekaran, 2006). Primary data collected include: (1) The identity of the respondent and the characteristics of business owners, include: name, address, gender, age, education, household size, number of family members who work, education, family members, spending an average families to groups of food and non food, (2) aspects of business / production, (3) Aspects of distribution / marketing, (4) Aspects of market demand.

### ***Collecting Data method***

Data collection methods used in this research is the method: In-depth Interviews and observation activities SHG's Batik.

1. In-depth interviews is the process of obtaining information for research purposes by way of question and answer face to face between the interviewer with the informant or the person being interviewed, with or without using a guide interview, where the interviewer and the informant involved in the life social relatively long. Keypersons depth interviews were conducted with competent, composed of the chairman of SHG's, namely Bapemas Kasie Community Empowerment, Dekranasda Surabaya.
2. Observation, a research technique in the search for a picture of social life that is difficult to resolve with other methods so that the observations were made to explore the function of exploitation. From the observations we found a clear picture of the problem and possible clues on how to solve them. Thus, it is clear that the purpose of the observation is to obtain a variety of concrete data directly in the field or place of study. This observation is the non-participation observation, instrument used in performing observation of checklists, rating scales, anecdotal records, records periodically, and mechanical devices.
  - a. Check list, a list that contains the names of respondents and the factors that is observed.
  - b. Rating scale is an instrument to record symptoms according to the level.
  - c. Anecdotal record, the notes made by researchers on the remarkable behavior-behavior that is displayed by the respondents.
  - d. Mechanical device, a mechanical device that is used to photograph certain events displayed by the respondents.

### **Result and Discussion**

Surabaya is one cosmopolitan city, where residents come from various regions as a newcomer to the mix of cultures metropolis with indigenous cultures that make Surabaya Surabaya rich in culture. This is also reflected in the motif produced by SHG's batik in Surabaya, most of batik craftsmen from different regions. Batik Surabaya is not like batik from other coastal areas which traces its history can be traced. Batik Surabaya tend to be difficult because once the transit area of trade. Motif rose also about Surabaya. At first glance looks no different batik Surabaya with Madura batik or Batik Jetis Sidoarjo origin

which was the star at the end and beginning of 1900 and is the market big enough batik there and then, but if observed in detail it was look the difference. Batik Surabaya has a concept of strong colors and bold. Besides batik Surabaya also had a motive - the typical motifs such, clover flowers, rooster in Sawunggaling legend, a boat typical of Surabaya, as well as advertisements shark (javanese: sura) and crocodiles (javanese: baya) are also an icon of the city of Surabaya.

**Performance Model for Firm Value on SHG’s Creative Batik Surabaya**

Based on interviews with SHG’s and observations in connection with the selling rate was 90% SHG’S Batik increased 30% to 40% after training and assisted on the creation motif, coloring and packing. The organizational structure of the group run in accordance with the duties and responsibilities, which means that each member is directly involved in the activities to make batik.

Bookkeeping at SHG’s previously recorded has been recorded and accounted for using the method of accounting as simple as noted cash-in, cash-out, supply, sales, purchasing, and other costs. Results of regular group meetings marked by the attendance list of each meeting in the archive by the secretary of the group and almost 75% of members in each group SHG’S has always been active in regular meetings.

Another factor of the value of the company are managed by SHG’S Batik is member savings. SHG’S Batik classified in this study 100% have savings of members, these savings are the result of the sale of batik in a given period and distributed as profits, in addition to the savings members can use the group as additional capital when booking sales more than usual, for example if there is an order the uniform of an institution or family wedding uniform and orders the PKK. Factor latter is a partnership, 70% SHG’S Batik partnership in business development and marketing network, but some are not due to the distribution of profits or bought breaking price does not correspond with those offered SHG’S.

**Table 3**  
**Transaction and Accounting of SHG’s**

N	Book keeping transaction	Respondent				Number of respondent	
		Reported		Unreported		Total	Percentage
		Total	Percentage	Total	Percentage		
1	Cash flow in	28	100%	-	-	28	100%
2	Cash flow out	20	74,07 %	8	25,93%	28	100%
3	Sales	28	100%	-	-	28	100%
4	Buy	28	100%	-	-	28	100%
5	Supply	28	100%	-	-	28	100%
6	Other	22	78,5%	6	21,5%	28	100%

Source: analyzed data

**Performance Model for Product Value of SHG’s Creative Batik in Surabaya**

Based on observations and interviews with SHG’s batik, obtained excellence product that is unique motifs and colors have a special series of Surabaya and a solid match between the colors, motifs and attractive packaging makes the product batik Surabaya interesting local buyer in Surabaya and outside Surabaya, because the motive Surabaya cultural show like a rooster, clover flowers, fish and shark and crocodile. Ease of getting a product that is already marketed through the SHG’s Batik exhibitions in malls and

exhibitions held Dekranasda at national and international level. Likewise with the packaging already placed the identity of batik such as address and phone number.

Another factor in the products value that purchase incentives given to members who can sell and market more outside than the benefits to be obtained from SHG'S members. As a form of work more on marketing and sales of the members who sell outside the SHG's program received the incentive. As for product modifications not 100% because if batik modified it in any mixture of batik and machine. The result was different and of course, the time it takes much longer. Packaging modifications have been started by SHG's with unique packaging and elegant yet the prices remain affordable.

### Conclusion

Batik that produced by SHG's creative reflect cultural values and characteristics of the city of Surabaya. Increase productivity in Surabaya batik craftsmen formed the performance models based on the perspective of product value and firm value. Criteria of the firm value at the top of SHG'S are sales growth, organizational structure, bookkeeping, regular meetings, member savings and partnerships. Value of products consists of product excellence, ease of getting the product, purchase incentives and product modifications.

In the perspective of firm value was found that an increase in sales growth after training. The clear divisions of job descriptions also help improve the organizational structure of SHG's. In the process of bookkeeping SHG's mostly been doing the bookkeeping that allows them to calculate the cash inflows, cash, and other expenses. SHG's coordination was created when they often conduct regular meetings between members. In order to manage the finances of each member of SHG's also have savings and cooperate with other groups such as the PKK.

In the perspective of product value obtained product excellence that reflect the cultural characteristics of the city of Surabaya and Surabaya like motifs and bold colors. Besides the implementation of incentive for each member of SHG's to market its products is a positive point in order to increase product sales.

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## SUPPLIERS STRUCTURE AND PERFORMANCE EVALUATION SUPPLIER NETWORK STAGE IN THE SUPPLY CHAIN MANAGEMENT OF RICE IN SOUTH SUMATRA

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### Abstract

This study aimed to identify the mapping patterns emerge and supply chain structure in stages supplier of rice supply chain management network in South Sumatra and the analysis of the problems in the structure. In addition, this study tried to measure the performance of the supply chain network supplier stages of the rice supply chain management in South Sumatra. Furthermore, the results of this research are used as the basis for consideration of supply chain performance improvement, especially phase network supplying the rice supply chain management in South Sumatra on indicators that have problems. Data collection is done by direct interview, questionnaire, and observation. Analysis of data using qualitative descriptive and analytical tools Supply Chain Operations Reference (SCOR). Based on these results, the first, Based on interviews, the fundamental problems of farmers as a major producer of rice supply chain in South Sumatra are limited in the information when they harvest grain prices on the supply chain network supplier this stage. Second, based on the results weighted scoring system OMAX obtained total index value of 7.67, so the TLS are in the yellow category which indicates that the company's performance in South Sumatra rice agro-industry in the rice supply chain as a whole has not reached the expected performance although the result is close to the target set. Third, there needs to be improvement, particularly in the five KPIs that need to get immediate corrective action, ie deviation actual demand with demand forecasting results, the amount of raw materials that can be met by the supplier, the amount of raw materials that do not match the quality and specifications are determined, the number of complaints from suppliers, as well as the number of production planning.

**Keywords:** *Suppliers Structure, Performance Evaluation, Suppliers, Suplly Chain of Rise*

### 1. Introduction

At the level of supply chain management recognized three stages of the supplier network, integrated enterprise, and distributive network. These three stages together with the opinion of Anatan (2008) which divides the supply chain management in three parts, namely, first, the upstream supply chain, which includes suppliers first tier section of organizations and suppliers in it has nurtured a relationship. Second, the internal supply chain, part of which includes all the processes used by organizations in transforming inputs into outputs delivered by the supplier, from the time the material is entered in the company until the product is distributed outside the company. Third, the downstream supply chain, part melingkup all the processes involved in the delivery of the product at the customer end.

Supplier network stage or part of upstream supply chain is no less important in the next two stages in the supply chain management for businesses agrindustri rice. Because of good practice in stages supplier network in supply chain management is a necessity in the development of agribusiness rice in South Sumatra. Phase supplier network in supply chain management are demanding an increase would care quality and coordination across the organization as well as the need for the smooth flow of products and capital flows in the complete cycle of production processes of farmers as producers of raw materials once

the supplier, who followed the actor chain of suppliers in the supply chain of rice company to the rice industry in South Sumatra. That is why, in the stage of supplier networks in the rice supply chain management in South Sumatra is not limited to purely transactional relationship, but rather a collaboration with institutions and actors as well as the rice agrindustri company later stage, should be mutually beneficial enterprise integration.

The process of evaluation and selection according to Sarkis and Talluri (2002), is needed in finding and determining the right suppliers, especially those that are able to provide quality products at a time proper service, satisfying and the price is right by the number and exact time of receipt. This paper focuses the discussion on the structure of the supplier and the supplier network performance evaluation stage in solving problems in the agro-industry supplier of rice in South Sumatra. An increase in market demand led to participate bertambahannya raw material needs while also increasing the percentage of material costs of production.

Based on the background of the problems mentioned above, there are some problems studied in this paper, namely: What is the pattern of supply chain structure in stages supplier of rice supply chain management network in South Sumatra? How is the performance of the supply chain network supplier stages of the rice supply chain management in South Sumatra? What recommendations can be given in supply chain performance improvement phase network supplying the rice supply chain management in South Sumatra?

This study aimed to identify the mapping patterns emerge and supply chain structure in stages supplier of rice supply chain management network in South Sumatra and the analysis of the problems in the structure. In addition, this study tried to measure the performance of the supply chain network supplier stages of the rice supply chain management in South Sumatra. Furthermore, the results of this research are used as the basis for consideration of supply chain performance improvement, especially phase network supplying the rice supply chain management in South Sumatra on indicators that have problems. An improvement in the performance stage of supplier network, is needed, especially in the five KPI that need to get immediate corrective action, is deviation actual demand with demand forecasting results, the amount of raw materials that can be met by the supplier, the amount of raw materials that do not match the quality and specifications specified, the number of complaints from suppliers, as well as the number of production planning.

There are no similar research, the rice supply chain management is done in South Sumatra. Though this research is very important, considering the South Sumatra province declared as National Food Barn. Therefore, research on the rice supply chain management is a form kritisiasasi, evaluative, and to provide an alternative for the province as the national food, especially the issue of equity and distribution of rice among the district rice production and non-production of rice in the South Sumatra.

## 2. Literature Review

Rice is the main source of calories for some communities in Indonesia, so that the current share of rice in total calorie consumption reached 54.3%. This means that more than half of their calorie intake comes from rice. According Harianto (2001) there are two main parameters of demand for rice in Indonesia, namely rice demand is strongly influenced revenues and rising rice price fluctuations largely determine consumer attitudes to the amount of rice consumed. Interestingly, according to Khudori (2005), the government's task to formulate a rice policy that could benefit all parties, obviously not be easy. When the price of rice soaring, the government should be able to halt the price. Conversely, when the price of rice plummeted, the government should be able to lift

prices. The success of balancing the pendulum motion "braked and raised" the price of rice is at stake the credibility of the government. While on the other hand, the issue of rising and falling prices of rice, will bring in a dilemma among people in rural areas who plays as a consumer and producer of rice. The fall in the price of rice would benefit subsistence farmers who were net buyers, by contrast, farmers are net sellers consumers will be harmed if the price of rice declined.

South Sumatra, which proclaimed itself as one of the provinces nationwide barns are not independent of the availability of potential land resources are quite varied, ranging from irrigated land, rainfed, tidal marsh, lowland and upland. In addition also has other excellent commodities such as corn, peanuts, cassava, sweet potato, vegetable crops and fruits. Therefore, the Government of South Sumatra Province are trying to optimize and improve the business of food security (Food Security Agency of South Sumatra Province, 2011).

Supply Chain Operations Reference (SCOR) is a reference model of supply chain operations. SCOR is able to map the parts supply chain. According Pujawan (2005), basically SCOR is a model-based process. Under SCOR, Supply Chain Management is defined as the process of planning (plan), procurement (source), manufacturing (make), delivery (deliver), and return (return). Weighting method used is Analytical Hierarchy Process (AHP). Analytical Hierarchy Process (AHP) is used to rank alternatives based on several criteria laid out in SCOR. This model has three hierarchy process shows that SCOR perform the decomposition process from the general to the detail. The first level, defining the number, scope, and content of the supply chain and how performance is measured. The second level where each of the above processes is further illustrated by the type of process. The third level contains the definition of business processes used for the transaction of sales orders, purchase orders, work orders, the right of return and forecasting.

This study is based on research Sidarto (2008) on the measurement of activities in supply chain management that can be done by combining a model of performance measurement SCOR and the POA, which include cost, time, capacity, productivity, utility, out-come, reliability, responsiveness, flexibility, cost, and assets. While Ervil Rico (2010) conducted research on the design of performance measurement systems that can be done by developing the Balanced Scorecard model that generates supply chain performance indicators derived from the development of performance indicators of the company. Both studies produce a picture of the internal condition of the company in the position of best in class. Meanwhile, research Wiyono and Sutopo (2009), inspired associated with the provision and distribution of information distribution post-harvest rice commodities by building a distribution model based on SCM.

### 3. Method

This research was conducted in the province of South Sumatra with a focus on three areas namely rice industry Ogan Komering Ilir (OKI) Regency, Ogan Komering Ulu Timur (OKUT) Regency, and Banyuasin Regency, as well as the city of Palembang. The location was chosen on the basis of purposive sampling in analyzing the supply chain process at the stage manajemen supplier network. The data collection was conducted over seven months, October 2015- May 2016 in collecting secondary and primary data. Data collection is done by direct interview, questionnaire, and observation. Analysis of data using qualitative descriptive and analytical tools SCOR. SCOR method used in measuring the performance of the supply chain management, especially the phase of supplier network that requires criteria performance attributes such as reliability and responsiveness with respect to stage supplier network.

#### 4. Findings

##### 4. 1. Mapping the Supply Chain At Level Supply Chain Supplier Network

This study examines the performance of each of the supply chain involved in the processing of the supply chain of rice at stages Supplier network in the province of South Sumatra. To determine the best performance will be benchmarking against rice agro-industry enterprises in South Sumatra, as table 1 below:

Table. 1. Rice Agroindustrial Company's Name in Palembang

No	Company's Name	Address	Production Capacity/Year	Product Type	Status
1	PT. Karya Jaya Mandiri Perkasa	Jl. Muara Kelingi RT 10 Kelurahan Karya Jaya Kertapati Subdistrict Telp. (0711) 7037829	6.000 Ton	Rice Packaging	Active
2	CV. Sukses Karya Mandiri	Jl. Brigjend Yusuf No. 22 RT 23 Musi II Karya Jaya Subdistrict Kertapati district Telp: 081278528888	3.600 Ton	Rice Packaging	Active
3	CV Lintas Indo Comoditi Mandiri	Jl. Mayjen Yusuf Singadikane RT 01 RW 01 Musi II Keramasan Subdistrict Kertapati district	20.000 Ton	Rice Packaging	Active
4	PD Piramid Sembada	Jl. Ir. Sutami (ex Pabrik Ban Tepi Sungai Musi) RT 22	6.000 Ton	Rice Packaging	Active



		Sei Selincah			
		Kalidoni District			

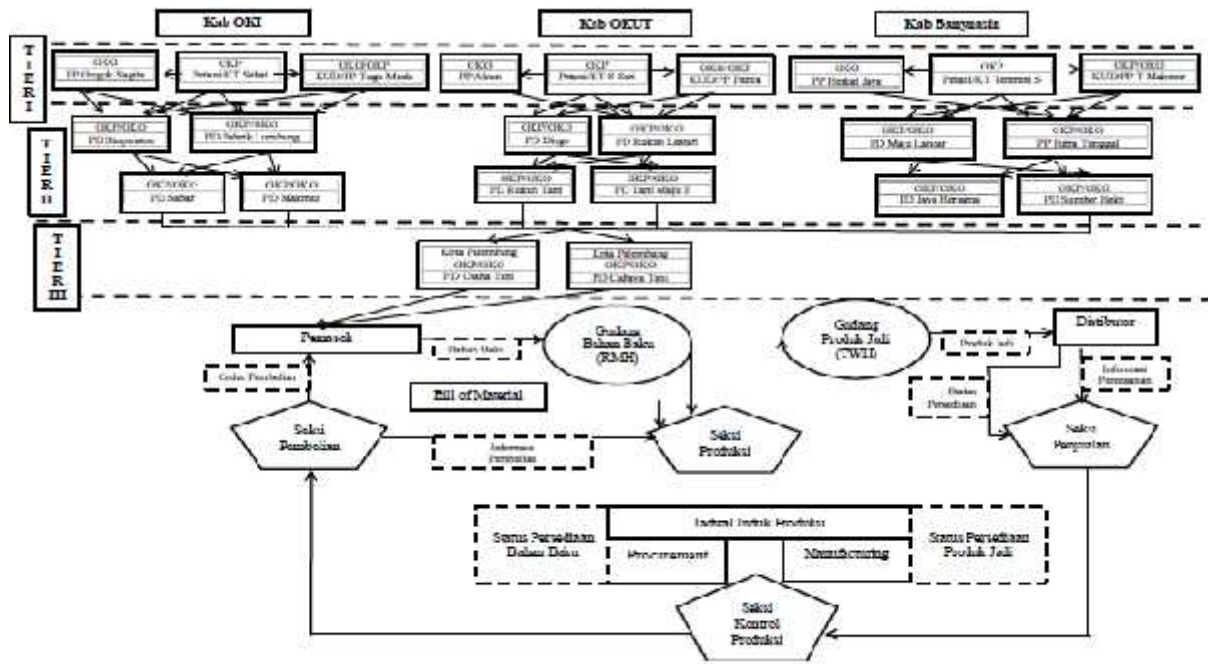
Source: Disperindag South Sumatra Province, 2014

Based on these data, do benchmarking against the companies which will be selected as the sample the researchers used multi-stage sampling to see the rice supply chain mapping in South Sumatra. Selection of the supply chain mapping samples be two stages, according to the stage of network supplier in the rice supply chain management, namely: First, Stage I determine the starting point of the supply chain of rice in South Sumatra. Using purposive sampling method, from the four companies of the rice industry in South Sumatra, and then acquired the company PT. Karya Jaya Mandiri Perkasa as samples. Selection of the rice company in consideration of rice products packaging as a product of secondary processing of the products taken from local raw materials of South Sumatra Province, namely Ogan Komering Ilir Regency, Ogan Komering Ulu East (OKUT) Regency and Banyuasin Regency. In addition, PT. Karya Jaya Mandiri Perkasa is an agroindustrial active until the time of the study. Agroindustrial company PT. Karya Jaya Mandiri Perkasa is elected will be measured performance.

Secondly, Stage II is the determination of institutions associated with the supply chain. Once elected agro-industry supply chain used as a starting point, then proceed with the snowball technique in selecting the rare characteristic unit and additional units indicated by the respondents before (Sarwono, 2006). That is the determination of the institutions involved in a supply chain flow of rice in South Sumatra can be known based on information supplied by another institution.

The use of a snowball technique was conducted to determine the flow of product, financial and supply chain information from suppliers of rice and rice agro-industry companies that have been previously and the supply chain of raw material origin agro-industries. The supply chain is observed as farmers, farmers' groups, cooperatives and Farmers Group Association, as well as rice mills, traders sub-district and district capitals and major traders in the city of Palembang who became suppliers to the rice agro-industry company PT. Karya Jaya Mandiri Perkasa. Based on interview data, for submission being a supplier to the PT. Karya Jaya Mandiri Perkasa, first prospective suppliers deliver raw materials in accordance with the specifications demand, price quotes, and ask for the complete sample with quality analyzer. After the approval of PT. Karya Jaya Mandiri Perkasa, the supplier can already receive PO.

Based on data from the supplier of rice on the system behavior should be seen in the rice supply chain PT. Karya Jaya Mandiri Perkasa. Overall, you need to know in advance the flow of data and material in a clear and detailed. Therefore, it is necessary mapping data and material flow in several levels. The first level illustrates the flow of data and material in the system in general. The second level illustrates the flow of a more detailed, and so on until the flow can no longer be specified.



Based on Figure 1 above, the flow of the commodity supply chain of grain and rice in South Sumatra found four aliran rice supply chain in South Sumatra, namely: First, farmers> millers> small traders> Wholesalers> companies; Second, farmers> small traders> millers> wholesaler> companies; Third; farmer> mills> Wholesalers> companies. And fourth, the farmer> traders> Wholesalers> companies. For more details the structure of the flow of grain and rice supply chain can be described as follows:

Based on questionnaire data, flow data obtained rice supply chain centers in three districts of South Sumatra rice, as follows, namely: At first the rice supply chain flow, farmers (46%) sell grain to millers. At the beginning of the process, in grain rice mills grouped and undergo special treatment include the drying process into milled rice (GKG), milling, and packaging are still tentative. The rice that has been packed in the meantime, further distributed to wholesalers central district and city. Furthermore, from wholesalers, rice distributed to rice agro-industrial company, PT. Karya Jaya Mandiri Perkasa for further processing. Many farmers sell their produce directly to millers by the kilogram system (Per Kg) on the flow of the supply chain of rice in South Sumatra caused a few, namely: first, generally there is a new trend in which rice mills also builds storage and drying of rice near the area of rice fields , so that farmers find it easy to make the process of selling the harvest. Second, prices received by farmers in the rice mills to sell grain was higher when compared to slash system generally performed in the second stream supply chain in South Sumatra. The selling price to millers Rp. 4500, / Kg dry grain harvest (GKP).

The flow pattern of the second supply chain, farmers (24%) drain the rice to traders who also berposisi as small traders accomplice millers. This small traders, usually consisting of farmer groups or individual traders themselves, they distribute the grain to millers. Based on the interview, generally the flow of the supply chain have both lower because farmers sell their crops to traders conducted with a slash. Apparently, the sales system with a single stroke, according to the respondents regarded as purchases are not transparent, where farmers sell their crops in the field without knowing the amount of grain production of the crop gets. In this case the farmer not to harvest because the harvest is done by traders after the purchase price was agreed. If in the average sales price of grain received by farmers to slash system that is Rp. 4220, - / Kg of dry grain harvest (GKP).

In the third stream supply chain, farmers (18%) sell grain directly to millers in the form of dry grain harvest (GKP). In the rice milling grain in the process of becoming the next rice distributed to wholesalers. From a wholesaler and then the rice distributed to PT. Karya Jaya Mandiri Perkasa. Next the flow of the supply chain is actually almost equal fourth with three channels, namely the farmers (12%), doing stream supply chain to sell their crops, dried grain harvest, through intermediate traders in the capital city district or regency.

According to the interview data, the lack of treatment of the flow of the supply chain the third and fourth than the first and second flow, due to the tendency of farmers are easier to sell dry grain harvest (GKP) than dry grain store (GKS). Based on the interview, the difficulties of farmers in producing dry grain store (GKS) due to two things. First, the difficulty in managing indirect sales for direct sales dominate the supply chain. Secondly, often the urgent need for farmers so they prefer to sell directly from the store the harvest. Third, the lack of storage facilities at the same time adequate grain drying in the farmhouse. These three things, which often puts the crops these farmers in a weak bargaining position, in addition to falling prices is hard to avoid.

Interestingly, according to the interviews, the lack of involvement of the Village Unit Cooperatives (KUD) in the flow of the supply chain of rice is based on data from interviews and observations in the field due, namely: first, KUD rarely take part in the trade sector of commodity grain and rice in the supply chain in South Sumatra the. This, it turned out in line with the opinion of Surono (1998), that the Village Unit Cooperatives in Indonesia, including farmer groups, not many have a role in the marketing sector, including in commodity grain and rice.

Second, the role of covert, where KUD also act as millers. As KUD Tugumulyo in Tugu Muda village, OKI Regency or KUD Makmur Telang in Muara Telang, Banyuasin Regency. Third, KUD in its operations, including farmer groups in it, based on data from interviews banyak have a significant role in the technical field, good cultivation, and distribution of agricultural inputs. The interview data, have in common with research Purnomo and Sidik (1991) in Karawang Regency. According to the study, less involvement of Village Unit Cooperatives, Farmers Group and Logistics Agency, Bulog, due to the tendency of the price of grain in the market is higher than the price set by the government. These conditions make KUD or Bulog reduce role in the purchase of grain and rice to farmers, including in the rice supply chain in South Sumatra.

Based on interview data, it turns out the map of the rice supply chain flow in the South Sumatra, mostly farmers still face some problems in memasaran crops. The main problem is commonly found on the farmers as primary producers in the supply chain of rice in South Sumatra are keterbatas them in knowing the information when they harvest grain prices in financial flows in the supply chain network supplier this stage.

#### **4.2. Stage Performance Evaluation of Supply Chain Supplier Network Rice**

The initial stage performance evaluation of supply chain network supplier of rice in South Sumatra, is done by submitting the initial questionnaire containing 37 indicators of performance based on the Key Performance Indicator (KPI). The questionnaire was given to the management of PT. Karya Jaya Mandiri Perkasa who know the problems and conditions in the supply chain management company to do the validation. KPI made by SCOR approach based on the perspective of the major supply chain plan, source, make, delivery, and return. Once indicators specified in KPI then performed the validation of the indicators in the KPI that are expected to represent the supply chain performance of PT. Karya Jaya Mandiri Perkasa in supply chain management, especially the phase of supplier network.

Further weighted using Analytical Hierarchy Process (AHP) and the calculation of scoring system using Objective Matrix (OMAX) and analysis Traffic Light System (TSL). Analysis of Traffic Light System (TSL) was conducted to determine the performance indicators KPI entered categorized in green, yellow or red. If there is a performance indicator in the category of yellow and red, then it should be given remedial actions, for the achievement of its performance is still below target.

Based on data from the questionnaire KPI performance indicators in the calculation of weighted first weighted perspective. The first calculation, the weighting perspective performed at level 1 based on five perspectives Supply Chain Operations Reference (SCOR), the plan, source, make, deliver, and return. From the data obtained, the results of weighting perspective can be seen in Table 3 below, namely:

Table 3. Weighting Perspective

Perspective	Weight
Plan	0,220
Source	0,326
Make	0,228
Deliver	0,144
Return	0,082
Jumlah	1
<i>Inconsistncy Ratio</i>	0,05

Based on Table 3 can be seen that for weighting the five perspectives in SCOR showed inconsistency has a weight ratio of 0.05. Weight value weighted inconsistency ratio in five perspectives in SCOR is acceptable because it has met the maximum limit of inconsistency ratio, which is equal to 0.1.

After making the weighting of each dimension within each KPI, then calculate the scoring system. Calculation scoring system using Objective Matrix (OMAX) combining the criteria of productivity into a form that is integrated and related to each other. This model involves all levels in the company, ranging from subordinates to superiors on rice agroindustrial company PT. Karya Jaya Mandiri Perkasa. Results scoring system for each perspective plan in the first dimension of SCOR can be seen in Table 4 below:

Table 4. Results Weighting Dimensions

Perspective	Dimensions	Weight
<i>Plan</i>	<i>Reliability</i>	0,700
	<i>Responsiveness</i>	0,300
	<i>Total</i>	1
	<i>Inconsistency</i>	0

	<i>Ratio</i>	
<i>Source</i>	<i>Reliability</i>	0,550
	<i>Responsiveness</i>	0,450
	<i>Total</i>	1
	<i>Inconsistency Ratio</i>	0
<i>Make</i>	<i>Reliability</i>	0,750
	<i>Responsiveness</i>	0,250
	<i>Total</i>	1
	<i>Inconsistency Ratio</i>	0
<i>Deliver</i>	<i>Reliability</i>	0,500
	<i>Responsiveness</i>	0,500
	<i>Total</i>	1
	<i>Inconsistency Ratio</i>	1
<i>Return</i>	<i>Reliability</i>	0,650
	<i>Responsiveness</i>	0,350
	<i>Total</i>	1
	<i>Inconsistency Ratio</i>	0

In Table 4 it can be seen that the value of the lowest scoring system currently on the achievement of KPI P1B with a score of 3.48 and KPI achievement P1e with a score of 3.52. Because the overall rate is far below the target and are in the red category, then the KPI should be given remedial action to improve its performance.

After a weighted scoring system on a five perspectives in the rice supply chain in South Sumatra, then the result of supply chain performance measurement rice supplier

network management phase PT, Karya Jaya Mandiri Perkasa. For the rice supply chain performance measurement phase of the company's overall network supplier can be seen in Table 5 below, namely:

Table 11. Performance measurement stage supply chain network supplier rice agroindustrial company PT. Karya Jaya Mandiri Perkasa

No.	Perspective (A)	Dimensions (B)	KPI	Value	VxB (C)	AxB (D)
1.	Plan (0,220)	Reliability (0,700)	P1b, P1c, P1e, P1f, P1g	7,40	5,18	2,41
		Responsiveness (0,300)	P2a	10	3,00	
2.	Source (0,326)	Reliability (0,550)	S1a, S1b, S1c, S1d, S1e, S1f, S1g, S1h, S1i, S1j	6,18	3,39	2,03
		Responsiveness (0,450)	S2a, S2b	8,72	3,65	
3.	Make	Reliability	M1b,	7,25	5,64	1,67

	(0,228)	(0,750)	M1d, M1e, M1f, M1h, M1i			
		<i>Responsiveness</i> (0,250)	M2a, M2b	8,32	2,08	
4.	<i>Deliver</i> (0,144)	<i>Reliability</i> (0,500)	D1a, D1b, D1c, D1d	7,64	3,82	1,20
		<i>Responsiveness</i> (0,500)	D2a, D2b	8,02	4,01	
5.	<i>Return</i> (0,082)	<i>Reliability</i> (0,650)	R1a, R1b, R1c, R1d	9,12	5,92	0,26
		<i>Responsiveness</i> (0,350)	R2a	10	3,50	
Index Total						7,67

Based on data from Table 5 above and after the measurement of the performance of the supply chain as a whole network supplier stages in PT. Karya Jaya Mandiri Perkasa, then obtained a total Index score of 7.67. Based Traffic Light System (TLS), then the total value of the Index are in the yellow category. This means that the rice supply chain performance at PT. Karya Jaya Mandiri Perkasa still showing supply chain performance of companies as a whole has not reached the expected performance although the result is close to the target set. Therefore, it is expected the management of PT. Karya Jaya Mandiri Perkasa have to be careful with their various possibilities that can degrade the

performance of supply chain companies and should keep doing improve performance on an ongoing basis.

Based on the data and the calculation result scoring system by using OMAX on five perspective of supply chain at the stage of supplier network, known from 37 KPIs, there are 25 KPIs included in the green category, 7 KPI that fall into the category of yellow, and 5 KPI are in the category red. Based on this, the green category KPI indicates performance has already reached the target set by the company, so it should be maintained and even improved. However, to KPIs that have not reached the target, the KPI on a red and yellow categories should be given remedial action to improve the supply chain performance of the company. But that needs to be given priority is the improvement of KPI on the red category for the overall rate is far below the target. If the KPI is not immediately given remedial actions, then the rice supply chain performance in the company will decrease and also adversely affect the production activities that take place in the company of PT. Karya Jaya Mandiri Perkasa.

KPIs need to get immediate remedial actions are, among others: first, KPI deviation of actual demand with demand forecasting results. Second, KPI amount of raw materials that can be met by the supplier. Third, KPI amount of raw materials that are not in accordance with defined specifications, and Fourth, KPI number of complaints from manufacturers and fifth, KPI amount of production planning. Based on several KPIs that should be corrected, then given several recommendations that should be undertaken by rice agroindustrial company in South Sumatra in line with the results of the analysis Traffic Light System (TLS) that supply chain performance indicators networknya supplier stage is still in the red category.

First, the KPI deviation of actual demand with demand forecasting results, considered the problem arises because the rice agro-industrial company in South Sumatra generally do not have and apply forecasting methods to forecast the demand for rice supply supply chain flow. If there is any forecast made more use of the institution's top management on request periodic supply data earlier. Techniques like these perceived result is still less accurate and precise in fulfilling the raw materials for the production company. In addition, demand for each type of rice products for raw materials actually processed each month always fluctuated due to weather factors. During the rainy season the product demand tends to decrease while the dry season increased demand.

Recommended fixes to this problem, companies need to have employees who are trained at the same time be able to apply appropriate methods of forecasting, appropriate and accurate to demand for raw materials based on the data in the previous period. The pattern of seasonal demand data categorized companies and has the trend, so that the method can be applied in forecasting demand is the method of Winter.

Second, the KPI amount of raw materials that can be met by the supplier, is considered to still have a problem because most suppliers in the supply chain of rice has limitations and can not meet the amount of supply of raw materials in accordance with the number of orders the company. Constraints rice supply of raw material due to factors unforeseen at the time of producing the raw material suppliers, such as damage to production machines in pinggilingan in tier 1 and declining labor productivity in the secondary distributors. Furthermore, some recommendations for improvement is the need to improve and reinforce the memorandum of understanding (MOU) with the supplier companies, suppliers, such as the sanctions and penalties for suppliers who do not meet the amount of raw material supply orders.

Thirdly, the KPI amount of raw materials that do not fit the specified quality specifications from suppliers, such as defects in materials or their fleas rice. For this issue recommended their information written documentation provided to all suppliers. In



addition, the company should also provide rewards for pamasok who meet demand expectations. For example, by rewarding the price a little expensive for good quality rice. Fourth, KPI's indicators number of complaints from suppliers, suppliers generally give a complaint to carelessness of employees in the company in charge of the rice industry to reconsider the rice supplied to the company. Therefore, there needs to be caution employees to reconsider the rice supplied. Fifth, to KPI amount of production planning also affect the flow of the existing supply chain. Because this often happens stocked memicuh supply coming out. One of the reasons such as the need to season rice production is likely to increase over the Eid seasons of the other. Recommendation, the necessary historical data that takes into account seasonal factors.

## 5. Closing

Based on the results of research and discussion, there are some conclusions drawn.

First, based on the mapping of the rice supply chain structure in stages of supply chain management network supplier of rice South Sumatra, there are four structures rice supply chain flow. (1) farmers (46%)> millers> traders> Wholesalers> companies; (2) Farmer (24%)> traders> millers> wholesaler> companies; (3) Farmer (18%)> mills> Wholesalers> companies; (4) Farmer (12%)> traders> Wholesalers> companies. Based on interviews, the fundamental problems of farmers as a major producer of rice supply chain in South Sumatra are limited in the information when they harvest grain prices on the supply chain network supplier this stage.

Second, the result of supply chain performance measurement phase network supplying the rice supply chain management in South Sumatra with SCOR method shows that there are 25 KPI categorized as green, yellow category 7 and 5 red category. For the green category needs to be maintained, even improved continuously. While the category of yellow, red and even necessary repairs as soon as possible. Based on the results weighted scoring system OMAX obtained total index value of 7.67, so the TLS are in the yellow category which indicates that the company's performance in South Sumatra rice agro-industry in the rice supply chain as a whole has not reached the expected performance although the result is close to the target set.

Third, there needs to be improvement, particularly in the five KPIs, namely deviation actual demand with demand forecasting results, the amount of raw materials that can be met by the supplier, the amount of raw materials that do not match the quality and specifications are determined, the number of complaints from suppliers, as well as the number of production planning.

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## LOCAL GOVERNMENT FINANCIAL PERFORMANCE FACTORS: DECENTRALIZATION IMPACT IN INDONESIA

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### Abstract

This study aims to determine factors that effecting Financial Performance of local government (regional autonomy and parent regions) in South Sumatera province, Indonesia. Budget Realization Report from 2009 to 2013 that inspected and audited by BPK used in this research as secondary data. Data collected from 8 (eight) regional autonomy and 6 (six) parent regions. The analysis technique is multiple linear regression models estimated by ordinary least squares (OLS) with fixed effect model. Result shows that Local own-source revenue (PAD), Capital Capital Expenditure, Operational Expenditure simultaneously significant effect on Independence Ratio and Effectiveness Ratio of Regional autonomy and Parent Regions. Furthermore, they also simultaneously significant effect on Development Expenditure Activity Ratio and Operational Expenditure Activity Ratio of Regional Autonomy and Parent Regions in South Sumatra.

**Keyword:** *Autonomy, Parent regions, Independence Ratio, Effectiveness Ratio, Activity ratio.*

### Introduction

In the late 1990s, decentralization in Indonesia became more of a political imperative. Establishment of regional autonomy in Indonesia is one of implementation decentralization in Indonesia. The formation of regional autonomy carried out in order to accelerate the economic growth of the region to empower local potential based on economy. Based on Law No. 22 of 1999 that changed to Law No. 32 of 2004, the establishment of autonomy region can be incorporated of some regions or part of a region into two regions or more. The two laws drastically altered the national-subnational relations by transferring powers, taxes, funds, and personnel to the regions. As a result of such massive decentralization, the deconcentrated agencies of central government have, for the most part, been abolished, but provinces continue to represent the center in certain instances (Widodo, 2009).

According to Brodjonegoro and Asanuma (2000), there are some regulations in the new laws; first, under the new laws, the central government's power is substantially to be devolved to the second level local governments, whose administrative, managerial and planning capabilities are inadequate. Secondly, a major part of local governments' revenue would rely on the sharing of natural resources taxes, which would aggravate horizontal imbalances. Thirdly, there would be thus a need for large-scale fiscal transfers, which would strain the central government's budget. Lastly, given the enormity of the tasks ahead, a more gradualist approach is preferable. The region that could be implement autonomy has some characteristics. Halim (2008: 167) explains that the main characteristic of a region that is capable of implementing autonomy, namely (1) financial capacity that means the area should have authority and ability to explore the financial source, manage and use sufficient finances to finance the government implementation, and (2) the dependence on central assistance

should be as minimal as possible, so the local own-source revenue (PAD) should be part of the largest financial resources so the government's role has become even greater.

The regulations has consequence to the change in local government fiscal management so financial performance measurement is important to assess transparency and Accountability (accountability) of realization report of local government budgets. The financial performance of local governments is the ability of regions to manage financial their own resources to meet their needs to support the government system, community service and local development by not depend entirely on the central government and have flexibility in using funds for the benefit of local communities within the limits prescribed legislation (Susantih, 2009: 6). Analysis of the financial performance of local governments is not only useful as an evaluation, but also to help understand and interpret the financial statements of the local governments.

Analysis of financial performance and the factors affecting financial performance becomes the important points. Koen et al (2004) tensions between different levels of autonomy appear in practice, indicating the need for an combined and integrated study of the effects of the different dimensions of autonomy on performance. Groves et al (2001), indicated that variables that affect the financial performance of local governments are financial indicators of local governments affected by both financial factors, environmental factors and organizational factors. Moreover, Steven and McGowen (1983) indicated that financial factors (financial factors) consists of revenue, expenditure, operating position, debt structure, unfunded liabilities, and the condition of capital fund and the financial trend is influenced by many factors such as population and income sources for local governments. Furthermore, Hari (2006) stated there is significantly influences both regional economics growth and regional own revenue. It also finds that the government's decision to allocate the greater capital expenditure to the supported economic growth infrastructures will brings more regional own revenue.

Moreover, Stine (1994) The local government revenue response to federal aid was found to be asymmetric. The reduction in federal aid induced a reduction in own-source revenue. The results support the notion that taxpayers prefer fiscal restraint when permanent loss of aid occurs. Furhetmore, Rondinelli et al (1989) An integrated political-economy framework that draws from the most useful aspects of each set of approaches can provide policy analysts with a more powerful set of concepts and methods for designing and implementing decentralization policies more effectively. Finally, Nick Devas (1989) stated that in order local governments have optimal ability to levy local taxes in region, it would need to consider regional taxes that are own-sources of income to create efficiency and effectiveness in tax collection.

Furthermore, Lewis (2003) stated that revenue generated by new taxes and charges would appear to be negligible; even under the most optimistic of assumptions, any increase in regional own-source revenues that may have resulted from the creation of new taxes and charges would be very small relative to overall budgets. Moreover, Research result in some áreas in Indonesia have different result. Financial performance of Malang ( a city in Western Java) is basically good, when it is viewed from PAD Effectiveness Ratio, Effectiveness of Local Taxes and Expenditure Efficiency Ratio, however ratio of Regional Financial Independence, Degree Contributions enterprises and Analysis of Expenditure Growth has not shown in the maximum performance (Sidharta, 2008). Moreover, Yanuar (2009) conducted a

study Bangka Belitung ( a province in Sumatera) has mixed result; good, moderate, and not good financial performace.

Implementation of autonomy has brought impact of expansion in one of high income provinces in Indonesia, South Sumatra. It locates in the southern part of Sumatra Island, spans 91,592.43 km<sup>2</sup> and had population more than 8 million people. After implementation autonomy regulation, from 2001 to 2013, South Sumatra became to 17 districts/municipalities from 10 municipalities/regencies. The new regional autonomy are Pagar Alam, Prabumulih, Lubuk Linggau, Banyuasin, Ogan Ilir, South OKU, East OKU, Empat Lawang, Penukal Abab Lematang Ilir Regency (PALI), Musi Rawas North. While the parent regions is Lahat, Muara Enim, Musi Rawas, Musi Banyuasin, Ogan Komerling Ulu (OKU), Ogan Ilir (OKI) (BPK RI, 2013). The comparison revenue between autonomy and parent regions as can be seen as follows:

**Table 1: PAD Realization on Total Revenue (%)**  
**Regional Autonomy and Parent Regions**  
 (South Sumatera, 2009-2013)  
 (in thousand IDR)

Parent Regency (R)/ Municipality (M)	Ave rage	Autonomy (Regency(R) / Municipality (M)	Ave rage
Lahat (R)	5,42	Pagaralam (M)	4,38
Muara Enim (R)	6,79	Prabumulih (M)	5,20
Musi Rawas (R)	4,53	Lubuk linggau (R)	4,77
Musi Banyuasin (R)	2,84	Banyuasin (R)	3,00
Ogan Komerling Ilir(R)	4,09	Ogan Ilir (R)	2,85
Ogan Komerling	5,69	OKU Selatan (R)	2,47

Ulu(R)			
		OKU Timur (R)	2,81
		Empat Lawang (R)	2,67
Average	4,89		3,51

*Source : BPK RI Prov. Sumatera Selatan.*

Based on the tables above, it can be seen the comparison of percentage of local own-source revenues to total revenues is South Sumatra, with an average of 4.89 percent for Parent regions and 3.51 percent for regional autonomy. This means that the level of financial dependence of parent regions to central government aid is lower than the regional autonomy but it is still in very poor category.

The high dependence of regional finance of regional autonomy especially in South Sumatra province to the central government, as well as the pressure in collection of local own-source revenue in South Sumatra are some problems of autonomy in this province. Optimally, the fiscal balance transfer funds that obtained local government finance in South Sumatra Province should be allocated to expenditures which will increase local own-source revenues. However, in reality it indicates, local government finance and its Parent regions tend to ignore the excavation Local own-sources as the main base of local revenue and making the balance transfer funds as substitutes. Based on the motivation above, this study aims to determine factors that effecting financial performance of regional autonomy and parent regions in South Sumatera to accelerate the economic growth of the region to empower local potential based economy.

## Literature Review

### 1. Agency theory

Jansen and Meckling (1976) defines the agency theory as the relationship between the agent (management of a business) and Principal (business owners). In the agency relationship there is a contract in which one or more persons (the principal) govern another person (the agent) to perform a service on behalf of the principal and authorized agent to make the best decisions for the principal. In public sector organizations, especially local government, agency relationship arises between the local government as an agent and Parliament as a principal. If explored further, then the parliament is itself an agent of the public / citizens in the area. In this agency relationship, the public / citizens apply as principal authorizing Parliament (agent) to monitor the performance of local governments. Accountability becomes a logical consequence of the relationship between the agent and the principal.

### 2. Regional Expansion

Implementation of the autonomous regional government, according to Law No. 32 of 2004 on Regional Government aims to accelerate the realization of people's welfare through

improvement, service, empowerment, and community participation, as well as increased competitiveness of the region with regard to principles of democracy, equity, justice, privilege and specificity of a region within the Unitary State of the Republic of Indonesia. The objectives of the expansion under PP 129 of 2000 are; increase in service to the community, accelerating the growth of democratic life, accelerating implementation of regional economic development, acceleration of region management potential, improvement of harmonious relations between the central and local regions.

### **3. Regional Financial Accounting and Local Government Budget**

According to Halim (2008: 42), Regional Financial Accounting is process of identifying, measuring, recognition, and reporting of economic transactions (financial) of local government entities-governments (countries, municipalities, or provinces) which serve as information for economic decision making that required by external parties entity (country, city, or province). Moreover, Local government budgets is prepared to improve local empowerment and welfare of the community. Through budget, an area can maximize local own-source revenue, and spend those funds in appropriate programs and activities that have been specified in the regulations. According to Halim (2008: 23), form of a new budget revenue sources are also divided into three categories: local own-source revenues, fiscal balance transfer funds, and other legitimate revenues.

### **4. Financial performance**

Financial Performance of local governments is the ability of an area to dig and manage financial own-resoure to meet their needs to support the passage of the government system, the public service and regional development by not depend entirely on the central government and have flexibility in using funds for the benefit of local community within the limits prescribed legislation (Syamsi, 1989: 199). PAD is a local own-source revenues in a given period, the increasing of revenue hope meet the obligations of government in providing public community services. Operational expenditure is expenditure that benefits only one fiscal year and add an asset to the area. Development expenditure is expenditure that benefits tends to exceed one fiscal year and add to regional assets.

### **5. Financial Performance Factors**

This study uses the expenditure and revenue factors, namely: (1) revenue which is the amount of local revenue by local governments in period, Halim (2008: 52), that compose of local taxes, retribution area, result of separated owned wealth management, other legitimate PAD. (2) Operational Expenditure, according to Halim (2008: 54) is the expenditure that benefits only for one fiscal year and add to asset / wealth for the region. It consists of personnel, good expenditure, interest expenditure, subsidy expenditure, grant expenditures, social assistance expenditure, financial aid expenditures. Finally (3) Development Expenditure, according to Halim (2008: 55) is the expenditure that benefits tend to exceed one fiscal year and will add to asset / wealth of the region, and will further add to the regular budget. It consists of land expenditure, expenditures on equipment, capital expenditure for building, capital expenditures for roads, irrigation, and networks, other fixed asset expenditures, and other assets expenditures.

## 6. Financial Ratio Analysis

Financial ratio analysis is the core of performance measurement as well as concept to ensure the management of government organizations doing public accountability to the public. The results of the analysis of financial ratios can be used to measure the performance (Halim, 2008: 126). According to Halim (2008: 230) to evaluate the financial statements, it can be used financial ratio analysis of the posts in the financial statements. Financial ratio analysis of the budget that has been used as benchmarks to: assess the local financial independence in finance decentralized governance, measure effectiveness and efficiency in the realization of regional revenue, measures the extent to which the local government activities in expenditure the revenue, measure the contribution of each revenue source to form local revenue, see revenue and expenditures growth or development incurred during a specific time period.

## 7. Various Financial Ratios

### *Independence Ratio of Regional Financial*

Local financial independence ratio or what is often referred to as fiscal autonomy in the regions demonstrate the ability of self-finance government activities, construction, and services to the people who have paid taxes and levies as a source of revenue.

$$\text{Independence Ratio} = \frac{\text{PAD}}{\text{Government Transfer} + \text{Provision \& Liability}} \times 100\%$$

### *Effectiveness Ratio*

Effectiveness ratio aims to measure the extent to which the government's ability to mobilize the revenue receipts in accordance with the target. Effectiveness ratio of revenue is calculated by comparing revenue with revenue budgeted revenue target (Halim 2008:234).

This ratio is defined as follows:

$$\text{Effectiveness Ratio} = \frac{\text{PAD Revenue Realization}}{\text{PAD Revenue Target}} \times 100\%$$

### *Activity Ratios*

There are two type of activity ratio, operational expenditure ratio and development expenditure ratio. The formula can be seen as follows:

$$\begin{aligned} * \text{ Operational Expenditure Ratio} &= \frac{\text{Total Operational Expenditure}}{\text{Total Local Expenditure}} \times 100\% \\ * \text{ Development Expenditure Ratio} &= \frac{\text{Total Development Expenditure}}{\text{Total Local Expenditure}} \times 100\% \end{aligned}$$

## Previous Research and Hypotheses Development

Analysis of financial performance and the factors affecting financial performance becomes the important points. Cohen (2006) stated five variables that affect financial performance are: *gross domestic product, citizen population, real estate, tourist and capital*. These affect expressed in nine financial ratio that consists of: *return on equity, return on assets, profit margin, current ratio, debt/equity, long term liabilities/ total assets, assets turnover, operating revenues/ total revenues and operating revenues/ operating expense*. However, factors that have higher influence are the number of people and capital.



Furthermore, study by Groves et al (2001), indicated that variables that affect the financial performance of local governments are financial indicators of local governments affected by both financial factors, environmental factors and organizational factors that could be monitoring through *Financial Trend Monitoring System* (FTMS). Moreover, reseach in local government by Steven and McGowen (1983) indicated that financial factors (financial factors) consists of revenue, expenditure, operating position, debt structure, unfunded liabilities, and the condition of capital fund and the financial trend is influenced by many factors such as population and income sources for local governments. While Suyono (2010) the revenue variable positively significant effects on financial performance.

*Local Own-source revenue (PAD) Influence on Performance of Local Government Finance.*

Nick Devas (1989) stated that in order local governments have optimal ability to levy local taxes in region, it would need to consider regional taxes that are own-sources of income to create efficiency and effectiveness in tax collection. Furthermore, Hari (2006) stated there is significantly influences both regional economics growth and regional own revenue. Moreover, Steven and McGowen (1983) indicated that financial factors (financial factors) consists of revenue, expenditure, operating position, debt structure, unfunded liabilities, and the condition of capital fund and the financial trend is influenced by many factors such as population and income sources for local governments.

*Development Expenditure and Operational Expenditure Influence on Local Government Finance Performance*

Stine (1994) The local government revenue response to federal aid was found to be asymmetric. Stine (1994) Own source revenue response also may be asymmetrical if revenue maximizing agencies or special interest group resist program reductions. Revenue will be less responsive if the institutional features of representative government lead to excess spending. Moreover Hari (2006) also found that the government's decision to allocate the greater capital expenditure to the supported economic growth infrastructures will brings more regional own revenue.

*Effect of new regional autonomy and Parent regions on the Performance of Local Government Finance*

Koen et al (2004) tensions between different levels of autonomy appear in practice, indicating the need for an combined and integrated study of the effects of the different dimensions of autonomy on performance. Moreover, Groves et al (2001), indicated that variables that affect the financial performance of local governments are financial indicators of local governments affected by both financial factors, environmental factors and organizational factors. Furthermore, Wihardja (2010) Extreme heterogeneity in endowments, factor immobility, and the endogenous deterioration of local governance institutions can each undermine the supposed development-enhancing promises of decentralized government in emerging economies such as Indonesia.

Then, Stine (1994) The local government revenue response to federal aid was found to be asymmetric. The reduction in federal aid induced a reduction in own-source revenue. The results support the notion that taxpayers prefer fiscal restraint when permanent loss of aid occurs. Rondinelli et al (1989) also stated that an integrated political-economy framework that draws from the most useful aspects of each set of approaches can provide policy analysts with a more powerful set of concepts and methods for designing and implementing decentralization policies more effectively. Finally, Lewis (2003) stated that revenue generated by new taxes and charges would appear to be negligible; even under the most optimistic of

assumptions, any increase in regional own-source revenues that may have resulted from the creation of new taxes and charges would be very small relative to overall budgets. Without access to more substantial tax bases, regional governments will remain unsuccessful in realizing significant own-source revenues and fiscal decentralization in Indonesia will continue to be an unbalanced affair.

Based on motivation above, the hypothesis in this study are explained as follows:

- Hypothesis 1 : PAD, Development Expenditure and Operational Expenditure is significant influence on independence ratio regional autonomy and Parent regions in South Sumatra.
- Hypothesis 2 : PAD, Development Expenditure and Operational Expenditure is significant influence on the effectiveness ratio regional autonomy and Parent regions in South Sumatra.
- Hypothesis 3: PAD, Development Expenditure and Operational Expenditure is significant influence on development expenditure activities ratio of regional autonomy and Parent regions in South Sumatra.
- Hypothesis 4: PAD, Development Expenditure and Operational Expenditure is significant influence on operational expenditure activity ratio regional autonomy and Parent regions in South Sumatra.

## Research Methods

### 1. The scope of research

This study is focused to analyze the factors that influence performance of Autonomous Government Finance and Parent regions in South Sumatra about PAD, Operational Expenditures, capital expenditures, total revenue and total expenditure contained in Budget Realization Report (LRA) during the 2009-2013 period. Data used in this study only from 2009 till 2013. It is based on consideration in South Sumatera that in 2014 there are some new regional autonomy appear that they still manage new regions. It is not balance if compares new regional autonomy and old regional autonomy.

### 2. Data Sources

It is a quantitative research using secondary data such as report of budget realization in 2009 to 2013 that have been examined / audited by BPK. Data collected from 8 (eight) regional autonomy and 6 (six) parent regions. The Municipalities of Expansion/autonomy are; Pagar Alam, Prabumulih, Lubuk Linggau, and the regencies are Banyuasin, Empat Lawang, Ogan Ilir, Ogan Komering Ulu Selatan, Ogan Komering Ulu Timur. Furthermore the Regional Parent regions are Lahat, Muara Enim, Musi Banyuasin, Musi Rawas, Ogan komering Ilir, and Ogan Komering Ulu.

### 3. Data analysis technique

Collecting data in this study with documentation method and analysis using multiple regression techniques with Eviews software using panel data and fixed effect model.

Equation Mode :

$$\text{LnK} = \beta_0 + \beta_1 \text{LnPAD} + \beta_2 \text{LnBP} + \beta_3 \text{LnBR} + \text{dummy} + e$$

$$\text{LnE} = \beta_0 + \beta_1 \text{LnPAD} + \beta_2 \text{LnBP} + \beta_3 \text{LnBR} + \text{dummy} + e$$

$$\text{LnABP} = \beta_0 + \beta_1 \text{LnPAD} + \beta_2 \text{LnBP} + \beta_3 \text{LnBR} + \text{dummy} + e$$

$$\text{LnABR} = \beta_0 + \beta_1 \text{LnPAD} + \beta_2 \text{LnBP} + \beta_3 \text{LnBR} + \text{dummy} + e$$

Description:

Dependent Variable :

LnK = Financial Performance Local Government (Independence Ratio)

LnE = Financial Performance Local Government (Independence Ratio)

LnABP = Financial Performance Local Government (Development Expenditure Activity Ratio)

LnABR = Financial Performance Local Government (Operational Expenditure Activity Ratio)

Independen Variables :

PAD = Local Own-Source Revenue

BR = Operational Expenditure,

BP = Development Expenditure,

Dummy (R) = Autonomy / Parent Regions

$\beta_0$  = constanta,

$\beta_1 - \beta_3$  = regression coefficient,

$e$  = *residual term*.

## Results And Discussion

### 1. Financial Independence of Autonomy and Parent Regions

Prabumulih city has the highest independence value among other regions of autonomous government in South Sumatra. Consistently from 2009 to 2013 with an average value of independence ratio of 5.75%. Although it still classified much less, but it is the greatest independence ratio compare to other regions in South Sumatra. Moreover, for Parent Region, Muara Enim regency has the highest value independence value among other divisions of local government in South Sumatra. Consistently from 2009 to 2013 with an average value of independence ratio of 7.01%. Although it still classified less but if compare to the autonomy expansion that is equal to 5.57%, it is better.

### 2. Financial Effectiveness of Autonomy and Parent regions

Banyuasin, South OKU, and Empat Lawang regencies are the areas that are very effective which are 149.39%, 143.07%, and 135.36% respectively for managing local revenue. They have local own-source revenue realization (PAD) are higher than PAD target revenue predetermined. Moreover, for Parent Region, Muara Enim regency is an area that is very effective in managing local own-source revenue, with realization (PAD) is higher than the target revenue of PAD predetermined. It can be seen from the magnitude-effectiveness ratio is 109.78%.

### 3. Operational Expenditure Activities and Financial Development Expenditure

OKU Timur has operational expenditure ratio level of regional autonomy during 2009-2013 with the highest average of 77.22% and the lowest ratio of autonomous regional development expenditure during 2009-2013 with an average of 22.78%. Moreover, for parent region, Lahat regency has the highest level of Operational Expenditure Activity ratio of Parent regions during 2009-2013 with an average of 76.64% and ratio of the lowest of regional development expenditure during 2009-2013 with an average of 23.37%. It shows

high percentage of funds allocated to operational expenditure of Parent regions so the fund is used to provide regional development expenditure is getting low. As a result of facilities and infrastructure of economic community will be accepted tend to be smaller.

**4. Regression Analysis Model Equations**

The following data is output by regression results EViews 6.0 program to regression model are:

Equation 1

$$\ln K = 1872,342 - 0,120628 \ln PAD + 1,053073 \ln BP + 1,581585 \ln BR + 9,3775191 \text{ dummy} + e$$

Equation 2

$$\ln E = 1873,289 - 0,339578 \ln PAD + 1,102295 \ln BP + 1,511915 \ln BR + 9,417816 \text{ dummy} + e$$

Equation 3

$$\ln ABP = 1872,214 - 1,641080 \ln PAD + 1,021500 \ln BP + 4,061335 \ln BR + 7,451566 \text{ dummy} + e$$

Equation 4

$$\ln ABR = 1874,173 + 0,000119 \ln PAD + 0,958814 \ln BP + 1,546970 \ln BR + 9,302844 \text{ dummy} + e$$

**5. Hypothesis testing**

**Simultaneous Test (Test F)**

Simultaneously, F test of this research can be seen in table below:

**Table 2: F Statistics Test Result**

MODEL	F- Statistik	F tabel	Probabilitas F	Ho
MODEL I	25,45862	1,980	0.0000< 0,05	Rejected
MODEL II	26,07850	1,980	0.0001< 0,05	Rejected
MODEL III	29,42657	1,980	0.0000< 0,05	Rejected
MODEL	25,76811	1,980	0.0000<	Rejected

IV			0,05	
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Source: output E-views 6.0

As can be seen above, all models are significant simultaneously.

### Partial testing (t test)

T test aims to see the significance of the influence of the independent variable on the dependent variable individually. The variables have a significant influence when the value  $t_{count} > t_{table}$ . Partial test of this research can be seen in table below:

**Table 3: t-statistics Test Result**

Model	Variable	t-statistics	T table	Probabilitas t	Ho
Model I	Ln PAD	-	1.99714	0.7654 > 0.05	Accepted
	Ln BP	0.299904		0.0693 > 0.05	Accepted
	Ln BR	1.854924		0.0010 < 0.05	Rejected
	Dummy	3.475004		0.0000 < 0.05	Rejected
Model II	Ln PAD	-1.10550	1.99714	0.2740 > 0.05	Accepted
	Ln BP	2.208448		0.0316 < 0.05	Rejected
	Ln BR	3.391318		0.0013 < 0.05	Rejected
	Dummy	10.92484		0.0000 < 0.05	Rejected
Model III	Ln PAD	-	1.99714	0.0091 < 0.05	Rejected
	Ln BP	2.708839		0.0303 < 0.05	Rejected
	Ln BR	2.227251		0.0002 < 0.05	Rejected
	Dummy	3.996308		0.0000 < 0.05	Rejected
Model IV	Ln PAD	0.809486	1.99714	0.4219 > 0.05	Accepted

IV	Ln BP	1.978800		0.0541>0.05	Accepted
	Ln BR	3.464116		0.0011<0.05	Rejected
	Dummy	10.71430		0.0020<0.05	Rejected

Source: output E-views 6.0 (proceed)

As can be seen above, partially only model III is significant, however the others are either significant or insignificant result.

**The coefficient of determination (R2)**

In Model I and II, based on a linear regression calculation, R2 value of 0.892 and 0.895 respectively , it means that 89.2 and 89.5 per cent of Independence ratio and effectiveness ratio can be explained by local own-source revenue variable (PAD), Development Expenditure (BP), Operational Expenditure (BR). However, other percent are explained by other variables that is not included in the model estimation.

Moreover, in Model III and IV, R2 value of 0.905 and 0.893 respectively, it means that 90.5 and 89.3 per cent of Development Expenditure Activity Ratio and Operational Expenditure Activity Ratio can be explained by local own-source revenue variable (PAD), Development Expenditure (BP), Operational Expenditure (BR), dummy. While other percent is explained by other variables that not included in the model estimation.

**Local Own-source revenue (PAD) Influence on Performance of Local Government Finance.**

In Model 1, it can be seen PAD has t-count less than t-table, it means that PAD does not significantly influence the ratio of independence. This insignificant effect due to it has not been able to finance its own activities of governance, development and public service who have paid taxes and levies as a source of revenue (Halim, 2008: 232). PAD has negative effect that means it has a low level of public participation in paying taxes and levies that would describe the low level of social welfare (Halim, 2008: 232). Furthermore, in model 2, it can be seen revenue PAD does not significant and negatively affect Effectiveness ratio. The insignificant effect due to the regency / city governments have not been able to mobilize the revenue receipts in accordance with the target (Halim, 2008: 234).

Moreover, in Model 3, it can be seen that PAD significantly and negatively affect to ratio of Development Expenditure Activity. This means revenue (PAD) are funds allocated to development expenditure of local government district / municipality, while the negative effect means that a high percentage of revenue (PAD) that is allocated will reduce development expenditure used to provide economic infrastructure of society (Halim, 2008: 236). Finally, in Model 4, it can be seen that revenue (PAD) to ratio of operational expenditure Activity variable has t-count less than t-table, it means that the variable revenue (PAD) has no significant effect and negatively affect effectiveness ratio. This insignificant effect due to revenue (PAD) cannot be given as priority in the allocation of operational funds expenditure (Halim, 2008: 236).

This result supports research by Nick Devas (1989), Steven and McGowen (1983), Hari (2006), Lewis (2003). Nick Devas (1989) stated that in order local governments have optimal ability to levy local taxes in region, it would need to consider regional taxes that are

own-sources of income to create efficiency and effectiveness in tax collection. Moreover, Steven and McGowen (1983) indicated that financial factors (financial factors) consists of revenue, expenditure, operating position, debt structure, unfunded liabilities, and the condition of capital fund and the financial trend is influenced by many factors such as population and income sources for local governments. Furthermore, Hari (2006) stated there is significantly influences both regional economics growth and regional own revenue and Lewis (2003) revenue generated by new taxes and charges would appear to be negligible; even under the most optimistic of assumptions, any increase in regional own-source revenues that may have resulted from the creation of new taxes and charges would be very small relative to overall budgets.

### ***Development Expenditure Influence on Local Government Finance Performance.***

In Model 1, it can be shown that Development Expenditure on independence ratio has t-count less than t-table, it means that Development Expenditure does not significantly influence the independence ratio. This situation because city or regency government still depends on central government. The Independence that relatively small ratio means, it is not able to change the composition of budget expenditure in of city/regency. Moreover, in Model 2, it can be seen the Effectiveness ratio of Development Expenditure has t-count greater than t-table that means the Development Expenditure significantly influence the effectiveness ratio. This condition can be concluded that the realization of PAD outweigh targets. This indicates that if a regional financial is effective, it has assumptions that the region realize its development budget is quite high, especially for public interest.

Furthermore, in Model 3, it can be seen Development Expenditure on development expenditure activity ratio has t-count greater than t-table, it means that the Development Expenditure variable significantly influence the activity ratio of development expenditure. This significant influence means the increasing ratio of the activities of development expenditure, the increasing development expenditure. Finally, in Model 4, it can be seen the Development Expenditure on operational expenditure activity ratio that does not significantly affect the activity ratio of expenditures. It means that the higher the percentage of funds allocated for operational expenditure, the expenditure percentages used for the development community is getting smaller, so the ratio of operational expenditure is relatively low activity caused no percentage of development expenditure.

This result supports research by Hari (2006) and Stice (1994). Hari (2006) found that the government's decision to allocate the greater capital expenditure to the supported economic growth infrastructures will brings more regional own revenue. Moreover, Stine (1994) The local government revenue response to federal aid was found to be asymmetric. He also stated that Own source revenue response also may be asymmetrical if revenue maximizing agencies or special interest group resist program reductions. Revenue will be less responsive if the institutional features of representative government lead to excess spending.

### ***Operational Expenditure Influence on Performance of Local Government Finance***

In Model 1, it can be seen that Operational Expenditure on independence ratio has t-count greater than t-table, it means that variable operational expenditure has significant effect on independence ratio. It means that the independence ratio of Regency / City that is relatively high will be able to change the composition of operational expenditure in budgets of Regency / City.

Moreover, in Model 2, it can be seen that Operational Expenditure on effectiveness ratio has significantly influence. This condition can be concluded that the realization of PAD outweigh targets. This indicates that if a regional financial is effective, it means there is assumptions that that region realize highly enough its regular budget. Furthermore, in Model 3, it can be shown Operational Expenditure variables has significantly influence the activity ratio of operational expenditures. Finally, in Model 4, it shown the Development Expenditure significantly influence the activity ratio of operational expenditures.

This result supports research by Stine (1994) and Hari (2006). Stice stated that the local government revenue response to federal aid was found to be asymmetric. He also stated that Own source revenue response also may be asymmetrical if revenue maximizing agencies or special interest group resist program reductions. Revenue will be less responsive if the institutional features of representative government lead to excess spending. Moreover Hari (2006) also found that the government's decision to allocate the greater capital expenditure to the supported economic growth infrastructures will brings more regional own revenue.

### ***Effect of new regional autonomy and Parent regions on the Performance of Local Government Finance***

Model 1 shown that dummy (regional autonomy and Parent regions) on the independence ratio. The dummy variable (regional autonomy and Parent regions) has t-count greater than t-table, it means that regional autonomy and Parent regions variable significantly influence the independence ratio. It means that the Government of Regency/City has ability to finance their own regional government activity. Furthermore, in Model 2, it can be viewed dummy (regional autonomy and Parent regions) on the effectiveness ratio. The dummy variable (regional autonomy and Parent regions) has t-count greater than t-table, it means that the dummy variables significantly influence the effectiveness ratio. This significant influence means that Government of Regencies / Municipalities can measure the ability of to mobilize realization according to the target.

Furthermore, in Model 3, it can be viewed that dummy (regional autonomy and Parent regions) on ratio of development expenditure activity which is the dummy variable (regional autonomy and Parent regions) has t-count greater than t-table, it means that the variables significantly influence the ratio of development expenditure activity. It means that local governments prioritize the allocation of funds to the optimal development expenditure. Finally, in Model 4, it shown that dummy (regional autonomy and Parent regions) on independence ratio which is the dummy variable (regional autonomy and Parent regions) has t-count greater than t table that means that the dummy variables significantly influence the operational expenditure activity ratio. This indicates that local governments prioritize the allocation of funds on a regular expenditure optimally.

This result supports research by Koen et al (2004), Groves et al (2001), Wihardja (2010), Stine (1994), Rondinelli et al (1989). Koen et al (2004) tensions between different levels of autonomy appear in practice, indicating the need for an combined and integrated study of the effects of the different dimensions of autonomy on performance. Moreover, Groves et al (2001), indicated that variables that affect the financial performance of local governments are financial indicators of local governments affected by both financial factors, environmental factors and organizational factors. Furthermore, Pepinsky and Wiharja (2010) Extreme heterogeneity in endowments, factor immobility, and the endogenous deterioration



of local governance institutions can each undermine the supposed development-enhancing promises of decentralized government in emerging economies such as Indonesia.

Then, Stine (1994) The local government revenue response to federal aid was found to be asymmetric. The reduction in federal aid induced a reduction in own-source revenue. The results support the notion that taxpayers prefer fiscal restraint when permanent loss of aid occurs. Rondinelli et al (1989) also stated that an integrated political-economy framework that draws from the most useful aspects of each set of approaches can provide policy analysts with a more powerful set of concepts and methods for designing and implementing decentralization policies more effectively. Finally, Lewis (2003) Revenue generated by new taxes and charges would appear to be negligible; even under the most optimistic of assumptions, any increase in regional own-source revenues that may have resulted from the creation of new taxes and charges would be very small relative to overall budgets. Without access to more substantial tax bases, regional governments will remain unsuccessful in realizing significant own-source revenues and fiscal decentralization in Indonesia will continue to be an unbalanced affair.

### Conclusion

Based on the results of multiple linear regression equation, it can be explained as follows:

- Local Own-source Revenue (PAD), Development Expenditure, Operational Expenditure are simultaneously significant effect on Independence Ratio and Effectiveness Ratio of Regional autonomy and Parent Regions in South Sumatra.
- Local Own-Source Revenue (PAD), Capital Expenditure, Operational Expenditure are simultaneously significant effect on Development Expenditure Activity Ratio and Operational Expenditure Activity of Regional autonomy and Parent Regions in South Sumatra.

### Limitation and Future Research

This research has limitation which is data used in this study only from 2009 till 2013. This period is based on situation in South Sumatera when 2014 there are some new regional autonomy appear and they still implemented new management. It is not balance if compares new regional autonomy and old regional autonomy. For further research, it is better to cover all new autonomy in Indonesia with long period year analysis.

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## DESIGNING SUB-CONTRACT MODEL AS STRATEGY TO INCREASE INCOME OF SELF-HELP GROUPS IN SURABAYA

Nur Handayani

Lilis Ardini

### Abstract

Self-Help groups (SHG's) are a population of people who unite voluntarily in groups due to help each other to build a source of financial services in order to encourage and develop productive activities. Although Surabaya has amount of SHG's but there is still hard to reach their sustainability due to some problem such us lack of entrepreneurship, creativity, and marketing. The aim of this research is to build sub-contract model with business partnership in order to increase the efficiency and affectivity of SHG's performance, develop the SHG's business performance, and increase high income. This research uses an exploratory research with focus group discussion method. The population subject in this research is total amount of 20 SHG's which include in the moderate and high category of performance and entrepreneur orientation. The result of this study is sub-contract model between the SHG's and business partnership that can be implemented for gaining the regional market and even international market.

**Keywords:** *Self-Help groups, sub-contract model, performance, entrepreneurship*

### Introduction

One of Surabaya city government's efforts to increase the incomes of the poor is deceived by providing training and development through self-help groups. Training and guidance provided in the form of vocational training and management training in cooperation with instructors and institution of educators as a form of concern for economic growth, social and environmental conditions in the city of Surabaya. Cultivate the entrepreneurial spirit in previous research SHG's has break down into three categories based on the performance. They are strong performance (20 SHG's or 54, 28%), moderate performance (11 SHG's or 31,43%) and low performance (5 SHG's or 14 , 29%) (Handayani and Ardini, 2015).

Furthermore, to increase revenue at SHG'S can be done by partnership program that aims to improve the ability of SHG'S to be resilient and self-reliant through support for the capital, facilities, and human resources professionals and skilled in order to support marketing and business continuity in the future. SHG'S empowerment in the midst of globalization and high competition makes SMEs should be able to face global challenges, such as improving product and service innovation, human resource development and technology, as well as the expansion of the area of marketing. This needs to be done to add value to SME itself, mainly in order to compete with foreign products are increasingly flooding the industrial centers and manufacturing in Indonesia, considering that SMEs are the economic sectors that can create jobs in Indonesia (Sudaryanto, 2011).

The research activities can't be separated from cultivate the entrepreneurial spirit in the SHG's, the first step to do if interested plunge into the entrepreneurial world is fostering the entrepreneurial spirit in ourselves SHG'S. Much can be done for example (1) through formal education. Now, various educational institutions both medium and high present a variety of programs, or at least of entrepreneurship courses, (2) through entrepreneurship

seminars. Entrepreneurship seminars are often held with invited experts and practitioners in entrepreneurship so that through this medium we will build the entrepreneurial spirit in ourselves, through training. Various simulation effort is usually given through a good training is done indoors (indoor) and outdoor (outdoor), (3) through this training, courage and responsiveness us to the changing dynamics of environment be tested and constantly improved and developed Self-taught, (4) through various media, we can foster the spirit of entrepreneurship. For example through the biographies of successful entrepreneurs (success story), the medium of television, radio, newspapers and magazines of various media that we can access to cultivate the entrepreneurial spirit that is in us (Suryana, 2003).

In order to raising revenue of SHG's, it is required cooperation with partners as a means of SHG'S grow the business through the draft sub-contracts/partnerships between businesses that have a market share, in this study the researchers will design a model that suits the needs of SHG'S. Based on the background problems, it would require the development of a model of partnership between SHG'S with partners as a means of business development and facilitate in decision-making SHG'S marketing, product, price, and improve the effectiveness and efficiency of SHG'S. The goal is to increase income and sustainability of SHG's in order to become empowered and independent innovation.

## **Theoretical framework**

### *Self-Help Groups*

Self-Help groups (SHG's) is a population of people who unite voluntarily in groups due to help each other and work together to build a source of financial services in order to encourage and develop productive activities and improve the living standards of its members and their families. Additionally SHG's has a unifying bond, namely the vision, interests and needs are the same, so that these groups have a common goal to be achieved together. SHG's in the city of Surabaya is formed in each village and has built by Bapemas Surabaya. SHG's was given skills training in groups and develop their business in groups.

Definition of interest in entrepreneurship is a sense of attraction of a person to conduct business as an independent with the courage to take risks. High interest means the realization that entrepreneurial individuals attached to him so that more attention and get more pleasure out of entrepreneurial activity. According Susatyo in Sukardi (2008), self-employment has six characteristic that are self-confidence, originality, people oriented, result oriented task, future oriented, and risk taking. Littunen (2000) mentions two characteristics of entrepreneurs, i.e. their creativity and courage in taking risks.

While Marbun (in Alma, 2000) mentions the seven characteristics, namely confidence, task-oriented and results, risk-taking, leadership ability, originality of ideas, vision on the future clearly, and creativity in their work. The same thing also conveyed by Ardini and Respatia (2011), they said that poor families in the city of Surabaya is more effective and efficient after being given vocational training in terms of increasing the income of the poor family.

According to Siswoyo (2009), the development of the entrepreneurial spirit has become important in the future. Entrepreneurship has become an important role. Through entrepreneurship will create employment opportunities for the community. This is mainly to develop people. The activity of SHG's is not only need a capital but also an intention and social interaction that called humanism capital and social capital (Khoirini dan Kartika, 2014)

This article will explain developing entrepreneurship for students and faculty. They have a position strategic role in developing entrepreneurial attitudes. Entrepreneurship program especially in the practice of entrepreneurship, the entrepreneurial job training; seek business opportunities through the activities of lecturers; using industrial cooperation agreement.

According to Mutaqin (2010), the independence is something very necessary within the framework of the era of strong competition in getting jobs. One effort that can be done in them is by giving a briefing on the SHG's form of activity or training on entrepreneurship. This entrepreneurial activity in order to improve the spirit of entrepreneurship, which is done through regular learning activities contained in entrepreneurship curriculum. The entrepreneurship education developed customized education and vocational technology, which technology entrepreneurship education. The concept of implanting technology entrepreneurship education and encourage students early constantly thinking and developing creative ideas, design, create and develop a business based on lecture material had ever learned.

### *Partnership*

The Partnership is a collaboration of small and medium businesses or large businesses with coaching and development by medium sized businesses or large enterprises with regard to principles require, mutually reinforcing and mutually beneficial (Saparudin, 2012). The pattern of the partnership is a partnership that is set in Act N0 9 Year 1995 on small businesses.

The concept of partnership has various meanings in the light of the behavior, attitudes, values and technical cooperation for the many people, organizations or institutions. In addition to the attributes attached to the partnership between the others is trust, same vision, long-term commitment, dedication to goal together, and cultivate the hope of building (McGregor& Palmer 1997; Bresnen& Marshall 2000).

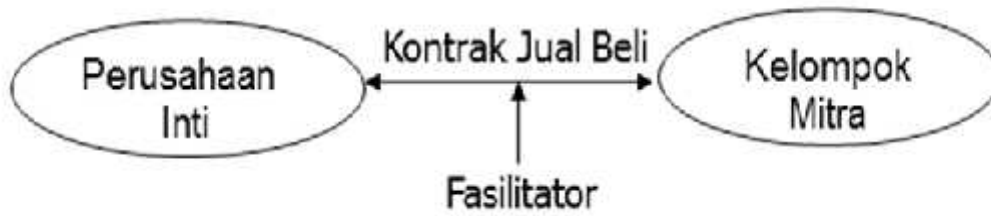
### *Sub-Contract Models*

In this study, featuring several models of sub-contracting, which can then be selected as a model of subcontracting SHG'S and business players, some models of partnerships, among others:

- a. The core of plasma model is a partnership relationship between small businesses with a medium or large business, which includes medium or large businesses to act as the core and small businesses as plasma. The Company acts as the core enterprise partner, who are incommoding, purchase of production, provide counseling services to SHG's group of partners as plasma.

- b. Buy Contract Model

At this partnership model, going cooperative relationships between groups of small scale with a medium or large scale companies are contained in an agreement written sales contract for a certain period witnessed by Government Agencies. Self-Help Group is a forum to coordinate its members in a production setting, the collection and sorting of production that will be purchased by the group, do the packaging production according to demand corporate buyers and represent its members in relation to corporate buyers. In this model the government is not directly involved, function only as moderator and facilitator.



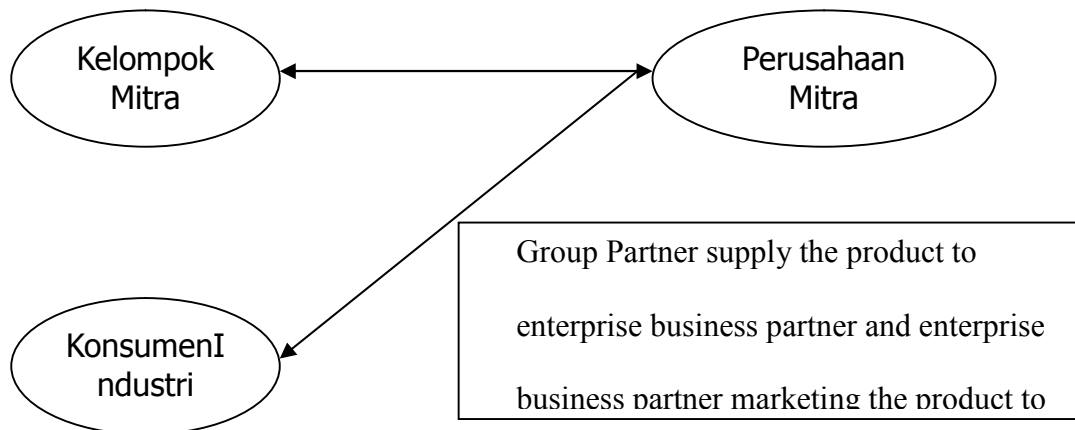
c. Sub-Contract Model

Sub-Contract Model is a partnership between small businesses with a medium or large business in which small businesses produce components or services that are part of the production of medium or large businesses. This partnership model resembles a partnership contract SHG’S group but this pattern did not contract directly with the company's processor (processor) but through an agent or trader.

d. General Trade Model

General Trade Model is a partnership relationship between small companies with medium or large or medium-sized business market the production from small businesses Development of general trade pattern can be done by requiring a medium or large enterprise that its business partners to market the production of small business, or a small business supplying the medium or large businesses. Give small businesses the opportunity to work on production based on the expertise of small businesses sell their products intended and the corresponding expertise small business and sell its products meant that the medium or large efforts are not business partners.

Give small businesses the opportunity to market the production of large enterprises.



**Picture 2**  
**General Trade Model**

## e. Operational Cooperation Model of SHG's

Is a partnership that includes partner groups providing services and labor, while the partner companies provide a cost or capital or the means to cultivate or produce business SHG's

*Characteristics of Entrepreneurship*

According to Izedonmi and Okafor (2007), the individual characteristics of entrepreneurs has the ability to identify opportunities and mobilize resources to achieve entrepreneurial goal. Characteristic is identified as the main core of the behavior and performance of an entrepreneur. Characteristics possessed by entrepreneurs, as follows (1). Needs (motivation) achievement, (2). Locus of control, (3).Risk-making, (3) Proactive, (4).Tolerance to uncertainty, (5).Creativity.

Peggy A Lambing & Charles R Kuehl (in Hendro and Chandra, 2006) states that every entrepreneur (entrepreneur) who are successful have four basic elements, namely: the ability (to do with IQ and skill), courage (to do with Emotional Quotient and mental), courage (to do with self-motivation), creativity requires an inspiration as a forerunner to the idea of finding opportunities based on intuition (to do with experience).

**Methods**

This research uses an exploratory research that aims to understand more deeply and establish a model sub-contract between SHG's with a business partner. The method used in this research is a focus group discussion (FGD) to find problems and solutions together in order to construct a model contract. The population of this study was 20 SHG'S incorporated into the category of medium and high performance and entrepreneurial orientation of the 15 districts in Surabaya.

**Table 1. Self-help Groups and the Products**

<b>NO</b>	<b>SHG's</b>	<b>DISTRICT</b>	<b>PRODUCT</b>	<b>BUSINESS PARTNER</b>
1	Teduh Jumpat	Bubutan	Handycraft/IkatCelup	Alsier Ari
2	Gundih Berseri	Bubutan	Handycraft/IkatCelup	Tiara Handycraft
3	Ujung Galuh	Genteng	Handycraft/IkatCelup	Alsier Ari
4	Batik Sidorame	Sawahan	Handycraft/IkatCelup	Alsier Ari
5	Rajawali Aksesoris	Sawahan	Handycraft/ Accessory	Tiara Handycraft
6	Panji Gumilang	Tenggilis Mejoyo	Handycraft/ Accessory	Tiara Handycraft
7	Dahlia	Wonokromo	Handycraft/IkatCelup	Alsier Ari
8	Anggrek	Wonokromo	Handycraft/ Accessory	Tiara Handycraft



9	Batik Tulip	Benowo	Batik Tulis	Alsier Ari
10	Mandiri	Benowo	Aneka usaha/jahitKreatif	Tiara Handycraft
11	AnggrekUngu	Pakal	Handycraft/pelepahpisang	Bengkel kriya daun
12	HikmahCollection	Gubeng	Aneka Usaha/jahitKreatif	Tiara Handycraft
13	Ceria	KarangPilang	Batik tulis	Alsier Ari
14	Batik KedungAsem	Rungkut	Batik Tulis	Alsier Ari
15	SimokertoMaju	Simokerto	Aneka Usaha/ sabun Cuci	Anton
16	Delima	Simokerto	Menjahit/Sprei	Tiara Handycraft
17	Cut NyakDien	Tandes	Aneka Usaha/Karbol	Anton
18	Melati	Wonocolo	Makanan/Kuekering	Tristar
19	Merak	PabeanCantian	Handycraft/IkatCelup	Alsier Ari
20	Puspa	Semampir	Handycraft/ Accessory	Tiara Handycraft

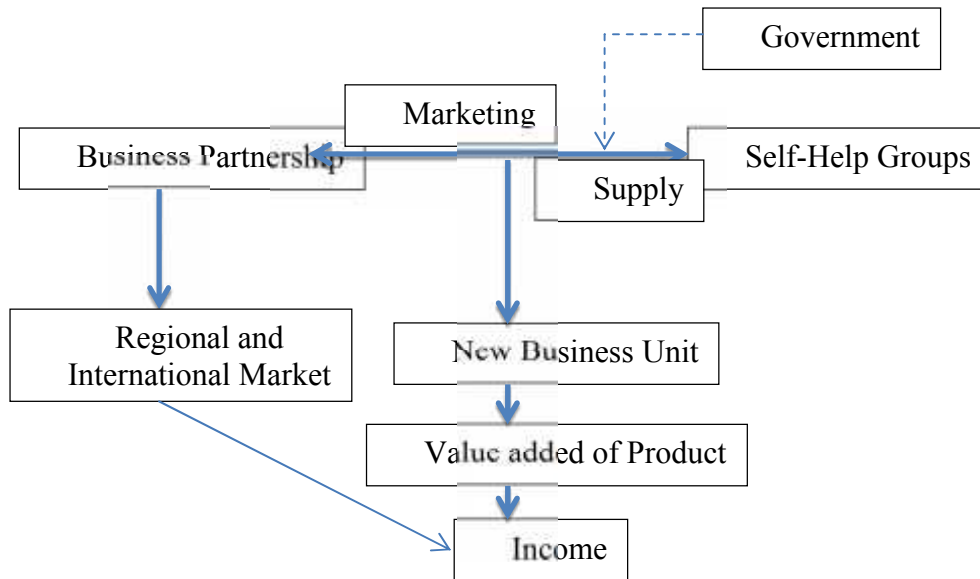
### Result and discussion

SHG's in the city of Surabaya is formed by the city government through community empowerment Bapemas in the framework of the community, especially women with low levels of family income. Those who joined in SHG's given training and initial capital by the government with the hope can be developed independently. Training includes skills training, managerial, economic calculations in computing earnings. During one year of technical support and training SHG's mapped into three categories based on performance and entrepreneurship orientation (performance low, moderate performance, and high performance). They are classified as low performance group will be given more in-depth training again and they were included into the medium and high performance to the next stage of the development model of sub-contracts with business partners.

Some 20 SHG's given technical assistance to design a model of entrepreneurship through new business unit sub-contract, for marketing and quality improvement skills possessed SHG's. This model of collaboration designed is a model sub-contracts involving groups of partners, the company's core, and the government as a facilitator but without any direct contract within a specified period.

Sub-contract model design makes SHG's position as a partner group that is producing, collecting, and filtering production. An important point in the formation of this model is to make SHG's independent entrepreneurs by increasing interest shown by the confidence, creativity, courage, and future oriented. Business partnership in the design of this model as the

company that manages the work of SHG's products to further marketed to regional and international markets. An important point business partners in this regard is how to market and maintain product position in the market so that the SHG's business remains sustainable. Government in sub-contract model design is as a facilitator who is not directly involved in the contract activity. Despite the government's position as a moderator does not mean the government does not contribute to the success of this cooperation. Moreover, the government is a bridge between the two businesses.



**Picture 3.**  
**Design Sub-Contract Model between SHG's and business partner**

Based on the design sub-contracts models, SHG's will be facilitated to expand its business through collaboration with partners to penetrate the national and even international markets. Access marketing will be more efficient and effective when together with experience that given before and development of human resources will strengthen marketing strategies, as well as access to capital and business relationship management and business groups on the performance of financial and business performance of non financial. This is supported by research Saparuddin and Bado (2011), that access to marketing, training and human resource development, access to capital and relationship management of businesses and organizations significant positive effect on the business performance of the financial and business performance of nonfinancial on small and medium enterprises and cooperatives in Jeneponto city.

SHG's internal factor is support for the successful sub contract for this activity required cooperation with other members because it fits with the vision and mission and managing the business together. Performance is determined by SHG's itself well to an increase in marketing and other innovations as a form of performance SHG's. Cooperative relationships with partners must work in harmony and in line, meaning that the internal and external factors KSM must be considered as the sustainability of these activities. The same is done by Sulisty and Adiatma (2011), that the internal and external factors both sides between SMEs and Cooperatives are determined the success of SMEs.

Additionally in the model subcontract this decision becomes the main thing because when KSM took the decision to accept or reject this order indicates that the Group is able to cooperate with partners as giving orders and it becomes full responsibility KSM. In line with Jamila and Hartati (2011), one of the alternatives in solving problems in the company's subcontracting election for policy makers is to build a decision support system for choosing subcontract model. Decision support systems are able to evaluate some of the criteria in the

assessment through the calculation process, which in the end of the alternative will provide the output of choice which is best subcontract to production activity.

### Conclusion

In order to make the SHG's an Independent and sustainable cooperation is needed between the government and the community. One attempt to improve SHG's revenue is through the establishment of cooperation with business partners that have regional and international market share. SHG's easier in determining the decisions relating to marketing, product, and price and improve the effectiveness and efficiency of SHG's performance.

The design of the proposed cooperation model is a model sub-contracts which involve SHG's, business partners, and governments with their respective roles. This model is proposed because it matched SHG's condition as a prospective business unit that require a business partner in order to market their products and the government as a facilitator and early movers. Without the cooperation SHG's third goal made as an independent business unit will be difficult to achieve.

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## CORPORATE SUSTAINABILITY DISCLOSURE AND FINANCIAL PERFORMANCE EFFECT ON COST OF CAPITAL IN ASEAN BANKING SECTOR

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### Abstract

This study aims to investigate the effect of sustainability disclosure to corporate cost of capital, and also examine the moderating effect of banks financial performance on the relationship. The sustainability disclosure; which consists of economic; environmental; and social aspects, measured by GRI G3.1 and FSSS index. While the cost of capital was calculated by weighting all source of cost of capital in WACC method. Banks financial performance is measured based on profitability and capitalization, which calculated by three proxies; CAR, ROA, and NIM. The result showed that banks with more sustainability disclosure attracts lower cost of capital. However, if it examined partially, instead of lowering cost of capital, the economic aspects tend to have opposing effects compared to environmental and social aspects. High economic disclosure tends to increase the cost of capital. Further examination showed that sustainability disclosure is successfully lower cost of capital in banking sector for banks that have high profitability.

**Keywords:** *sustainability disclosure; cost of capital; WACC; financial performance*

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### Introduction

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One factor influencing company's strategy in facing the global competition is the disclosure of the company's non-financial activities through sustainability reports. Companies all around the world have extensively published CSR (Corporate Social Responsibilities) or sustainability reports as their response to global attention on sustainability development issue. The sustainability reporting practice has grown gradually over the years and has been taken as a corporate behaviour (KPMG, 2013). This practice rose as the result of business sustainability failure cases, such as Enron in 2001 and WorldCom in 2002, which resulted in stakeholders' skepticism in business activity (White, 2006). Fry et.al. (1982) stated that this behaviour is also motivated by the corporate strategy to be more competitive in global market.<sup>i</sup>

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The disclosure of sustainability information is considered the key to reduce the<sup>1</sup> financing costs or the cost of capital in company's financing strategy. Dhaliwal et.al. (2011) reported that firms are able to develop better relationship with their stakeholders, including the capital suppliers, by disclosing more sustainability information as they convey positive messages in their sustainability reports. Companies can reduce their risks then consecutively get an ease of capital attainment and cheaper financing costs by showing their values (El Ghoul et al., 2011; Bassenet al., 2006). Accordingly, Sharfman and Fernando (2008) and Feldman et al. (1997) found that investors perceive a company's risk more favorable if the company pays attention to sustainability. This enhanced perception can finally cause the lower cost of capital (Sharfman and Fernando, 2008).

Some prior studies found optimistic evidence that corporate sustainability disclosure can actually draw a better financing opportunities for companies. For example, the disclosure of sustainability information is successfully proved to be able to reduce asymmetric information between managers and investors, then consequently lower the cost of capital in US companies (Dhaliwal et al., 2011; El Ghoul et al., 2011; Sharfman and Fernando, 2008). CSR or sustainability information based on Global Reporting Initiatives (GRI) guidance is also confirmed to able to decrease asymmetric information and raise market value for Finland firms (Schadewitz & Niskala, 2010). Accordingly, in the UK firms, research conducted by Murray et al. (2006) found that firms with greater sustainability disclosure obtain high returns on their investments. In other words, the disclosure of sustainability information helps companies to get better financing prospects.

However, some researchers debate the effect of sustainability disclosure to corporate financing activity. For example, Reverte (2009) claimed that there is no significant effect of CSR disclosures to corporate financing activity in Spanish firms. Moreover, unlike the findings reported in western countries, some research conducted in Asian companies have been empirically shown to have quite different results; the sustainability disclosure did not affect corporate financial performance or corporate capital. Feng et al. (2014) found that firms with higher disclosure of CSR enjoying lower cost of equity capital in North America and Europe, but not in Asian. Lasmin and Nuzula (2012) also indicated that environmental or social disclosure did not impress investors in Japanese companies. Similarly, Xu and Yang (2010) claimed that sustainability issue in Chinese companies had no effect on their corporate activity because of the low level of CSR value awareness in the country. Likewise, Muirhead et al. (2002) reported that 60% of Asian managers presume CSR or sustainability issue as a useless tool to rise financing performance or opportunities. In brief, the evidence shows that the effect of corporate sustainability on financing opportunity is remain ambiguous.

Understanding the findings of previous studies, this research is focused on fulfilling the research gap and provide an empirical study related to sustainability disclosure effect on the cost of capital by focusing the research on one sector in developing countries. The sample of this study is the banking sector in south-east Asian region. Banks are chosen to be the sample of research because this sector has a wide range of stakeholders; for example, the multinational companies, SMEs (small and medium enterprises), individual citizens, governments and many more stakeholders that will highlight the sustainability of banking sector. Jeucken and Bouma (1999) stated that as intermediary organizations, banking sector holds a unique position in sustainable development issue.

This research will not only examine the effect of sustainability disclosure to the future cost of capital (next year's cost of capital) but also examines the moderating effect of banks financial performance on the relationship between sustainability disclosure and cost of capital. According to Botosan (1997), the higher the financial information delivered to the stakeholders, the lower the company's cost of capital. Moreover, Dhaliwal (2014) indicated that firms with better financial performance have more resources to do social or environmental activities in order to get better prospects in the future. Francis et al. (2004) concluded that firms with good performance tend to have lower cost of capital. Thus, it is interesting to find the interaction of financial performance on the relationship of sustainability disclosure and cost of capital.

The remainder of this paper is organized as follows: in section 2, we review the sustainability concepts formed from the basic, some relevant studies underlying this research, and development of hypotheses. In section 3, we describe research design, variables and method to do data analysis. Section 4 reports the result of analysis using software Eviews 9.0, while section 5 presents the research' conclusions.

## **Prior research and hypotheses**

### *Underlying theories and previous studies*

The stakeholder theory appears to be the prevailing theory of company's decision regarding its sustainability. The stakeholder theory posits that companies sustainability related activities could improve their long-term value and reputation by reporting corporate social and environmental responsibilities (Feng et al., 2015). Unlike the traditional financial reporting that generally provides information only for fulfilling shareholder needs, the sustainability reporting presents information to a wider range of stakeholders and therefore helps the companies to respond the societal and environmental issues for sustainable business. Additionally, the signaling theory also justifies the urgency of company in disclosing information. A company discloses its sustainability information with the intention of providing additional data associated with company's activity. Lys et al. (2015) indicated that the proper sustainability disclosure, which meets the expectation of the stakeholders, is believed to signal them that the company has a good prospect in the future by creating a sustainable development. Not only signaling through sustainability information, Francis et al. (2004) and Ogneva et al. (2007) indicated that showing a good financial performance also found to be the way to signal the stakeholders. The stakeholder, especially the investors, are expected to response this signal positively; so that the company can improve its fund and lower its business risks and costs.

The relationship of sustainability disclosure and cost of capital has been previously investigated by some researchers. Botosan (1997) examined the relationship between disclosure level and company's cost of equity capital. The finding shows that there's a negative relationship between voluntary disclosure and cost of equity capital. Moreover, Botosan (1997) divided the sample into two subcategories, firms that attract more analysts and firms that attract less analysts. By dividing the sample, Botosan (1997) intended to find the significance of the relationship on two sub sample. The research resulted that the relationship between disclosure and cost of equity is less significant for the companies that attract more analysts.

Additionally, research conducted by Feng et al. (2015), that investigate the impact of CSR disclosure to the cost of equity capital, showed that the higher the CSR disclosure, the



lower the cost of capital. Feng et al. (2015) examined this effect on 10,803 firm-year observations of 25 countries. However, the effect shown to be significant only to the firms in North America and Europe.

Furthermore, Ng and Rezaee (2015) explored the relationship between sustainability disclosure and cost of equity capital. Ng and Rezaee (2015) divided sustainability disclosure into two main aspects; the ESG (Economic, Social, and Governance) and ECON (Economic). Using more than 20 years of observations, the study found that sustainability disclosure affects cost of equity capital negatively. However, only growth and research dimensions from ECON, and environmental and governance dimension from ESG, that influence significantly on the relationship. Ng and Rezaee (2015) also examined the interaction of ESG on the relationship between ECON and cost of equity capital which indicated that the strong ESG moderated the relationship.

Dhaliwal et al. (2014) investigated the benefit of CSR disclosure to firms financing activity. Dividing the samples into more and less stakeholder-oriented, Dhaliwal et al. (2014) using proxies such as labor protection status, disclosure requirements, and public awareness towards CSR impacts. The findings showed that CSR disclosure is successfully attract investor and lowering company's cost of capital in firms that are in more stakeholder-oriented countries.

In addition, Feldman et al. (1997) examined sustainability effect to shareholder value that reflected by its stock price. Feldman et al. (1997) specifically examined the environmental sustainability performance. The result of this study found that firms with environmental initiatives beyond the regulation enjoy higher valuation of its stock price. Firms get more opportunities in financial performance by conducting more environmental activity.

In financial point of view, Ognevaet al. (2007) examined the financial performance effect to the cost of capital. Ognevaet al. (2007) used proxies of internal control weakness to assess firms' financial performance. The result showed that firms with poor financial performance tend to have more expensive cost of equity capital than firms with better internal control and financially well performed. Accordingly, Francis et al. (2004) examined the relationship between earnings attribute and cost of equity capital. The earnings attributes were measured using seven points, namely earnings quality, persistence, predictability, smoothness, value relevance, timeliness, and conservatism. The result showed that cost of equity capital is successfully reduced on firms that has good financial performance, especially shown by earnings quality and value relevance.

### *Hypotheses development*

We proposed two main hypotheses that will be explained, and for each hypotheses are broken down into three sub hypotheses in order to find better understanding regarding with the topic.

According to signaling theory, voluntary disclosures are able to reduce information asymmetry between managers and investors. Botosan (1997) revealed that corporate executives believe a mechanism that if company discloses information voluntarily, it can lower the cost of capital. This mechanism applies as far as the information is considered value-relevant (Botosan, 1997). Prior research has shown that voluntary disclosures are able to give relevant information to investor investment's decision and successfully lower company's cost of capital afterwards. A proper sustainability disclosure deliver signal to

investors that the company has a good prospect for sustainability development and finally attract the ease of capital attainment. Dhaliwal et al. (2011), Feng et al. (2014), and Ng and Rezaee (2014) find that sustainability disclosures can actually enhance organizations financing through the lower cost of capital. Specifically, Feldman et al. (1997) stated that initiatives in environmental aspects are able to lower the perceived risk and higher valuation of the firms, which means environmental activity lead to easier attain capital attainment. The Global Reporting Initiatives (GRI) classified this sustainability disclosure into three main dimensions; economic, environmental, and social. For these reasons, it is hypothesized that:

### **Hypothesis 1. The sustainability disclosure has a negative effect on cost of capital**

To find further explanation about how each aspects of sustainability information affect corporate cost of capital, the first hypothesis is extended into:

H1a : The sustainability disclosure on economic category have a negative effect on cost of capital

H1b : The sustainability disclosure on environmental category have a negative effect on cost of capital

H1c : The sustainability disclosure on social category have a negative effect on cost of capital

Stakeholder theory revealed that the companies must be responsible to all of the users of financial and non-financial reports. The method used to communicate their responsibilities is usually through corporate disclosures. A company's disclosure is aimed to convince the stakeholders that the companies is credible, performed well, and sustainable. In financing activity, the capital suppliers, such as investors and creditors are mainly assessing the bank's performance in order to ascertain their credibility. Ognevaet al. (2007) indicated that firms that have bad internal control, which are poorly performed, tend to get the higher cost of capital. Francis et al. (2004) showed that firms that financially well-performed has the ability to attract lower cost of capital. Moreover, Ng and Rezaee (2015) explained that firms with good sustainability performance will have difficulties in signaling their values to the investors if their financial performance is poor.

Firms that pay attention to both sustainability and financial performance create more opportunities in increasing investors' trust and reduce cost of capital. Dhaliwal (2014) stated that by having a good financial performance, companies will have more resources to do sustainable development. So, the effect of sustainability disclosure in lowering the cost of capital can be strengthened for the banks that performed well. In order to understand how well banks are doing, some indicators must be assessed before concluding the performance of the banks. Prior financial literatures have mainly explain two factors to consider in determining banks performance, which are the profitability and capitalization of the banks. Athanasoglou (2008) stated that profitability of banks can be assessed through return on asset (ROA) and net interest margin (NIM) ratio. According to Goddard et al (2004)and Liu and Wilson (2010), banks capitalization also represent its performance for banks that maintain high level of capital have lower risk of bankruptcy and are performing well. Therefore, it can be hypothesized that:

### **Hypothesis 2. Banks financial performance strengthens the negative effect of sustainability disclosure to cost of capital**

In order to find further evidence of the moderating effect of financial performance in the relationship between sustainability disclosure and cost of capital, this study breakdown the second hypothesis into:

H2a : Higher level of NIM strengthen the negative effect of sustainability disclosure to cost of capital

H2b : Higher level of ROA strengthen the negative effect of sustainability disclosure to cost of capital

H2c : Higher level of CAR strengthen the negative effect of sustainability disclosure to cost of capital

## Data and research model

### *Data and sample*

The data used in this study is secondary data taken from some sources. The sustainability data were taken from each company's websites in the form of separated or integrated sustainability reports. The data for the financial performance were measured and calculated from each company's publication form of annual financial statements. While the data for cost of capital were calculated from financial statements. Moreover, the historical data of companies' stock returns and market returns for cost of equity capital calculation, were obtained from Yahoo! Finance website (<http://www.finance.yahoo.com/>).

The sample chosen for this study were the commercial banks which operate in four countries of South-East Asia: Indonesia, Malaysia, Thailand, and Philippine for the year of 2011-2015. The sample of this study used unbalanced panel data. The purposive sampling method used to select sample for this study by using criteria such as; banks that go public and listed on the stock market of each country, banks that publish their financial statements and annual report, and also produce the sustainability report during the period. This sampling method yields final sample of 78 samples for this study.

### *Analysis method*

Method of data analysis in this study using descriptive statistics, multiple regression analysis, and moderating regression analysis with computerized statistic tools Eviews 9.0. The descriptive statistics describes the value of mean, standard deviation, variance, maximum, minimum, sum, and skewness value of data. Multiple regression analysis and moderating regression analysis were conducted to find the relationship among variables observed. The regression equation for hypotheses 1 and hypotheses 2 expressed in terms as follows:

$$COC_{it} = \beta_0 + \beta_1 Econ_{it} + \beta_2 Envi_{it} + \beta_3 Soc_{it} + \varepsilon$$

$$COC_{it} = \beta_0 + \beta_1 TotalDisclosure_{it} + \beta_2 TotalDisclosure_{it} * NIM_{it} + \beta_3 TotalDisclosure_{it} * ROA_{it} + \beta_4 TotalDisclosure_{it} * CAR_{it} + \varepsilon$$

### *Variable definition*

**Cost of Capital (COC).** The dependent variable in this study is company's cost of capital. Brealey et al. (2011) described cost of capital as the cost of funds intended for financing a business. A company's cost of capital consist of cost of equity and cost of debt. The best measurement of cost of capital is derived from a weighted average of all sources of capital, commonly known as Weighted Average Cost of Capital (WACC). Referring El Ghouli et al. (2011), the effect of information disclosure in year t is examined to the cost of capital in

year t+1. According to Brigham and Houston (2006) and Grüninger and Kind (2013), WACC was calculated as follow:

$$WACC = \frac{D}{D + E} \times Kd (1 - T) + \frac{E}{D + E} \times Ke$$

Where:

WACC= Weighted Average Cost of Capital

D =Total Debt

E =Total Equity

T = Corporate Tax Rate

Kd = cost of debt; calculated by  $\frac{\text{Interest Expense}}{\text{Total Debt}} \times 100\%$

Ke = cost of equity; calculated by CAPM method

The CAPM method was chosen to be the measurement of cost of equity capital for the reason of this research focus is to examine the effect of sustainability disclosure to the cost of capital in listed banks, which the equity capital is mainly acquired from capital market. Thus, CAPM is believed to be the best measurement since it considers the market risk (beta). According to Campbell et al. (1997) and Pettengill et al. (1995), the cost of equity in CAPM is calculated by:

$$Ke = rf + \beta (rm - rf)$$

According to Brealey et al. (2011), the market return (Rm) and systematic risk are calculated by:

$$Rm = \frac{Pm_t - Pm_{t-1}}{Pm_{t-1}}$$

$$\beta = \frac{Cov (Ri, Rm)}{Var (Rm)}$$

Rf = risk-free rate based on short term treasury bill rate on each country

Rm = the mean return of market in a year.

Pm<sub>t</sub> =historical market price on month t

Pm<sub>t-1</sub> =historical market price on month t-1

Ri = historical stock return

**Banks Performance.** This study used bank's financial performance as the moderating variable to find the deeper relationship between sustainability disclosure and cost of capital. In order to understand how well banks are doing, some indicators must be assessed before concluding the performance of the banks. Prior financial literatures have mainly explain factors to consider in determining banks performance, which are the profitability, capitalization, and efficiency of the banks. Referred to Liu and Wilson (2010), Goddard et al (2004), and Athanasoglou et al (2008), the bank's financial performance measured by 3 (three) indicators, which are:

1. Return on Asset (ROA) measures how efficient bank assets are managed by the management in order to generate profit. ROA is calculated by:

$$ROA = \frac{\text{earnings after tax}}{\text{total asset}}$$

2. Capital Adequacy Ratio (CAR) shows the ability of banks to maintain sufficient capital and the ability to identify, measure, monitor, and control the possible risks related to capital management. CAR is calculated by:

$$CAR = \frac{\text{total capital}}{\text{weighted risk asset}}$$

3. Net Interest Margin (NIM) reflects the ability of banks to earn interest income based on earnings assets. NIM is calculated by:

$$NIM = \frac{\text{net interest income}}{\text{earnings asset}}$$

**Sustainability Disclosure (SD).** Independent variable for this study is the sustainability disclosure. To measure the sustainability disclosure, this research used Sustainability Disclosure Index based on GRI indicators. The GRI G3.1 index divides sustainability indicators into three main categories; economic, environmental, and social category. The social category is divided further into four sub-categories; labor practices and decent work, human rights, society, and product responsibility. Additionally, according to the research samples that are companies in financial service sector, the GRI FSSS (Financial Service Sector Supplement) was added to the index in order to complete the indicator of sustainability disclosure. As seen on **Table 1**, this research combined the GRI 3.1 and GRI FSSS to measure the disclosure level of sustainability reports. The method of index measurement used content analysis of sustainability report based on the dichotomy approach. The dichotomy approach is conducted by giving score 1 to item disclosed, and 0 to items that are not disclosed. Next, the scores were summed up to get total score for each company. The calculation of Sustainability Disclosure was conducted as follow:

$$\text{disclosure} = \frac{\text{item disclosed}}{\text{total item on index}}$$

**Table 1.**  
**Sustainability indicator based on GRI 3.0 index**

<b>Sustainability Categories</b>	<b>GRI-G3.1</b>	<b>GRI Service Supplement</b>	<b>Financial Sector</b>	<b>Total items</b>
Economic	9			9
Environmental	30			30
Social				
Labor practices and decent work	15			15
Human rights	11			11
Society	10	2		12
Product responsibility	9	14		23
<b>TOTAL ITEM</b>				<b>100</b>

## **Empirical Result**

### *Descriptive statistics*

The descriptive statistic is used to define a research data from the average (mean), maximum, minimum, and standard deviation value. According to **Table 2**, sustainability disclosure on economic dimension variable (ECON) has the widest range of values between 0-100 percent because it has the least item to disclosed, the disclosure on environmental dimension variable (ENVI) has a range value of 6.7-76.7 percent, while the social dimension of sustainability disclosure variable (SOC) has a range value of 11.5-86.9 percent. The values of STDEV show that there are deviations from the average or mean value of economic, environmental, and social disclosure variable in the amount of 25.8%, 17%, and 18% consecutively. Overall sustainability disclosure (TOTAL\_DISCLOSURE) data spread between 10-81 percent, the mean value and standard deviation was 46.4% and 16.5% respectively. Thus, among three aspects of sustainability, the environmental aspect has the lowest disclosure rate.

**Table 2.**  
**Descriptive statistics of samples**

Variables	N	Min	Max	Mean	STDEV
ECON	78	0.0000	1.0000	0.57813	0.2276
ENVI	78	0.0667	0.7667	7	0.1527
SOC	78	0.1147	0.8688	0.34938	0.1551
TOTAL_DISCLOSURE	78	0.1000	0.8100	3	0.1434
NIM	78	0.0231	0.1010	0.49916	0.0211
ROA	78	0.0400	0.0515	7	0.0109
CAR	78	0.0900	0.2060	0.46133	0.0224
COC	78	-	0.0880	9	0.0178
		0.03345		0.04695	
				4	
				0.01996	
				5	
				0.15692	
				0.02219	
				8	

The variable of bank's performance is defined by NIM, ROA, and CAR. Net interest margin (NIM) of the sample has a minimum value of 2.3% and a maximum value of 10.1%. The average value of bank's financial performance measurement is 4.7, 1.9 and 15.7 percent respectively for NIM, ROE, and CAR. The STDEV value indicates the deviation or diversion data from mean value of each of NIM, ROE, and CAR variable in the following order of 2.1, 1.09, and 2.2 percent. While the cost of capital (COC) measured by weighted-average cost of capital has the minimum value of 0.6%. The maximum value of WACC is 4.6%. The average or mean value of cost of capital is 1.9%, while the deviation from the mean value is 0.9% shown by STDEV.

## **Eviews Result**

### *Classical Assumption Test*

Before testing the hypotheses, it is necessary to test the classical assumptions first in order to get unbiased estimator for the study. According to Ghazali (2011), the classical

assumption includes normality test, autocorrelation test, multicollinearity test, and heteroskedasticity test. Since this study has two regression equations, the classical assumption test had been conducted for each equations.

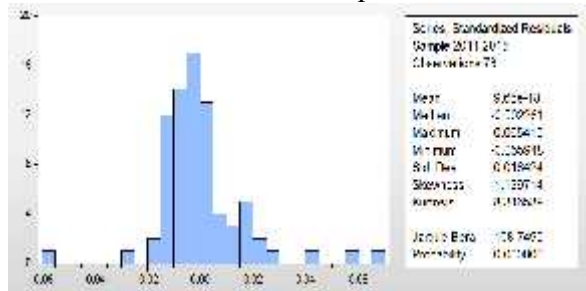


Fig.1 Normality test of Hypotheses 1

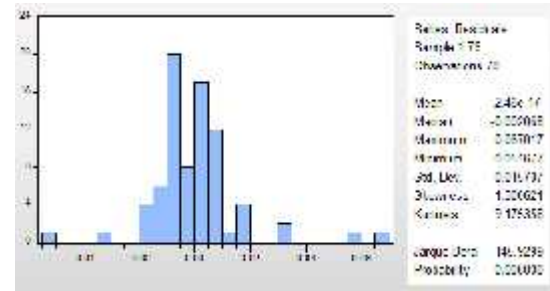


Fig.2 Normality test of Hypotheses 2

The normality test aimed to determine the data distribution of variables that are used in the study. Normal distributed data should have probability value greater than 0.05. The result of normality test using Eviews 9 showed that the data for this study (both for regression equation 1 and 2) have probability value lower than 0.05. It means the data for this study did not pass the normality test. However, one of normality theory, The Central Limit Theorem, provide justification for this condition. It explained that larger data would be eventually normal distributed than fewer data. Gujarati (1994) classified that data with sample >25 is categorized as large data. This study use 78 samples, therefore the data would be normal eventually.

Table 3. Multicollinearity Test of Hypotheses 1

	ECON	ENVI	SOC
ECON	1.000000	0.509656	0.698313
ENVI	0.509656	1.000000	0.625720
SOC	0.698313	0.625720	1.000000

According to **Table 3**, none of the independent variable has tolerance value greater than 0.8. So, it can be concluded that equation for hypotheses 1 has no multicollinearity problem. The multicollinearity test was only conducted to regression equation 1 for the second equation is a moderated regression that don't need multicollinearity test.

Autocorrelation problem was tested using Durbin-Watson (DW). For both regression equations have no autocorrelation problem because they have DW value between dU and 4-dU. The first and the second equation have value of 2.064 and 2.030 respectively, they are greater than 1.7129 and lower than 2.2871. Therefore, the equations for this study has no autocorrelation problem.

Heteroskedasticity test for this study conducted using Heteroskedasticity White Test. All of the equations have probability value of Obs\*R-squared greater than 0.05. Thus, this study has no heteroskedasticity problem.

*Hypotheses Test Result*

The first hypotheses was tested based on the equation:

$$COC_{it} = \beta_0 + \beta_1 Econ_{it} + \beta_2 Envi_{it} + \beta_3 Soc_{it} + \varepsilon$$

The significance level to test the hypotheses for this study is 5%. The result of the first hypotheses test showed that economic disclosure (ECON), environmental disclosure (ENVI), and social disclosure (SOC) are able to explain the dependent variable (COC) as much as 15.56%. The relationship of independent and dependent variables for hypotheses 1 are shown in **Table 4**.

The effects of sustainability disclosure to the cost of capital varies among each dimensions. According to **Table 4**, the effect of economic dimension disclosure to the cost of capital is significant at 0.0014 (P value < 0.05). This relationship has a positive parameter coefficient value which means that sustainability disclosure on economic dimension has a positive effect to the cost of capital. This result is contrary to H1a: The sustainability on economic dimensions have a negative effect to cost of capital. Therefore, **H1a is rejected**.

Next, the effect of environmental dimension of sustainability disclosure to cost of capital is insignificant. The insignificance is proved by P value of 0.2748. This relationship has a negative parameter coefficient value. So, the more environmental dimensions disclosed, the less the cost of capital. The result is matching to H1b: The sustainability on environmental dimensions have a negative effect to cost of capital. However, due to the insignificant probability value, this result cannot support hypotheses 1b. Thus, **H1b is rejected**.

Furthermore, the result on **Table 4** shows that of social dimension of disclosure affects the cost of capital significantly, which shown by P value of 0.0153. The parameter coefficient value is negative. So, it can be concluded that the relationship between social disclosure and cost of capital is negative. The result is corresponding to H1c. Thus, **H1c is accepted**.

Table 4. Summary of the First Hypotheses Test Result

Independent Variables	Coef ficient	Prob.	Note
ECON	posit	0.001	H1a rejected
ENVI	ive	4	H1b rejected
SOC	nega	0.274	H1c accepted
	tive	8	
	nega	0.015	
	tive	3	

The second hypotheses was tested based on the equation:

$$COC_{it} = \beta_0 + \beta_1 TotalDisclosure_{it} + \beta_2 TotalDisclosure_{it} * NIM_{it} + \beta_3 TotalDisclosure_{it} * ROA_{it} + \beta_4 TotalDisclosure_{it} * CAR_{it} + \varepsilon$$

The second regression has R squared value of 22.78%. It showed that total disclosure and the interaction between total disclosure and banks performance explains cost of capital as much as 22.78%. The relationship of independent and moderating variables for hypotheses 2 are shown in **Table 5**.

According to Table 5, the total sustainability disclosure has significant effects to the cost of capital/ as shown in the table, this effect is significant on P value of 0.0032. The coefficient value shows a negative parameter coefficient which means the higher the sustainability disclosure, the lower the cost of capital.

To examine the moderating effect of banks' performance on the relationship between sustainability disclosures to the cost of capital, this study uses some financial ratios as the



proxy of banks performance. **Table 5** shows that NIM has a positive moderating effect on the relationship between total disclosure and cost of capital. This effect is significant because the statistic result shows P value 0.0049. Therefore, it can be concluded that higher value the NIM weaken the negative relationship of total disclosure and cost of capital. In other words, high value of the NIM turn the relationship between total disclosure and cost of capital into a positive effect. This result is contrary to H2a. Thus, **H2a is rejected.**

In the relationship between total disclosure and cost of capital, the result shows that ROA significantly moderates the relationship to a negative effect. This role is statistically significant, it is proved by P value of 0.0278. It means that high value of ROA can strengthen the negative effect of total disclosure to the cost of capital. This result is supporting H2b. Therefore, **H2b is accepted.**

Nevertheless, instead of strengthen the negative effect of total disclosure to cost of capital, the moderating role of CAR is shown to change the effect of total disclosure to be positive. This is proven by the result of **Table 5**, that TOTALDISCLOSURE\*CAR has a significant P value of 0.0298, and a positive coefficient parameter. It means that the higher CAR, the effect of total sustainability disclosure to the cost of capital is weakened. This result is contrary to H2c. So, it can be concluded that **H2c is rejected.**

**Table 5. Summary of The Second Hypotheses Test result**

Independent Variables	Coefficient	Prob.	Note
TOTALDISCLOSURE	negative	0.0032	
TOTALDISCLOSURE*NIM	positive	0.0049	H2a rejected
TOTALDISCLOSURE*ROA	negative	0.0278	H2b accepted
TOTAL DISCLOSURE*CAR	positive	0.0298	H2c rejected

### Interpretation and Conclusion

#### *The Effect of Sustainability Disclosure to the Cost of Capital*

Based on the hypotheses test result on Table 5, the effect overall sustainability disclosure is significantly negative to the company's cost of capital. This finding is consistent with previous studies which stated that firms with more voluntary information disclosure is facing a cheaper cost of capital (Botosan, 1997; Dhaliwal, 2014; Ng and Rezaee, 2015). However, the result from Table 4 proves that each dimensions of sustainability disclosure has different impacts on cost of capital. The sustainability on economic dimension has a positive effect on companies' cost of capital. Based on Global Reporting Initiative Guidelines (GRI G3.1), the sustainability disclosure of economic dimension mainly illustrates the organizations' impacts on the economic condition of their stakeholders (i.e. compensation to employees, payment to government, and community investment) through three aspects, namely economic performance, market presence, and indirect economic impacts. This dimension highlights the monetary contributions of organizations to sustainable development. As prior work of Reverte (2009) found that some industries perceived to have a higher level of risk by the investor, especially industries with high consumer visibility. By doing disclosure of economic contributions, the visibility of company and risks will increase. According to Feng et al. (2015) and Lasmin and Nuzula (2012) most investors in Asian or developing countries see social contributions as a risky and worthless expenditure which is able to reduce company's

profit. Thus, the investors' response is negative, shown by high level of cost of capital. Therefore, economic dimension of sustainability, is possible to increase the cost of capital.

On the other side, the environmental and social dimension of sustainability disclosure are possible to lower a firm's cost of capital. These findings are supported by signaling theory, which explains that information disclosed by companies is a signal to their capital providers, especially the investors. The sustainability information of environmental and social is considered as a positive signal by the capital providers, which triggers the ease of capital attainment and lower cost of capital. These findings are in line with Feldman et al. (1997) and Ng and Rezaee (2015) that conclude the firms that disclose more environmental performance are perceived as a less risky firm by investor and further lowering it cost of capital. Stakeholders respond positively to the banks that produce more environmentally products and concern to environmental activity. Thus, companies with more environmental disclosure get lower cost of capital. The findings also confirm Dhaliwal et al. (2011) and El Ghoul (2011) that report firms with high social performance enhance their firm value and exhibit cheaper financing cost.

#### *The Effect of Banks Financial Performance on the Relationship between Sustainability Disclosure and Cost of Capital*

According to the hypotheses test result, financial performance of banks has variety of effects in moderating the relationship between overall sustainability disclosure and cost of capital. The effect of total sustainability disclosure to the cost of capital is strengthened by ROA. As Dhaliwal (2014) stated that firms with better performance have more resource to conduct social activities and tend to disclose their sustainability. This tendency can support the arguments that firms with high profitability that disclose their sustainability to their stakeholders are able to enjoy a lower cost of capital. Accordingly, Ng and Rezaee (2015) stated that firms are able to produce sustainable performance when they keep profitable in the long run.

However, the result proved that level of NIM and CAR weaken the negative effect of overall sustainability to the cost of capital. NIM is the ratio of profitability that measure the interest income generated by the banks compared to interest paid to the lenders, relative to their interest-earning assets. High level of NIM shows high level of profitability for banks, but it also shows inefficiency. By charging huge rates of interest to their debtors, banks will get higher NIM. It will burdens the debtors as one of the capital supplier. Therefore, cost of capital can increase even though the bank has good sustainability performance. The same way applies for CAR. Capital Adequacy Ratio reflects the adequacy level of banks capital in bearing risk-asset. High level of CAR shows high level of healthy banks, but if the value is too high it reflects that bank has too much idle fund. This shows a poor management and performance. Thus, it cause CAR change the effect of disclosure and cost of capital.

#### **Conclusions**

This study examines the relationship between corporate sustainability disclosure and the cost of capital, and also the effect of banks performance on the relationship between corporate sustainability disclosures to the cost of capital. Using 78 samples of listed banking sector in 4 ASEAN countries; Malaysia, Indonesia, Thailand, and Philippines, this study was analyzed using multiple and moderated regression analysis with Eviews 9.0. According to the test, the result of this study can be summarized as follow:

1. The total sustainability disclosure is significantly lowering firm's cost of capital. Specifically, the sustainability on environmental and social dimension are the factor that contribute on this effect. However, the environmental disclosure effect is insignificant. While the disclosure on economic dimension, however, shown to increase cost of capital.
2. The banks performance that moderate the relationship between sustainability disclosure and cost of capital is ROA. Partial examination showed that ROA strengthens the negative effect of social disclosure to the cost of capital. While the moderating effect of NIM and CAR on the relationship between sustainability disclosure and cost of capital are found to turn the effect into positive.

Therefore, it can be concluded that the sustainability disclosure is successfully lower cost of capital in banking sector. However, high economic disclosure tends to increase the cost of capital. Specifically, banks with excellent sustainability disclosure on social aspects (labor practices and decent works, human rights, society, and product responsibility) are able to get cheaper cost of capital. Furthermore, by having high profitability, banks are able to reduce the cost of capital.

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## BOARD OF DIRECTOR OWNERSHIP, LEVERAGE, AND PERFORMANCE: THE ROLE OF R&D INTENSITY

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### Abstract

This research aims to examine the effect of board of director ownership and leverage on R&D intensity; also the effect of board of director ownership and leverage on performance with R&D intensity as moderating variable. The sample of this research are 221 listed companies in Indonesia Stock Exchange (IDX), which is selected by purposive sampling method. The data used in this research is secondary data collected from IDX website (<http://idx.co.id>). This research uses random effect panel data regression and Moderated Regression Analysis (MRA) for the moderating test. The results show that only leverage that has negative effect on companies' performance, while board of director ownership do not have effect on companies' performance. Moreover, there is no indirect effect found between board of director ownership and leverage on performance with R&D intensity as moderating variable.

**Keywords:** *board of director ownership, leverage, R&D intensity, performance.*

### Introduction

The advancement in economic theories shows that board of directors are having an important role within companies' managements (Fama & Jensen, 1983; Williamson, 1983), especially in public companies that tend to have problems on the company ownership and monitoring (Fauzi & Locke, 2012). Board of directors have a monitoring function – which means they have a responsibility in monitoring the managers over the name of the shareholders (Hillman & Dalzien, 2003). In operating an effective management, the board of directors are having a responsibility in giving suggestions and applying the main strategy of the company (Nath et al., 2015). However, shareholders are not always agreed with the strategy, which later it tends to cause an agency problem (Fauzi & Locke, 2012).

Research and Development (R&D) is one of companies' strategic decision that can be a subject of companies' conflict of interest between the manager and shareholders (Baysinger et al., 1991). In this case, board of directors had a power to end the conflict of interest – which will reduce the agency cost (Baysinger & Butler, 1985). In line with Baysinger & Butler (1985), Fauzi & Locke (2012) argues that board of directors is one of corporate governance mechanism that can reduce the conflict of interest in a public company. Board of directors also have a direct access to the company resource (Kor, 2006), which means it plays an important role over the application of a company main strategy (Nath et al., 2015).

Agency theory saw the primary function of board of director as the monitoring agent (the managers) to protect the principal's behalf (the owner) (Eisenhardt, 1989; Jensen & Meckling, 1976). Based on the agency theory perspective, conflict of interest between the

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shareholders as the owner and manager can be reduced if the managerial ownership increased (Jensen & Meckling, 1976). Managerial ownership is referring to the ownership of board of directors, CEO, and managers (Omar et al., 2014). This research only focused on the board of director ownership. Moreover, board of directors is expected to reduce the agency cost by monitoring the management (Eisenhardt, 1989; Fauzi & Locke, 2012).

Based on the agency theory, agency cost is not only arises from the conflict of interest that involving shareholders, but also bondholders (debtholders). Different with shareholders who want the distribution of top level company performance result, bondholders tends to relate with the distribution of bottom level company performance result, which is associated with the repayment of principal and interest. Therefore, bondholders do not like a risky project which will threaten the availability of corporate funds in paying the principal and interest (Balakrishnan & Fox, 1993). As a high-risk projects, R&D is interesting for shareholders who want the top distribution of the performance results, but bondholders do not consider it interesting (Baysinger and Butler, 1985).

An increase in debt financing will decrease managers' willingness to invest in a hi-risk, but more profitable project (Balakrishnan & Fox, 1993). However, R&D is part of intangible asset investments and there is no guarantee it will bring good output (Vincente-Lorente, 2001). O'Brien (2003) argues that a company which competes on innovation should prioritizing low leverage, because it is related with R&D continuity and company's funding.

Jensen & Meckling (1976) claims that the amount of leverage in the capital structure will effect manager's operational decision, thus it will also affect companies' performance. Therefore, few researchers are interested to examine the effect of leverage on companies' performance. Previous researches on the effect of leverage on the performance show inconsistent result. Jeremias (2008), Shaheen (2014), and Vithessonthi & Tongurai (2015) find that leverage has a negative effect on companies' performance. Other researches, Ofek (1993) and Ho & Hsu (2010) finds a contrary result, where leverage has a positive effect on companies' performance. While, a research by Fachrudin (2011) find that leverage does not have an effect on companies' performance.

Similar to many researches on leverage and companies' performance, researches on the effect of board of directors on companies' performance provide various findings (Pearce II & Zahra, 1991; Dalton et al., 1998; Hillman & Dalziel, 2003; Uadiale, 2010; Horvath & Spirollari, 2012; Priya & Nimalathasan, 2013; Meyer & Wet, 2013; Nath et al, 2015). Most studies find that the level of board of director ownership has a positive effect on the company's performance (Pearce II & Zahra, 1991; Dalton et al., 1998; Horvath & Spirollari, 2012; Priya & Nimalathasan, 2013). However, Hillman & Dalziel (2003) finds that board of director ownership is affecting company's performance and being moderated by monitoring and provision of resources. In contrast to other studies, Uadiale (2010) and Meyer & Wet (2013) find that the board of directors' ownership is negatively affecting company's performance. While Nath et al. (2015) find that board of director ownership does not have a significant effect on companies' performance.

These inconsistencies in the previous researches have motivated the researcher to do a research on the effect of board of director ownership and leverage on companies' performance. Furthermore R&D intensity is added as a moderating variable. R&D intensity chosen because it is one of a company main strategy which tends to rise the conflict of interest, whether between the manager and shareholders or the manager and bonds holders.

Bondholders tend to dislike a hi-risk project such as R&D because it is threatening the company funding in paying their debt and interest, while shareholders are interested in R&D (Balakrishnan & Fox, 1993). Even though it will create higher risk, but R&D can be considered as an investment over a new technology which could be transformed to an efficient productivity method (Tuna et al., 2015). Companies' performance might be increased using the new technology resulted from the R&D

### **Hypothesis development and research method**

#### *Board of Directors' Ownership and Performance*

Based on agency theory perspective, the conflict of interest between the shareholders as the owner and the manager can be reduced when the managerial ownership increase (Jensen & Meckling, 1976). Most researches on similar topics also find that the level of board of directors' ownership has a positive effect on company performance (Pearce II & Zahra, 1991; Dalton et al., 1998; Horvath & Spirollari, 2012; Priya & Nimalathasan, 2013). When board of director members also have shares in the company it can reduce the agency problem. It is expected that company's performance can be increased by board of directors who act as principal and agent who will perform their functions more properly. Based on the discussion, the third hypothesis is as follow.

**H<sub>1</sub>: Board of directors' ownership has a positive effect on company performance.**

#### *Leverage and Performance*

Jensen & Meckling (1976) claims that the amount of leverage in the capital structure will have an effect toward the manager operational activities decision as well as on company performance. The amount of leverage will cause a higher interest expense (Brigham & Gapenski, 1997). The high of interest expense that is not followed with a high operational profit will make the company suffer a financial problem. This will make the company performance decreased (Fachrudin, 2011). Previous researches by Jeremias (2008), Shaheen (2014), and Vinthessonthi & Tongurai (2015) find that leverage has a negative effect on performance. Based on the discussion, the fourth hypothesis in this research is as follow.

**H<sub>2</sub>: Leverage has a negative effect on performance.**

#### *Board of Director Ownership, Leverage, R&D intensity, and Performance*

Intangible investments become essential for intensive business competition in contemporary economics (Anagnostopoulou, 2008). R&D activities as an intangible investments should be a subject of concern (Chan et al., 2001). However, R&D is the main strategy of a company which can rise the conflict of interest, whether between the shareholders or the bondholders (Baysinger et al., 1991). Bondholders tend to not liking a risky project like R&D because it will threaten the company funding in paying their debt and interest, while the shareholders were more interested with the R&D (Balakrishnan & Fox, 1993). Even though it'd be risky, but R&D serves as an investment in new technology and knowledge base, which can be transformed into a more efficient production method for the resources available (Tuna et al., 2015). Therefore, the writer argue that performance will be increased by a new technology resulted from the R&D. Based on the discussion, the sixth hypothesis in this research is as follow.

**H<sub>3</sub>: R&D intensity moderate the effect of board of director ownership on performance.**

**H<sub>4</sub>: R&D intensity moderate the effect of leverage on performance.**



## Research method

The population of this research is all of public companies listed in IDX within the year of 2010-2015. Purposive sampling method is used in selecting the sample – the selection is based on the researcher subjective considerations, where data are entered to the sample when it reaches some criteria specified by the researcher. The criteria used in determining the research sample of this research are: (1) company that uploaded their financial report in the website of IDX (idx.co.id) in the period of 31<sup>st</sup> December in year of 2010-2015 and has been audited by a public accountant office; (2) company that attaching complete data needed in this research; (3) and company that has positive equity.

This research is designed to collect an empirical evidence on the effect of board of director ownership and leverage on performance with R&D as the intervening variable. Data used in this research is a panel data – the data collected are consisted of cross-section and time series data. The data is tested using the panel data regression with supports of EViews 8.1 software. To test the effect of intervening variable Sobel test is carried out. Before the analysis of panel data regression, the estimation method and statistic descriptive should be determined.

The regression model used in this research is.

$$PERF = \alpha + \beta_1 BOD + \beta_2 LEV + \beta_3 RD + \beta_3 INS + \beta_4 SIZE + \varepsilon \quad (1)$$

$$PERF = \alpha + \beta_1 BOD + \beta_2 LEV + \beta_3 RD + \beta_3 INS + \beta_4 SIZE + \beta_5 BOD * RD + \beta_6 LEV * RD + \varepsilon$$

(2)

Notes:

PERF = Performance (multiplication of stock market prices and number of shares outstanding divided by the book value of assets)

RD = R&D intensity (amount of R&D cost divided by total asset)

BOD = Board of Director (BoD) Ownership (number of ordinary shares owned by BoD divided by the number of outstanding ordinary shares)

LEV = Leverage (total liability divided by total asset)

INS = Institutional Ownership (number of ordinary shares held by domestic institutions divided by the number of outstanding ordinary shares)

SIZE = Company Size (Ln(Total Asset))

## Analysis and Discussion

The results show that the adjusted R-squared for regression equation (1) and (2) are 0.0781 and 0.0739 consecutively, which means that in regression equation (1) 7.81% R&D intensity can be explained by board of director ownership and leverage, while the remaining 92.19% are explained by other variables outside the equations. While for regression equation (2) the adjusted R-Square is 0.0739, which means that 7.39% firm performance can be explained by board of director ownership, leverage, and interaction of board of director ownership and leverage on R&D intensity, while the remaining 92.61% are explained by other variables outside the equation. The result shows that adjusted R square of direct effect > adjusted R square of indirect effect model. It means that generally, R&D intensity cannot moderate the effect of board of director ownership and leverage on performance.

**Table 1 Regression Test Result**

Variable	Model 1 Direct Effect	Model 2 Moderating Effect
C	1.835119** (0.0141)	2.196585*** (0.0064)
BOD	-1.289095 (0.5598)	-1.532048 (0.5235)
LEV	-2.155346*** (0.0000)	-2.496465*** (0.0000)
RD		-76.82907*(0.0979)
INS	0.204604 (0.6601)	0.072902 (0.8814)
SIZE		0.0547 (0.5005)
BOD*RD	0.060716 (0.4481)	-86.08462 (0.7234)
LEV*RD		128.2692 (0.2462)
R-squared	0.09489	0.10340
Adj. R-squared	0.078128	0.073934
Wald test (Chi square)	22.90937***( 0.0001)	24.60879***( 0.0014)

*Notes: \*\*\*; \*\*; \* significant in 1%; 5%; 10% level; BOD= BoD Ownership; LEV= Leverage; INS=Institutional Ownership; SIZE= Company Size; RD= R&D Intensity*

The results of t-test in Table 1 show that board of director ownership does not affect firms' performance (PERF) directly, which means that the **first hypothesis is not supported**. This result is consistent with Nath et al. (2015) who find that board of director ownership is not significantly affect the performance of a firm. It might be because of low percentage Indonesian board of director ownership, which is only account for 1.73% of the total outstanding shares, in average. Jensen &Meckling (1976) argue that managerial ownership can reduce conflict of interest. However, the low board of director ownership in Indonesia may lead to the inability of board of director ownership to reduce conflict of interest.

Leverage is negatively affecting firms' performance with the regression coefficient of -2.1553 ( $p < 1\%$ ), which means that **second hypothesis is supported**. This result is consistent with Jeremias (2008), Shaheen (2014), and Vithessonthi &Tongurai (2015) who find that leverage is negatively affecting performance. Jensen &Meckling (1976) state that the amount of leverage in capital structure will affect manager in selecting the activities in company operation and thus, it will affect firm's performance. Higher leverage will lead to the higher interest expense in firm (Brigham &Gapenski, 1997). If it is not accompanied by higher net income, firm's performance will decline (Fachrudin, 2011).

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Moderated Regression Analysis (MRA) is used to test the moderating effect in this research. The result shows that there is no indirect effect in the board of director ownership and leverage on performance with R&D intensity as moderating variable with  $p > 5\%$ . This shows that the **third and fourth hypothesis is not supported**, or there is no indirect effect of board of director ownership and leverage on performance with R&D intensity as moderating variable.

The reason behind the absence of such relationship may be caused by the relatively low R&D activities in Indonesia, which result in the inability of R&D to moderate board of director ownership and leverage on firm's performance. Also, Indonesian R&D intensity has not produce new patented finding, so that there is no obvious result of R&D activities. It is different with China, in which according to Choi et al. (2011), the average patent as an output of R&D is 5.67 patent, while in Indonesia it is difficult to find firm with patented R&D result. Yet undefined output of R&D may also be the cause of R&D intensity that does not affect company's performance.

### Conclusion and suggestion

This research aims to examine the effect of board of director ownership and leverage on firm's performance; the indirect effect of board of director ownership and leverage on firm's performance with and R&D intensity as the moderating variable. The findings show that only leverage has a negative effect on company performance, while board of director ownership and the R&D intensity does not have effect on company performance. The findings support previous research - that leverage has a negative effect on performance (Jeremias 2008; Shaheen, 2014; and Vithessonthi & Tongurai, 2015) and support the finding of Nath et al. (2015) that board of director ownership has no effect on companies' performance. MRA test results show that there is no indirect effect of board of director ownership and leverage on the performance with R&D intensity as an moderating variable. Similar to board of director ownership, the low intensity of R&D is also suspected to be the cause of the absence of R&D intensity to moderate the effect of board of director ownership and leverage on performance.

This research has a few limitations – using the sample from all of industry sectors, including the financial sector and non-financial sector. Thus, it may cause a bias in the research result because the financial sector has different regulations. However, due to the sample limitation, this research combined the companies in the financial and non-financial sector as research sample. The suggestion for future research is to separate the two sectors by expanding the research period to fulfill the sample requirement. This research has not considered another variable that may also affect R&D intensity – such as internal cash flow and business group. Hall (2005) and Lee (2012) find that internal cash flow, measured using operational cash flow divided by total asset, has an effect on R&D intensity, with R&D intensity as (t+1). The future research can add another variable which may affect R&D intensity such as internal cash flow and business group.

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**FISCAL DECENTRALIZATION EFFECT ON FINANCIAL  
PERFORMANCE:  
MEDIATED BY SIZE AND MODERATED BY AUDIT OPINION  
IN LAMPUNG PROVINCE**

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**Abstract**

This research aims to examine the effect of fiscal decentralization on financial performance by adding government size as the mediator variable and audit opinion as the moderator variable of counties and cities in Lampung Province. Lampung Province is the center of economic mobility in South of Sumatera Island so it can impact well to regional autonomy implementation and has the best financial statements (an unqualified opinion) in Sumatra Island (47.5%). This research was conducted in 13 counties and 2 cities in 2010-2013 for the objective to see the regional autonomy implementation started in one decade. The examination of hypothesis used to Partial Least Square with the significant of decision-making  $<0.10$ . The results show that fiscal decentralization gives the positive and significant effect to financial performance but non-significant effect to government size; government size gives the positive and non-significant effect to finance performance; and fiscal decentralization gives the positive and non-significant effect to finance performance with the audit opinion as the moderator variable.

**Keyword:** *decentralization, financial performance, audit opinion*

**Introduction**

*Background Research*

Regional autonomy implemented since 2001. Speaking about regional autonomy, then do not forget to speak of fiscal decentralization that is used as the basis for the implementation of regional autonomy. The local government through fiscal decentralization is given discretion in managing local revenue to meet the needs of the autonomous region.

The magnitude of what the central government on fiscal decentralization to be properly budgeted and realized well that the financial independence of a region can be realized so that all shopping needs will be met in the area also has become a common thing for some it is an indicator of financial performance area. In fact, fiscal decentralization remains a serious problem in all counties/cities in Lampung Province after a decade in the implementation of regional autonomy. During 2010-2013, fiscal decentralization in the counties/cities in Lampung Province has a pattern of relationships instructive, whereas fiscal decentralization is an important thing that is used to determine the financial dependence on the central government. Small fiscal decentralization will greatly affect the local financial performance (effectiveness) because the form of fiscal decentralization in Indonesia focused on fiscal decentralization expenditures.

It is also fueled by a growing number of people in an area that would be a financial burden, whereas the population is an asset for the region as well, which if fulfilled needs will have a positive impact on the economy. The need for the central government to intervene in

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providing additional revenue by considering the amount of income each region and the many of the population will be a solution for the region because of the big size of local government will help fiscal decentralization in realizing the financial performance of quality. In addition, decentralization also make the government vulnerable to misuse of regional wealth. The need for transparency and accountability its performance will be better, so the selection of audit opinion variables can be used to strengthen the influence of fiscal decentralization on local financial performance.

#### *Research Purposes*

On the basis of research background, the purposes of this study to evaluate the implementation of regional autonomy in counties/city Lampung Province. The evaluation implementation of regional autonomy in counties/city Lampung Province through testing 1). the positive effect of fiscal decentralization on financial performance of the counties/city in Lampung Province, 2). the positive effect of fiscal decentralization on local governance size counties/cities in Lampung Province, 3). the positive effect of local government size on financial performance of the counties/cities in Lampung Province, and 4) the positive effect of fiscal decentralization on financial performance of the audit opinion as moderating variable in the counties/cities in Lampung Province.

#### *Research Contributions*

The findings of the research will be the input for the counties/city government in Lampung Province in formulating budget policy. Based on that, the construction activity is expected to be smooth and supports the achievement of good governance government so as to improve budget managing in counties/city Lampung Province. In addition, research findings will be useful in contributing to the development of public sector finance theory.

### **Literature study and hypothesis development**

#### *Literature Study*

According to Halim and Abdullah (2006), implementation decentralization attaches agency theory as a result of devolution, then automatically there will be parties to delegate powers (the principal) and no authorized parties (agent). Executives in the public sector is an agent for the legislature and the public (dual accountability) and the legislative is agent for the public. Natural thing in the agent and the principal is the discrepancy between the information. More information will be owned by the agency rather than by the principal. According to Basrie *et al.* (2012), the government's performance in Bandar Lampung is not maximized due to a lack of responsibility for human resources. This is evident from the achievements of the amount of expenditure which only amounted to 96.69% of the target and the amount of cash flow decline.

According to Kusumawardani (2012), the size of government and the size of the legislature affect the financial performance of local governments. It can be used as a justification of a large size can help the operations of local authorities accompanied by increased financial performance of local governments. Legislative size affect the financial performance of local governments, because the increasing number of qualified members of the legislature, the more lightweight and easy to carry out the task of their functions and roles in the supervision of the local government. Leverage does not affect the financial performance of local governments for external financing of local government not only through debt but also from the Fund Balance.

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According to Dwijayanti and Ruserlistyanti (2013), there were differences in the degree of independence, effectiveness, and activity between routine and development expenditure in the provincial government's financial performance in Indonesia 2008-2010. However, there are differences in the level of efficiency and revenue growth rates on the financial performance of the provincial government in Indonesia 2008-2010. According to Fidelius (2013), the ratio of the effectiveness of the financial management performance of Manado is quite effective. This is demonstrated by the effectiveness of financial management performance reached 104.26% of the local budget in 2012. However, for the performance of financial management Manado City based financial self-sufficiency ratio is still very low. That is, the relatively small contribution of revenue in the budget.

According to Manik (2013), prosperity and the size of local government a significant effect on human development. According to Sianturi *et al* (2013), the level of fiscal decentralization below 10%. It can be seen from the ratio of revenue to the budget which in 2008 amounted to 4.56%, in 2009 by 4.71%, 2010 was 4.32%, 2011 was 6.78%, and 2012 by 7.82%. This indicates that the degree of fiscal decentralization in Batu City is still lacking. According to Sularso and Restianto (2011), the financial performance APBD counties/cities in West Java Province has not been optimal. That is, the counties/cities in West Java Province have not been effective and precise in using the budget. Therefore, budgets counties/cities in West Java Province has not resulted in increased social welfare.

According to Susanto and Badrudin (2016), the allocation of the budget so that more priority alignments for public purposes (capital expenditure) rather than the interests of personnel (personnel expenditure). In allocating the capital expenditure component must consider several things: direct capital expenditure for the construction of supporting infrastructure investment in the region in promoting economic growth in the region; an evaluation and assessment of the inventory items are available both from the state and its economic life so that the procurement of inventory items can be selectively carried out according to the needs of each Local Government Unit (SKPD); and make capital expenditures for the purchase price/ wake fixed assets plus all expenditures associated with procurement of fixed assets until ready to use.

Routine problems that always arise in the management of the budget is the proportion of capital spending and the rate of absorption of low capital expenditure budget. This relates to the politics of local government budgets in managing the budget. Budgets are policy instruments owned by the local government to describe a comprehensive statement about the priorities of the region and also shows the estimated performance of local governments that will be achieved during a certain period. Many counties/cities in Indonesia, which has a large portion of the budget with the allocation of indirect expenditures (personnel expenditures), while the allocation of direct expenditure (capital expenditure) is relatively low. This affects the success of development as measured by the Human Development Index. Therefore, the principle of budget management should as much as possible for the prosperity of society (Badrudin and Siregar, 2015 and Badrudin, 2015).

#### *Hypothesis Development*

Fiscal decentralization provides an opportunity for the region to explore and manage revenue. The local government will be more flexible in determining the budget of local revenue for local governments more aware of the condition of the autonomous region, so that the realization is more easily achieved (Halim and Abdullah, 2006). The participation of



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district Own Source Revenues are very important in the success of fiscal decentralization (Sianturi *et al.* 2013). After realization can be achieved, the government will reduce its dependence on the central government which is characterized by local financial independence. Fiscal decentralization also makes it easier to regulate the proportion/conformity expenditure (the proportion of recurrent and development expenditure), so that the greater is fiscal decentralization will be the greater local financial performance (Smeru, 2002: 41 and Susanto and Badrudin, 2016). Based on these explanations, it can be arranged hypothesis:

H1: Fiscal decentralization has positive effect on local financial performance of the counties/cities in Lampung Province

Fiscal decentralization will provide flexibility for regions to dig own resource revenue, so that own resource revenue will increase and revenue of sharing fund tax and non-tax be the main source to finance the interest of the population/ public. The implication revenue (central and local) will be greater than the total population. This means that fiscal decentralization will increasingly contribute positively to the size of local government. Dwijayanti and Ruserlistyanti (2013) show that fiscal decentralization is measured using indicators of revenue and expenditure decentralization have a positive impact or increasing the size of local government at the local counties/cities. Based on these explanations, it can be arranged hypothesis:

H2: Fiscal decentralization has positive effect on local government size of the counties/cities in Lampung Province

The regional government large size will provide added value to the area because it would be optimal in providing services to the needs of the autonomous regions, especially financial needs. It is expected that the size of the local government will have implications on the region's financial performance. It can be seen from the optimal management of potential areas in order to achieve independence, conformity and effectiveness of the underlying financial performance of a regional framework (Badrudin, 2015). So that the larger the size of local government, the greater the financial performance of the region. According Kusumawardani (2012), Fidelius (2013), and Malik (2013), the regional government large size be able to help the operations of the local government, accompanied by improved financial performance of local governments. Based on these explanations, it can be arranged hypothesis:

H3: Local government size has positive effect on local financial performance of the counties/cities in the Lampung Province

Fiscal decentralization in certain situations was not able to guarantee the high performance of the local government finance, because there is no transparency and accountability of the local government finance report. Basically, the calculation of fiscal decentralization and regional financial performance using ratios from local government finance report. if the numbers are expressed in local government financial report is not a number that should be. It is certain that the financial performance of the calculation results become inaccurate. The audit opinion from Badan Pemeriksa Keuangan (BPK) can prove through accountability and transparency local government financial report (Basrie *et al.*, 2012). The audit opinion is expected to strengthen the effect of fiscal decentralization on local financial performance, so the better the audit opinion (unqualified opinion) will have good implications and strengthen the effect of fiscal decentralization on local financial performance. Based on these explanations, it can be arranged hypothesis:

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H4: Fiscal decentralization has positive effect on local financial performance of counties/cities in Lampung Province with audit opinion as moderating variables.

## **Research methods**

### *Research Design*

The design of this research is explanatory, the research was designed through the stages of collecting the necessary data, the determination of the analytical tools used, and the analysis of the data used

### *Research Samples*

The population selected in this study were all counties/cities in Lampung Province during the period 2010-2013 which amounted to 13 counties and 2 cities. The sample used in this study is the counties/cities that has full terms of data to be sampled. Pesisir Barat Counties does not qualify as samples, because formed in 2012, so that the sample used in this study were 12 counties and 2 cities in Lampung Province.

### *Data Collection Technique*

Secondary data in this study is financial data and data non-financial. The financial data is data regional government budget and the realization of the regional government budget that displays data is fiscal decentralization, local financial performance, local revenue and income that comes from the center. Non-financial data is data of the population and the audit opinion given BPK. The sampling technique used is purposive sampling (samples using criteria). The criteria in question, namely the availability of financial data, audit opinion data, and total population. Methods of data collection in this study is a documentation done by collecting data from books and publications, both online and offline.

### *Research Model*

This study uses the one exogenous variables is fiscal decentralization, that is the authority and responsibility in the preparation, implementation and monitoring regional government budget by local governments. Measure of the degree of authority and responsibility given by central government to local government in exploring and managing income. Measurement of fiscal decentralization variables in this study using a ratio indicator between Own Source Revenue and tax revenues and non-tax with total regional expenditure (Badrudin, 2012: 49).

This study also used the endogenous intervening variable local government size, that is local government size is a nominal to describe the magnitude of a local governance (Kusumawardani, 2012). According to Manik (2013), local government size variable was measured by using a formula of revenue (central and regional) with total population. The dependent variable in this research is the local financial performance that is measure of performance using financial indicators (Sularso and Restianto, 2011). The local financial performance can be measured by several ratios, among them effectiveness ratio, local financial independence ratio, and conformity ratio.

This study also uses a moderating variable is audit opinion, according to Law No. 15 Of 2004 on Management and Financial Responsibility State article 1 paragraph (11) opinion is a statement professional as conclusion examiner's regarding the level of fairness of the information presented in the financial statements. The results measurement audit opinion variable expressed in quantitative form in the following order: (1) Unqualified Opinion (UO),

(2) Unqualified Opinion with Explanatory Language (UO-EL), (3) Qualified Opinion (QO), (4) Adverse Opinion (AO), and (5) Disclaimer Opinion (DO). The following research models:

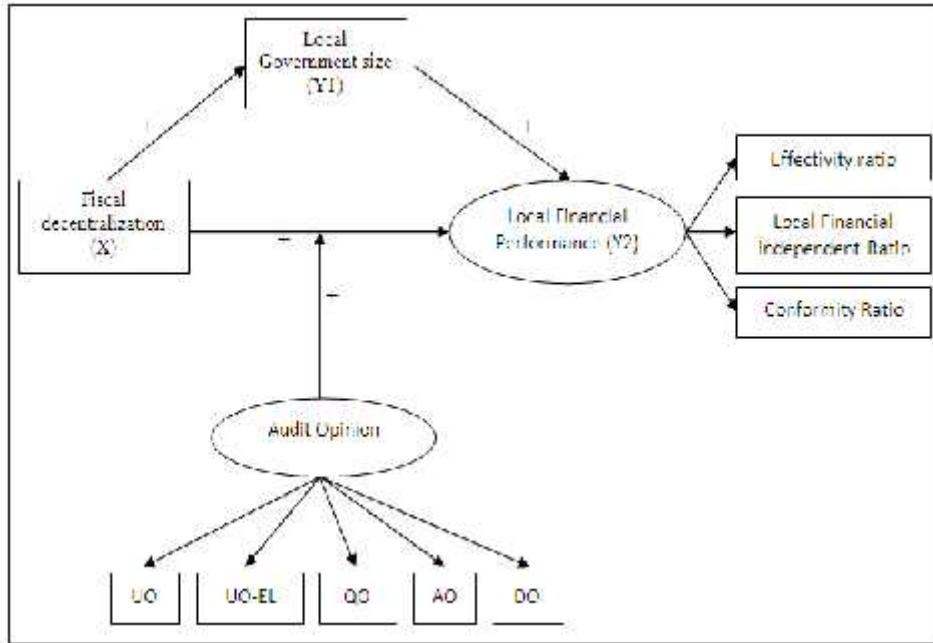


Figure 1. Path Diagram

*Analysis Techniques*

The data analysis technique in this study use descriptive and inferential statistics analysis. Descriptive analysis is used to reveal a descriptive overview of the field data in a way to interpret the results of processing through the tabulation to describe the tendency of empirical data and descriptive as the average value. Inferential statistics analysis used to Partial Least Square (PLS) especially WarpPLS because WarpPLS also directly display the significant value of making it easier for researchers to immediately know the results. WarpPLS can give a warning if there multicollinearity fairly high and the availability of the value output of the indirect/mediation (Solihin dan Dwi, 2013: 32-35). As the panel regression approach in the research is the simplest because it combines data time series and cross section (Winarno, 2015:10-1). Decision-making hypothesis test used in this study is, if the significance value <0.10, then the hypothesis is accepted.

**Results and discussion**

*Descriptive Statistics Analysis*

Table 1 below describes the characteristics of variables such minimum, maximum, and mean.

**Table 1. Variable Description**

Variable	Minimum	Maximum	Mean
Fiscal Decentralization	0.0759	0.8837	0.1367
Effectiveness Ratio	0.5505	54.8299	2.3796

Ratio Local Financial Independence	0.0100	0.5911	0.0556
Conformity Ratio	0.0867	0.5051	0.2458
Local Government Size	0.8234	4.0271	1.6679
Audit Opinion	1	5	2.52

**Source:** Obtained from data processing.

Based on Table 1 seemed variable fiscal decentralization at counties/cities in Lampung Province in 2010-2013 had an average of 0.1367, meaning that the numbers of fiscal decentralization at counties/cities in Lampung Province is very low. Fiscal decentralization low of 0.0759 occurred in Tanggamus in 2013 because local revenues and revenue sharing of tax and non-tax are not comparable with the expenditure area. Consequently Tanggamus have a high dependence on the central government in order to earn additional income that regional spending needs can be met. Fiscal decentralization high of 0.8837 occurred in Mesuji in 2010. It is supported by the high local revenues and other income were legitimate.

Effectiveness ratio on the budget at counties/cities in Lampung Province in 2010-2013 by an average of 2.3796 with effectiveness ratio was lowest in Way Kanan amounted to 55.05% in 2011. Way Kanan not managed to realize a local revenue. Effectiveness ratio was highest in Mesuji amounted to 5,483% in 2010 because it can exceed 100 percent. The ratio of local financial independence on the budget at counties/cities in Lampung Province in 2010-2013 by an average of 0.0556 with local financial independence lowest in Tulang Bawang Barat amounted to 0.0100 in 2010. That is, Tulang Bawang Barat in 2010 was not able to finance all the needs of the region. The ratio of local financial independence was highest in Mesuji amounted to 0.5911 in 2010.

The ratio harmony public expenditures at the budget counties/cities in Lampung Province in 2010-2013 by an average of 0.2458. That is, the counties/ cities government to allocate funds for development expenditures amounted to only 24.58% of the total budget. Harmony ratio was lowest in Lampung Tengah amounted to 0.0867 in 2010 and this ensures Lampung Tengah many concentrate on expenditures. The ratio of the highest harmony in Tulang Bawang amounted to 0.5051 in 2013. That is, Tulang Bawang in 2013 more priority to development expenditures.

The size of local government describes the large and the small size at the counties/cities in Lampung Province. The larger the size of the government and thus further strengthen the counties/cities, because of the activities and responsibilities in the counties/cities will be more credible and reliable to meet the needs of the autonomous region. Variable size of the counties/cities in Lampung Province in 2010-2013 by an average of 1.6679. The size of government was lowest in Lampung Selatan amounted to 0.0867 in 2010 and the size of government was highest occurred in Kota Metro amounted to 4.0271 in 2013. The situation in the two regions affected by PAD and population.

The audit opinion illustrates both the poor level of transparency and accountability in the financial statements of local government counties/cities in Lampung Province based on the results from BPK granting audit opinion. There are five audit opinion that is used by BPK to express an opinion, which is unqualified (WTP), unqualified with an explanatory paragraph, a qualified, the opinion is not fair, and Not Giving Opinions (TMP). Variable audit opinion on counties/cities in Lampung Province in 2010-2013 had an average of 2.52. That is, the audit opinion of the counties/cities in Lampung Province is still in a bad zone. The audit

opinion be one way to measure the success of the counties/cities governments in managing local finance based on provisions of existing law.

#### *Inferential Statistics Analysis*

Evaluate the value of goodness of fit model serves to determine the suitability of a model used in this study by using a fiscal decentralization variable, local financial performance, local government size, and audit opinion. Results of testing the goodness of fit model can be seen in Table 2 below:

**Table 2. Goodness of Fit Model Value**

The Criteria	Goodness of Fit Model
APC=0.289, P<0.001	Good if P< 0.05
ARS=0.494, P=0.095	Good if P< 0.05
AVIF=31.402	Good if < 5

**Source:** Obtained from data processing.

Based on the test results, the Average R-squared value (ARS) obtained the results of 0.494 with a value of  $p = 0,095$ . This means the value of the ARS is not significant because it can be called significant if the p-value of  $<0.05$ . Value 0.494 shows that the variables in this study are only able to affect the dependent variable amounted to 49.4% and 50.6% owned by other variables outside the model. Average Path Coefficient (APC) values of 0.289 with a value of  $p <0.001$ . This means a significant APC values ( $<0.05$ ). The significant value of APC can prove that endogenous and exogenous variables have a cause and effect relationship either directly or indirectly. In addition, the high multicollinearity for the model in this study proved the high value of Average Variance Inflation Factor (AVIF) amounted to 31.402. Testing AVIF moderation should be the main focus for the WarpPLS using interactions between variables can occur multicollinearity (Sholihin and Dwi, 2013: 61). Multicollinearity on research is not caused by the moderating variable, because after deletion of data outliers, AVIF value of  $<0.05$ . So it can be further analyzed.

The impact arising from non-fulfillment of the criteria of the value of goodness of fit model is a model be considered good, and the solution can be done by adding either an endogenous variable endogenous dependent or intervening. In addition, the lack of samples in this study can also make the cause of the poor value of goodness of fit model. The need for additional data, will be but this cannot be done. This study uses data years 2010-2013, when adding data before the year 2010 there will be three districts which cannot be excluded from the sample because of the newly-formed in 2008 and financial statement data become available each complete in 2010. The principal purpose of research this is to see the implementation of regional autonomy under decentralization (there are three new districts in the era of regional autonomy), so the solution is to add the data in 2014, but such data are not available at this time, which should be obtained from early July in accordance with the mandate Law No. 17 of 2003 on State Finance of article 31.

According Solihin and Dwi (2013: 61), interpretation of indicator depending on the model fit SEM analysis purposes. If the aim is only testing the hypothesized relationship among other variables, the indicator model fit is becoming less important. The main objective

in this study was not to compare some of the best models, just test the hypothesis only, then no replacement models.

**Table 3. Results of Hypotheses Testing**

No	Relationship Variable	Path Coefficient	P-Value	Explanation
1	Fiscal ---> Perform	0.93	0.08	Significant
2	Fiscal ---> Size	-0.13	0.35	No Significant
3	Size ---> Perform	0.05	0.43	No Significant
4	Fiscal*AO ---> Perform	0.05	0.40	No Significant

**Source:** Obtained from data processing.

Based on the results of statistical tests fiscal decentralization on regional financial performance showed that the value of the path coefficient have positive value 0.93 and a p-value of 0.08 or less than the standard specified p-value ( $<0.10$ ). Based on these test results can be concluded that the first hypothesis in this study received, fiscal decentralization significant positive effect on the financial performance of the counties/cities in Lampung Province. This suggests that increasing fiscal decentralization proxied with counties own source revenue and revenue sharing fund and non-tax to local expenditure total will take effect good on more increasing local financial performance for budgeting counties own source revenue at once the realization that, so will affect financial independence local on the counties/cities in Lampung Province which will ultimately impact both on the conformity expenditure local. Compatibility setting shopping area, because the role of fiscal decentralization improve reception area, so that local governments will be more easily manage the realization of counties/cities own source revenue and expenditure arrangements. These findings support the results of a study Halim and Abdullah (2006), Sianturi *et al.* (2013), and Susanto and Badrudin (2016).

This research is evidence that the implementation of regional autonomy, especially in the fiscal sector was able to improve the financial performance of the counties/cities in Lampung Province, especially the success in realizing counties/cities own source revenue. Budgeting strategy that do the counties/cities in Lampung Province be a sign of that counties/cities in Lampung Province not arbitrarily in predicting the realization of counties/cities own source revenue based on the real potential that exists. Although the counties/cities in Lampung Province have not managed to achieve financial independence that led to dependence on the central government is still very high. In addition to the counties/cities governments have not managed to organize and prioritize portion routine expenditure and development expenditure.

Based on the statistical test fiscal decentralization on local government size, shows that the value of the path coefficients have are negative values of -0.13 and a p-value of 0.35 or greater than the standard specified p-value ( $<0.10$ ). The coefficient negative sign indicates that if the implementation of fiscal decentralization has been optimal it will have a bad impact

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on local government size. Based on these test results can be concluded that the second hypothesis in this study was rejected, namely fiscal decentralization significant negative effect on the local government size in the counties/cities in Lampung Province. These findings does not support the study results Dwijayanti and Ruserlistyanti (2013).

This suggests that fiscal decentralization is proxied with counties own source revenue and revenue sharing fund tax and non-tax to expenditure local total expenditures would bring the negative effect on the size of local government proxied with revenue (central and local) of the total population. This is caused by the entire delegation of authority to local government, but local government have has not been able to carry it. Evident from the pattern of relationships instructive owned by the counties/cities in Lampung Province, so that the greater fiscal decentralization that would make the size of local government becomes increasingly lower. In addition, greater fiscal decentralization are becoming much chance for diversion of funds as more and more funds become increasingly unmanageable, as well as the demand meet the needs of growth population accompanied by a growing total population.

Based on the results of statistical tests the government local size on local financial performance, shows that the value of the path coefficient is positive value 0.05 and a p-value of 0.43 or greater than the standard specified p-value ( $<0.10$ ). Marked positive coefficient indicates that increasing the local government size will the higher the local financial performance. Based on these test results can be concluded that the third hypothesis in this study was rejected, local government size is not a significant positive effect on the local financial performance the counties/cities in Lampung Province. These findings does not support the study results Kusumawardani (2012), Fidelius (2013), Malik (2013), and Badrudin (2015).

This shows that the local government size proxied by revenue (central and local) population has not been able to provide a positive contribution to improving the financial local financial performance. Although local government size in the counties/cities were small because of the imbalance of population increase should be financed with a total income of less than optimal. Though the size of a large regional government can have a positive impact also for budgeting and the realization counties own source revenue and counties own source revenue higher would be capital to regional financial independence that will create the physical development of the area which will indirectly help boost economic growth, because the large size of local government likely to encourage local financial performance. Meaning that more funds can be used to meet the needs of the public (Smeru, 2002:41).

Based on the results of statistical tests fiscal decentralization on regional financial performance with the audit opinion as moderating variables showed that the value of the path coefficient is positive value 0.05 and a p-value of 0.40 or greater than the standard specified p-value ( $< 0.05$ ). Marked positive coefficient indicates that the better the audit opinion (unqualified opinion) obtained an area it will reinforce the positive effects of fiscal decentralization on the local financial performance the counties/cities in Lampung Province. Based on these test results can be concluded that the fourth hypothesis in this study was rejected, namely fiscal decentralization is not a significant positive effect to the local financial performance with audit opinion as moderating variable in the counties/cities in Lampung Province. This is evident from not optimal financial management in local government at the counties/cities in Lampung Province so many counties/cities in Lampung Province in the year 2010-2013 were getting bad audit opinion (unqualified opinion with explanatory

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language, qualified opinion, adverse opinion, and disclaimer opinion) from BPK. These findings does not support the study results Basrie *et al.* (2012).

## **Conclusion and suggestions**

### *Conclusions*

Fiscal decentralization has significant positive effect on regional financial performance. Although still low of fiscal decentralization value and still shows the relations that instructive, but the fiscal decentralization low can be categorized on target, because through the delegation of authority fiscal made the government is able to perform financial management although there is not yet local financial independence full and the setting local expenditure proportion not yet inadequate. Fiscal decentralization has significant negative effect on local governance size, because regional autonomy is a sign that the local government is not only given confidence to dig and manage potentials in the autonomous region but also to be fully able to finance all the public interest, while acquired is not optimal to finance the interest of the population in the autonomous region although there are additional revenues from the center so as to make the size of government becomes increasingly lower. Local government size is not a significant positive effect on the regional financial performance. This means the size of a small government is not able to increase local financial performance. The small effects the local government size to local financial performance due to the increasingly rapid population growth is not matched by the rapid amount of income, especially local income, so causing the local government size has little influence. The countiess/cities that have small counties/cities own source revenue and the much as total population will cause the local government size cannot as much expected due to a restriction of transfer funds given by the central government. As a result, government size is not the maximum would also hamper the local financial performance. Fiscal decentralization has not significant positive effect on the local financial performance with audit opinion as moderating variables. It is meaningful audit opinion has not been able to strengthen positive effect fiscal decentralization on local financial performance. The small effect of audit opinions on the positive effects of fiscal decentralization on regional financial performance is consequence from still bad from BPK audit opinion received by the counties/cities in Lampung Province. So can be ascertained most of the number in the financial statements is not the actual number. Still need to evaluate the performance of human resources in each counties/cities is also a consideration for the government that the implementation of regional autonomy may also running as it should, because it will feel useless if the result of hard work in earned income that will be used to finance the autonomous region abused by the parties are not responsible.

This research has evidence that audit opinion does not make fiscal decentralization stronger in counties/cities Lampung Province. There are several factors that cause. The institutional structure of the government counties/cities and province in Lampung Province requires further evaluation due to low quality and quantity of employees and there are overlapping authority between counties/cities and province. Routine expenditures (personnel expenditure) in the counties/cities Lampung Province tends to increase while capital expenditure tends to decrease. This results in low capital expenditure for infrastructure development. The size of fiscal decentralization in counties/cities Lampung Province low due to the local revenue and tax revenue-sharing and non-tax low while the relatively high budget. This is due to lack of personnel able to be creative in raising local revenue due to limited



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human resources. In fact, the balance of funds from the central government also allocated for routine expenditure (personnel expenditure). The size of the fiscal decentralization in cities is higher than counties have an impact on the ability to build infrastructure so that infrastructure development in cities is relatively more developed than counties. In addition, the cities government budget financial performance was also better than the counties in Lampung Province.

#### *Research Limitations*

The variables this study have not been up to affect the financial performance of it is known from the low value of R-Square, so need to add another variable that can improve local financial performance such as economic growth because economic growth is an important factor also in support to improve of local financial performance. The higher and faster economic growth it will be easier for a counties/cities in improving local financial performance. In addition, it can add a asset variable because the large asset will be easier for the government in the realization of postal counties own source revenue. The law is to earn a great income, necessary facilities must complete/good too and the need to provide necessary facilities as well as adequate cost. This research is aim to know the implementation of regional autonomy overall in Lampung Province, so unknown among counties/cities are capable of implementing regional autonomy. So if this research be distinguished the economic strength of each counties/city in Lampung Province, the research result is robust.

#### *Suggestions*

Based on the conclusions generated in this study, it submitted several suggestions are expected to be useful for practical purposes and further research. The government needs to pay attention to financial governance, for example pay attention to the routine and development expenditure for the acceleration of economic growth of Lampung Province is a province that is strategically located as a gateway to the island of Sumatra, so user facilities such as cross road Sumatera be convenient. Maximizing counties/cities own source revenue so that can to manage and improve the resources that already exist or excellence of each region like the beach, the harbor and the hills that can be used as a tourism needs to be given a public facility that will provide comfort for visitors in the end will also be able to add local retribution, increase the size of the postal levies, as well as improving economic growth in the surrounding community, so it will be able to help the welfare of society. Based on the results of the audit opinion received on counties/cities in Lampung Province, the government needs to make audit opinion improvements as evidence that the local government financial statements have been presented in a transparent and accountable. For further research, should include Klassen typology analysis to distinguish the economic strength of each counties/city in Lampung Province so will result robust research.

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## APPENDIX

**Table 4**  
**The Data of Research Variables**

No .	Fiscal Desentralization	Local Government Size	Audit Opinion	Effectivity Ratio	Local Financial Independent Ratio	Conformity Ratio
1	0.1415	0.9164	3	1.1411	0.0346	0.0867
2	0.0977	1.0747	3	1.3420	0.0398	0.1574
3	0.1297	1.2669	5	2.3072	0.0669	0.1863
4	0.0952	1.3286	3	1.2510	0.0507	0.1855
5	0.1297	0.8234	5	1.0918	0.0527	0.1114
6	0.1290	1.0953	4	1.1711	0.0680	0.1528
7	0.1217	1.2108	3	1.3638	0.0713	0.2465
8	0.1322	1.2608	3	1.3509	0.0835	0.1934
9	0.0923	1.2968	1	0.9154	0.0178	0.2189
10	0.0934	1.5497	3	2.3840	0.0314	0.1954
11	0.0797	1.6608	2	1.5789	0.0216	0.1925
12	0.0830	1.8609	2	2.3193	0.0367	0.3911
13	0.1997	1.0876	5	1.1554	0.0904	0.3003
14	0.2126	1.3326	4	1.3793	0.1371	0.0953
15	0.2646	1.6165	5	1.2935	0.2047	0.2006
16	0.2382	1.7924	5	0.9642	0.2136	0.2245
17	0.1079	1.4137	5	1.2457	0.0274	0.2888
18	0.1047	1.6291	4	1.4145	0.0312	0.2377
19	0.1046	1.7691	5	1.7641	0.0334	0.2366
20	0.0940	1.9661	5	1.1859	0.0396	0.4698
21	0.1602	1.1468	3	3.5717	0.0494	0.2431
22	0.1091	1.6550	3	0.8903	0.0300	0.2573
23	0.1069	1.5914	3	0.9186	0.0354	0.1978
24	0.1358	1.6478	3	1.3174	0.0526	0.5051
25	0.1406	0.8842	3	1.3284	0.0100	0.2428

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26	0.0904	1.8951	5	2.0114	0.0103	0.3661
27	0.0932	2.0338	5	1.1019	0.0112	0.3465
28	0.0794	2.1884	5	1.3537	0.0182	0.3249
29	0.1336	1.1795	5	0.5606	0.0183	0.2049
30	0.1086	1.5079	5	0.5505	0.0153	0.1916
31	0.1097	1.6786	5	0.7467	0.0146	0.2010
32	0.0981	1.8394	5	1.5609	0.0319	0.2662
33	0.1798	0.9468	1	1.0335	0.0229	0.1372
34	0.1818	1.1363	1	1.5692	0.0287	0.3119
35	0.1748	1.2662	3	1.9620	0.0403	0.1506
36	0.1360	1.3830	3	1.0053	0.0296	0.1539
37	0.1644	2.9319	5	1.0953	0.0647	0.1923
38	0.1638	3.4935	5	1.4674	0.0818	0.2349
39	0.1886	3.6891	5	1.4768	0.0878	0.1443
40	0.1861	4.0271	5	1.3979	0.1181	0.1714
41	0.1041	1.2876	3	2.6255	0.0258	0.2158
42	0.0978	1.3587	3	2.1112	0.0327	0.4711
43	0.0986	1.6598	3	1.7471	0.0380	0.2898
44	0.0767	1.8793	3	1.4208	0.0329	0.2918
45	0.0852	1.0414	1	1.2037	0.0153	0.1495
46	0.0899	1.6560	3	1.1183	0.0318	0.1834
47	0.0916	1.9949	1	1.3274	0.0394	0.4413
48	0.0849	2.0688	3	1.2177	0.0388	0.2147
49	0.0977	1.1266	3	1.1571	0.0193	0.1617
50	0.0913	1.3926	3	1.2388	0.0214	0.1951
51	0.0850	1.5069	3	1.2959	0.0226	0.2084
52	0.0759	1.5774	3	1.1009	0.0249	0.2523
53	0.8837	1.4557	3	54.8299	0.5911	0.3626
54	0.0843	2.5193	1	2.1998	0.0113	0.4497
55	0.1181	2.3329	3	1.8017	0.0185	0.3487

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56	0.1011	2.4722	3	1.3224	0.0261	0.3151
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**Source:** Obtained from data processing.

## TECHNOLOGY TRANSFER AND COMMERCIALISATION PATTERN: A CASE STUDY OF LIPI

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### Abstract

Innovation has nominated as the driver of economic growth. Technology transfer has emphasized as a challenging task and important driver in innovation and the creation of sustainable growth. Center for Innovation LIPI as Technology Transfer Office (TTO) of LIPI has conducted technology transfer from research results LIPI to start up company. Need to be mapped patterns of development start-up company, starting from the invention until an initial public offering of the business that Adopted the technology. This study will map out the stages of the pattern of technology transfer and commercialization, using qualitative research methodology to approach the study of literature to collect data and information related to the topic of study. It was done with interviews and searching for information related to the themes and issues from a variety of sources in writing, in the form of books, journals, articles or writings of other experts. There are three stages in the development of tenant or start-up company, namely: Establishment Start Up New Company, and Business Development. Center for Innovation LIPI as TTO until now have been carrying out these stages until the first stage. For the next stage should be strengthened so as to enlarge the field of promotion of the company's scale and obtain additional funds through angel investors.

**Keywords:** *commercialisation, innovation, start-up company, technology transfer, technology transfer office (TTO)*

### Introduction

The growth of competition force determines the importance of innovation and technology transfer. Carlsson and Stankiewicz (1991) state innovation is not just an invention or research and development, but a series of processes as a whole must consider as a system. Furthermore, Markard and Truffer (2008) suggested a technology innovation system is a set of network actors and institutions which together interact in a particular field of technology and contribute to the generation, diffusion and use of a variant of the new technologies and new products. Research that produces the right technology at the right time is critical for competitive success in many industries.

Innovation has been recognized as one of the drivers of economic growth (Todaro & Smith, 2014). In determining the index of global competitiveness, innovation is one of the important pillars that counts (Fig. 1). In this regard, Indonesia is still in phase two, namely efficiency driven, and has not yet reached the stage of innovation driven. Technology transfer has emphasized as a challenging task and important driver in innovation and the creation of

sustainable growth. The growing number of innovation and technology transfer studies followed by different kinds of theories and concepts developed, typologies and taxonomies proposed, forming reviews these various relationships between concepts.

The technology transfer has become a very effective way to disseminate innovation and knowledge. It is an alternative to competitive for a work unit to search not only for the exploration of internal resources to take advantage of intellectual property as well as the results of research and development activities. It is also a way for external partners to getting an increase in new technology to make it a new business opportunity in the form of the start-up company.

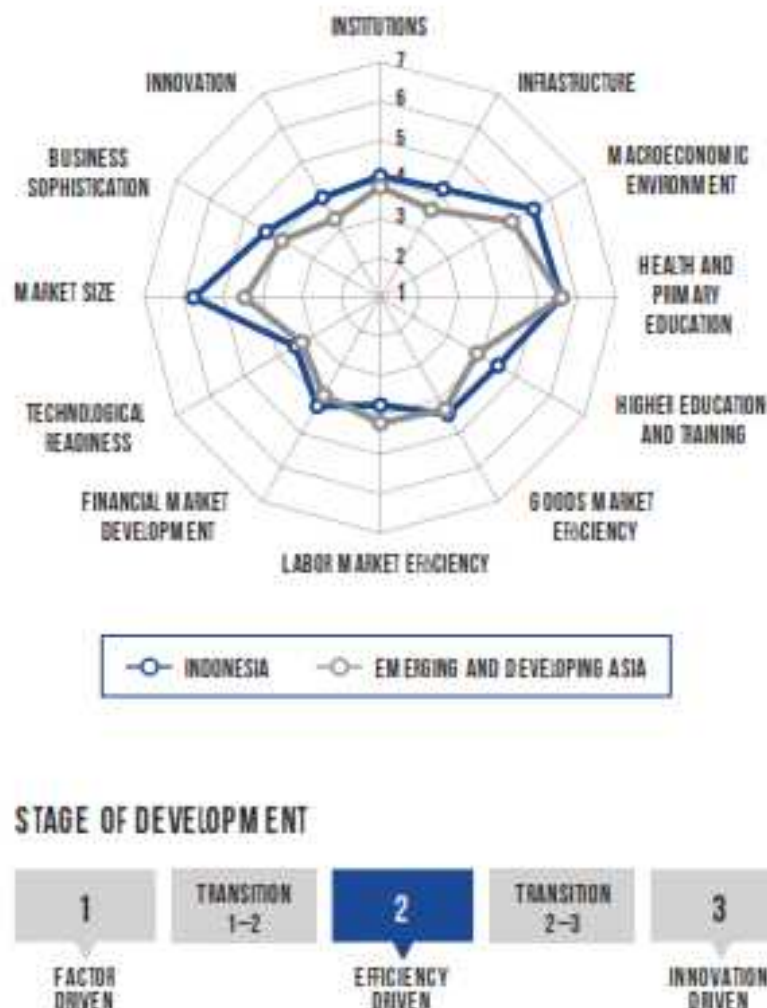


Figure 1. Global Competitiveness Index 2015: 12 Pillars of Competition  
 Source: <http://reports.weforum.org/global-competitiveness-report-2015-2016/economies/#indexId=GCI&economy=IDN>

The concept and technology transfer activities spearheaded by the United States, until 1980 there was only a few patent licensing in the United States. In that year also raised Bayh-Dole Act regarding uniformity patent policy for federally funded research, the protection and licensing of another company or the sale of intellectual property rights through universities, and the development of technology transfer.

In the early 1990s focused on the establishment of technology transfer spin-offs, and European countries began to recognize the importance of technology transfer. Japan and Taiwan started to adopt the Bayh-Dole Act in the late 1990s, and then followed the global interest in the transfer of technology. In 2004 Switzerland began setting the legal basis for the transfer of technology and followed by Indonesia in 2005 appears the Government Regulation on Transfer of Technology. In the Indonesian Government, Regulation No. 20 in 2005 formally technology transfer is defined as the transfer of the ability to utilize and master of science and technology among institutions, bodies or persons, whether they are in a domestic environment likewhatever comes from abroad into the country or vice versa.

Center for Innovation LIPI as Technology Transfer Office (TTO) aim to see to that intellectual property as well as the results of research and development activities could harness into a knowledge-based business / economic value of technology that has a significant impact on the growth of business starters. The impact of the growth of new venture based on this technology is expected to empower the skills of local resources to increase local economic growth.

This study will map out the stages of the pattern of technology transfer and commercialization. It will start from the invention until an initial public offering of the company that adopted the technology. Also, this study will look at the development stage of the transfer of technology in LIPI to produce recommendations to support future activities.

## **Conceptual background**

### *1. Technology Transfer*

Technology transfer is defined as an effort to disseminate the technology of research results into a form that can be utilized. Technology transfer describes the process of which the knowledge of technology share, or moves from creator to user. The research institute is a source of technology that will be utilized. Technology transfer is the process by which commercial technology is distributed by taking the form of technology transfer transactions, which may or may not be covered by a legally binding contract (Blakeney, 1989), but which involves the communication of relevant knowledge by the transferor (the owner of the technology) to the recipient.

Process and an understanding of technology transfer will not be the same for each institution. Universities, corporations, federal labs, and developing countries have different roles and interests in technology transfer (Choi, 2009). Differences models tend to be influenced by the tendency of a system or technology that will be transformed to each institution. There are many widely used models of technology transfer; examples include the appropriated models, the dissemination of models, the knowledge utilization patterns, the contextual collaboration models, the material transfer patterns, the design transfer patterns, and the capacity transfer patterns (Choi, 2009).

Frey (1987) could be considered the most typical advocator of this approach, and technology is characterized as four elements: object, process, knowledge, and volition. Moreover, Markert



(1993) defined technology transfer as the transfer of technology once developed in a different setting. Furthermore, Johnson, Gatz, and Hicks (1997) moved further by taking into account both the movement of the original location and acceptance and use by the final user. Technology transfer is regarded as a way to obtain competitive advantages through performance improvements in corporations that are the recipients of this technology (Choi, 2009). The three most important aspects of technology practice are cultural, organizational, and technical (Pacey, 1986).

According to Dubickis and Sarkane (2015), different kind of relationships between innovation and technology transfer appear from the review of definitions, results of the first focus group discussion and classifications provided by the regular search show. The graphical model of these relationships is presented in the Fig. 2.

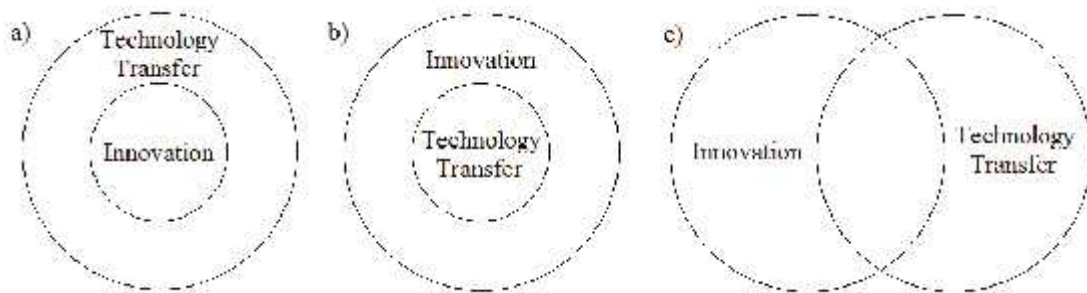


Figure 2. Relationships Between Innovation and Technology Transfer

Source: Dubickis and Sarkane (2015)

Relationships between innovation and technology transfer unveil a different kind of perspectives on innovation and technology transfer: a) technology transfer includes innovation; b) innovation includes technology transfer and c) innovation and technology transfer overlap. The results of the second focus group discussion confirm the discovered relationships. The focus group also estimates that the perspective where innovation and technology transfer overlap is dominant and recommends future research on a global level. Also, there is still a question how high is the overlap of innovation and technology transfer and which are the points of the contact.

## 2. Funding in New Company

Creating a new company will be affected by its funding source. The commercial source will also affect the ability of the new company in business developing. Garson (2011) classified investors by the willingness to invest (buy the business) and the calculation of high and low risk will be accepted into three, such as:

- a. Angel Investors. These investors are usually a relatively new company and are willing to bear the relatively large risk. Entrepreneurs who become angel is demand still will be directly involved in running the business
- b. Venture Capitalists. These investors will provide funds with greater than nominal from angel investors. These investors will be the supervisor in managing a business, and not directly involved. The risk borne by investors is also not as big as that taken by angel investors.
- c. Private Equity/Investment Companies. These types of investors will provide funds in large numbers. Forms of involvement of investors in the form of acquisitions. Usually,

the companies that will receive funds from the investment companies are companies that are already well underway and already earn a higher profit.

The relationship between entrepreneurship, angel investors and venture capital According to Hellman and Thiele (2013) are interconnected and continuous (Fig. 3). Entrepreneurship will need angel investors to start creating a business and as an investor in the early stage. While venture capital will be required in the new company will expand its business to increase production capacity.



Figure 3: Financing Stages – Angel and VC Markets

Source: (Hellmann and Thielez, 2013)

Inderst and Müller (2004) point out that bargaining power between entrepreneurs and VCs, as reflected in equity shares, for example, varies with technological and economic conditions. There are two primary reasons why entrepreneurs choose venture capital as a source of finance. The first based on the observation that in addition to funding, VCs provide assistance and advice which adds value to entrepreneurs' investment projects (monitoring, professionalizing ventures, and certification). The second reason is that equity finance is the optimal financial contract for some entrepreneurs, which VCs specialize in offering. (Parker, 2009. p.239),

Venture Capital is a business financing in the form of equity in a private company as a business partner (investee-company) that wants to expand its activities for a period (temporary). Venture capital business profile characterized as a high-risk business due to there is no guaranteed return of capital or a successful future for the company that has been invested (Carvalho, Calomiris, Matos, 2007).

Moreover, the University of Oxford classifies investors into four groups based on its funding source, namely venture capitalist (£ 0,5 m upwards), business angels (£50,000 to £250,000), private investors (friends and family), and Bank, universities, government award funds (usually <£50,000).

The fact that angels' average deal sizes are so much smaller than those of VCs suggests that they serve a different part of the entrepreneurial finance market. Business angels tend to concentrate on early-stage financing in younger companies. Their role usually declines at later stages when more substantial funding is needed. (Parker, 2009. p.249). Thus, 45 percent of US angel deals in 2004 focused on seed and early-stage projects, compared with just 6 percent among VCs (Amatucci and Sohl, 2007).

### **Methodology**

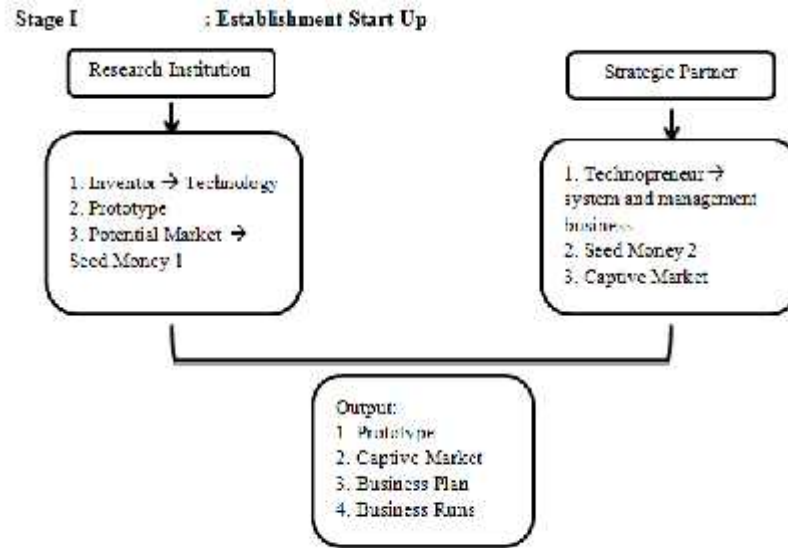
This study uses qualitative research methodology to approach the study of literature to collect data and information related to the topic of study. A desk review and interviews were done to collect information related to the themes and issues from a variety of sources in writing, in the form of books, journals, articles or writings of other experts. These were sourced mainly from the Center for Innovation of LIPI, government and private institutions, and other online sources.

### **Result and discussion**

Technology transfer is the final process of research and development activities. Trends that exist today require research institutes also have a working unit or a separate division that has tasks and functions in the transfer of technology. Technology Transfer Office has a significant role in the technology transfer process. Technology Transfer Office can be defined as a bridge between technology suppliers and technology receiver (Mitasiunas, 2013). Technology Transfer Office serves to ensure the level of preparedness of the resulting technology research institute was ready to be brought to the industry. The technology transfer process has been studied in various parts of the world, in one literature explained that there are six stages in the process of technology transfer, namely technology innovation, technology confirmation, targeting technology consumers, technology marketing, technology application, technology evaluation (Risdon, 1992). Recent research shows that to be able to run the stages of technology transfer is effectively required knowledge management that includes: socialization, combination, internalization, externalization (Khadem, et al. 2014).

The technology transfer process will begin when technology derived from research results have to meet the standard needs of the market (public). The results of the research that have been made in the form of the prototype will do a feasibility study to map out the response from potential users. If the technology were judged to have the appropriate circuitry needs of the community, it would be the determination of the model of technology transfer. One example of technology transfer is the establishment of a Start-up Company.

Based on qualitative research methodology that has been done, in the development of tenant or start-up company in the context of the technology transfer obtained the following patterns.

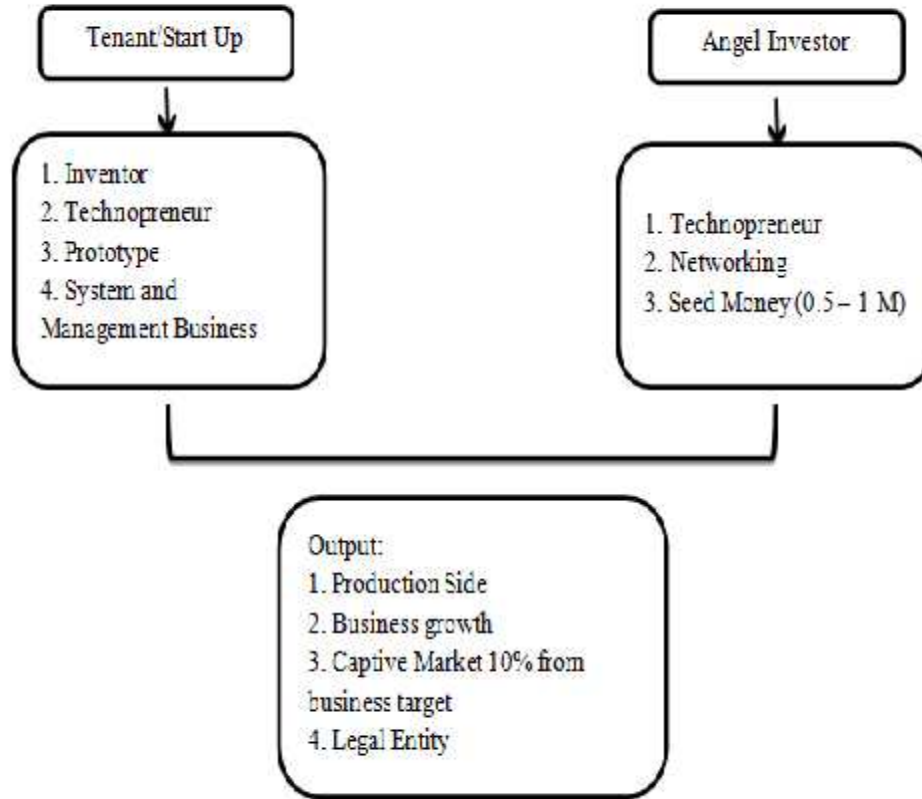


The stages of technology commercialization start from its existing Research and

The stages of technology commercialization start from its existing Research and Development (R & D) institutions and strategic partner. R & D institutions are institutions that have technology research and development activities. The central element of R & D institutions is inventors or researchers with technology that can be applied by the society. Characteristic of this stage is the technology has been made in the prototype form for a market test. The market test conducted to obtain potential market and the public interest level in the product. At this stage, TTO of R & D institutions are still providing funds or seed money to create a prototype.

The other party involved at this stage is the Strategic Partner. A strategic partner is a Small Medium Enterprise (SME's) who have knowledge about system and management business. SME's also having their seed money as the initial capital start-up formation. At this stage, the resulting output is a prototype used to market test, captive market, business plan as a guide to running the business and the business runs through the micro level.

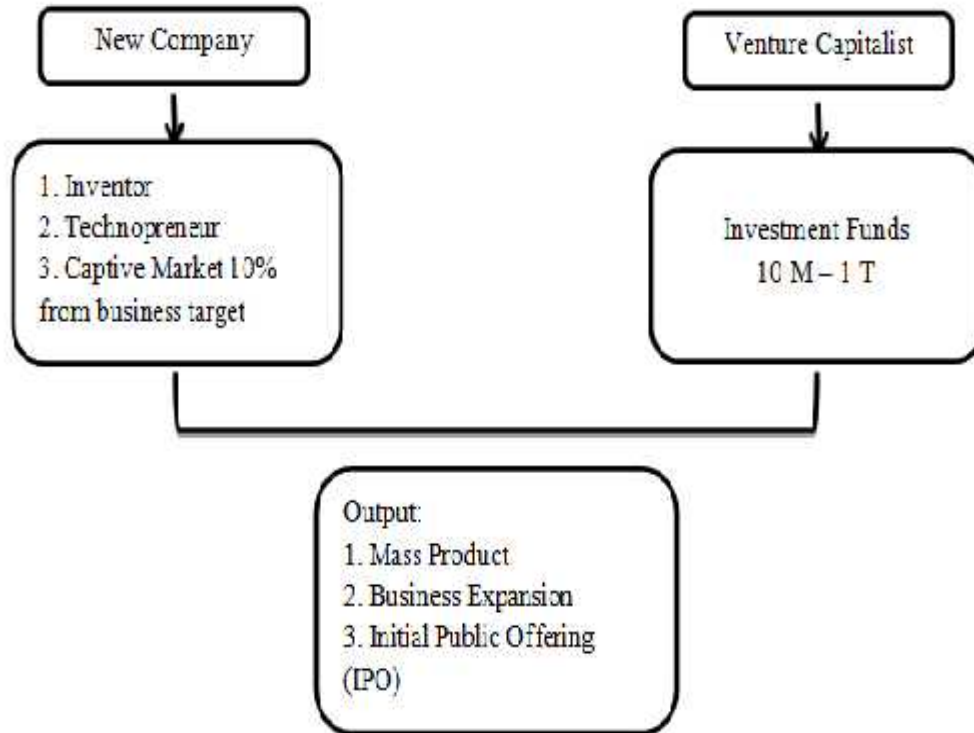
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**Stage II : New Company**


The second stage in the process of technology commercialization is a continuation of the previous stage. In this stage start-up company has to have an element of technology inventors, technopreneurship, a prototype to market test, also a good system and management business to run the business. The other party involved in this stage is the angel investor. The idea about the relationship of entrepreneurs (especially start-ups) and angel investors when viewed from the perspective of social capital can be lifted from Janney and Dess (2006) research. They stated that an entrepreneur tied into the network of relationships that can offset the risk of entering new businesses.

The role of an angel investor is the ability to provide funding and expand the new company network to be formed. Angel investors already have a fairly extensive network in business development. Angel investor also can provide seed funding or initial capital of 0.5 to 1 Billion Rupiah.

The resulting output at this stage exists production side in larger scale, business growth, captive market about 10 percent of business targets, and their legal entity. The final result of this second stage is companies that ready to be developed.

**Stage III : Business Development**

The last stage of technology commercialization is the development of enterprises to become bigger. The new company established in the second stage is considered to have a captive market of 10 percent, but still need the support of a larger fund. At this stage, the new company will be looking for a venture capitalist, which can provide funds between 10 Billion to 1 Trillion Rupiah. Venture Capitals would eventually receive compensation in stock share. If this stage has been successfully implemented, these companies will have the ability to do mass production, business expansion and able to sells stock in publics.

Center for Innovation is one of the organizations that facilitates technology transfer and has well developed over the years. Similarly, the technology transfer process conducted by the Center for Innovation, a significant development occurred when the Center for Innovation incubator have any buildings and workshops in 2013. Until this year, there are at least 18 adopted by the discovery of a strategic partner which are start-up companies that became tenants at the Innovation Center LIPI to get assistance.

Mentoring conducted by TTO aims to produce products/prototypes are ready for market, scale-up enterprise, capture the market potential and public interest, and including providing funds or seed money. Strategic partners are adopting the invention expected to have a knowledge of the system and management of business, and also having reviewed their seed money as the initial

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start-up capital formation. The resulting output of this stage is prototype products are ready for market, and the business is running on the stage of small-medium enterprises.

Through observation and in-depth interviews with the actors of technology transfer at the Center for Innovation and several colleagues Involved, then the schema concept of transfer of technology in the Center for Innovation is the first stage of commercialization. Thus, there is still the need for support for the next phase, in particular by promoting the inventions, the company, and the resulting product, for example with a business meeting, exposure, and others, with the goal of getting more funding through Angel Investors.

### Conclusions

There are three stages in the development of tenant or start-up company, namely: Establishment Start Up, New Company, and Business Development. The Center for Innovation LIPI as TTO until now have been carrying out these stages until the first stage. For the next stage should be strengthened so as to enlarge the field of promotion of the company's scale and obtain additional funds through angel investors.

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## THE INFLUENCE OF TRANSFORMATIONAL AND TRANSACTIONAL LEADERSHIP TO SOCIAL CAPITAL AND ITS INFLUENCE TO PERFORMANCE

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### Abstract

This research examines transformational and transactional leadership influence to social capital (measured by structural and relational dimension) and social capital influence to performance measured by in role and extra role performance. Participants of this research are administration staffs (non production) with more than 1 year work tenure from 9 big manufacturing companies located in Yogyakarta, Semarang, and Solo. Data was processed with structural equation modeling that enables simultaneous data processing with mediating variable. There are several important results. First, transformational leadership has positive influence to relational dimension of social capital. Second, transactional leadership has negative influence to structural dimension of social capital. Third, relational dimension of social capital has positive influence to extra role performance. Fourth, structural dimension of social capital has positive influence to in role performance. Fifth, extra role performance has positive influence to in role performance.

**Keywords:** *Social capital, leadership, in-role performance, extra-role performance*

Social capital is an employee asset that will result in employee's performance, which in turn will result in better organizational performance (Akdere, 2005). Basically there are a few research gap related in social capital research. First, the non-comprehensive social capital measurement, since most social capital researches focus on interactional aspect of social capital. Second, lack of research examining social capital's antecedents. Third, performance measurement only to in-role performance.

This research focus on interactional and relational dimension of social capital. This research also uses transactional and transformational leadership as antecedents of social capital. This research will use in-role and extra role performance as employee performance indicator.

### Main Text

Social capital concept was first introduced by Hanifan (1916) who defines social capital as the goodwill, fellowship, sympathy, and social intercourse among the individuals and families who make up a social unit (Farr, 2004). Adler and Kwon (2002) than concluded from several sources and defined social capital as the goodwill available to individuals or groups. Its source lies in the structure and content of the actor's social relations. Its effects flow from the information, influence, and solidarity it makes available to the actor.

Social capital will influence employee performance because it has three usefulness (Adler & Kwon, 2002). First, social capital facilitates access to information sources so it will increase the quality, relevance, and timeliness of information needed to support performance. Second, social capital will build control and power, which enables someone to get support in his/her work. Third, social capital will increase solidarity which will create better teamwork.

Nahapiet and Ghoshal (1998) stated that there are three dimensions of social capital: cognitive, relational, and structural. Cognitive dimension of social capital are shared languages (codes), shared narratives, and shared vision which facilitates the understanding about collective goal and the how to act in a social system. The relational dimension is the personal relationship and trust

among employees which come from the interaction. Structural dimension is the impersonal configuration of linkages among people which means that someone's position in interaction, will give him/her certain advantages. This research has its focus on structural and relational dimension, since many companies has no clear and internalized vision. Since social capital is so important, it is necessary to understand the antecedents of social capital, which this research focus on leadership and personality.

### **Leadership and social capital**

Social capital does not exist by itself (Baker & Obstfeld, 2000). One of external factors influencing social capital is leader's behavior (Jung & Avolio, 2000; MacKenzie et al., 2001). This research examines the influence of leadership to social capital using transformational and transactional terminology (Bass, 1985) and Nahapiet and Ghoshal's (1998) definition of social capital.

Transformational leadership is a leader behavior which enables employees to reach higher motivation and make them achieve performance beyond expectation. Employees who try to work beyond expectation will build relationship with their fellow co worker, because they realize that the interaction will enable them to reach good performance. Related to transformational leadership and social capital, we develop hypothesis concerning the influence of leadership to social capital:

H1: Leader's transformational leadership has positive influence to employee's relational dimension of social capital.

Transactional leadership has to do with giving reward and punishment to employees to achieve organizational goals. In order to creating high level of social capital, leader can use incentives to ensure that employees will work together. This implies that transactional leadership can increase the structural dimension of social capital, so we define the second hypotheses as follows:

H2: Leader's transactional leadership has positive influence to employee's structural dimension of social capital

### **Social capital and employee performance**

Social capital will support employee's performance since it has three benefits (Adler & Kwon, 2002; Coleman, 1988). First, social capital facilitates access to wider information sources so it will increase the quality, relevance, and timeliness of information needed to support performance. Second, social capital creates influence, control, and power for someone who has strong social capital. Third, social capital creates solidarity among employees.

There are two kind of employee performance: in role performance and extra role performance. In role performance is an employee's performance related to his/her job description. Extra role performance is employee's performance that is not related to job description. Extra role performance includes several things such as: helping coworker, doing more than what is expected, etc.

Related to the influence of social capital to performance, this research argues that structural dimension of social capital will influence employee's in role performance. Structural dimension of social capital is an employee's position in the network of relationship. When an employee has so many friends around him/her, the employee will get many benefit from the relationship, such as he/she can get access to resources he/she need to complete his/her job. So having good interaction will make him/her work well.

When employee has good relationship dimension of social capital, which means that the employee is trusted by his/her coworkers, this relationship will result in helping behavior among employees. Since helping behavior is sometimes outside job description, it is defined as extra role performance. The higher the relationship dimension of social capital, the higher the extra role will be. So, this research develops several hypotheses concerning the influence of social capital to performance:

H3: Structural dimension of employee’s social capital has positive influence to employee’s in-role performance.

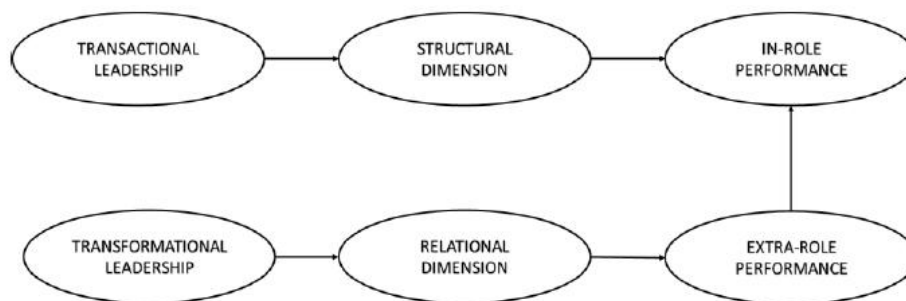
H4: Relational dimension of employee’s social capital has positive influence to employee’s extra-role performance.

**In role and extra role performance**

In role performance is an employee’s performance related to his/her job description. Extra role performance is employee’s performance that is not related to job description. Extra role performance includes several things such as: helping coworker, doing more than what is expected, etc. This research argues that when an employee extra role performance is higher; this will increase employee’s in-role performance. This due to higher extra role performance will create a good helping behavior climate, so employee will get support from co workers. So we define the fifth hypotheses as follows:

H5: Extra role performance has positive influence to in role performance.

**Research Model**



**Research Method**

Research participants are administration staff (non production) with more than one year work tenure from several big manufacturing companies located in Yogyakarta, Semarang, and Solo. Data was collected using questionnaires and there were 504 questionnaires remaining for further analysis.

**Table 1  
 Participants Demographic**

		Count	%
Gender	Male	296	58.7
	Female	208	41.3
Age	Until 25 Year	66	13.1
	26 – 30 Year	131	26
	31 – 35 Year	106	21.2

	36 – 40 Year	88	17.5
	41 – 45 Year	71	14.1
	46 – 50 Year	29	5.8
	>50 Year	12	2.4
Marriage Status	Married	371	73.6
	Not Married	133	26.4
Work Tenure	Until 5 Year	157	31.2
	6 – 10 Year	135	26.8
	11 – 15 Year	108	21.4
	16 – 20 Year	54	10.7
	21 – 25 Year	34	6.7
	26 – 30 Year	14	2.8
	>30 Year	2	0.4

### Variables and measurement

Transformational and transactional leadership was measured with Multifactor Leadership Questionnaire 5X (Bass, 1985). Relational dimension of social capital was measured by combining items of interpersonal trust at work developed by Cook and Wall (1980) and one item of employee togetherness developed by Chua (2002). Structural dimension of social capital was measured by self-developed instrument.

In-role performance was measured by using instrument developed by Williams and Anderson (1991). Extra-role performance was measured by using instrument developed by MacKenzie et al. (1999). Instruments for measuring transformational leadership (Multifactor Leadership Questionnaire), relational dimension of social capital (interpersonal trust at work), in-role performance, and extra-role performance were developed using back-translation process.

### Validity and reliability tests

Factor analysis was used to test the validity of instrument items, followed by computation of Cronbach's Alpha as reliability measure. Analysis factor was operated separately for performance variables, social capital variables, leadership variables, and personality variables. Analysis factor procedure was based on procedures done by Antoni et al. (2002) which is analysis factor is operated repeatedly until there is no factor that can be dropped based on stated criteria.

An item will be remained if its factor loading was equal or more than 0,5 based on Comrey and Lee's (1992) guidance as quoted by Tabachnick and Fidell (1996) which stated that 0,5 criteria will explain around 30% of variance. Items will also be dropped if there were factor loading values fulfilling criteria in more than one factor (Peck, 1994). Analysis factor was operated with principle component analysis method using varimax rotation to get better factor separation (Tabachnick & Fidell, 1996). The final result of validity and reliability test is presented in table 2.

**Table 2**  
**Summary of Validity and Reliability test**

VARIABLE	RELIABILITY AND ITEMS VALID
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In-role performance	alpha	0,83
	item	KIR1, KIR2, KIR3, KIR4
Extra-role performance	alpha	0,83
	item	KER1, KER2, KER5, KER6, KER7, KER8
Relational dimension of social capital	alpha	0,76
	item	MSR1, MSR2, MSR3, MSR4
Structural dimension of social capital	alpha	0,83
	item	MSS1, MSS2, MSS3, MSS4, MSS5
Transformational leadership	alpha	0,90
Item		TF2, TF3, TF4, TF6, TF8, TF10, TF12, TF13, TF14, TF15, TF16, TF17, TF20
Transactional leadership	alpha	0,65
	item	TS9, TS10, TS12

### Result and Discussion

The fit values (Table 3) shows that basically the model has an acceptable goodness of fit, so hypothesis testing can be done with the model.

**Table 3**  
**Model Fit Testing**

ABSOLUTE FIT	CRITERIA	FIT VALUES	
Chi square; df; probability	Not significant (Hair et al., 1998)	157, $p < 0,01$	Not quite good
GFI	$> 0,9$ (Hair et al., 1998)	0,911	Good
RMR	$< 0,08$ ; upper limit $< 0,1$ (Arbuckle, 2005)	0,049	Good
RMSEA	$< 0,08$ ; upper limit $< 0,1$ (Arbuckle, 2005)	0,184	Not quite Good
INCREMENTAL FIT			
AGFI	$> 0,8$ (Sharma, 1996)	0,792	Good
CFI	$> 0,9$ (Hair et al., 1998)	0,642	Not quite Good
PARSIMONIOUS FIT			
CMIN/DF	1 – 2 over fit 2-5 liberal limit (Arbuckle, 2005)	17,1	Not quite good

Hypothesis testing about the influence of leadership to social capital and the influence of social capital to performance is based on the existence of significant path in the research model. If there is a significant path, the related hypothesis is supported.

**Table 4**  
**Hypothesis Testing Result**

	STATEMENT	$\beta$	SE	CR	p	Description
H1	Leader's transformational leadership has positive influence to employee's relational dimension of social capital	0.291	0.05	5.854	< 0,01	Supported
H2	Leader's transactional leadership has positive influence to employee's structural dimension of social capital	-0.266	0.057	-4.68	< 0,01	Not Supported
H3	Structural dimension of employee's social capital has positive influence to employee's in-role performance.	0.376	0.049	7.701	< 0,01	Supported
H4	Relational dimension of employee's social capital has positive influence to employee's extra-role performance.	0.333	0.059	5.696	< 0,01	Supported
H5	Extra role performance has positive influence to in role performance	0.299	0.047	6.294	< 0,01	Supported

## Discussion

### 1. Leadership and social capital

This research found that transformational leadership has positive influence to relational dimension of social capital. It means the higher the transformational leadership, the higher the relational dimension of social capital. Leader's transformational behavior will be able to make employees to trust one to another. It happens because a transformational leader gives a shared vision, so each employee will have the same purpose and togetherness, which will raise inter-employee trust (Pillai et al., 1999).

Contrary to hypotheses, this research found negative relationship of transactional leadership to structural dimension of social capital. It means, when the leaders stresses on reward and punishment, this may ruin employee's structural dimension of social capital.

### 2. Social capital and performance

This research found that structural dimension of social capital has positive influence to in-role. Employee with high structural dimension of social capital will have good social interaction with his/her co-workers. The social interaction will enable the employee to share access to wider

information sources, so it will increase the quality, relevance, and accuracy for information needed to support employee's performance (Nahapiet & Ghoshal, 1998). This finding consistent with Wayne et al. (1997) who found that employee interaction will enable him/her support each other, give feedback, and share resources, so he/she have the chance to work better, besides they can support their co-workers.

This research found that relational dimension of social capital has positive influence to extra-role performance. So, this finding supports previous research in this field. This research finding supports social resource theory (Lin, 1982 as quoted by Lin, 1999) which states that there are resources available in a social network. Employee who has good relation with his/her co-workers will be able to use those resources, so he/she will achieve higher in-role performance. This happens since everyone has certain limitations, so he/she will need support from co-workers to support him/her. Besides that, the network owned by an employee also enable him/her help one to another, so his/her extra-role performance will also be good.

This research found that extra role performance has positive influence to in-role performance. When employees are willing to work with his/her friends, there will be a helping behavior climate which will enable every employee to do his/her work better.

### Conclusion

This research found several findings. First, transformational leadership has positive influence to relational dimension of social capital. Second, transactional leadership has negative influence to structural dimension of social capital. Third, relational dimension of social capital has positive influence to extra role performance. Fourth, structural dimension of social capital has positive influence to in role performance. Fifth, extra role performance has positive influence to in role performance.

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## REPLICATING HOFSTEDE'S CULTURAL FRAMEWORK ON INDONESIA'S FIVE MAJOR ETHNIC GROUPS

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### Abstract

This study aims to investigate in-country cultural differences and similarities by implementing Hofstede's four dimensions of national culture. Indonesia, the fourth most populated country in the world, consists of thousands of ethnic groups and hundreds of local languages that influence the cultural variations within the country. To understand Indonesia's cultural values, the varieties of culture among ethnic groups must be acknowledged. This research used survey method comprising 699 respondents from five major ethnic groups: Javanese, Sundanese, Batak, Minangkabau, and Chinese-Indonesian. The findings of this study showed that there were differences among the observed ethnic groups, which can be traced by the socio-cultural factors of each group. In this regard, future research should be conducted with cultural variations in mind.

**Keywords:** *cultural differences, cultural values, cultural variations, ethnic groups, national culture*

### Introduction

#### 1. Background

Understanding cultural differences is essential for persons working in a multicultural environment to improve intercultural competence (Matveev & Milner, 2004). This is particularly true to the case of Indonesia. As a country that consists of 31 major ethnic groups, there are cultural variations that need to be acknowledged.

In an attempt to compare one culture to another, prior studies proposed many analytical frameworks on cultural differences (Hofstede, 1980; Trompenaars & Hampden-Turner, 1998). Of most-used available frameworks, Hofstede's (1980) four dimensions of national culture performed the most comprehensive in describing differences among countries (Schuler & Rogovsky, 1998; Shackleton & Ali, 1990; Triandis, 1982).

According to Hofstede (1980; 2010), Indonesia is a country in which the society upholds great tolerance toward inequality of a power (large power distance). It tends to accept uncertainty (weak uncertainty avoidance), preference not to chase career, money and assertiveness (low masculine), and collectivist value.

The Hofstede's findings are seemingly accurate in describing typical Indonesian's values. However, it does not fully reflect all 31 Indonesian major ethnic groups (from thousands of smaller ethnic groups) and hundreds of local languages and traditions. On the other hand, there is also a tendency from Hofstede to present Javanese culture and values as Indonesia in general. The evidence can be observed in his publications in Hofstede (1982) and Hofstede, Hofstede, & Minkov (2010).

Based on this consideration, this study argued that careful approach was needed to understand Indonesia's vast cultural variations. By focusing on utilizing Hofstede's four main dimensions on the indigenous group level in Indonesia, this study is to answer the following questions: (1) how ethnic groups will differ from one another? (2) to what extent did the national cultural framework meaningfully describe in-country values differences?

The study seeks to answer the questions by implementing Hofstede's national culture dimensions on five major Indonesian ethnic groups, namely Javanese, Sundanese, Batakese, Minangkabau, and Chinese-Indonesian.

### **Javanese**

The Javanese is one of the largest ethnics who lived in Indonesia with a population about 40.22 percent of the Indonesian population. They lived in an environment that had strong culture. It starts from pregnancy until death. Although they do not reside in Java Island, they still hold the culture as "ugeman" or reference in that life. Many literatures that explained the Javanese have diversity of characteristics, cultures, and traditions such as Jong (1976), Koentjaraningrat (1984), Magnis (2001), and Mulder (1983).

The Javanese well known with politeness, shy, likes to hide feelings, and keep on ethics. As revealed by Magnis (2001) in his book entitled *Ethics of Java*, the uniqueness of the values in the culture of Java is its plastic without reduction from the value of authenticity. In marketing activities, there is the concept that in attaining victory without demeaning others and to achieve something not necessarily with exceptional strength or the completeness of the facility.

Now, philosophies of Javanese often overlooked, whereas it could be developed and disseminated in business institutions included in the work ethic. As another example, in the puppet *Semar* there are lessons that can be drawn to the science of services. *Semar* could serve the boss well and respected by his opponents. *Semar* is not high-minded, despite having a tremendous weapon. As a god who has great strength, he still has the values of a good serve (Setyodarmodjo, 2007).

### **Sundanese**

Sundanese is the second largest ethnic group in Indonesia after the Javanese, about 15.5 percent of the total population in Indonesia. Sundanese has some similarities with the Javanese. They respect older people, have a collectivist character, and comfort in stable and predictable conditions. However, there is something that distinguishes them from the Javanese, especially in the religious activities, the Sundanese generally can be said as more devout.

### **Minangkabau**

Minangkabau ethnic have matriarchate characteristics, which means the woman is someone who plays an important role within the family. Therefore, Minangkabau people are also known as matrilineal ones. The majority of Minangkabau people is from West Sumatra, about 2.73 percent of the overall population in Indonesia. The men are used to leave the home, go to another city after they graduate from the college or high school, in order to search for a better life. In another city, most of them become entrepreneurs. Although these men are happy to go to another city, they will not forget his hometown and the family.

### **Batak**

Differ to the ethnic of Minangkabau, Batak known as Patriarchal ethnic. Men play an important role within the family. A small family should have at least one man to carry the family names. The majority of Batak ethnic is located in North Sumatra which has the population about 3.58 percent of the overall population in Indonesia. Batak is also known as indigenous that often go to another city to find out the better life.

### **Chinese-Indonesian**

Chinese-Indonesian people are Chinese's migrants who initially entered via trade and have been recognized to be part of ethnic groups in Indonesia according to act number 12/2006 on Republic of Indonesia. The ethnic of Chinese is known to have a tendency like trade or become entrepreneurs. The proof is that, although few in number, only about 1.2% of the total population of Indonesia, Chinese dominate the top of the richest persons in Indonesia (Forbes, 2011).

Chinese-Indonesian has a tendency to do entrepreneurial or trade activities. In conducting its business, they help each other. For example, if a store does not have the items that requested by the customer, the store owner will try to find items in another store, so that customers do not feel disappointed. If impossible, then the store owner will provide a reference to customer to go to another store from the same ethnic. Chinese-Indonesians are recognized to have a tendency to look for material success.

### **Hofstede's Four Dimensions of National Culture**

#### **1. Power Distance**

Power distance is defined as the degree to which people with less power or social status expect and accept that power is distributed unequally (Hofstede, 1980; Hofstede et al., 2010). This dimension refers deals with the fact that all individuals in societies are not equal – it expresses the attitude of the culture towards these inequalities among people.

In countries with large power distance, the relationship between bosses and subordinates is like a family. Boss plays a role as a father figure for his or her subordinates. In this society, decisions are made centrally from top management. To maintain the harmony in the workplace, disagreements and arguments is avoided.

#### **2. Individualism vs. Collectivism**

Individualism vs. Collectivism deals with the degree of interdependence a society maintains among its members. It has to do with whether people's self-image is defined in terms of "I" or "We." In Individualist societies, people are supposed to look after themselves and their direct family only. In Collectivist societies people belong to 'in groups' that take care of them in exchange for loyalty (Hofstede et al., 2010).

#### **3. Masculinity vs. Femininity**

A high score (Masculine) on this dimension indicates that the society will be driven by competition, achievement and success, with success being defined by the winner / best in field – a value system that starts in school and continues throughout organizational life.

A low score (Feminine) on the dimension means that the dominant values in society are caring for others and quality of life. A Feminine society is one where quality of life is the sign of success and standing out from the crowd is not admirable.

In Feminine countries the focus is on "working in order to live", managers strive for consensus, people value equality, solidarity and quality in their working lives. Conflicts are resolved by compromise and negotiation. Incentives such as free time and flexibility are favored. Focus is on well-being; status is not shown. An effective manager is a supportive one, and decision making is achieved through involvement. In contrast, Masculine countries and to an extent lower Masculine countries that do not score too low on the scale to be called Feminine countries, display the traits of the Masculine societies but in a lesser degree.

#### 4. Uncertainty Avoidance

Uncertainty Avoidance is defined as “the extent which the members of institutions and organizations within a society feel threatened by uncertain, unknown, ambiguous, or unstructured situations” (Hofstede et al., 2010).

The dimension Uncertainty Avoidance has to do with the way that a society deals with the fact that the future can never be known. This ambiguity creates anxiety and different cultures have learnt to deal with this anxiety in different ways.

The extent to which the members of a culture feel threatened by ambiguous or unknown situations and have created beliefs and institutions that try to avoid these is reflected in the score on Uncertainty Avoidance.

### Materials and Methods

#### 1. Materials

The present study employed Hofstede’s Value Survey Module 1982 (VSM 82). VSM 82 measures four dimensions, namely Power Distance, Individualism vs. Collectivism, Masculinity vs. Femininity, and Uncertainty Avoidance. Responses were made through 5-point scale and calculated using VSM 82’s formulas as follows:

$$PDI=135-a+b-25c \quad UAI=300-40d-30e-f \quad IDV=76*m4-43*m1+30*m8-27*m13-29$$

$$UAI=60*m8-66*m11+30*m6-39*m14+76$$

Information:

PDI = Power Distance Index

UAI = Uncertainty Avoidance Index

IDV = Individualism Index

MAS = Masculinity Index

#### 2. Respondents

The respondents of this research consist of entrepreneurs and employees from five major ethnic groups in Indonesia, totaling 699 respondents residing in Central Java Province. The ethnic groups are Javanese ( $n = 200$ ), Sundanese ( $n = 149$ ), Padang ( $n = 100$ ), Batak ( $n = 100$ ), and Chinese Indonesian ( $n = 150$ ).

Census technique was employed in the selection of the samples of this study in which members of the populations had the same opportunity as the unit of analysis. Cooper & Schindler (2001) explains that samples are elements of population, which could provide conclusions about the entire populations.

This research investigated the cultural values of 5 major ethnic groups in Indonesia using Hofstede’s Value Survey Module.

**Table 1**  
**Number of Respondents by Ethnicity**

<b>Ethnic Group</b>	<b>N</b>	<b>%</b>
Javanese	200	28.61
Sundanese	149	21.32
Batak	100	14.31
Minangkabau	100	14.31
Chinese-	150	21.46

Indonesian		
Total	699	100.00

## Results and Discussions

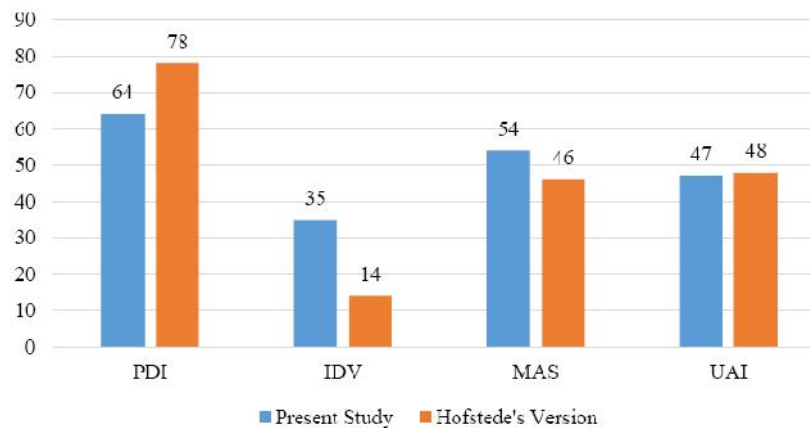
**Table 2**  
**Cultural Values of Indonesia – Hofstede’s findings**

Dimensions	Score	Category
Power Distance	78	Large Power Distance
Individualism vs. Collectivism	14	Collectivist
Masculinity vs. Femininity	46	Low Masculine
Uncertainty Avoidance	48	Weak Uncertainty Avoidance

**Table 3**  
**Cultural Values of Indonesia (Averaged from Each Ethnicities)**

Dimensions	Score	Category
Power Distance	64	Large Power Distance
Individualism vs. Collectivism	35	Collectivist
Masculinity vs. Femininity	54	Low Masculine
Uncertainty Avoidance	47	Weak Uncertainty Avoidance

### Indonesia Scores Comparison



**Exhibit 1: Comparison between Indonesia Score and Hofstede’s Score**

Table 2 shows Indonesia in Hofstede’s findings, whilst Table 3 shows the average score of this study. Looking into Exhibit 1, it can be seen that in this study, Indonesia is a country that is large on power distance (64), collectivist (35), low in masculine (54), and has preference toward avoiding uncertainty (47).

### Closer Investigation on Ethnicity Level

On this section, analysis on each ethnic group will be discussed. It will also discuss each ethnic groups' scores in relation to socio-cultural factors that is experienced by each of the ethnic groups. To contrast the scores of each ethnic group, comparison to the average score of this study is also conducted.

**Table 4**  
**Cultural Values by Ethnicity**

Ethnic Group	Dimensions			
	PDI	IDV	MAS	UAI
Javanese	61	28	42	44
Sundanese	<b>54</b>	32	53	42
Batak	<b>74</b>	<b>27</b>	<b>72</b>	<b>21</b>
Minangkabau	66	<b>52</b>	<b>39</b>	61
Chinese-Indonesian	64	38	63	<b>68</b>
<b>Indonesia (Average)</b>	<b>64</b>	<b>35</b>	<b>54</b>	<b>47</b>
<b>Indonesia (Hofstede's Version)</b>	<b>78</b>	<b>14</b>	<b>46</b>	<b>48</b>

Table 4 shows the cultural values of each ethnic group. From the table, it can be seen that each ethnic groups demonstrate some similarities with Hofstede's score.

### Javanese

**Table 5**  
**Javanese Cultural Values**

Dimensions	Javanese		Indonesia	
	Score	Category	Score	Category
Power Distance	61	Large PD	64	Large PD
Individualism vs. Collectivism	28	Collectivist	35	Collectivist
Masculinity vs. Femininity	42	Low Mas	54	Low Mas
Uncertainty Avoidance	44	Weak UA	47	Weak UA

Table 5 shows the cultural values of Javanese ethnic group. From the table, it can be seen that Javanese is categorized as having large power distance (62), collectivist (28), low masculine (42), and weak uncertainty avoidance. Compared to the average score of this study, Javanese has similar results and is in the same categories on every dimension.

**Sundanese**

**Table 6**  
**Sundanese Cultural Values**

Dimensions	Sundanese		Indonesia	
	Score	Category	Score	Category
Power Distance	<b>54</b>	<b>Intermediate</b>	64	Large PD
Individualism vs. Collectivism	32	Collectivist	35	Collectivist
Masculinity vs. Femininity	53	Low Mas	54	Low Mas
Uncertainty Avoidance	42	Weak UA	47	Weak UA

Table 6 shows the cultural values of Sundanese ethnic group. From the table, it can be seen that Sundanese is categorized as a society which is in intermediate level of power distance (54), collectivist (32), low masculine (53), and weak uncertainty avoidance (42). Compared to the average score of this study (Indonesia), Sundanese has very similar scores on three dimensions: Individualism vs. Collectivism, Masculinity vs. Femininity, and Uncertainty Avoidance. With slightly lower score on Power Distance, Sundanese people tend to be more equal. The need to respect elderly and people with social status is still there but it is not as strong as the other ethnicities. The result also indicates that Sundanese almost shares the same category as the average score of Indonesia with only Power Distance dimension that differs.

**Batak**

**Table 7**  
**Batak Cultural Values**

Dimensions	Batak		Indonesia	
	Score	Category	Score	Category
Power Distance	74	Large PD	64	Large PD
Individualism vs. Collectivism	27	Collectivist	35	Collectivist
Masculinity vs. Femininity	<b>72</b>	<b>Masculine</b>	54	Feminine
Uncertainty Avoidance	21	Weak UA	47	Weak UA

Table 7 shows the cultural values of Batak ethnic group. As can be seen on the table, Batak is characterized as a society which is large on power distance (74), collectivist (27), masculine (72), and weak uncertainty avoidance (21). Power Distance score of 74 indicates that Batak is a more hierarchical society compared to the average score of Indonesia. It is also in the category of masculine society compared to low masculine on the average score, meaning Batak people tend to be more open to competition and strive for the best. Compared to the average score of Indonesia, Batak is more masculine than any other Indonesians.

## Minangkabau

**Table 8**  
**Minangkabau Cultural Values**

Dimensions	Minangkabau		Indonesia	
	Score	Category	Score	Category
Power Distance	66	Large PD	64	Large PD
Individualism vs. Collectivism	<b>52</b>	<b>Intermediate</b>	35	Collectivist
Masculinity vs. Femininity	<b>39</b>	<b>Feminine</b>	54	Low Mas
Uncertainty Avoidance	<b>61</b>	<b>Strong UA</b>	47	Weak UA

Table 8 shows the cultural values of Minangkabau ethnic group. Minangkabau's score on Power Distance (66) is a high score, meaning that Minangkabau has a hierarchical society, very much the same as any other ethnic groups. On Individualism vs. Collectivism dimension, Minangkabau scored 52 which is in the intermediate level. Moreover, Minangkabau is categorized as Feminine (39) and having strong Uncertainty Avoidance. Compared to the average score of Indonesia, Minangkabau differs in most dimensions with only one similarity (PDI).

## Chinese-Indonesian

**Table 9**  
**Chinese-Indonesian Cultural Values**

Dimensions	Chinese-Indonesian		Indonesia	
	Score	Category	Score	Category
Power Distance	64	Large PD	64	Large PD
Individualism vs. Collectivism	38	Collectivist	35	Collectivist
Masculinity vs. Femininity	<b>63</b>	<b>Masculine</b>	54	Low Mas
Uncertainty Avoidance	<b>68</b>	<b>Strong UA</b>	47	Weak UA

Table 9 shows the cultural values of Chinese-Indonesian ethnic group. From the table, it can be seen that Chinese-Indonesian is categorized as a society that is large on power distance (64), collectivist (34), masculine (63), and strong uncertainty avoidance (68). Compared to the average score, Chinese-Indonesian is more masculine and has strong uncertainty avoidance.

## Discussion

The results of this study indicated interesting facts to be discussed. Firstly, the average score of this study show similarity on all dimensions as Hofstede's findings. Hofstede argues that culture tends to remain the same over time. At the same time, the similarities were also found in the results of Javanese. These findings provide support to the allegation made by Perdhana (2015) stating that Hofstede used Javanese to describe Indonesia.



Secondly, the results varied when the analysis was on the ethnic group level. On Power Distance dimension, almost all ethnic groups are categorized as having large power distance. Only Sundanese scored on an intermediate level. This means in most culture in Indonesia, respect for parents and older relatives is a basic and lifelong virtue.

On Individualism vs. Collectivism dimension, almost all ethnic groups are categorized as collectivist societies. The scores, however, are higher compared to Hofstede's version (14). This might indicate that Indonesians are not as collectivist as they were 35 years ago when Hofstede obtained the result. What is interesting is Minangkabau with score 52. This score indicates that Minangkabau is an individualist society. The tendency to go outside homegrown perhaps makes Minangkabau people have more individualistic nature to be successful in their new place.

On Masculinity vs. Femininity dimension, the results varied. Two ethnic groups are categorized as low masculine: Javanese (42) and Sundanese (53); two ethnic groups are categorized as masculine: Batak (72) and Chinese-Indonesian (63); and Minangkabau is categorized as feminine. The varieties of results showed that there are different preferences among the ethnic groups.

Lastly, Uncertainty Avoidance dimension. The results also varied. Two ethnic groups are categorized as having weak uncertainty avoidance: Javanese (44) and Sundanese (42); two ethnic groups are categorized as having strong uncertainty avoidance: Minangkabau (61) and Chinese-Indonesian (68); and Batak is categorized as low uncertainty avoidance. Chinese-Indonesian is the most uncertainty avoiding culture compared to the rest. This is often attributed to the long history of discrimination that Chinese-Indonesian has had to endure. Under these circumstances, Chinese-Indonesians learned to avoid the discrimination by being entrepreneurs or work for themselves rather than work for someone else.

## Conclusions

This study was conducted to answer the following questions:

- How ethnic groups will differ from one another?
- To what extent did the national cultural framework meaningfully describe in-country cultural differences?

The present study employed Hofstede's VSM 82 in order to make cultural comparisons among ethnic groups in Indonesia. The results of the study indicated that there are cultural differences among ethnic groups in Indonesia. These differences create distinctive characteristics among them, which can be traced from their past historical experiences they have endured. In this regard, we argue that Hofstede's cultural framework can meaningfully describe in-country cultural differences. Attention should be paid on the cultural variations within a country to avoid generalizations.

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## THE EFFECT OF LOCALLY-GENERATED REVENUE AND FISCAL TRANSFER FROM CENTRAL TO REGION FUNDS ON POVERTY WITH INTERVENING VARIABLES CAPITAL EXPENDITURES AND ECONOMIC GROWTH OF REGENCY/CITY IN THE EAST KALIMANTAN PROVINCE

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### Abstract

This study aimed to examine the effect of locally generated revenue and fiscal transfer from central to region fund on poverty with intervening variable capital expenditure and economic growth of the regency/city in East Kalimantan Province. Data source used are secondary data from reports on realization of local government budget, which contains data on the realization of locally generated revenue, fiscal transfer from central to region funds, capital expenditure budget, economic growth and poverty that was obtained from Central Bureau of Statistics in Yogyakarta from 2006 up to the year 2012. The data analysis technique used is Partial Least Square (PLS). The research results showed that 1) Locally generated revenue negative and no significant effect on capital expenditures regency/city in East Kalimantan Province; 2) Revenue-sharing fund is positive and significant effect on capital expenditures regency/city in East Kalimantan Province; 3) The general allocation fund doesn't have any significant positive effect on capital expenditures regency/city in East Kalimantan Province; 4) The special allocation fund also doesn't have any significant positive effect on capital expenditures regency/city in East Kalimantan Province; 5) The capital expenditure significantly had positive effect on the economic growth of the regency/city in East Kalimantan Province; 6) Economic growth also has a negative and significant effect on poverty regency/city in East Kalimantan Province.

**Keywords:** *PAD, DBH, DAU, DAK, Capital Expenditures, Economic Growth.*

### Introduction

The reforms implemented since 1998 in Indonesia has made political and administrative changes. One form of such reform is the change in the government bureaucracy that previously centralized to decentralized government bureaucracy. Based on these changes issued Act No. 22 of 1999 on Regional Government (Pemerintahan Daerah) and Act No. 25 of 1999 on Fiscal Balance between Central Government and Local Government (Perimbangan Keuangan antara Pemerintah Pusat dan Daerah) which subsequently converted into Act No. 32 of 2004 on Regional Government and Act No. 33 of 2004 on Fiscal Balance between Central Government and Local Government. Then Act No. 32 of 2004 on Regional Government replaced by Act No. 23 of 2014. Based on these Acts, regions were given broad authority to manage their own household with a little help from the central government. The local government has the broad right and authority to use the financial resources of its accordance with the needs and aspirations of societies that flourished in the region.

In Act No. 33 of 2004 on Fiscal Balance between Central Government and Local Government stated that one of the local revenue is Fiscal Transfer from Central to Region Fund (Dana Perimbangan/DP) which consists of Revenue-Sharing Fund (Dana Bagi Hasil/DBH), General Allocation Fund (Dana Alokasi Umum/DAU), and Special Allocation Fund (Dana Alokasi Khusus/DAK). DBH is divided into two, namely the tax DBH and non-tax DBH/resources DBH. DAU aims to equalize fiscal capacity among regions that are intended to reduce imbalances financial capabilities between the regions through the application of a formula that takes into

account the needs and potential of the region. DAK is intended to help finance specific activities in specific regions that are regional affairs and in accordance with national priorities, specifically to finance infrastructure and basic public services that have not reached a certain standard to accelerate regional development. DBH is a fund sourced from State Budget (Anggaran Pendapatan dan Belanja Negara/APBN) allocated to regions based on the certain percentage to finance the needs of the region in the implementation of decentralization.

### **Theoretical Basis**

Agency theory has been widely used, both in the private sector and the public sector. Agency theory is used to analyze the relationship between principal and agent in relation to public sector budgeting (Abdullah, 2012). Agency theory analyzing the contractual arrangement between two or more individuals, groups or organizations. Principals make a contract, either implicitly or explicitly with the agent in the hope that the agency will act/perform the work as desired by principal (Jensen and Meckling, 1976).

Accounting theory has a close connection with financial accounting, especially financial reporting to external parties. A theory needs to be supported by a variety of research in which there are hypotheses verifiable. According to Mardiasmo (2004), the theory has three basic characteristics, namely: (1) The ability to describe or explain the phenomena, (2) The ability to predict the phenomena, (3) The ability to control the phenomena.

According to Badrudin (2011), most regencies/cities in Indonesia depend on the source of regional income from DP that come from APBN allocated to the regions to finance the needs of the region in the implementation of decentralization. DP as stipulated in Act No. 33 of 2004 includes DBH, DAU, and DAK. The three component of DP is a trilogy that can not be separated from one another because all three objectives are complementary or the so-called DP trilogy (Badrudin, 2013).

According to Halim (2002: 4), capital expenditure (Belanja Modal/BM) is a form of investment in the form of BM that benefit more than one year. As a form of public sector investment, BM focused on government policies with varying time dimension.

According to Todaro and Smith (2006), the development process has at least three core objectives: 1) Increase the availability of and expansion of the distribution of basic necessities of life, 2) Improvement of living standards, and 3) Expansion of choices economically and socially. According to Todaro and Smith (2006), economic growth (pertumbuhan ekonomi/PE) is the increase in long-term capacity of countries to provide a wide range of economic goods to its citizens. The increase in capacity is determined by the progress or technological adjustment, institutional, and ideological to the demands of the existing situation.

According to Suharto (2006: 3), the welfare of society, including as a process or a concerted effort undertaken by individuals, social institutions, communities and government agencies to improve the quality of life through the provision of social services and social security benefits. According to Suud (2006: 5), the welfare of society is prosperous condition of a society. Public welfare includes health, economic situation, happiness and quality of life of the people.

Todaro and Smith (2006: 61) states that the poverty level in a country is determined by two main things: 1) The level of the average national income and 2) Wide-narrow gap in income distribution. So, however high levels of per capita national income of a country, as long as the uneven distribution of income, poverty levels in the country remains poor.

## Hypothesis Development

The authority of local governments to carry out its policies as an autonomous region is strongly influenced by the region's ability to generate local revenue. The greater the locally generated revenue (PAD) is received, the greater the authority of the local governments in implementing the policy of autonomy. Research conducted by Darwanto and Yustikasari (2007) succeeded in proving that the PAD variable positively effect on BM budget allocation. If the local government wants to increase BM for public services and the welfare of the community, the local government should dig PAD profusely. Based on the above explanation, can be formulated the following hypotheses:

**H1: The locally generated revenue positively effect on regency/city capital expenditures in East Kalimantan Province.**

In Act No. 33 of 2004 on Fiscal Balance between Central Government and Local Government mentioned that DBH consists of Tax-DBH and Non-Tax DBH (Natural Resources). DBH is a fund sourced from APBN allocated to regions based on the certain percentage to finance the needs of the region in the implementation of decentralization. Research results of Siregar (2013) further strengthen the empirical evidence that DBH positively effect on BM. Based on the above explanation, can be formulated the following hypotheses:

**H2: The revenue-sharing fund positively effect on regency/city capital expenditures in East Kalimantan Province.**

The DAU is fund derived from the APBN allocated for the purpose of financial equalization between regions to finance expenditure needs in the context of decentralization. The DAU is a consequence of the transfer of power from central government to local governments. Research conducted by Darwanto and Yustikasari (2007) succeeded in proving that the DAU variable positively effect on BM budget allocation. This provides strong indications that the region expenditure behavior of particular regions of BM will be greatly influenced by the source of the DAU. This is due to an area that has a large amount of DAU, the allocation for regional budget (BM) will also increase. Based on the above explanation, can be formulated the following hypotheses:

**H3: The general allocation fund positively effect on regency/city capital expenditures in East Kalimantan Province.**

DP is the embodiment of the financial relationship between central and local government. One form/type of DP is a DAK. DAK is a fund sourced from APBN and allocated to local governments to finance the special activities of regional affairs and national priorities. Research conducted by Situngkir (2009) indicate that the DAK positively and significant effect on the BM budget. This indicates that there is a relationship between the DAK with a budget allocation of regional spending through BM. Based on the above explanation, can be formulated the following hypotheses:

**H4: The special allocation fund positively effect on the regency/city capital expenditure in East Kalimantan Province.**

Government spending in the form of BM is based on facilities and infrastructure needs, both for the smooth implementation of the tasks for the government and public facilities such as land, equipment and machinery, buildings, roads, irrigation, networks and other fixed assets. Sularso and Restianto (2011) showed that BM has positive effect on PE, so that the allocated budget can

be a stimulus to the economy. Based on the above explanation, can be formulated the following hypotheses:

**H5: The capital expenditures positively effect on the regency/city economic growth in East Kalimantan Province.**

Sukirno (2012) explains that PE is the development of the activity in the economy that led to the goods and services produced in the community increases. The main factors affecting the growth and development of a country is a wealth of natural resources and land, the quantity and quality of labor, capital goods available, the technology used, the social system and community attitudes. Suparmoko (2004) suggests that the relationship between poverty and 5

PE showed a negative relationship. PE without being followed by the equalization of income will not be able to reduce the number of poor people. For that there needs to be an increase in PE is accompanied by equitable distribution of income so as to the welfare of society. Based on the above explanation, can be formulated the following hypotheses:

**H6: Economic growth negatively affects the regency/city poverty in East Kalimantan Province.**

### Research Methods

In this study, the region that became the object of research is the whole regency/city in East Kalimantan Province. The population used in this research is the entire regency/city local government in East Kalimantan Province with a population of 11 districts and four cities in the period of 2006 to 2012. The population in this study is the district of Berau, Bulungan, Kutai Barat, Kutai Kartanegara, Kutai Timur, Mahakam Ulu, Malinau, Nunukan, Paser, Penajam Paser Utara, Tana Tidung, the city of Balikpapan, Bontang, Samarinda and Tarakan.

### Sources and Research Data

The data used in this research is secondary data. The research data was sourced from the report documents the realization of local government budget (APBD) obtained from the Directorate General of Fiscal Balance Indonesian Ministry of Finance (Direktorat Jendral Perimbangan Keuangan Kementrian Keuangan Republik Indonesia) through [www.djpk.depkeu.go.id](http://www.djpk.depkeu.go.id) period from 2006 until 2012 and the Central Bureau of Statistic (BPS) through [www.bps.go.id](http://www.bps.go.id)

Local government budget

**Table 1**  
**Research Variable**

No.	Variable	Variable Name	Operational Definition	Measurement
1	Exogenous	PAD	PAD is revenue earned by the county levied based on local regulations in accordance with the legislation	PAD= Local tax + Local retribution + The results of the local wealth management separated + Other legitimate PAD.

2	Exogenous	DP	DP is a fund sourced from APBN allocated to regions to fund the needs of the region in the implementation of decentralization	$DP = DBH + DAU + DAK.$
3	Endogenous Intervening	BM	BM is a form of investment in the form of capital expenditure as expenditure/cost/ expense for the benefit of more than one year.	Data taken from the realization of the local government budget (APBD)
4	Intervening Endogenous	PE	PE can be defined as the increase in production capacity of an economy that is realized in the form of increase in national income	The difference between the gross regional domestic product (PDRB) at present time with the PDRB at previous time divided by the PDRB at previous time.
5	Depending endogenous	Poverty	Poverty is the inability of the individual to meet minimum basic needs for a decent life.	Data taken from BPS

## Data Analysis

### An Overview of Research Object

East Kalimantan Province is a province that is an integral part of the Unitary State of the Republic of Indonesia (NKRI). The location of this province is on the island of Kalimantan. East Kalimantan Province is the second largest province in Indonesia with an area of 245,237.80 km<sup>2</sup>. The capital city of East Kalimantan Province is located in the city of Samarinda.

**Table 2**  
**Descriptive Analysis**

	Locally Generated Revenue (in millions)	Revenue Sharing Fund (in millions)	General Allocation Fund (in millions)	Special Allocation Funds (in millions)	Capital Expenditure (in millions)	Economic Growth (%)	Poverty (%)
Mean	86.147	990.144	203.989	22.864	572.972	73,29	11,05
Minimum	12.334	325.690	1.365	1.241	67.845	1,83	3,3
Maximum	352.034	5.097.976	557.697	91.576	1.817.067	253,9	24,578

Based on Table 4.1 it appears that the PAD variable had an average for all regencies/cities in East Kalimantan Province per six years of Rp86.147.976.358. Lowest PAD shown by the Kutai Timur Regency in 2006 amounted Rp12.334.740.000 and the number of PAD was highest in Balikpapan City in 2012 amounted Rp352.034.256.557. PAD describes the ability of the regency/city in East Kalimantan Province to explore the available potencies to increase local revenue to realize the PAD planned to finance the needs of the region in order to achieve the welfare of society.

Based on Table 4.1 it appears that the DBH variable had an average for all regencies/cities in East Kalimantan Province per six years of Rp990.144.547.032. Lowest DBH shown by Tana Tidung Regency in 2009 amounted Rp325.690.420.426 and DBH number is highest in Kutai Regency in 2012 amounted Rp5.097.976.867.896.

Based on Table 4.1 it appears that the DAU variable has average for all regencies/cities in East Kalimantan Province per six years of Rp203.989.353.620. Lowest DAU shown by Kutai Regency in 2011 amounted Rp1.365.820.000 and DAU number is highest in Malinau in 2012 amounted Rp557.697.933.000.

Based on Table 4.1 it appears that the DAK variable has average for all regencies/cities in East Kalimantan Province per six years of Rp22.864.523.611. Lowest DAK shown by Penajam Paser Utara Regency in 2012 amounted Rp1.241.022.000 and the DAK number is highest in Nunukan in 2007 amounted Rp91.576.892.000.

Based on Table 4.1 it appears that the BM variable had average for all regencies/cities in East Kalimantan Province per six years of Rp572.972.025.560. Lowest BM shown by Tana Tidung Regency in 2009 amounted Rp67.845.468.210 and amount of BM was highest in Kutai Regency in 2012 amounted Rp1.817.067.377.318.

Based on Table 4.1 it appears that economic growth variable has average for all regencies/cities in East Kalimantan Province per six-year high of 73.29%. Lowest economic growth shown by Tana Tidung Regency in 2009 was 1.83% and total economic growth was highest in Bontang City in 2006 amounted to 253.98%.

Based on Table 4.1 it appears that poverty variables had an average for all regencies/cities in East Kalimantan Province per six-year high of 73.29%. Lowest poverty shown by the City of Samarinda in 2012 amounted to 3.3% and the number of poverty is highest in Malinau Regency in 2008 amounted to 24.57%.

### **Inductive Analysis with Partial Least Square (PLS)**

In this study was not done testing outer models covering validity test and reliability test because the data used in this study was measured data. Goodness of fit inner models in PLS analysis using size Stone-Geisser Q-Square test in the form of Q-Square predictive relevance value 8

which is calculated based on the value of R<sup>2</sup> each endogenous variable, that is BM variable obtained RBM<sup>2</sup> value of 0.64; economic growth variables obtained RPE<sup>2</sup> value of 0.03; and public welfare variables obtained RK<sup>2</sup> value of 0.31. Thus, the value of the Q-Square predictive relevance is:

$$\begin{aligned}
 Q^2 &= 1 - (1 - RBM^2) (1 - RPE^2) (1 - RK^2) \\
 &= 1 - (1 - 0.64) (1 - 0.03) (1 - 0.31) \\
 &= 1 - (0.36) (0.97) (0.69) \\
 &= 1 - 0,24 \\
 &= 0.76
 \end{aligned}$$



Based on these calculations, obtained the value of the Q-Square predictive relevance of 0.76 or 76%, so the model is said to have a strong predictive value because variables in the model that includes PAD, DP, and economic growth variables was able to explain the poverty variable by 76 %, while the remaining 24% is a variation of other variables outside the model.

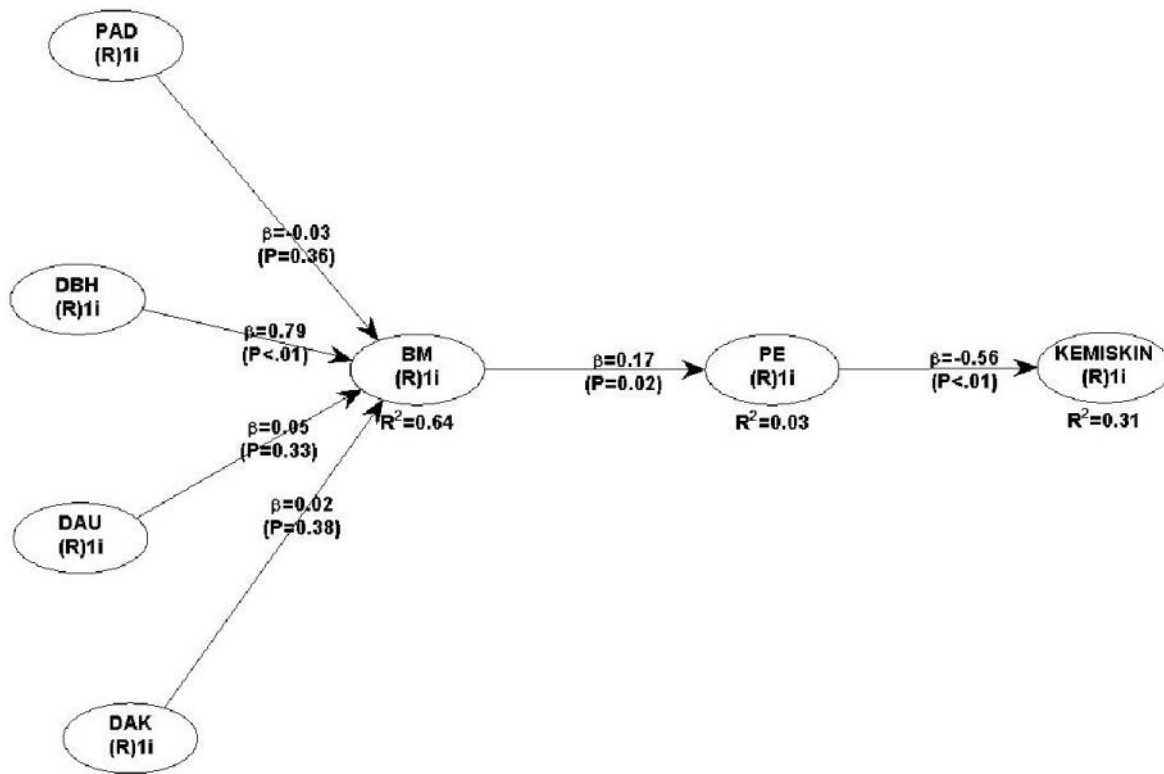


Figure 1. Output Results of the PLS Hypothesis Testing

## Results And Discussion

### 1. PAD positively effect on regency/city capital expenditures in East Kalimantan Province

The analysis showed that the PAD is not positively effect on regency/city BM in East Kalimantan Province ( $\beta = -0.03$ ;  $p > 0.05$ ). The first hypothesis in this study is the PAD positively effect on the regency/city BM in East Kalimantan Province. The results showed that PAD negative and no significant effect on regency/city BM in East Kalimantan Province, so that the hypothesis is not supported. This was due to PAD in East Kalimantan Province not only for BM allocation but also used for operational expenditures and expenditures for goods and services so that local governments have not been able to allocate PAD on BM effectively. Halim (2002) states that when the local government respond more BM comes from central government transfers than PAD owned by local government, so-called phenomenon of flypaper.

### 2. Revenue-sharing fund positively effect on regency/city capital expenditures in East Kalimantan Province

The analysis showed that the DBH positively effect on regency/city BM in East Kalimantan Province ( $\beta = 0.79$ ;  $p < 0.05$ ). The second hypothesis in this study is DBH positively effect on the regency/city BM in East Kalimantan Province. The results showed that DBH positively and significant effect on regency/city BM in East Kalimantan Province, so the hypothesis is supported. This is because when the DBH is divided into regions evenly increased, then the government's BM incurred for development also increased. The central government had divided DBH on target to regions in need.

The second hypothesis test results in this study support the results of research Wandira (2013) which showed that DBH has a significant positive effect on BM. The other study was conducted by Siregar (2013) also concluded the same thing, namely DBH positively effect on BM. 10

### **3. The general allocation fund positively effect on regency/city capital expenditures in East Kalimantan Province**

The analysis showed that the DAU positively and not significant effect on regency/city BM in East Kalimantan Province ( $\beta = 0.05$ ;  $p > 0.05$ ). The third hypothesis in this study is the DAU positively effect on regency/city BM in East Kalimantan Province. The results showed that the DAU positively effect and not significant to regency/city BM in East Kalimantan Province, so that the hypothesis is not supported. This is due to the increased DAU is not accompanied by an increase in BM in the government of East Kalimantan Province. In addition, it also caused the nominal amount of DAU received from the central government is smaller than the nominal DBH. Nominal DAU only amounted Rp203.989.353.620 compared with a nominal DBH reached Rp990.144.547.032. DAU in East Kalimantan Province not only for BM, but also used for personnel expenditure. The third hypothesis test results in this study support the results of Syafitri research (2009) which shows that the DAU does not affect the allocation of BM.

### **4. The special allocation fund positively effect on regency/city capital expenditure in East Kalimantan Province**

The analysis showed that the DAK no positively effect on regency/city BM in East Kalimantan Province ( $\beta = 0.02$ ;  $p > 0.05$ ). The fourth hypothesis in this study is DAK positively effect on regency/city BM in East Kalimantan Province. The results showed that the DAK positively and not significant effect on regency/city BM in East Kalimantan Province, so that the hypothesis is not supported. This is due to the increased of DAK not accompanied by an increase in BM in the government of East Kalimantan Province. This is because the DAK in the East Kalimantan Province not necessarily exist in every year or unsustainable. For example, this year local governments have funds from the central government to repair roads damaged, but in the following year the local government does not necessarily have the funds from the central government to continue the improvement of roads are damaged. Therefore, the local government has not been able to allocate DAK for BM evenly.

The fourth hypothesis test results in this study supports the results of Santosa and Rofiq research (2013) which shows that DAK has no significant effect on BM. 11

### **5. The capital expenditure positively effect on the regency/city economic growth in East Kalimantan Province**

The analysis showed that BM positively effect on the regency/city economic growth in East Kalimantan Province ( $\beta = 0.17$ ;  $p < 0.05$ ). The fifth hypothesis of this study is BM positively effect on the regency/city economic growth in East Kalimantan Province. The study results showed that BM positively significant effect on the regency/city economic growth in East Kalimantan Province, so the hypothesis is supported. In other words, the increase in BM will be followed by an increase in economic growth.

The results of the fifth hypothesis testing in this study supports the results of Sularso and Restianto research (2011) which showed that BM positively effect on economic growth. The other study was conducted by Zasriati (2015) also concluded the same thing, that is BM positively significant effect on economic growth.

## 6. Economic growth negatively affect the regencies/cities poverty in East Kalimantan Province

The analysis showed that the economic growth negatively effect on the regency/city poverty in East Kalimantan Province ( $\beta = -0.56$ ;  $p < 0.05$ ). The sixth hypothesis in this study is the economic growth negatively effect on the regency/city poverty in East Kalimantan Province. The results showed that the economic growth negatively effect on the regency/city poverty in East Kalimantan Province, so the hypothesis is supported. It shows that economic growth results in poverty reduction. Economic growth also resulted in an increase in the welfare of society. This is because the economic growth effect on increasing the availability of field jobs that the unemployment rate declined.

The results of the sixth hypothesis testing in this study correspond to Suparmoko statement (2004) that poverty is negatively correlated with economic growth. However, economic growth without being followed by the equalization of income will not be able to reduce the number of poor people. Therefore, it is necessary to increase economic growth at the same time accompanied by equal distribution of income, so as to improve the welfare of the community. 12

## Conclusion

The conclusions that can be drawn from this study are:

1. The PAD is negative and not significant effect on the BM of the regency/city in East Kalimantan Province. This indicates that the PAD has not been able to affect BM in East Kalimantan Province, as local governments have not been able to allocate PAD on BM effectively.
2. The DBH is positive and significant effect on the BM of the regency/city in East Kalimantan Province. This indicates that the DBH affect BM in East Kalimantan Province because when DBH is divided into areas evenly increased, then the BM incurred for the development of local governments also increased. The central government has divided DBH appropriately targeted to regions in need.
3. The DAU is positive and not significant effect on the BM of the regency/city in East Kalimantan Province. This shows that the DAU has not been able to affect BM in East Kalimantan Province, due to increased DAU is not accompanied by an increase in BM in East Kalimantan Province.
4. The DAK is positive and not significant effect on the BM of the regency/city in East Kalimantan Province. This shows that DAK has not been able to affect BM in East Kalimantan Province, due to increased DAK is not accompanied by an increase in BM in East Kalimantan Province.
5. BM is positive and significant effect on the economic growth of the regency/city in East Kalimantan Province. This suggests that BM may affect economic growth in East Kalimantan Province. It also suggests that the increase in BM will increase economic growth, including through the construction of roads, building hospitals, and other public facilities.
6. Economic growth is negative and significant effect on poverty of the regency/city in East Kalimantan Province. This suggests that increasing economic growth will reduce poverty.

## Limitations

This study has several limitations as follows:

1. This study only uses research area in East Kalimantan province. In other words, this study is limited to the region. This led the research applies only to regencies/cities were selected as

sample, so it has not been able to generalized to the regencies/cities in Indonesia, except in areas that have similar region and economic conditions to East Kalimantan Province.

2. The period of analysis is 2006-2012 year, so the discussion of the results is limited by the conditions that occurred during the period. Therefore, in future research needs to be extended period of time in order to obtain an overview analysis on the latest conditions that occurred in the East Kalimantan Province.

### Suggestion

Suggestions for the subsequent studies are:

1. In a subsequent study is expected to add other variables which can influence the allocation of spending by the government, in order to further develop this study and its scope becomes more widespread, such as indirect spending variable.
2. This study only uses secondary data within a period of six years. Future studies are expected to increase the period of time that is longer than this study.
3. Further study is expected to develop into a larger scale, for example by adding North Kalimantan, West Kalimantan, and South Kalimantan to compare economic growth in the respective regencies/cities in each province.

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## THE INFLUENCE OF CITY MARKETING PERFORMANCE, AND MAYOR PERSONAL BRANDING TOWARDS TOURIST REVISIT INTENTION: THE CASE OF BANDUNG

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### Abstract

Tourism taking important part of the city. Due to this reason, every city in the world are racing to attract more tourist to come, and revisit intention become the key for succession in this competition. Tourist revisit intention of a city determined by its city marketing performance. And someone who responsible for this activity is obviously the mayor. This study proposed that city marketing and mayor personal branding are influencing tourist revisit intention. The aim of this study is to reveal the casual relationship between city marketing performances, and mayor personal branding, towards tourist revisit invention. Based on the theoretical model, hypotheses were formulated. The primary data were collected from the respondents which consist of 250 visitors. Structural Equation Model were used to test the study hypotheses. The study result reveals that city marketing performance and mayor personal branding are influenced revisit intention. The outcomes of the study have significant managerial implications for city government.

### Introduction

Tourism sector is obviously crucial in a city (Bunnag, 2014, cited in Hurriyani et al. 2015 p.19). By showing off the city's potential, each of the tourism destination within a city could improve its local economic, social and cultural aspect. In 2014, tourism sector has contribute 4,01% of the national GDP, and providing job opportunity for 10,32 million people in Indonesia (KEMENPAR, 2015, p.32). City marketing is used to alter the external perceptions of a city in order to encourage tourism, attract inward migration of residents, or enable business relocation (Balencourt and Zafra, 2012, p. 8). And nowadays every city in the world are competing to attract more tourist to come.

One of favorite city to visit by domestic and international tourist in Indonesia is Bandung (Tanjung, 2016). City marketing performance of Bandung has successfully promoting not only within domestic tourist, but also international tourist. More tourist destination and attraction in Bandung has successfully attract more than 5.877.162 domestic tourist and 183.932 international tourist. It has make this sector growth 5.87% annually (DISBUDPAR, 2015). This also have made competition in tourism more intense.

City marketing performance is also one of the parameter of successful mayor. Previous study shows that there are positive correlation between employee performance and employee personal branding (Amoako and Adjaison, 2012). It drives the mayor of Bandung, Ridwan Kamil to gain positive personal brand trough his achievement for Bandung. The current mayor personal brand also help Ridwan Kamil to be consider as someone who is able to surpass the current Jakarta Governor Basuki Tjahaja Purnama on Jakarta governor election in 2017 despite some scandalous news involving him (Perdana, 2016). Other study also found that a person who has a good personal could help a product to develop a brand by associating it with them and lead the customer to repurchase the brand or in this case, revisit the city. (Zahaf & Anderson, 2008; Shafiq *et al.*, 2011).

The combination of city marketing performance and mayor personal branding could be the key to win the tourist attention to visit. But, it is important for the tourists not only visit the city of Bandung, but intend to revisit and recommended to others (Luo et al, 2013, p. 3639) as the revisit intention is considered as a key to Defensive Marketing strategies and business success in general.

From an academic point-of-view, the current study contributes to the tourism literature by developing a Structural Equation Modeling using Partial Least Squares (SEM-PLS) to analyze the hypothesized relationships between city marketing performance, mayor personal branding, and tourist revisit intention in Bandung. It was assumed that the city marketing performance and mayor personal branding will affect tourist intention to revisit. In addition the tourist's perception about current city marketing performance of Bandung, mayor's personal branding and their revisit intention to Bandung also tested to add the existing knowledge by providing city government with a further understanding of tourist perceptions and the behaviors associated with revisit intention.

## **Theoretical Background**

### **1. City Marketing**

In his book Kotler and Keller explain there are 10 main types of marketers market entities which are goods, services, events, experiences, properties, organizations, information, ideas, persons, and places. (2016, p. 27). Place marketing involves regarding places as a collection of products, with their planning and marketing being guided by a strategic vision and related goals (Bramwell, 1998 cited in Metaxas, 2005 p. 49). This marketing process whereby local activities relate as closely as possible to the demands of target customers and aim to maximize the efficient social and economic functioning of the area concerned (Ashworth, 2008, p. 8).

Nowadays cities around the world has taking place marketing in bigger scale to gain strategic advantage among others cities. City marketing is different with traditional place marketing. Usually, a city do not have a marketing division to conduct the city marketing activity. City marketing is a long term process of instrument including all those different, related activities, managing policy, and city's resources (Lombarts, 2008, p. 15). To conduct city marketing activity, various stakeholders are needed to collaborate in order to create economic sustainability, social sustainability, and environmental sustainability (Rufaidah, 2007). In other research she also explain the dimension of city marketing which are Investability, city's ability to optimized its potensial and attract investor, Livability, city's ability to create opportunity so its citizen could reach their potential, and Visitability, the city ability to optimize local optimism and provide hospitality to attract more tourist (Noviana and Rufaidah, 2012, p.1278) A survey was conducted to measure mayor performance also include the city marketing performance in its indicator (BAPPEDA Kota Bandung, 2015). And other studies found positive relationship between individual performance and personal branding (Amoako and Adjaison, 2012)

### **2. Personal Branding**

Almost everything could be branded (Keller, 2013, p.36). A brand could be a name, term, design, symbol, or any other feature that represent a product or seller (AMA, 2016) including a person. It mean that a human or personal brand could be defined as being a person, name, term, sign, symbol or design, or a combination of these, intended to identify the goods or services of one seller, or group of sellers, and to differentiate them from those of competitors (Hughes, 2008). Personal branding is about creating the externally facing identity that you as a business project (Montoya, 2002, p.14). Personal branding also reflected in every action we take and stimulates



perceptions not only our but also in audience about the values and qualities that a person stands for (Lang, 2007; Gad, 2001 cited in Ratman, 2009, p.18). In his research, Hughes had develop dimension to measure a person personal branding which are attribute, benefit, personality, and value (2008, p. 2)

A person who maintain his personal brand are likely doing great in his work performance (Amoako and Adjaison, 2012). To gain competitive edge and achieve success, an organizations needs to give top priority to the personal performance. When an individual brands himself strategically, organizational success is achieved thereby leading to career success (Amoako and Adjaison, 2012, p. 121). Other researchalso found that if a product could successfully associated with someone who has good personal brand, it would helped the product to transferring its meaning and value toward the customer and lead to repurchase behavior (Zahaf & Anderson, 2008; Shafiq *et al.*, 2011) (Zahaf & Anderson, 2008; Shafiq *et al.*, 2011)

### 3. Revisit Intention

Understanding the concept of revisit intention is fundamental for destination managers because some argue that the degree of tourists' loyalty to a destination is reflected in their intentions to revisit the destination. (Chi & Qu 2008, p.625). Revisit intention is the willingness to recommend, in the sense that the tourists express willingness to revisit a destination and make recommendation to their friends because they have satisfactory travel experience and this satisfactory experience brings about word-of-mouth marketing and customer loyalty (Ajzen and Driver, 1992, pp.209-210; Robertson and Regula, 1994, p. 175). Past research also found that revisit intention come from evaluating past experience traveling the tourists would like to go back to the recreation area again willingly (Baker and Crompton, 2000, p.799). In their research Ajzen and Driver measured tourist's revisit intention by their willingness to revisit a destination and their willingness to recommend that destination (1992, p 212)

Past research found that the key of tourist revisit intention is not only by the attraction that a destination provide, but also the promotion activity that conducted by that destination such as rebranding, repositioning, and restructuring a destination to keep the destination performance quality and tourist satisfaction (Baker & Crompton, 2000; Reid & Reid, 1993).

### Hypotheses Development

Based on the literature review above we could develop a theoretical model and the hypothesis of this study:

*Figure 1.* Theoretical Model of the research

Where city marketing and personal branding as independent variable and revisit intention as dependent variable.

And the hypotheses of this study were:

H1 : City Marketing have has a positive effect on Mayor Personal Branding

H2 : City marketing have has a positive effect on revisit intention

H3 : Mayor personal branding have has a positive effect on revisit intention. 5

### Research Methodology

#### 1. Sample

The population of this study are domestic tourist who visited Bandung. This study was not include international tourist as a sample because the writer and supervisor were agreed that international tourist would not have enough knowledge and information about the current mayor. The determination of sample number are proposed by Hair *et al.*, (2010, p.102) who determine

the sample by number of parameter (question) times 5 due to large number and uncertain of the tourist who visit Bandung. The number of question that was used in this research are 44 question, then the number of minimal sample required are  $Number\ of\ Parameter \times 5 = 44 \times 5 = 220 \approx 250$

## 2. Sampling and procedure

The data collection was in 19th-26th September 2016 right after long holiday of *Idul Adha* and was using online survey to reach respondents outside Bandung. All respondents are approached personally by the researchers within two months in the holiday destination area. All questionnaires were completed and returned.

This research was use both descriptive and verivicative analysis to understand tourist perception about those factors and how strong is the relationship between those factors.

Descriptive analysis pf this study was done by calculating the total score percentage of each question and compare it to ideal score as proposed by Riduwan *et al.*, 2008, cited in Nurrahmat (2015, pp. 66-67). This study used Structural Equation Model Partial Leas Square method proposed by Urbach and Ahlemann (2010) for verivicative analysis. This method was selected because SEM-PLS allowed the small number of sample compare to regular SEM. This method also allowed random sampling, and provide the structural model for the readers to understand.

## 3. Instrument

The instrument of the survey consist of four parts. First part consist the question about respondents profile, the second part consist of 22 questions about city marketing performance, third part consist of 14 questions about mayor personal branding, and last part consist of 6 question about tourist revisit intention.

This questioner used Likert scale from 1 to 5 as proposed by Aaker *et al.* (2011, p.259) and Malhotra (2009, p.276) in order to help the writer transform the answer into measureable data for this study. 6

## Research Findings

### 1. Respondents Profile

Characteris tic	Frequency	Percentage
Gender		
Man	104	41,60%
Woman	146	58,40%
Total	250	100,00%
Age		
15-20 Years Old	30	12,00%
21-25 Years Old	138	55,20%
26-30 Years Old	17	6,80%
31-35 Years Old	15	6,00%
36 - 40 Years Old	10	4,00%
41 - 45	7	2,80%

Years Old		
46-50 Years Old	33	13,20%
Total	250	100,00%
Occupation		
College Students	107	42,80%
Private Employee	62	24,80%
Entreprene ur	14	5,60%
Others	28	11,20%
PNS / BUMN / TNI	31	12,40%
Students	8	3,20%
Total	250	100,00%

The table above shows that comparison of the male and female respondents are almost the same (41,6% : 58.4%). Most of the respondents are 21-25 years old (55,2%) followed by 46-50 years old (13,2%) and 15-20 years old (12%). The occupation of the respondents are mostly Collage students (42,8%) followed by private employee (24,8) and public employee (12,4%)

## 2. Descriptive Analysis of Questionnaire

The result of the questionnaires shows that the domestic tourist still think that the local business in Bandung are growing rapidly and agreed that Bandung is a profitable market to open new business. Tourists also agreed that the number of unemployment is less than employment due to the rapid growth of business activity. The tourist think that the human resources from Bandung are creative and the main industry of Bandung are still dominated by fashion industry and they also agreed that in this industry, Bandung could follow the latest trend.

Tourist explains that when the first time they visited Bandung, it was a fun experience and they feel happy, and to they are looking forward to revisit Bandung. The architecture and museum from Bandung are amazing and must be visited while in Bandung. Tourist also thinks that the event that held in Bandung is interesting and they not feeling boring while visited it.

According to the result of questionnaire, tourists are aware that the best collage and school in Indonesia are located in Bandung, but that's not enough to consider that Bandung is "Education City". Tourist thinksthat job available in Bandung is very limited and also tend to decreasing. The tourist also consider to live in Bandung and think that to spent more time in Bandung is delightful for them.

Tourist of Bandung also think that Mayor Ridwan Kamil is a figure who has a lot of achievement and an experience leader. That make tourist think that he has a reputation of a god leader. Tourist also believes that Ridwan Kamil are accountable and competent for his job, he also could give happiness to citizen of Bandung.

When tourist see Ridwan Kamil, they believe that he is authoritative, honest and someone whose smart and have wide knowledge. They don't believe that Ridwan Kamil has lack of communication skill. For the tourist perspective, Ridwan Kamil is a modest figure, he also

faithful to his religion. Tourist disagree that Ridwan Kamil is not very assertive when leading the city.

From the result we could see that the tourist wanted to revisit Bandung, they also would not mind to revisit same destination. And the also preferred to visit Bandung rather than other cities in Indonesia. When interacted to other tourist, they willing to give positive testimony about their previous experience while visited Bandung and even willing to recommends to others when asked about holiday destination.

### 3. Verificative Analysis of the Questionnaire

The result of the questionnaire was then proceed to verivicative analysis using SmartPLS software. This method begins with validity and reliability test to know that whether the respondents understand the question and whether that this research could be used in further research.

#### A. Validity and Reliability Test

##### 1. Validity Test

Model validation denotes the process of systematically evaluating whether the hypotheses expressed by the structural model are supported by the data or not. In general, the model validation is an attempt to determine whether the measurement models as well as the structural model fulfill the quality criteria for empirical work (Urbach and Ahlemann, 2010, p.18).

According to Urbach and Ahlemann (2010, p.18) formulating from Gefen and Straub, unidimensional refers that the loading factor should have a value above 0.500 is valid, above 0.600 is high, below 0.400 is low. Attempts to measure the amount of variance that latent variable component captures from its indicators relative to the amount due to measurement error. Proposed threshold value:  $AVE > 0.500$ , Urbach and Ahlemann (2010 p.19).

The following output is PLS loading factor:

**Table 2 The Output of Loading Factor from SmartPLS Software Calculation**

Variable	Indicators	Factor loadings
City Marketing	X11	0.73
	X12	0.79
	X13	0.79
Personal Branding	X21	0.87
	X22	0.88
	X23	0.83
	X24	0.66
Revisit Intention	Y11	0.86
	Y21	0.84

The table above shows that the result has a value above 0.5 for all construct, therefore, these variables are valid.

Further on, the value of square root of average variance extracted (AVE) are as follow:

**Table 3 Result for AVE**

Variable	AVE
City Marketing	0.599
Personal Branding	0.662
Revisit Intention	0.722

The table above shows that the result has a value above 0.5 for all construct, therefore, these variables are valid.

## 2. Reliability Test

According to Urbach and Ahlemann (2010, p.18), there are several assessment tests for reliability test, such as: internal consistency reliability and indicator reliability. Formulating from Cronbach, the traditional criterion for assessing internal consistency reliability is Cronbach's alpha (CA), whereas a high alpha value assumes that the scores of all items with one construct have the same range and meaning, it has to have a value above 0.600, composite Reliability above 0.7.

Reliability test is conducted using composite reliability from the indicator block that measure construct. The result of composite reliability as follow:

**Table 4 Result for Composite Reliability**

Variable	Composite Reliability
City Marketing	0.818
Personal Branding	0.885
Revisit Intention	0.839

The table above shows that the result has a value above 0.7 for all constructs, therefore, these variables are reliable.

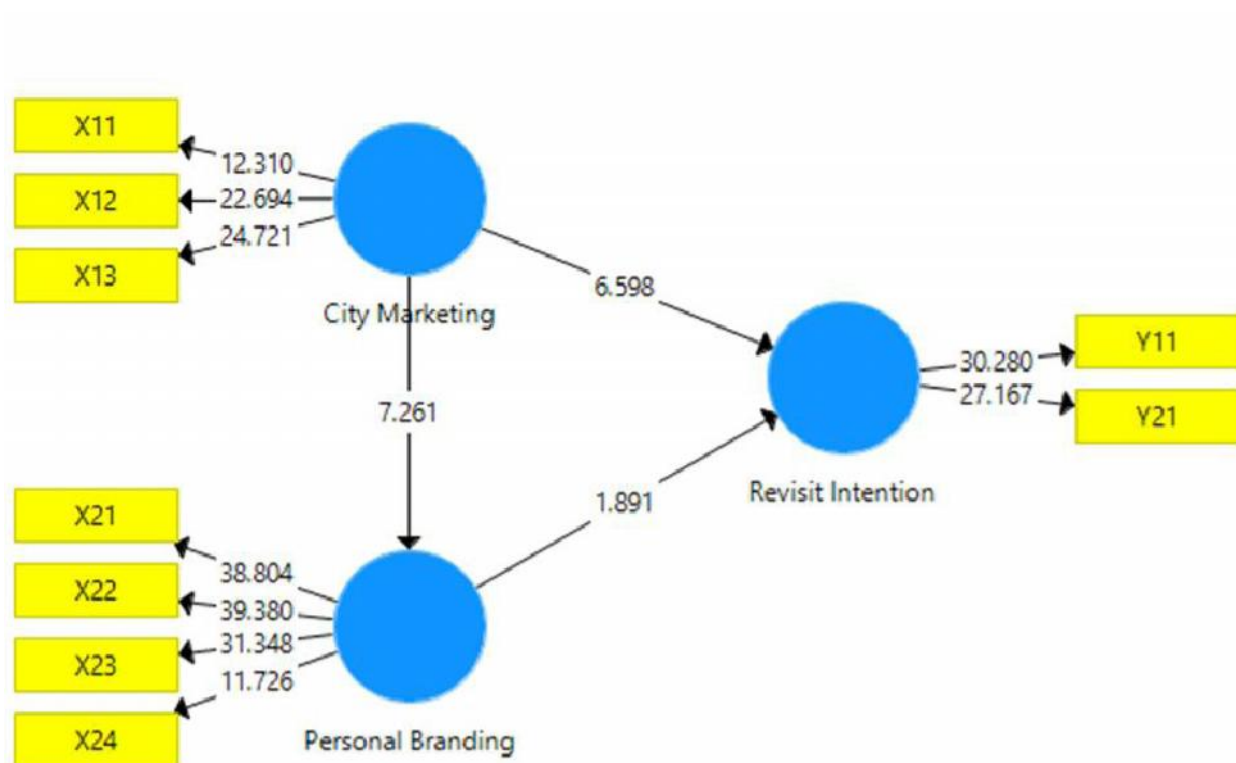
Formulating from Werts *et al.*, and Nunally and Bernstein, internal consistency reliability has a composite reliability for their criterion, attempts to measure the sum of an LV's factor loadings relative to the sum of the factor loadings plus error variance (Urbach and Ahlemann, 2010, p.19). It leads to values between 0 (completely unreliable) and 1 (perfectly reliable). Alternative to Cronbach's Alpha, allows indicators to not be equally weighted. Proposed threshold value for confirmative (explorative) research: CA > 0.800 or 0.900 (0.700). Values must not be lower than 0.600.

**Table 5 Result for Croanbach's Alpha**

Variable	Cronbach's Alpha
City Marketing	0.667
Personal Branding	0.824
Revisit Intention	0.616

The table above shows that the result has a value above 0.6 for all construct, therefore, these variables are reliable. 9

**4. The Relationship between City Marketing, Personal Branding, and Revisit Intention**



**Figure 2 Output Bootsraping using SmartPLS Software**

From the figure above we could see that City Marketing has the highest T-statistics value towards the Personal Branding, follow by City Marketing towards the Revisit Intention, and the lowest one is T-statistics Personal Branding towards the Revisit Intention. Further about figure 4.x will be explained in hypothesis test result.

**Table 6 Result of Hypothesis Test**

	<b>Variable</b>	<b>Original Sample (O)</b>	<b>Sample Mean (M)</b>	<b>Standard Deviation (STDEV)</b>	<b>T Statistics ( O/STDEV )</b>	<b>P-Values</b>
H1	City Marketing -> Personal Branding	0.479	0.484	0.067	7.169	0.000
H2	City Marketing -> Revisit Intention	0.458	0.458	0.070	6.576	0.000
H3	Personal Branding -> Revisit Intention	0.126	0.128	0.066	1.915	0.028

H1, City Marketing have has a significant and positive effect on Mayor Personal Branding  
 Analysis of the data revealed that City Marketing and Personal Branding is positive and significant with T-statistic is 7.169(>1.69) and original sample estimate is positive which has value 0.479. The City Marketing performance significantly has influence towards mayor personal brand. This result also support Amoako and Adjaison study (2012) who explain that the performance of every individual is influencing one way or the other with their personal branding. This result also supports Rampersad, H. K. (2008) study about the blue print to create authentic personal branding. Rampersad, H. K. (2008) explains that one of the key to create authentic personal branding is through their performance.

H2 : City marketing have has a significant and positive effect on revisit intention

The relation between City Marketing and Revisit Intention is positive and significant with T-statistic is 6.576 (>1.69) and original sample estimate is positive which has value 0.458. That mean city marketing significantly has influence towards revisit intention This result also support study form Baker and Crompton (2000) who explain that various destination marketing activity including events, new attraction, and destination performance quality will engaged tourist loyalty behavior such as intention to revisit and giving positive feedback to others tourist.

H3 : Mayor personal branding have has a significant and positive effect on revisit intention.

The relation between Personal Branding and Revisit Intention is positive and significant with T-statistic 1.915 and original sample estimate is positive which has value 0.126. From this result we can conclude that mayor personal brand significantly has influence towards revisit intention. This result support the study from Zahaf and Anderson (2008) and Shafiq *et al.* (2011) who reveal that a public figure who has powerful personal branding based on their attractiveness, experience and credibility could engage the customer intention to repurchase (in this case, revisit) of a product if a product could successfully associated with that person and lead the customer to become loyal.

### **Conclusion**

This research was intended to investigate the casual relationship between city marketing performance, mayor personal branding and tourist revisit intention. This research also provide the structural model of the relationship between variable and tourist perception for each variable. The key findings of this study include the acceptance of proposed model and hypotheses. Based on findings, city marketing performance and mayor personal branding has positive influence to tourist revisit intention. And city marketing performance has higher influence than mayor personal branding toward the tourist revisit intention. This research also supported previous

theory about relationship between the variables. The local government also the mayor should take a note of this findings and considering this result of this study before creating the policy about city marketing and the dimension therein.

The result revealed that Bandung city's marketing performance is doing well to attract both tourist and investor. Bandung also has succeeded to create a comfortable atmosphere to live by tourists and local citizen. The tourist perception of the mayor Ridwan Kamil personal brand is also positive. And it leads to behavior of tourist revisit intention to Bandung. The results can be used as valuable information of the marketing strategies to attract both tourist and investors. These strategies could then be implemented to develop new activity, attraction and policy for the needs of the tourists and investors. 11

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## EXPLORING CREDIBILITY OF FULL-FLEDGED ISLAMIC BANK IN INDONESIA: AN EXPLORATORY FACTOR ANALYSIS (EFA) APPROACH

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### Abstract

This study attempts to explore the antecedents of credibility of full-fledged Islamic banks in Indonesia. The sampling technique in the study is purposive random sampling with criteria; each respondent has a bank account in full-fledged Islamic bank for at least one year. The data were collected from respondent using the structured questionnaires. A total of 250 questionnaires were distributed in different of six major Islamic banks (PT. Bank Muamalat Indonesia, PT. Bank BRI Syariah, PT. Bank BNI Syariah, PT. Bank Syariah Mandiri, PT. Bank Mega Syariah, PT. Bank Maybank Syariah Indonesia, and PT. Bank Tabungan Pensiunan Nasional Syariah) operating in Aceh Province, Indonesia. The result showed that credibility refers to a multidimensional construct composed of three factors: reliability, concern and knowledge. A scale of overall credibility in Islamic Bank was obtained, composed of three factors and represented by 21 indicators that are significant for their measurement. The factor of concern refers the key to establishing and maintaining long-term relationships between companies and customers. In addition, knowledge can increase responsiveness to customers, improve work efficiency and ability to innovate. However concern and knowledge are new factors in the theory of credibility that can be applied in Islamic Banking.

**Keywords:** *Credibility, Reliability, Concern, Knowledge, Islamic Banks*

### Introduction

Credibility is the key driver of company reputation, which refers to the consumer to believe that the company can create and deliver products and services that satisfy consumer desires. One of the marketing purposes is to influence consumer perception and attitude toward the company. Therefore, companies must have high credibility. Creating and maintaining the company credibility can improve long-term business relationships, sales, financial performance and the company's success widely.

The concept of the Islamic Banks is the financial concept fully embraces Sharia law. The Law that invests a business of the partnership program, sharing risks and profits without interests (*Usury*). Islamic banking system has rapidly become a worldwide concern. This fame not only in the Islamic Bank but on conventional banks has shown interest in Islamic Banking system. As evidence, there are 180 Islamic banks with branches more than 8,000 units in Asia, Africa, Europe and America (Rizwan *et al.*, 2014).

Indonesia has 88.1 percent Muslim population, who conducts transaction with both conventional and Islamic banks. In 2015, it has 12 units of full-fledged Islamic bank, 22 units of dual window Islamic bank and 161 units of Islamic rural bank. The financial performance of Islamic bank experienced decreasing. *Capital Adequate Ratio* (CAR) is 14.09 percent compared with 15.74 percent in 2014. *Return On Asset* (ROA) is 0.89 percent compared with 0.79 percent in 2014 and *Return On Equity* (ROE) is 7.97 percent compared with 5.85 percent (Islamic Banking Statistics, 2015). Meanwhile, Otoritas Jasa Keuangan (2015) reported that market share

of Islamic bank achieved 4.78 percent of the total of the national banking. It is still stand at minimal target of 5 percent.

Koesen (2012) added that there is negative opinion of Indonesian toward Islamic bank, namely: (1) system of Islamic and conventional bank is the same, (2) for dual window system, capital source of Islamic bank is from conventional bank, (3) costs of Islamic bank is more expensive than conventional bank, (4) the achieved profit is uncertainty. (5) the perceived service by customers are still stiff, less friendly, less sophisticated technology, less knowledgeable about Islamic products and complicated procedure. This indicates that the Indonesian people are less trusting of Islamic banks.

### The purpose of this paper

This study attempts to explore the antecedents of credibility of Islamic bank in Indonesia by adapting and modifying corporate credibility model (Haley, 1996 & Eisend, 2006). This research is important to find the special dimensions of corporate credibility in sector of Islamic banking. The dimensions are useful for Islamic Bank in creating and maintaining consumer behavior for loyal and also increasing corporate performance.

## Literature Review

### 1. Definition of Credibility

Keller and Aaker (1998) say that credibility is the consumer to believe that the company can design and deliver products and services that satisfy the needs and desires of consumers. Newell and Goldsmith (2001) defines the company's credibility is the extent to which consumers feel that companies have the knowledge or ability to meet claims and whether the company can be trusted to tell the truth. Maathuis (2004) says that credibility is a fundamental asset for a person, organization, political party, or media products to achieve their goals.

Company credibility has studied as a variable of the predictor in marketing (Ballentine, 2006; Goldsmith, 2006) and a key to maintaining the long-term relationship in the business environment (Ghorban and Tahernejad (2012). Credibility reflects a company's reputation (Kotler and Keller, 2013), is a portion of the concept of trust and the sub-processes of a company's reputation (Adams *et al.*, 2010). Goldsmith *et al.* (2000) say that credibility as a predictor of consumer desire to buy.

### 2. Effects of Credibility

There are several references that explain the internal and external impact of credibility. Internally, credibility can increase the growth and profit for the company. While externally, credibility impacts on consumer value, satisfaction, commitment and loyalty (table I).

**Table I: effects of credibility**

No.	Sources	The effects
1	Fomburn (1996)	Credibility is company reputation that influence the company success
2	Keller & Aaker (1998)	Consumers trust that the company can design and deliver products and services that satisfy the needs and desires of consumers
3	Newell (2000)	Credibility can positively influence on company performance
4	Goldsmith <i>et al.</i> (2000)	If the company increases the credibility it will increase

		customer satisfaction
5	Erdem <i>et al.</i> (2002)	The credibility of the company is consumer trust in all products and services produced, definitely, can satisfy the needs and desires of consumers
6	Belch & Belch (2003)	Credible information can influence the beliefs, opinions, attitudes, behavior of the recipient of the information
7	Cretu & Brodie (2009)	There is a strong relationship between the reputation and image of the company to the value and loyalty of consumers
8	Zhang dan Rezaee (2009)	Credibility has direct correlation on performance of company
9	Alam (2012)	The credibility of the brand has a positive and significant impact on customer loyalty
10	Ghobran (2012)	Credibility positively correlates with commitment and sustained commitment loyal customers
11	Ghorban & Tahernejad (2012)	The credibility of the company has a positive influence on customer satisfaction
12	Amin <i>et al.</i> (2013)	Image and trust can increase consumer loyalty
13	Careras <i>et al.</i> (2013)	Credibility can influence behavior and increase the value for stakeholders
14	Sallam (2014)	Companies that pay attention to the credibility of the commitment can improve and enhance the satisfaction and word of mouth communication
15	Bachri <i>et al.</i> (2016)	The credibility will be the trend for future study in Islamic Bank.

From few references above shows that there is a direct and indirect relationship between the credibility, consumer value, satisfaction, commitment, loyalty and performance of company. Variable credibility is also an important element in creating customer value, satisfaction and loyalty and also increasing performance.

### 3. Factors of Credibility

Variable credibility not comes about easily but is formed from several sub-variables. For more details can be seen in the following table.

**Table II: Factors of Credibility**

No.	Sources	Factors
1	Belch & Belch (1994); Newell & Goldsmith (2001); Erdem <i>et al.</i> (2002); Sweeney & Swait (2008)	Expertise & Trustworthiness
2	Riel (1995); Keller & Aaker (1998)	Reliability, expertise & attractive
3	Haley (1996)	Trustworthiness, expertise, attractive & relevance
4	Goldsmith <i>et al.</i> (2000)	Expertise, attractiveness, power & trustworthiness
5	Eisend (2006)	Trustworthiness, competence & dynamism
6	Kotler & Keller (2013)	Trustworthiness, expertise, & likability

There are several types of antecedents to form variables credibility, namely: reliability, expertise, attractiveness, power, trust, likability, and relevance. From the study of some of the above references indicate that credibility has two main dimensions, namely expertise and trustworthiness.

### Methodology

The aim of this study is to understand how customer measure credibility of full-fledged Islamic banks in Indonesia. The sampling technique in the study is purposive random sampling with criteria; each respondent has a bank account in full-fledged Islamic bank for at least one year. The data were collected from respondent using the structured questionnaires. A total of 173 questionnaires were distributed in different of six major Islamic banks (PT. Bank Muamalat Indonesia, PT. Bank BRI Syariah, PT. Bank BNI Syariah, PT. Bank Syariah Mandiri, PT. Bank Mega Syariah, PT. Bank Maybank Syariah Indonesia, PT. Bank Tabungan Pensiunan Nasional Syariah) operating in Aceh Province, Indonesia.

A five-point Likert scale was used to measure perception of Islamic bank credibility, ranging from "strongly disagree" (1) to "strongly agree" (5). Credibility was measured by adapting indicators as suggested by Haley (1996) and Eisend (2006). To explore credibility of Islamic bank we used Exploratory Factor Analysis (EFA) approach.

### Analysis and Results

#### 1. Respondent Profile

Table 1 reports the descriptive statistics of the respondents in this study. A total of 250 questionnaires were distributed and 176 were returned (70.4 percent response rate). The sample characteristic includes 95 male customers (54 percent) and 81 female customers (46 percent). The dominantly respondents age is 31-40 years (38.1 percent) and works as businessman (39.2 percent) (Table III).

**Table III: Respondent Profile**

	Frequency	Percent	Cumulative Percent
<b>Gender</b>			
Male	94	54.3	54.3
Female	79	45.7	100.0
<b>Age (year)</b>			
18-23	12	6.9	6.9
24-29	44	25.4	32.4
30-35	65	37.6	69.9
36-41	41	23.7	93.6
42 and above	11	6.4	100.0
<b>Occupation</b>			
Government employee	38	22.0	22.0
Private employee	24	13.9	35.8
Businessman	67	38.7	74.6
Student	25	14.5	89.0
Other	19	11.0	100.0
<b>Marital Status</b>			

Married	144	83.2	83.2
Single	29	16.8	100.0
<b>Education</b>			
High School	20	11.6	11.6
Undergraduate	46	26.6	38.2
Graduate	87	50.3	88.4
Postgraduate	20	11.6	100.0

## 2. Assumption Tests of Factor Analysis

The Kaiser Meyer Olkin Measure of Sampling (KMO) test obtains the value of 0.923. This value is higher than 0.6 (0.6 the lowest and 0.99 the highest). The Barlett Test of Sphericity obtained is 2482.188 and the probability associated with the chi-squared statistic is lower than 0.05. The Measures of Sampling Adequacy (MSA) test has the Anti-Image Correlation values higher than 0.5 (0.50 the lowest and 0.99 the highest). Subsequently these assumptions have met eligibility for factor analysis.

### A. Communalities Analysis

To validate the scale of credibility we carried out communalities analysis of 22 indicators. Results showed that the values of extraction obtained are higher than 0.5 (0.50 the lowest and 0.99 the highest) except indicator of reputation (X6). Furthermore indicator of reputation (X6) must be excluded from the next analysis. Consequently total of indicators used the analysis is 21 indicators (Table IV).

**Table IV: Communalities Analysis**

No	Indicators of Credibility	Extraction
	Reliability (X1)	0.755
	Concern (X2)	0.639
	Delight (X3)	0.634
	Recognition (X4)	0.567
	Justice (X5)	0.580
	Social Responsibility (X7)	0.532
	Consistency (X8)	0.571
	Sincerity (X9)	0.596
	Honesty (X10)	0.646
	Ethics (X11)	0.736
	Familiarity (X12)	0.648
	Prestigious (X13)	0.626
	Ability (X14)	0.563
	Expertise (X15)	0.623
	Experience (X16)	0.618
	Qualify (X17)	0.712
	Positive opinion (X18)	0.600
	Like (X19)	0.640
	Understand (X20)	0.640
	Mutual sharing (X21)	0.584

	Knowledge (X22)	0.674 Required > 0.5
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**B. Grouping the Credibility Factors**

Eigenvalue Analysis showed that total factor of credibility is 3 factors. Total Eigenvalues obtained are higher than 1 (Acceptance > 1) (Tabel V).

**Tabel V: Eigenvalues**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative	Total	% of Variance	Cumulative	Total	% of Variance	Cumulative
1	10.830	51.570	51.570	10.830	51.570	51.570	5.564	26.494	26.494
2	1.346	6.409	57.979	1.346	6.409	57.979	4.652	22.154	48.648
3	1.045	4.975	62.954	1.045	4.975	62.954	3.004	14.307	62.954
4	.959	4.565	67.519						
5	.768	3.657	71.176						
6	.711	3.387	74.563						
7	.673	3.202	77.765						
8	.601	2.860	80.626						
9	.551	2.622	83.248						
10	.512	2.440	85.688						
11	.473	2.252	87.941						
12	.387	1.843	89.783						
13	.350	1.668	91.451						
14	.323	1.538	92.989						
15	.282	1.342	94.331						
16	.276	1.316	95.647						
17	.240	1.142	96.789						
18	.207	.984	97.773						
19	.174	.828	98.601						
20	.157	.747	99.347						
21	.137	.653	100.000						

Extraction Method: Principal Component Analysis.

Rotation method or principal component analysis was performed to determine any indicators that are part of the credibility factors (Factor 1, factor 2 and factor 3) (Table VI).

**Table VI: Rotation Method.**

No.	Rotated Components	Factors			Cronbach's Alpha
		1	2	3	
1	Reliability (X1)	.817			.922

2	Recognition (X4)	.691		
3	Justice (X5)	.562		
4	Social Responsibility (X7)	.570		
5	Sincerity (X9)	.585		
6	Ethics (X11)	.580		
7	Ability (X14)	.643		
8	Experience (X16)	.624		
9	Positive opinion (X18)	.542		
10	Like (X19)	.745		
11	Concern (X2)		.748	.886
12	Delight (X3)		.572	
13	Consistency (X8)		.577	
14	Honesty (X10)		.684	
15	Familiarity (X12)		.674	
16	Understand (X20)		.708	
17	Mutual sharing (X21)		.672	
18	Prestigious (X13)			.580
19	Expertise (X15)			.605
20	Qualify (X17)			.631
21	Knowledge (X22)			.788
			Required > .50	Required > .70

Rotation Method using Varimax with Kaiser Normalization showed that factor 1 has ten indicators namely; reliability, recognition, justice, social responsibility, sincerity, ethic, ability, experience, positive opinion and like. Value of Cronbach's Alpha for factor 1 is 0.922 (0.70 the lowest and 0.99 the highest). The factor is labelled the factor of reliability. Factor 2 has seven indicators namely; familiarity, delight, consistency, honesty, concern, understand and mutual sharing. Value of Cronbach's Alpha for factor 2 is 0.866 (0.70 the lowest and 0.99 the highest). The factor is labelled the factor of concern. Finally factor 3 has four indicators namely; knowledge, expertise, qualify and prestigious. Value of Cronbach's Alpha for factor 3 is 0.866 (0.70 the lowest and 0.99 the highest). The factor 3 is labelled the factor of knowledge.

Meanwhile component transformation also is conducted for validating three dimensions of credibility in Islamic Bank.

**Table V: Component Transformation Matrix**

Component	1	2	3
Reliability	.671	.592	.447
Concern	-.617	.780	-.106
Knowledge	-.411	-.205	.888

Factor reliability has correlation of 0.671 (0.50 the lowest and 0.99 the highest). Factor concern has correlation of 0.780 (0.50 the lowest and 0.99 the highest). Finally Factor knowledge has correlation of 0.888 (0.50 the lowest and 0.99 the highest). These mean that credibility of Islamic Bank in Indonesia has three factors namely reliability, concern and knowledge.



### Discussion and Managerial Implications

The purpose of this research is to explore variable of credibility for full-fledged Islamic bank. This study expands the existing literature by exploring credibility in sector of Islamic bank. Previous researches have the different dimensions, namely expertise and trust (Belch & Belch, 1994; Newell & Goldsmith, 2001; Erdem *et al.*, 2002; Sweeney & Swait, 2008). Haley (1996) developed four dimensions namely; expertise, attractive, trust and relevance. Goldsmith *et al.* (2000) added dimension of attractive and power so that it becomes four dimensions, namely: expertise, attractive, power and trustworthiness. In contrast to Kotler and Keller (2013) added dimension likability to become three dimensions namely expertise, trustworthiness and likability. While Riel (1995) and Keller & Keller (2013) have the same pastures that dimension of credibility consists of three dimensions: reliability, expertise and attractive.

In Islamic Banking Industry in Indonesia have three dimensions of credibility that should be considered namely reliability, concern and knowledge. Reliability is an important factor because it can increase the quality of service and satisfaction to customers. This factor supports the opinion of the Riel (1995) and Keller and Aaker (1998) say that reliability is an important element of the company's credibility. The factor of concern refers the key to establishing and maintaining long-term relationships between companies and customers. In addition, concern may increase the customer commitment and loyalty for the Islamic banks. The last factor is knowledge, can increase responsiveness to customers; improve work efficiency and ability to innovate. However concern and knowledge are new factors in the theory of credibility that can be applied in Islamic Banking.

### Suggestions for the Future Studies

Credibility is a major driver in creating and maintaining customer satisfaction and loyalty. Satisfied and loyal consumers will have implications on the success of companies such as growth and profitability in the long term. Concern and knowledge is a new element that must be considered in the Islamic banks because it can have a significant impact on the progress of the company. Therefore, future research should focus on factor of concern and knowledge to measure credibility of company.

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## ACQUIRING CROSS-CULTURAL COMPETENCE: INSIGHTS FROM INTERNATIONAL FIRMS IN FOUR COUNTRIES

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### Abstract

Firms increasingly have to compete globally in order to survive. An understanding of the host country's local culture arguably being one of the most important aspects of this survival. The greater the cultural difference, the higher the risk of miscommunication and of mismanagement. Given that cross-cultural management is acknowledged as an intrinsic part of firm establishment in foreign markets today, we set out to explore the linkages between the competence of international firms in managing cultural differences and the effectiveness of their business operations. How this 'cross-cultural competence' is acquired is of particular interest to this study. Swedish firms operating in Kenya, Lithuania, Poland and Russia are examined. The findings show that international firms tend not to formulate any preparatory measures to become 'culturally competent' prior to entering foreign markets. Learning takes place by doing. A Process Model of Acquiring Cross-Cultural Competence in Foreign Markets is constructed.

**Keywords:** *Internationalization; Kenya; Lithuania; Poland; Russia; Cross-Cultural Competence Process; National Culture; Cross-Cultural Management; Globalization*

### Introduction

"Culture and communication are inseparable, therefore culture does not only determine as to who talks to whom, about what, and how communication is conducted, it also helps to know how people understand and interpret a message, how much weight they put in the message, and the conditions and circumstances under which the message can or cannot be sent, noted or interpreted. The fact is that the whole program of our communication behavior to a large extent depends on the culture that we have grown up in. Consequently, culture is the base of communication. As a result, when the culture varies, communication also varies." (Translated from Bjerke, 1998).

According to Bjerke (1998), in order to get the proper response from the receiver of your message, the key is to be an effective communicator and to know how much information you need to deliver. Culture, in other words, is a frame of reference within which people communicate with each other. It follows that the greater the difference among the various cultures, the higher the risk of miscommunication. In other words, effective communication is critical for firms if they are to compete successfully internationally. Firms must communicate in a manner that is understood within the local cultural context. Since, to do otherwise would be to get an inappropriate response i.e. the communication process would fail, as would the relationship. This implies that cultural differences would impact a firm's communication process significantly when operating in foreign markets. This is especially critical in today's business environment where firms, both large and small, often have to compete globally in order to survive (Czinkota and Ronkainen, 1998; Roadblock, 1993; Braker, 1995), where an understanding of the local culture is, arguably, one of the most important aspects of this survival (Czinkota and Ronkainen, 1998).

Some academics believe that it is, in fact, impossible to understand other cultures fully and completely (Trompenaars, 1993). As a result, one can, at best, hope for only partial success in foreign markets. According to Trompenaars (1993), the cultural gaps, which exist among countries, influence all aspects of business activities: business negotiations; consumer and organizational behavior and decision making; the measures taken to avoid uncertainties; employer and employee relationships; time and resources consumed in a firm's operations. It is these differences and the impact of these differences, which makes understanding and managing cultural differences properly a critical issue in international business operations. Hofstede (1984), while not totally rejecting Trompenaars' position, contends that it is possible to understand how other cultures' values differ from our own and postulates that, "culture is the collective programming of the mind which distinguishes the members of one Human group from another. Culture, in this sense, includes systems of values, and values are among the building blocks of culture." (Hofstede (1984, p. 12).

According to Hofstede (1984), therefore, culture is learned and not inherited i.e. it is mentally programmed. From the very beginning of his birth, a child is influenced by his family and thereafter continues the programming of mind with the help of the school, youth groups, work place, etc. A person's way of thinking, feelings and behavioral pattern are learned throughout his lifetime. To be able to understand other cultures, the learned one must be forgotten, which is very difficult. Our thesis concurs with Hofstede's perspective i.e. that culture is learned. If the culture within a certain society has to be learned, then it must also be possible for the international business practitioner to be able to learn and understand the culture of a specific market, and how it affects the behavior and the decision making process. However, unlike Hofstede's viewpoint, we do not believe that it is necessary to forget the learned one in order to be able to understand others. Moreover, we take the view that it is possible to learn foreign cultures through both experiential learning and factual learning where the latter can promote and make the former easier and more comprehensive. Comprehensive learning makes adaptations easier, relevant and more appropriate, while adaptation increases the chances of success. Even if all we learn in the process is

that a part of a culture cannot be understood. This discovery in itself is useful learning as it means that we have identified the various constituents of a specific culture and learned what is possible to learn, and what is not.

### **Research Proposition**

As globalization gathers pace, so does the interest in the relationship between national culture and business practices (for example, Alder 2002; Dorfman et. al., 1988; Galliers, et al., 1998; Garfield and Watson, 1998; Gitman and McDaniel 2008; Hasan and Ditsa, 1999; Luthans, et al., 1993; Offermann and Hellmann, 1997; Thatcher, et al., 2003; Thomas and Ely, 1996; Trompenaars, 1997). This relationship becomes more complex when firms internationalize and find themselves confronted with an (often unfamiliar) national culture of their target (host) country. In other words, while managing internationalization poses a challenge in itself (Abraham and Mukhtar, 2014; Contractor et al., 2007; Ghoshal and Nohria, 1989; Roth, 1995; Sanders and Carpenter, 1998; Tihanyi and Thomas, 2005), adding the cultural dimension makes the process of firm establishment in a foreign market even more challenging.

Our thesis is that making advance 'cultural preparations' can increase a firm's chances of success in foreign markets. Such cultural preparedness promotes the creation of a good image in the host country, which in itself contributes to the firm's success, and speeds up the process of understanding and being accepted by the local host market, thereby accelerating the process of

firm establishment. Even if these preparations were not to have a direct impact on a firm's operational performance, at the very least, they can help firms to identify cultural gaps and to develop appropriate adaptations that narrow these gaps, and to handle the consequences of these gaps better. Cultural preparations represent an aspect of factual learning that can promote experiential learning as alluded to above. If a firm is culturally prepared, the chances of it making mistakes are minimized. Against this background, the specific issues addressed by this study are as follows.

1. To what extent are international business executives aware of the cultural differences and the impact of these cultural differences on their business operations prior to entering a foreign market?
2. Do international business executives make the necessary cultural preparations in order to identify cultural differences that might exist, and to mitigate the impact of these differences on business operations prior to launching their products in a foreign market?
3. If the international business executives do make cultural preparations prior to entering a foreign market, do they develop any mechanisms to manage the cultural differences that are identified, as well as their impact on business operations?
4. If the international business executives do not formulate a mechanism for managing the cultural differences that are identified prior to entering a foreign market, how do they learn; how do they bridge the cultural gap to mitigate the impact of these cultural differences on their business operations; and what results do they achieve?

### Conceptual Framework

A Process Model of Acquiring Cross-Cultural Competence in Foreign Markets is constructed (Figure 1). This model is developed based on a culmination of the theoretical and conceptual frameworks adopted by Hofstede (1980, 1984); Czinkota and Ronkainen (1997); Samovar and Porter (1994); Collier and Thomas (1988;1989); Goldman (1992); Gudykunst and Ting-Toomey (1988); Schneider (1976); and Spitzberg and Cupach (1984). Due to space limitations, a detailed discussion of these theses is out of the scope of this paper. The Model serves as a conceptual framework to examine the linkages between the cultural competence of international firms and the effectiveness of their business operations.

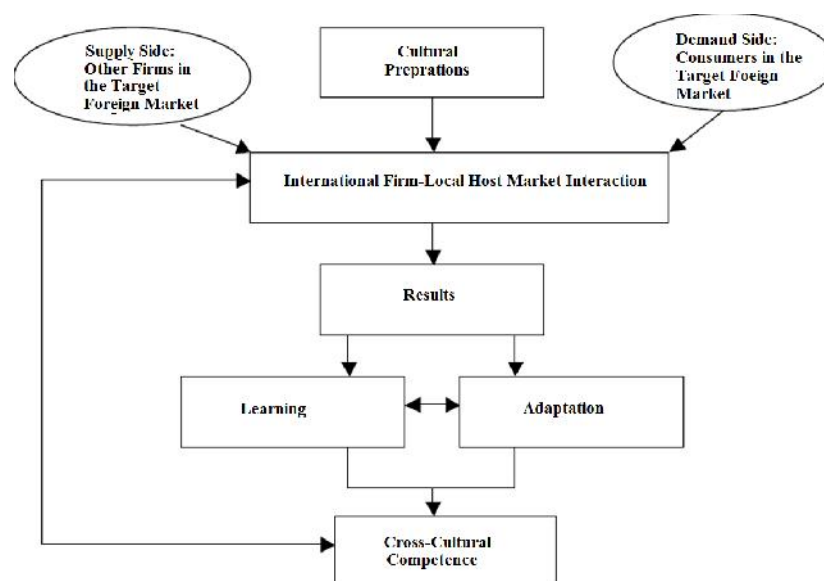


Figure 1: A Process Model of Acquiring Cross-Cultural Competence in Foreign Markets

*Cultural Preparations:* Cultural boundaries are not the same as geographic boundaries. That is why we often find sub-cultures within one country spanning different norms and values. As a result, it may be difficult, even impossible, to completely understand the culture within one's own country let alone another culture (Trompenaars, 1993). However, despite these difficulties, international business executives must find a way to understand other cultures if they wish to avoid cultural blunders and mistakes (Lindblom, 1999). Today companies do make a more conscious effort of incorporating cultural competence into their business strategies (Braker and Walker, 1995). Understanding a culture involves learning about its origin, history, and structure and how it functions. Firms need to be aware of the fact that culture also changes over time and can impact the marketing of their products and services (Albaum et al., 1998).

Although cultural preparations can take many different forms depending on the market in question, 3M's operations in China and Thailand offer a good example of such measures (Czinkota and Ronkainen, 1998). 3M showed sensitivity by embracing the local culture. The company employed the locals to gain cultural knowledge, and it built relationships with the national leaders with a view to establishing contacts and trust before even considering doing business in China. This patient and long-term perspective paid off resulting in the Chinese government making 3M the first wholly owned foreign venture on Chinese soil. Cultural preparation also helped the company to 'Asianize' its products. The other important part of this cultural preparation involved helping employees to understand the company by sending them to the 3M Headquarters in the home country. Such visits had a dual effect: the Chinese employees gained knowledge of the company's culture on the one hand, while they contributed knowledge on the other by sharing their own insights which were incorporated in the company's planned operations in Asia.

In contrast, an example of 'cultural unpreparedness' is cited by Czinkota and Ronkainen (1998) relating to the head of a U.S. beverage firm who was involved in negotiations with a Japanese food company with a view to exporting beer to Japan. The American executive who was used to finalizing a deal in no more than two days back home, became increasingly frustrated when two days into the negotiations, the Japanese said nothing about the project under negotiation, while all their discussions centered around the history, traditions, and the ethos of their company despite the American negotiator's repeated attempts to focus on the project. The American ended up going back with no deal. This example shows that although the American business executive had assumed he was well prepared to do a deal in Japan, the fact was he had not done the necessary homework on the Japanese way of conducting business which often takes much longer than in the West. Another example of cultural unpreparedness is the case of a British Bank in Singapore (Usuiner, 1999). The Bank insisted on entering the Singaporean market using its blue and green corporate colors despite a warning from a consulting firm that in Singapore, green is associated with death. Eventually the bank had to change to another more culturally acceptable shade of green.

*International Firm-Local Host Market Interaction:* Hofstede (1984) identified four dimensions of culture: individualism versus collectivism; high versus low power distance; high versus low uncertainty avoidance; and masculinity versus femininity. So, if for example, the international marketer belongs to a society where the power distance is very high while the customer is from a country where the power distance is low, this will have a significant impact on their interaction. The outcome would be dissatisfaction, a lower business volume and an unstable relationship. Similarly, if the international firm is from a collectivist society such as Japan, while its

consumers are from the individualist society such as the U.S and Sweden, this cultural difference will not only influence but even distract their relationship if it is not properly identified and dealt with. High versus low uncertainty avoidance and masculinity versus femininity would have similar consequences. Based on Hofstede's work, Mårtensson (1998) describes culture as: universalism versus particularism; ascribed status versus achieved status; specific versus diffused relationships in business networks, emotionally charged versus emotionally neutral dimensions. Czinkota and Ronkainen (1998) identify various elements of culture to include language, non-verbal language, religion, values and attitudes, manners and customs, material elements, aesthetics, education, and social institutions.

Thus in relation to the international firm-local host market interaction, which relates to both the supply side and the demand side, and where the demand side represents consumers in the target market, consequences of these cultural dimensions must be addressed. Otherwise, while the international firm might act in the belief that it understands the market, it may be faced with a quite unexpected behavior from consumers to the detriment of its business operations. Pepsi-Cola, for example, changed the color of its cooling and vending machines from dark blue to light blue in South East Asia not realizing that light blue has a negative connotations in that region. As a result, the company lost a significant market share to its competitor, Coca-Cola. The company, with the help of a local consultant, later discovered the cause and changed the color back to the original dark blue subsequently winning back its market share. Even the same English word or phrase might have different meanings in different English speaking countries. To say "at the end of the day" means at the end of the same day that people are conducting negotiations in some societies, whereas it means when the project or issue being discussed is over in others. If a business executive says, "the results bombed", it means the negotiations have failed in some societies, while the same phrase means the negotiations were a success in others.

*Results:* Results represent what an international firm is able to achieve following its interaction with the target market. It is worth noting that if a firm makes advance cultural preparations, it does not necessarily mean it would no longer make any mistakes, only that it will make less or minor mistakes. However, even mistakes that are seemingly minor, can be costly nevertheless in terms of market position and market share as was the case of Pepsi-Cola alluded to above.

*Learning:* The capacity of an international firm to learn is advanced with cultural preparations. Cultural preparations incorporate factual learning which both strengthens the capacity to interact and to learn from the preparation made, as well as from the actual interaction and the results achieved. This does not preclude firms from learning in the absence of cultural preparation. Simply that cultural preparation made in advance has a positive impact on the firms' interaction with the local market; the results achieved; the learning acquired; and the adaptations made. The firm, as a result, has a better chance of adapting its products and programs to the target market since it has now learned what functions well and why, and what further measures, if any, need to be taken to rectify the errors of cultural incompetence.

*Adaptation:* The adaptation or measures taken by an international firm in order to bridge the cultural gap depends very much on the results achieved. If these results are not satisfactory, it implies cultural incompetence and drastic changes are needed in the company's approach. In the case of Pepsi-Cola, it was evident that the company had to do something if the lost market share was to be won back, and changed the color of its vending and cooling machines back to the original dark blue. Similarly, the British Bank operating in Singapore had to change its Green



corporate color to a more ‘culturally acceptable’ green. These two examples highlight that learning through preparation, interaction and the results achieved, as well as the adaptation made increases the cultural competence of the international firm.

*Cross-Cultural Competence:* Although, a positive impact was noticeable following the adaptations made by Pepsi-Cola and the British Bank, success may not be guaranteed even after the necessary corrective measures have been taken. In which case, the international firm must develop the necessary cultural competence further, and more learning and adaptations must take place until the expected results are achieved. In other words, the measures taken in the form of adaptations following the learning, must necessarily have a positive impact on the results achieved i.e. such measures must reduce the cultural gap and thereby improve the international firm’s market position and performance in the host country. Narrowing the cultural gap advances effective communication paving the ground for successful interaction and positive results. Once this has been achieved, only then could a firm be called culturally competent. *An international firm has realized ‘cultural competence’ when it has acquired the capability to understand and handle cross-cultural differences, and thereby mitigate the negative impact of these cultural differences on its business operations through minimizing the cultural gap.*

### **Empirical Data**

Our target firms were from Sweden with international operations in culturally diverse countries. One of the key considerations was physical access to these firms for interviews. The sample comprised six Swedish firms with operations in Kenya, Lithuania, Poland and Russia. Semi-structured questionnaires were used for data collection. The interviewees were senior executives overseeing foreign operations and who were directly involved in the strategic decision making process in relation to firm establishment in the host country. The primary data collection process was corroborated with secondary sources where possible.

### **Findings**

*ABB in Kenya:* ABB has been operating in Kenya since 1960. Old East African Trading Company (OEATC) was representing ASEA (through which ABB Kenya operated) from 1960-1978. When in 1975, the OEATC production manager, who was also responsible for developing customer contacts, together with some engineers formed another company, almost half of ABB Kenya customers shifted to his new company despite the superior quality of ABB products. The ABB market share declined by 20%. Following this setback, ASEA conducted an extensive research to find how it could improve its market position. The firm learned that a local presence with a fully owned company was critical to its survival and growth. ASEA decided to terminate the agency contract with OEATC in 1978. ASEA Ltd., a subsidiary of ASEA, was formed to undertake the production and the sales functions in the local market.

A senior executive highlighted another aspect of the cultural gap and its impact on ABB position and market share in Kenya. When ABB started operating through ASEA Ltd., several potential customers had sought appointments with the firm’s managing director, but these customers were referred to his subordinates instead. There were long delays in decision making and most of the customers never returned despite repeated attempts by the firm to contact them. None of the deals that were negotiated with the lower management were ever finalized. Even though ABB Kenya was making reasonable offers, these were not being taken up. The managing director of ABB Kenya at the time, who had little knowledge and experience of the Kenyan market, could not understand the reason for the lack of customers’ interest. When Gitonga was appointed as

representative of ASEA Ltd., he recommended that whenever the local customers approach the company, they should be given an opportunity to present and discuss their case with the top management and decisions should be made at the negotiation table even if it meant lengthy negotiations. Implementation of these recommendations yielded immediate positive results. The customers started to buy the electrical equipment from ASEA Ltd. and the company increased its market share drastically within a short period of time.

*Tetra Pak in Kenya:* Tetra Pak operates in Kenya through a wholly owned subsidiary Tetra Pak Converters Ltd. (TPC). According to the firm's production manager, the Kenyan government in 1950 initiated the idea of having Tetra Pak's packaging machines, filling lines, and packaging materials in Kenya. The purpose of inviting Tetra Pak was to improve the packaging and distribution of milk within the country. Tetra Pak started its operations in Kenya through a Swedish agent Anton Petterson & Henius in 1956. In 1969, Tetra Pak took over the leasing of machines from Anton Petterson & Henius and established a new company, Tetra Pak Converters Ltd. (TPC). According to TPC managing director, the main product offered by Tetra Pak is packaging materials, and its main customer is the Kenyan Cooperative Creameries (KCC). Almost 40% of the milk produced by KCC is in the form of the long-life milk, known as MALA. It is notable that MALA was developed by Tetra Pak following the learning from its market research that people traditionally preferred fermented milk in Kenya. Since MALA represented a traditional product, it was easier to introduce in the local market and showed significant growth despite a very short sales promotion campaign. Conversely, based on its experience of selling porridge in South Africa in especially designed packaging, the firm assumed incorrectly that the same packaging would also work in Kenya. The poor performance of this product led to the learning that Kenyans like to eat porridge in traditional cups or glasses. TPC had to abandon the packaged product and started to sell porridge in traditional cups and glasses in accordance with the local market taste. The product has taken off since. Similarly, packaged yogurt also did not succeed. At the KCC's request, TPC developed the high-cream milk which enabled the firm to expand its liquid milk market in Kenya.

*DPC SKAFTE in Lithuania:* DPC Skafte is a Swedish firm collaborating in Lithuania with a local firm. According to the DPC managing director, there exists a wide cultural gap between the two partners. The Lithuanian partner lacked the experience of managing a company commercially. This lack of expertise stems from the fact there was no market economy under the Russian administration. Furthermore, an acute shortage of money meant that special financial arrangements had to be drafted such as five year payment period with low interest rates. DPC found the morale of the Lithuanian employees was difficult to judge. The firm found Lithuanian administrative procedures not only different, but also very bureaucratic: everything must be registered; each product must be documented; each document must be translated; and payment must be paid for each individual product. Moreover, Lithuania does not have a properly developed legal system. Instead, personal contacts especially with the government officials are critical to doing business in Lithuania. DPC Skafte found that it had no choice but to adapt to the Lithuanian legal system. Further, the firm had to develop a strong social network in order to secure the necessary finance as DPC learned that in order to keep operations smooth, it was easier if a local representative handles such matters.

*ACCEL Share Company in Lithuania:* ACCEL Share Company produces and sells climatic system components and electronic equipment for the European Automotive Industry. The firm

company has product development and production facilities in Lithuania operated through a joint venture with a local company, AB TERRA. ACCEL Share Company. The Swedish partner owns 51 %, and the Lithuanian partner 49% of the company. According to the Swedish Managing Director, negotiations with the Lithuanian customs authorities are difficult and time consuming that can delay deliveries for up to 3-4 days. ACCEL finds it has no choice but to wait for the clearance. Over time, ACCEL has learned to handle such problems by making longer planning horizons and allowing greater time for negotiations with the concerned authorities. ACCEL has learned that the local work force operates at a slower pace and that their attitudes are still fashioned by the old Soviet System making business operations more costly.

*Bulten Tools Share Company in Poland:* Bulten Tools Share Company is a public company listed on the Stockholm stock exchange. It has three major areas of operation: the automotive industry, general industry, (which produces screws and stainless material), and the electronics/telecommunications industry (which produces screws for mobile phones). Bulten Tools established a joint venture in Poland with local partners with Bulten retaining 93% of the ownership. The negotiation process to form the joint venture was lengthy and resources consuming. More than ten meetings in Poland and Sweden were conducted following the initial expression of interest. The main focus of these negotiations was to formulate the contract, fix the price, and to assess the value of the company. Once the deal was finally signed, it took another five months for government approval. The bureaucracy involved the Ministry of Interior through to the Ministry of Agriculture because the company had bought some industrial land, and a number of parties had to sign it. In addition, the deal had to pass through the Ministry of Defense, because the company was going to use screws, which, according to the Polish officials, could potentially also be used in the weapons industry. One of the biggest obstacles faced by the Bulten was communication since only five out of the 525 Polish employees spoke English. Bulten decided to tackle this problem with the use of translators in the short-term, and through employee training and hiring a English speaking management team in the medium to long-term. It would be another fifteen months before Bulten management felt that it was able to communicate with some of the Polish employees effectively. For example, through an American Head Hunting Company, a financial director was selected – A Pole who spoke English and knew the Polish bookkeeping and tax laws, as well as the Western controlling principles. It is worth pointing out that competition for such personnel is intense as foreign firms entering Poland continues to rise.

Transition to a market economy is still a big challenge for the Polish people. The concept of marketing did not exist in the Polish language until 1990. Another cultural problem is that employees do not respond well to the delegation of responsibility. The general view is that the boss should take, and be responsible for, every decision so if something goes wrong, it would be his fault. Bulten learned that the Polish mindset shaped by the planned command economy for almost fifty years, meant that the locals had adjusted to the idea of someone doing something for them, someone else planning for them, while they simply followed orders to achieve specified targets. The underlying premise begin that if you don't take any initiative or do anything on your own then you will never make any mistake and hence could never be penalized. Such attitudes affect team building and business operations. In addition, the bureaucratic environment is complex and lengthy. It takes a long time for import/export clearance as each document has to be negotiated. This is partly because the Polish Customs officers work on a commission which is directly related to the level of the duty they are able to impose. As much as one third of their

total salary is made up of commission in this manner. Not surprisingly, they try their best to raise the amount of duty paid by the importers. As a result, the company is affected by the delays in production and delivery, as a direct consequence, more people have to be employed resulting in higher costs. Bulten management feels that these factors have negated the initial objective of selecting Poland as a low production cost country. However, low wage costs mean Bulten still has some cost advantages overall.

*XYZ Share Company in Russia:* XYZ Share Company established a joint venture in Russia in collaboration with another Swedish firm. XYZ owned 85 % of the shares, and the other Swedish firm owned the rest. The Russians did not own any shares in the company. The cultural issues highlighted included the importance of personal contacts at the exclusion of all other factors. Compared to Sweden, where relationships are developed along business lines and offering a quality product at a competitive price is an important consideration, everything takes longer as you first have to cultivate personal friendships. XYZ learned that the Russians were used to responding to a very strong, clear and strict regime dictated from a very dominant leader who could tell them exactly what to do. The workers were used to operating in an environment where initiative and creativity were not encouraged. XYZ and its Swedish partner had to look for an authoritarian manager. However, this selection impacted the relationships between such a 'dominant' manager and the Swedish 'democratic' counterparts. Further, the Russian manager still needed clear instructions and guidelines from the Swedish management before proceeding with anything. XYZ also learned that Russian employees including top management happily take up additional jobs elsewhere if they came across an opportunity to earn extra money. The employees did not always give priority to their own company. XYZ has attempted to bridge this cultural gap through formal and informal training methods with some degree of success especially among the younger employees.

## **Discussion**

The findings are discussed in relation to the constructed Process Model of Acquiring Cross-Cultural Competence in Foreign Markets (Figure 1) as follows.

*Cultural Preparations:* The above case studies show that, in general, the need and the application of cultural preparations are not well conceived or understood by the Swedish international executives. This cultural myopia has resulted in financial losses. Those who took the trouble found cultural preparations to be worthwhile. For example, DPC Skafte before forming the alliance with the Lithuanian partner identified that developing personal contacts at the individual level with the authorities is more important than having a quality product or service. This knowledge helped to assign and manage company's scarce resources. This cultural aspect was critical to DPC's eventual success. Tetra Pak developed successful products after identifying that people in Kenya prefer fermented milk, and developed high-cream milk in collaboration the local Kenyan customer, KCC. Conversely, when Tetra Pak attempted to market packaged porridge and yogurt without any regard for the local culture and tradition, their efforts were met with failure.

*International Firm-Local Host Market Interaction:* These cultural gaps for ABB Kenya related to power distance and the speed of decision making. The former meant that for the Kenyan customers, presenting their issue to the top management was more important than the quality of the goods. While, the latter meant that the Kenyan customers sought immediate answers and

decisions. The two aspects were very important within the Kenyan context, but only unfolded after interaction with the local customers and only after losing a number of customers. In the case of Tetra Pak, the successful products were only those that were developed as a result of interaction with the local market. It took time for Tetra Pak to learn that personal contacts play a critical role in interacting with customers in these markets. Until such knowledge was developed, the cultural gap hindered the company-customer interaction, strained relationships and impacted the effectiveness of the business operations negatively. Personal relationships as a prerequisite to doing business were also confronted by ACCEL Lithuania, DPC Skafte Lithuania, Bulten Poland and the XYZ Russia, while slow bureaucracy and the slow pace of work were another aspect of the cultural gap. The degree of uncertainty avoidance in the case of DPC Skafte is low while the opposite is the case with its Lithuanian counterpart. Inability to communicate in a common language was particularly detrimental to Bulten Poland operations. The Swedish firms learned that their Eastern European partners tended to be passive and expected to wait for someone else to make the decision for them which impacted the employees' capacity to work and necessitated hierarchical organizational structures.

*Results:* In cases where there were advance cultural preparations, the firms achieved positive results. These preparations can either be at the beginning of a firm's operations in a foreign market, or after the firm has already started its operations but before launching a product. For Tetra Pak and DPC Skafte, the positive impact of the cultural preparations included the realization and the subsequent identification of a suitable local representative who could handle the cultural differences which enabled these firms to increase their respective market share. In the case of ACCEL Lithuania and XYZ Russia, cultural unpreparedness meant that the firms suffered enormous delays in planning and delivery as well as higher production costs. Unpreparedness for firms operating in Eastern Europe and Russia, in particular, resulted in poor financial performance due to differences in working practices which slowed down the operations, while the uncertainty resulted in the waste of management time and resources.

*Learning:* Learning includes both factual learning through cultural preparation and experiential learning, as well as through interaction and observing the results achieved. For example, ABB Kenya learned that there is power distance and an expectation on part of the Kenyan customer to get an answer immediately when negotiating. Another learning was that negotiating with top management was critical to finalizing a deal in Kenya, as was the cultivation of personal relationships with customers. Tetra Pak Kenya learned that products and packaging were culturally bounded and that cultural norms do not necessarily conform across different African countries. DPC Skafte learned that the Lithuanians are not commercially minded and developing personal contacts with the Lithuanian authorities plays a decisive role in business deals, and that the culture has a high level of uncertainty avoidance. ACCEL Lithuania and Bulten Poland learned that negotiations are lengthy and resources consuming, and that employees have different work ethics, working culture and punctuality norms. Bulten Poland learned that language barriers impacted its operations considerably and realized that the firm was misguided in thinking that interpreters would suffice. Instead, Bulten Poland had to hire English speaking Polish managers, but it took 15 months before the firm felt that it had resolved the communication problem. XYZ Russia learned that employees work best with autocratic leaders and are used to carrying out specific instructions which meant teamwork and team building was difficult to enforce.

*Adaptation:* As a result of their interaction with the local market and as a direct consequence of their learning, the Swedish firms made several adaptations: shifting the focus on developing personal relationships; refraining from referring customers to lower level management; finalizing decisions at the time of negotiations; developing new products and packaging designs were developed; dropping products and packaging which clashed with the local culture; redefining organizational structures employing autocratic managers; accepting longer planning and negotiating timelines. The executives from all sample firms were unanimous in stating that if these cultural adaptations were not made by them, their firms would not have survived in their respective foreign markets.

*Cross-Cultural Competence:* The factual learning acquired from advance cultural preparation, as well as through market interaction combined with the results and adaptation can help firms to understand which aspects of culture in the foreign market influence its operations and what measures should be taken to minimize the identified cultural gaps to achieve better results. The acquired cultural competence has a positive impact on the firm's operations, learning capability and in reducing the cultural gap. Only as a result of this process (Figure 1), international firms can more easily understand and handle cultural differences and their consequences.

## Conclusions

The findings emphasize the importance of cross-cultural management in international business operations. Yet, international firms tend not make any cultural preparation before launching their products and services in foreign market. Any cultural awareness that may exist within the firm, tends to be of a very basic nature. Much of the learning takes place by doing through direct interaction after entering a target market. The findings establish linkages between the level of the international firm's cross-cultural competence and the effectiveness of its business operations. Evidence shows that acquiring cross-cultural competence is a process. A Process Model of Acquiring Cross-Cultural Competence in Foreign Markets is constructed based on these linkages. The evidence shows that learning and adaptation critically contribute to, and raise the level of cross-cultural competence enabling international firms to formulate timely measures to manage cultural differences. Such measures yield superior results; help to avoid cultural blunders; increase competitiveness; and support positive image building within the target host market. It follows that conscious cultural preparations i.e. factual learning and learning by doing, are critical to making the necessary cultural adaptations, which, in turn, raise the cross-cultural competence of an international firm entering a foreign market and thereby minimize the cultural gap, as well as the negative impact of cultural differences on business operations.

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## INTERNATIONALIZATION OF SMALL AND MEDIUM ENTERPRISES: A PERSPECTIVE FROM SMES IN THE U.K

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### Abstract

Operating in a global environment poses additional challenges as businesses face greater and more informed competition; more culturally diverse and discriminating customers; more disparate markets; and shorter response times than ever before. The challenges faced by Small and Medium Enterprises (SMEs) are greater in magnitude simply because such businesses are 'small'. The aim of this paper is to explore internationalization from the SME perspective. The findings based on a survey of over 1500 SMEs in the UK, show that small firms are still intimidated by the prospect of internationalization and by and large, their owners perceive themselves to be ill equipped to accommodate the transition from being a local/national business to becoming an international operator.

**Keywords:** *SMEs; UK; Barriers; Internationalization; Drivers; Globalization; Exports; Services; Manufacturing*

### Introduction

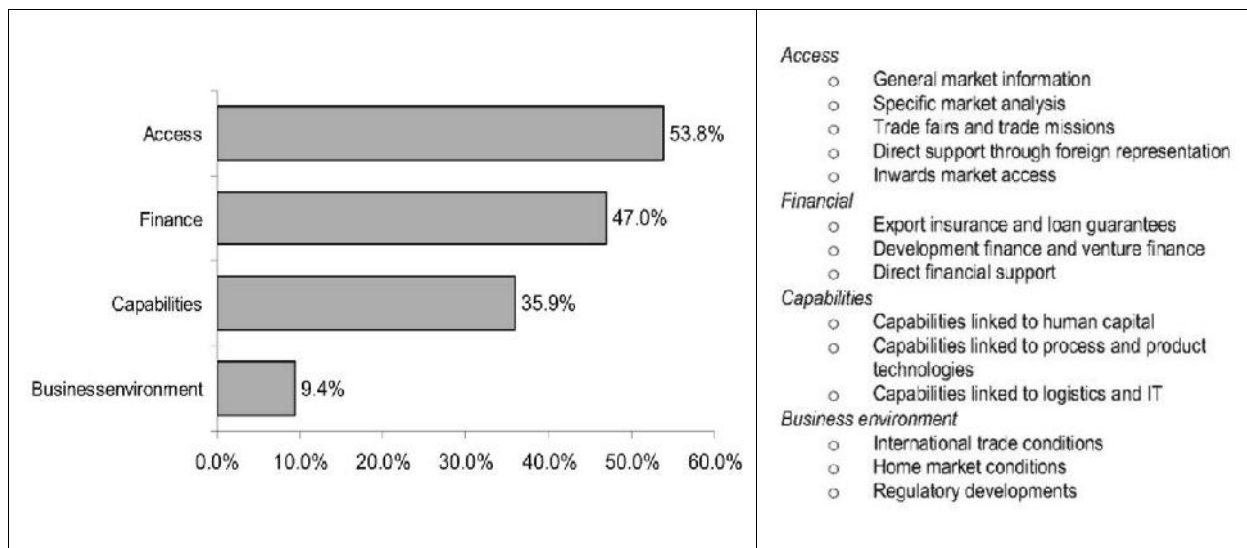
Assisted by technological advancements, the unrelenting drive towards business globalisation continues to gather momentum. The business environment is fast changing where old assumptions and frameworks no longer apply. Competition is becoming more widespread, and an organization's ability to cope with uncertainty is more critical than ever before. Farmer and Richman (1965), for example, identify such uncertainties to include the nature of the economic system (i.e. whether predominantly under private or public sector), the level of competition, whether exchange is based on sound money, the degree of governmental control over economic activity, factor endowment, and size of the market. Notably, the nature of competition itself is fast changing. The sheer scale of an organization is no longer a guarantee of a secure market position, neither is past performance a reliable guide to future prospects. "Competitive forces are all-embracing on the global battle field. Twenty-four hour a day competitors are probing for areas of weakness, market outposts that are asleep or otherwise unready" (Coulson-Thomas, 1992, p11-12). Regional groupings of states representing one particular market can fragment overnight as in the case of the former Soviet Union, and the more recent British exit from the EU, or are forged to protect national trading interests, such as the BRIC economies. Apart from making market operations complex, such formation of trading groups blurs the division between what is national and what is international i.e. is the EU internal market national or international to an organization? All these factors greatly influence the economic environment within which a firm operates and thereby dictate its decision-making process.

In such a turbulent environment, organizations find themselves in an exposed and vulnerable position. Their decision-making processes often require fast response times and immediate actions in order to stay ahead of their competitors. The speed of response can develop or destroy a major commercial opportunity. John F. Welch, Chairman and CEO of General Electric, states that speed is the driver sought by all of today's organizations and agility is critical to competitive success (in Hitt et al., 1995). In an attempt to deal with market uncertainties, organizations are

driven towards internationalization to spread their risk by having a diverse portfolio of activities, not depending on one particular market, and the SMEs are no exception.

However, it is surprising to note that while SME internationalization have been a topic of academic scrutiny for two decades now, ‘globalization’ as a subject, is still studied primarily from a large firm perspective. This is partly because SMEs are perceived as regional players, a vehicle for regional economic and employment regeneration (Birch, 1979; 1981). ‘Internationalization’ and ‘globalisation’ are, therefore, terminologies which are not readily associated with the small business sector. It is further suggested that any internationally-based activities on part of small firms can, at best, be described as *ad hoc* (Bilkey and Tesar, 1977; Bannock, 1987) which are usually “unplanned, reactive and opportunistic” (Bradley and Mitchell, 1986).

Irrespective of how SMEs embark on the path to internationalization, there is a growing evidence that internationalization is inevitable if they are to survive and grow in the global economy (APEC 2015). Yet, despite being “a major source of growth and job creation, SMEs appear to be under-represented in the international economy relative to their contribution in the national local economies” (OECD, 2008, p.15). This begs the question: why SMEs remain reluctant to engage with the international markets despite operating in the information age, and despite being supported by a myriad of government initiatives worldwide (Figure 1)? We set out to explore this question. The findings pertain to SMEs in the UK.



Source OECD 2008

**Figure 1: Focus of Government Support Programs Assisting SME Internationalization**

### SMES and Internationalization

There are several definitions of internationalization (Table 1). At its most basic, the term internationalization simply refers to a firm’s involvement in international markets. Notably, the two major rival theories that have dominated the discipline are the Uppsala model (Johanson and Wiedersheim-Paul 1975; Johanson and Vahlne, 1977) stipulating gradual engagement in international markets through experiential learning, and the transactions cost theory (Coase 1937; Williamson, 1975) according to which circumstances compel firms to absorb and internalize international transactions under its own organizational hierarchy. Other popular theories include the Network theory (Johanson and Mattsson, 1988), International Entrepreneurship theory

(McDougall and Oviatt, 2000) and the related International New ventures (INVs). Detailed analyses of these perspectives are well documented in the literature (e.g. Gelbuda et al., 2015). Just as the theoretical perspectives vary, so do the firms' motives to internationalize. Drivers for SME internationalization are cited as growth, profit, knowledge acquisition, network ties and reducing dependency on the local markets (Barnes et al., 2006; Camara and Simoes, 2008; Garvey and Brennan, 2006; So Won Jeong, 2015; Kocker and Buhl, 2007; Reynolds, 2007; Rundh 2007; Stoian, 2006).

**Table 1: Definition of Internationalization**

<i>Author</i>	<i>Year</i>	<i>Definition</i>
Welch and Luostarinen	1993	Internationalization is the outward movement of a firm's international operations
Calof and Beamish	1995	Internationalization is the process of increasing involvement in international operations
Johanson and Mattson	1993	Internationalization is the process of adapting firms' operations (strategy, structure, resources etc.) to international environments
Johanson and Vahlne	1990	Internationalization as a cumulative process in which relationships are continually established, developed, maintained and dissolved in order to achieve the firm's objectives
Lehtinen and Penttinen	1999	Internationalization as developing networks of business relationships in other countries through extension, penetration and integration
Lehtinen and Penttinen	1999	Internationalization concerns the relationships between the firm and its international environment, derives its origin from the development and utilization process of the personnel's cognitive and attitudinal readiness and is concretely manifested in the development and utilization process of different international activities, primarily inward, outward and cooperative operations
Ahokangas	1998	Internationalization is the process of mobilizing, accumulating and developing resource stocks for international activities

(Source: <http://www.conceptme.pt/conceptme/images/9/97/>)

Despite the gains accrued from SME internationalization (Achtenhagen, 2011; Kalinic and Forza, 2012; Lee et al., 2012; USITC, 2010), research findings show that SMEs tend to be export averse (e.g. Czinkota and Johnston, 1981) despite possessing such natural advantages as an ability to innovate and respond swiftly to their external environment compared with larger firms (Levy and Powel, 1998). This export aversion is attributed, in the main, to a lack of knowledge of potential markets, inability to formulate market entry strategies, and lack of financial resources (Czinkota and Usric, 1983; Edmunds and Houry, 1986; Leonidou, 2004; Rabino, 1980; Seely and Iglarsh, 1981). Evidence also suggests that when offered, the take-up of export assistance is often poor on part of small firms (Bell et al 1992) making the task of SME internationalization

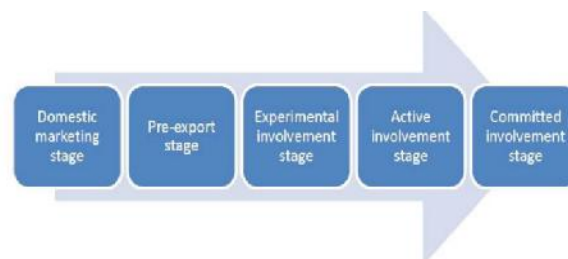
even more daunting (Seringhaus, 1986, 1987; Thomas and Araujo, 1985). Relatedly, Table 2 lists the barriers to internationalization.

**Table 2: Barriers to Internationalization (Ranked by the SMEs)**

1	Shortage of working capital to finance exports
2	Identifying foreign business opportunities
3	Limited information to locate/analyse markets
4	Inability to contact potential overseas customers
5	Obtaining reliable foreign representation
6	Lack of managerial time to deal with internationalisation
7	Inadequate quantity of and/or untrained personnel for internationalisation
8	Difficulty in matching competitors' prices
9	Lack of home government assistance/incentives
10	Excessive transportation costs

Source: OECD 2009

Internationalization may take various forms. Within the context of this study, we define internationalization as exporting activity, the most common form of international involvement for SMEs (UNCTAD, 2016). Relatedly, 72% of all government assistance programs worldwide tend to be export-centric (OECD, 2008). The six stages of Innovation Related Model (Figure 2) by Andersen (1993), is based on the export/total sales ratio, and postulates that every stage is an innovation for the firm (Gankema et al., 2000). The underlying premise being that exporting as a strategy for growth is the direct result of having an innovator within the firm (Vissak, 2003). It is worth pointing out that the number of stages may vary according to a particular innovation-related model (Bilkey and Tesar 1977; Cavusgil, 1980, 1982; Czinkota, 1982; Reid, 1981).



Source: Andersen 1993

**Figure 2: Innovation Related Model**

It follows that the export competence of small firms is not only critical to the owners and managers of SMEs, but is of paramount importance to both policy makers and policy deliverers. It is argued, however, that existing models offer partial insights into export development at best (Leonidou and Katsikeas, 1997). “No... model adequately explains the success of some companies to internationalize” (Etemad and Wright, 1999, p.9). Against this background, we set out to empirically analyse factors associated with, and influencing SMEs exports with a view to gaining insights into the process internationalization, as well as the owner-managers’ perceptions and capabilities pertaining to internationalization.

## Empirical Data

The data were gathered through a national survey based on a questionnaire which included responses on a Likert scale. The sample constituted randomly selected SMEs from the database of a national business organization. The internal reliability was acceptable based on the Cronbach's Alpha 0.88. 44.6% of the 1534 businesses in the sample were limited companies; proprietorship (28.5%) and partnerships (26.6%). In terms of size, 35.3% of businesses in the sample reported a turnover size of £150K-£499K, while 40.8% had a turnover greater than £500K (Table 3). The turnover is skewed towards larger businesses with £324,500 as the mean.

**Table 3: Sample Distribution by Turnover Size (N=1534)**

Turnover Size (£)	(%)
<44K	6.4
45K-89K	6.8
90K-149K	10.8
150K-499K	35.3
500K-999K	18.1
1M-4.9M	18.8
5M plus	3.9

In terms of employees, 62.3% of businesses in the sample had fewer than 10 people. The mean level of employment was 12 people (Table 4).

**Table 4: Sample Distribution by Number of Employees (N=1534)**

Number of Employees	(%)
1-4	32.4
5-9	29.9
10-19	20.3
20-49	12.2
50-99	3.8
100 plus	1.4

Table 5 shows the distribution of sample businesses by the industrial sector. The majority of businesses belonged to the manufacturing sector (23%) followed by services (27.0%) and the retail sector (20.1%).

**Table 5: Sample Distribution by Industrial Sector (N=1534)**

Industrial Sector	(%)
Agriculture	1.9
Construction	5.0
Manufacturing	23.0
Transport	4.0
Wholesale	7.3
Retail	20.1
Hotel/Catering	3.3
Printing/Publishing	2.7
Services (Financial/Business and other)	27.0
Professional	2.7

Other	2.9
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45.3 % of businesses described themselves as ‘expanding’ businesses in terms of growth while 12.7% defined themselves as declining businesses; and 42% as static businesses (Table 6).

**Table 6: Distribution of Businesses by the Stage of Growth (N=1534)**

Stage of Growth	(%)
Expanding	45.3
Declining	12.7
Static	42.0

### Findings

A detailed discussion of the hypotheses developed is omitted due to space limitations. Key findings are summarized as follows.

- Only a minority (32.5%, n=499) of businesses in the sample exported at all, while the majority of businesses (67.5%, n=1035) reported no international operations.
- Analysis by sector revealed that the professional sector showed the highest international activity at 43.7%. With the advent of new communication channels, it may very well be the case that professional businesses are now more able to engage in international activities than ever before. Other internationally oriented sectors include business/finance and other services (42.5%), transport (39.3%), and manufacturing (20.9%). Surprisingly, however, over 85% of retail firms had no exporting operations.
- It is not surprising to find a direct relationship between size of the firm and its propensity to undertake international operations. Exporting is far more significant in larger firms. Overall, over half of all businesses with a turnover size of £1M or more export, while less than 20% of firms with £150K report any international activity.
- Similar pattern emerges when international activity by employment size is analysed with over 60% of businesses with 50 or more employees engaged in exporting operations. The analysis reveals that firms with ‘above average’ exporting is only relevant to businesses with more than 10 employees.
- Expanding businesses have the greatest propensity to export (37.4%) while the proportion of static and declining exporting businesses is quite similar at around 28%. Comparison of SMEs experiencing actual growth and SMEs expecting growth in the future, show little divergence in international activity. In other words, the expanding businesses participate at an ‘above average’ level in the international process, which is also the case for businesses that expect future expansion. It is possible that businesses which have experienced expansion in the past are also likely to be the most optimistic about their future growth and thus most likely to report projected expansion in exports in the future and *vice versa*.
- Table 7 shows that by far the largest area of international operation for UK based SMEs is the European Union (79.2%) followed by North America (33.4%) and Asia (21.5%). Disaggregation of international regional activity reveals that the relative ranking of these three exporting destinations remains unchanged irrespective of the industrial sector, size, and growth rates of businesses in the sample. These results are congruent with the finding that 25% of EU SMEs export with only 13% active in markets outside the EU (European Commission, 2010).
- When the non-exporters were asked why they did not export, the majority (72%) attributed their reluctance to internal factors relating to firm-level capability and resource constraints

(Table 8). The most prominent include the lack of managerial ability; not knowing where to begin; poor knowledge of foreign markets; and the scarcity of time to engage in exports. The most notable external factors relating to the business operating environment include the lack of government support; training; access to finance; and economic uncertainty. These findings are congruent with earlier research alluded to above.

**Table 7:Principal Exporting Destinations (N=499)**

Exporting Area	Number of Businesses (%)
European Union	79.2
Eastern Europe	10.2
North America	33.4
South America	8.9
North and Central Africa	10.6
Middle East	14.0
Asia	21.5
China (inc. Taiwan)	17.7
Japan	7.8
Indonesia	0.7
Australia and New Zealand	1.0

**Table 8:Factors Preventing Exports(N=1035)**

Internal Factors(72%)	External Factors (28%)
Managerial ability to export	Government support
Do not know how to begin engaging in exports	Training opportunities
Knowledge of foreign markets	Access to additional finance
Availability of time to explore foreign markets	Economic uncertainty

- When the non-exporters were probed into how they knew if they lacked in managerial ability to export, or lacked in their knowledge of foreign markets, it was clear that their responses were based on their perceptions of themselves rather than on actual personal experience. In other words, it is possible that the SMEs reluctance to export is influenced by the owners' perceived barriers. No significant differences were observed across sectors in this regard. However, the size of business was correlated in that larger size SMEs put a greater emphasis on external factors compared with small businesses.
- Exporting did not feature high on the owner-managers' agenda in our study. In fact it ranked the lowest overall among their 20 most pressing business concerns. This finding substantiates the export-averse attitude of SMEs alluded to above.

### Concluding Remarks

The evidence shows that despite the unrelenting drive towards globalization, small firms' owners remain apprehensive and reluctant to engage in international activity. The majority SMEs in our survey does not engage in exports, and do not plan to engage in exports. Any international activity that does take place tends to be restricted to countries which are within close geographical vicinity. SMEs in the services sector have the highest propensity to internationalize

their operations, as do the larger and expanding SMEs. Non-exporters have little idea about how to begin the process of internationalization. Despite acknowledging that internationalization offered opportunities for growth, taking part in international operations was still perceived as intimidating by SMEs in our survey. Their reluctance to take advantage of internationalization, in part, appears to be self-imposing. While this aspect is a subject for further investigation, it is clear that as a policy measure, there is a need to propagate awareness among the SME owners that they, compared to larger firms, possess a greater ability to exploit and penetrate niche markets swiftly in a global environment where there is a growing trend towards specialist and segmented, rather than standardized products, complemented by their managerial structures that are adaptable and less bureaucratic, and operations that are more flexible and require less lead and response times.

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## THE INFLUENCE OF NARCISSISM ON COUNTERPRODUCTIVE WORK BEHAVIOR: THE ROLE OF ORGANIZATIONAL JUSTICE AS MODERATOR

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### Abstract

Narcissism is one of personality traits. Narcissist is likely to involved in aggressive behavior and other deviants when ego is threatened. Ego threat will lead to counterproductive work behavior that harm organization. Counterproductive work behavior is often linked to organizational justice, because someone will involved in counterproductive work behavior when perceived injustice in workplace. Perceived injustice will strengthen the influence of narcissism on counterproductive work behavior.

This study is aimed to examine the influence of narcissism on counterproductive work behavior and to analyze the role of organizational justice (distributive justice, procedural justice, and interactional justice) as moderator. The results indicates that narcissism did not influence counterproductive work behavior, in addition, distributive justice and procedural justice did not moderate the positive influence of narcissism on counterproductive work behavior. However, interactional justice moderated the positive influence of narcissism on counterproductive work behavior.

**Keywords:** *counterproductive work behavior, justice, moderated and narcissism.*

### Introduction

The term of narcissism comes from Greek mythology, the story of a young man, Narcissus, who fell in love with his own reflection in the pool, which ultimately led to the death as a result of vanity (King, 2007). The term of narcissism was first introduced in 1898 in the psychology literature by Ellis and Nacke. It attracted the attention of Freud to the study of personality and narcissist's behavioral traits. Narcissism becomes an important construct in Freud's thinking of meta psychology throughout the year 1914 (Raskin & Terry, 1988). Currently, the term of narcissism described a pervasive pattern of overt grandiosity, self-focus, and self-importance behavior, displayed by an individual or groups of individual (American Psychiatric Association, 2000, cited in King, 2007).

Narcissism is a personality dimension, not just a psychological disorder. Emmons (1987) states that the extreme narcissism will lead to pathological disorder, whereas low level of narcissism is reflected as part of the personality. Based on Raskin & Terry (1988), more than a thousand books and articles have been written about narcissism, almost described it as clinical disorder. However, research has shown that narcissism can be measured as a personality (Emmons, 1987; Raskin & Terry, 1988).

Narcissism can lead to acts of aggression. Narcissism and self concept clarity is a significant predictor of anger, depression, and verbal aggression, related to negative feedback (Stucke & Sporer, 2002, cited in Judge et al., 2006). Exaggerated sense of love or inappropriate favourable view of self, tend to lead to acts of aggression, as a result of ego threat (Baumeister et al., 1996). Personality is linked with counterproductive work behavior. Skarlicki et al. (1999) linked the

negative affectivity and agreeableness with retaliation. Narcissism as personality has not been much studied in relation to counterproductive work behaviors (Penney & Spector, 2002).

Some research has linked of narcissism on counterproductive work behaviors (Penney & Spector, 2002; Judge et al., 2006). Counterproductive work behavior has various terms, such as workplace aggression (Neuman & Baron, 1998), workplace deviance (Robinson & Bennett, 1995), and retaliation (Skarlicki et al., 1999). But basically, that behavior disrupts the organizations and people related to organizations such as employees and customers (Penney & Spector, 2002).

Counterproductive workplace behavior often associated with organizational justice (Skarlicki & Folger, 1997; Skarlicki et al., 1999; Jones, 2009; Ambrose et al., 2002). Organizational justice related to perceptions of employees about the fairness or the treatment received in the workplace. There are three forms of justice (Jones & Martens, 2009) are distributive justice (perceived fairness by employee related to outcome), procedural justice (fairness of the procedures used to determine the outcome), and interactional justice (perceived of interpersonal treatment by the employee when the procedure is executed). Perceptions of injustice led to counterproductive work behavior. Ambrose et al. (2002) explained that organizational injustice is the main trigger of sabotage. Skarlicki & Folger (1997) states that employees will give the response of unfair treatment by negative emotions, and drives reaction in behaviors such as stealing or damaging (Greenberg, 1990).

Based on the theory of threatened egotism and aggression (Baumeister et al., 1996), aggressive behavior resulting from the ego threat, which leads to negative emotions. Narcissistic individuals are very sensitive to negative information and situations that challenge the positive image of themselves (Anderson, 1994, cited in Penney & Spector, 2002). The absence of justice would threaten the narcissist's ego, then become a driving force for narcissist to counterproductive work behavior.

Previous research examined the influence of narcissism on counterproductive work behavior, mediated by the ego threat, such as anger (Penney & Spector, 2002). Judge et al. (2006) examined the direct influence of narcissism on counterproductive work behavior by using self report and others. However, previous studies have not explained the factors that strengthen or weaken the direct influence of narcissism on counterproductive work behavior. The aims of the study are to analyze the influence of narcissism on counterproductive work behavior and to examine the role of organizational justice (distributive justice, procedural justice, and interactional justice) as moderator.

## **Literature Review and Hypotheses Development**

### **1. Narcissism**

Narcissism reflects a set of attitudes, beliefs, and behavioral tendencies that may have an impact on each organization's criteria such as leadership, contextual performance, and task performance, in unique way (Judge et al., 2006). Emmons (1987) has developed measurement of narcissism, narcissistic personality inventory (NPI). Emmons (1984) examined the construct validity of the NPI and found four dimensions, which are labeled: (1) Exploitativeness/Entitlement (involve a heavy interpersonal manipulative content - expectations of favors, exploitation of others), (2) Leadership/Authority (emphasize enjoying being a leader and being seen as an authority), (3) Superiority/Arrogance (theme of superiority and grandiosity, and since one also has to be a bit arrogant), (4) Self-absorption/Self admiration (reflect traditional aspect of narcissism, such as liking to look at oneself in the mirror). Four dimensions showed high narcissism.

Narcissists have the extremes emotional in forming superiority, even if they are not sure their superiority is worthy (Bushman & Baumeister, 1998). Narcissists have a high self-esteem. Theory of threatened egotism and aggression (Baumeister et al., 1996) suggests that narcissist are likely to encounter information that challenges a positive image of oneself, the response of that will lead to aggression.

## **2. Counterproductive work behavior**

Counterproductive work behavior has been conceptualized in a number of ways (Fox et al., 2001), including organizational aggression (Neuman & Baron, 1998), workplace deviance (Robinson & Bennett, 1995), retaliation (Skarlicki & Folger, 1997), and sabotage (Ambrose et al., 2002). Counterproductive work behaviors include acts such as theft, spreading rumors at work, or late for work. Almost every day, there are media reports of workplace deviance, whether it be corruption among police officers, violence in the post office, or illegal activity on Wall Street (Robinson & Bennett, 1995).

Fox & Spector (1999) found a positive relationship between situational constraints experienced by employees (frustration) and counterproductive work behavior, as a response to frustration (personal and organizational aggression), which was mediated by affective reactions to frustration. Frustration is affected reactions of people to work situations due to blocking an individual's goal attainment (Peters & O'Connor, 1980). The management of negative deviant behavior in the workplace is growing concern in organizations globally since such behaviors can be detrimental to their financial well-being (Appelbaum et al., 2007).

## **3. Organizational Justice**

Organizational justice is a term used to describe the role of justice which is related to the workplace. Specifically, organizational justice associated to how employees determined whether they are treated fairly in their work. There are three forms of justice (Jones & Martens, 2009) are distributive justice (perceived fairness by employee related to outcome), procedural justice (fairness of the procedures used to determine the outcome), and interactional justice (perceived of interpersonal treatment by the employee when the procedure is executed).

## **4. Narcissism and Counterproductive Work Behavior**

Theory of threatened egotism and aggression (Baumeister et al., 1996) argued about narcissistic individuals, because they are very sensitive to negative information, likely to encounter information or situation that challenge their positive self appraisal. In response to these challenges, or ego threat, the individual may experience negative emotions such as anger, frustration, or hostility, which turns into aggression.

Narcissism has dimension of authority, superiority, and high self esteem (Emmons, 1987). Narcissists believe that they are centre of everything (Konrath et al., 2006). Narcissists behave aggressively when they perceived an ego threat (Konrath et al., 2006), criticized or rejected by others (Campbell et al., 2004a). Ego threats which most often studied in research of aggression is a negative feedback or criticism (Bushman & Baumeister, 1998). Negative feedback such as failure in performance of task and criticisms related performance can threaten the ego of narcissist. Ego threat is a negative emotion or anger. It may be a manifestation of hostility, frustration, absenteeism, and reduced performance will lead to counterproductive work behavior. The hypothesis can be constructed in this research as follows:

H1: Narcissism has positive influence toward counterproductive work behavior.

### **5. Distributive Justice as Moderator**

Skarlicki & Folger (1997) examined the relationships of organizational justice with retaliatory (a form of deviant behavior), which is defined as the response behavior of employees, over the unfair treatment. Skarlicki & Folger (1997) also found that distributive justice, procedural justice, and interactional justice, interact to explain retaliatory. Based on equity theory of Adams, one would determine whether he was justly rewarded by comparing the input (effort) and the output they get, to the input and the output received by others. Organizational justice is also related with social exchange theory, which one would give in return for the benefits that received from the other party.

Narcissist will respond to the other parties related to perceived justice from supervisors or co-workers. If employees feel injustice, they will feel unhappy, upset, and angry, thus tend to be involved in aggressive behavior (O'Leary-Kelly et al., 1996). Narcissists have extremes emotional. Narcissist will be angry and feel ego threat, if did not perceived distributive justice, such as in terms of salary or a promotion. Ego threat led on acts of aggression that is counterproductive work behavior. Injustice is a common trigger of sabotage (Ambrose et al., 2002). Thus, distributive justice would strengthen the influence of narcissism on counterproductive work behavior. The hypothesis can be constructed in this research as follows:

H2a: Distributive justice moderated the positive influence of narcissism on counterproductive work behavior.

### **6. Procedural Justice as Moderator**

Fair procedure is defined as a procedure that is not biased, based on accurate information, applied consistently, represent the entire section, can be corrected, and appropriate ethical standards (Leventhal, 1980, cited in Stecher & Rosse, 2005). Formal procedure is defined as the degree to which fair procedures were present and used in the organization (Moorman, 1991).

Fair procedures make individuals tend to be responsible for problems, than if the procedure is applied unfairly (Skarlicki & Folger, 1997). Procedural justice moderate the tendency of retaliatory, it will be maximum when distributive justice and interactional justice is low (Skarlicki & Folger, 1997). If the procedure be unjust (decision making), it will lead to retaliation (Cropanzano & Folger, 1989). Therefore, the hypothesis can be constructed in this research as follows:

H2b: Procedural justice moderated the positive influence of narcissism on counterproductive work behavior.

### **7. Interactional Justice as Moderator**

Interactional justice is appeared when decision makers treat people with respect and sensitivity and explain the rationale for decisions thoroughly (Colquitt, 2001). Narcissism is characterized by feeling superior and more self praise and appreciation from others (Wallace & Baumeister, 2002). If the source of injustice was interactional, individuals tend to engage in

retaliation (Ambrose et al., 2002). Thus, interactional justice strengthen the influence of narcissism on counterproductive work behavior, the hypothesis can be constructed in this research as follows:

H2c: Interactional justice moderated the positive influence of narcissism on counterproductive work behavior.

## **Research Method**

### **1. Sample and Data Collection**

Data were collected through a survey of company managers in Bandar Lampung. Criteria used in sampling is at least have one year tenure at the company. Overall 220 questionnaires were distributed, and 173 questionnaires were returned, the response rate 78,64%. The 47 questionnaires were not returned, 9 questionnaires cannot be used. Accordingly, total questionnaires that can be further analyzed for this study were 164 questionnaires. In general, majority of respondents were 133 male (81,1%), with an average of age 41,56 years old, the majority of respondents were 152 married (92,7%), the educational background of the respondents were under graduated with more than ten years tenure.

### **2. Measures**

#### **A. Narcissism**

Narcissism is excessive sense of love toward self-image. Measurement of narcissism using narcissistic personality inventory (NPI) which developed by Emmons (1987). Four dimensions of narcissism are labelled: (1) Leadership/ Authority (“I would prefer to be a leader”), (2) Exploitativeness / Entitlement (“I find it easy to manipulate people”), (3) Superiority / Arrogance (“I always know what I am doing”), (4) Self-absorption / Self-admiration (“I think I am special person”). Respondents were asked to fill out a list of statements about narcissism that consists of 37 item statements, using Likert scale ( 1 = strongly disagree to 5 = strongly agree). The reliability of 37 item scale was  $\alpha = 0,913$ .

#### **B. Counterproductive Work Behavior**

Counterproductive work behavior scale (fox & Spector, 1999) contains 27 items, but there is one item that is adjusted (taken any kind of drug to get high at work (including alcohol)) be “smoking when doing the task”. This is done to reduce bias in eastern cultural context, which tends to give a neutral answer related to the sensitive item. Respondents were asked to fill out 27 statements of counterproductive work behavior ( 1 = strongly never to 5 = very often). The reliability of 27 item scale was  $\alpha = 0,915$ . One example of statements were “purposely did your work incorrectly”.

#### **C. Organizational Justice**

Measurement of organizational justice was measure using Moorman (1991) item scale. Distributive justice was measured using five statements (“Fairly rewarded considering the responsibilities”) with  $\alpha = 0,834$ . Procedural justice was measured using seven item statements (“Procedures designed to have all sides affected by the decision represented”) with  $\alpha = 0,866$ . Interactional justice was measured using six item statements (“Your supervisor considered your view point”) with  $\alpha = 0,826$ . The entire statements were 18 items ( 1 = strongly disagree to 5 = strongly agree).

**D. Control Variable**

Characteristic of the respondents was measured to ensure the influence of narcissism on counterproductive work behavior to be unbiased. Gender is included as a control variable, because previous studies have found a correlation between gender and aggression (Eagly & Steffen, 1986). Tschanz et al., (1998) also examined gender differences in the structure of narcissism, there is a difference between men and women related to the dimensions of narcissism, which showed that men are more narcissistic than women.

**Results**

Table 1 shows mean, standard deviation, and correlation between variables. Based on table 1, narcissism correlated with counterproductive work behavior (  $r = 0,162, p < 0,05$ ). Distributive justice (  $r = -0,185, p < 0,05$ ), procedural justice (  $r = -0,256, p < 0,01$ ), and interactional justice (  $r = -0,408, p < 0,01$ ) are negatively correlated with counterproductive work behavior.

**Table 1. Mean, Standard Deviation, and Correlation between Variables**

Variables	M	SD	Narcissism	DJ	PJ	IJ	CWB
Narcissism	3,3354	0,41727					
DJ	3,7402	0,69324	0,107				
PJ	3,8040	0,59297	-0,057	0,379**			
IJ	3,9309	0,52863	0,090	0,424**	0,593**		
CWB	1,9429	0,42652	0,162*	-0,185*	-	-	
					0,256**	0,408**	

\*  $P < 0,05$

\*\*  $P < 0,01$

Hypotheses testing used moderated regression analysis. There are four steps are performed: (1) entering control variable, (2) entering control variable and independent variable, (3) entering control variable, independent variable, and moderating variable, (4) entering control variable, independent variable, moderating variable, and interaction.

Prior to hypothesis 1 testing, gender are controlled in this study, so the results are not biased by confounding variable. The control variable (gender) had no significant effect ( $\beta = -0,149; t = -1,924; p > 0,05$ ). Table 2 shows the results of hypotheses testing.

**Table 2. Result of Hypotheses Testing**

	CWB		
	$\beta$	t	p
Step 1			
Gender	-	-	0,056
$R^2 = 0,022$	0,149	1,924	
Step 2			
Gender	-	-	0,115
Narcissism (N)	0,124	1,584	0,078
$R^2 = 0,041^*$			
$\Delta R^2 = 0,019$	0,139	1,773	
Step 3			



Gender	-	-	0,092
Narcissism (N)	0,121	1,693	0,013*
Distributive Justice (DJ)			0,609
Procedural Justice (PJ)	0,183	2,512	0,851
Interactional Justice (IJ)	-	-	0,000**
R <sup>2</sup> = 0,221**	0,041	0,512	
ΔR <sup>2</sup> = 0,180**	-		
	0,017	0,189	
	-	-	
	0,418	4,583	
<hr/>			
Step 4			
Gender	-	-	0,252
Narcissism (N)	0,083	1,149	0,080
Distributive Justice (DJ)			0,540
Procedural Justice (PJ)	0,914	1,760	0,223
Interactional Justice (IJ)	-	-	0,054
N x DJ	0,391	0,615	0,616
N x PJ	-	-	0,193
N x IJ	0,761	1,224	0,009**
R <sup>2</sup> = 0,258**			
ΔR <sup>2</sup> = 0,036	1,224	1,945	
	0,396	0,502	
	0,998	1,308	
	-	-	
	2,363	2,660	

\*P < 0,05

\*\*P < 0,01

Hypothesis 1 states that narcissism has positive influence toward counterproductive work behavior, is not supported ( $\beta = 0,139$ ;  $t = 1,773$ ;  $p > 0,05$ ). Furthermore, hypothesis 2a states that distributive justice moderated the positive influence of narcissism on counterproductive work behavior, is not supported ( $\beta = 0,396$ ;  $t = 0,502$ ;  $p > 0,05$ ). Hypothesis 2b states that procedural justice moderated the positive influence of narcissism on counterproductive work behavior, is also not supported ( $\beta = 0,998$ ;  $t = 1,308$ ;  $p > 0,05$ ). Hypothesis 2c states that interactional justice moderated the positive influence of narcissism on counterproductive work behavior, is supported ( $\beta = -2,363$ ;  $t = -2,660$ ;  $p < 0,01$ ).

### Discussion

Hypothesis 1 states that narcissism has positive influence toward counterproductive work behavior, is not supported. These results are contradicted to study by Judge et al., (2006) that examined the direct effect of narcissism on counterproductive work behavior using self-report and other-report. Not supported for hypothesis 1 because the influence of narcissism on counterproductive work behavior requires mediation of ego threats such as anger and frustration, which ultimately led to the act of aggression, as shown in study of Penney & Spector (2002). Not supported for hypothesis 1 that testing direct effect of narcissism on

counterproductive work behavior, supporting the theory of threatened egotism and aggression (Baumeister et al., 1996), which states that aggression is often caused by combination of self-esteem and ego threat.

The results are also influenced by eastern culture context where study was conducted, namely the concept of face (positive self-image), related to prestige (Kim & Nam, 1998). Chinese culture holds the concept of personal dignity, fear of losing face and status, to maintain harmonious social relationships (Cardon, 2006). Asian people are very concerned with positive self-image compared to the western (Kim & Nam, 1998). Thus, in the context of face, respondents tend to give a neutral answer on the item statements of narcissism (mean = 3,3354; SD = 0,41727).

Then, hypothesis 2a states that distributive justice moderated the positive influence of narcissism on counterproductive work behavior, is also not supported. Hypothesis was not supported because of the perception of distributive justice are not perceived at low levels (mean = 3,7402). Perceptions of fairness regarding the distribution of benefits also influenced by cultural context (Conner, 2003; Kim et al., 1990).

Individuals in individualistic cultures (e.g., USA) are very concerned with the allocation of rewards than individuals of collectivist cultures that tend to consider equality (Conner, 2003). East Asians did not respond to injustice as negative as North Americans, their perceptions of injustice are less likely to be detected (Li & Cropanzano, 2009). Individuals of collectivist cultures are very concerned with social harmony rather than self-interest (Li & Cropanzano, 2009). The study was in context of collectivist cultures, which tend not very concerned with the allocation of rewards and give attention to social harmony. Consequently, distributive justice means less important in the context of collectivist cultures.

Hypothesis 2b states that procedural justice moderated the positive influence of narcissism on counterproductive work behavior, is also not supported. Skarlicki & Folger (1997) suggests that the relationship between organizational justice and counterproductive work behavior will be stronger when interactional justice and procedural justice are low. Hypothesis 2b is not supported because perceived procedural justice are not at low level (mean = 3,8040), so it did not lead to counterproductive work behavior.

Cultural context where study was conducted also influence the individual's perception of procedural justice. Procedural justice associated with decision making procedures (Lind & Earley, 1992). Fair process as part of procedural justice had significant effect for individuals in individualistic cultures than individuals of collectivist cultures (Conner, 2003).

Hypothesis 2c states that interactional justice moderated the positive influence of narcissism on counterproductive work behavior, is supported. When source of injustice is interactional, individuals tend to engage retaliation than when source of injustice is distributive and procedural (Ambrose et al., 2002). Perceptions of justice also influenced by cultures. Fraternal relationship became an important element in the perception of justice in East Asia, which is concerned with social harmony (Li & Cropanzano, 2009).

## **Conclusion**

Not supported the influence of narcissism on counterproductive work behavior, indicating a mediating role of ego threats such as anger in explaining the influence of narcissism on counterproductive work behavior. Based on the theory of threatened egotism and aggression (Baumeister et al., 1996), which states that aggression is often caused by a combination of self-esteem and ego threat.

Organizational justice consisting of procedural justice and distributive justice did not moderate the positive influence of narcissism on counterproductive work behavior. Hypothesis was not supported because of distributive and procedural justice are not on the low level. Perceptions of fairness also influenced by the cultural context where research is conducted, tend to be collectivism. Thus, not really concerned with the allocation of reward and prefer collective decision making.

Interactional justice moderated the positive influence of narcissism on counterproductive work behavior. Interactional justice associated with interpersonal treatment received by individual, so the impact is more sensitive to individual. Context of collectivism cultures is very concerned on social harmony, making interactional justice as the most important element in the perception of fairness.

### **Implication**

Theoretically, this study confirmed the factors that strengthen or weaken the influence of narcissism on counterproductive work behavior, using organizational justice as moderator. Interactional justice strengthen the influence of narcissism on counterproductive work behavior. Meanwhile, the implication for managerial is to help corporate management to understand the factors that reinforce the occurrence of counterproductive work behavior. Given the importance of perceptions of justice in the workplace, especially interactional justice, the interpersonal treatment that maintain social harmony will reduce the occurrence of counterproductive work behavior, especially in the context of eastern cultures that tends to feminine and collectivism.

### **Limitation And Future Research**

Sampling in this study using purposive sampling techniques (non random sampling), thus generalizing the results of research must be done carefully. Therefore, future research should use random sampling techniques, so that the generalization of the results will be higher.

The use of self-report data to assess narcissism and counterproductive work behavior, are less able to provide accurate reports and tend to bias related to social sensitivity of variables used in the study. Future research should also use other-report in measuring narcissism and counterproductive work behavior. Thus, the report will be provided more accurately.

Research conducted cross-sectional data with correlation design, consequently made it less able to explain the causality of the variables. Future research should use experimental designs to explain the causality of the variables.

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## THE EFFECTS OF TECHNICAL AND FUNDAMENTAL FACTORS ON THE INVESTMENT DECISION AND THE COMPANY VALUE IN THE AGRICULTURAL SECTOR

Mamay Komarudin

### Abstract

This study aims to analyze the influences of technical variables, which consist of the stock price and the Total Volume Activity (TVA), as well as fundamental variables, which consist of the Price Book Value (PBV) and the Debt to Equity Ratio (DER) on the investment decisions and the company value measured by using the PER of some companies of agricultural sector listed in the Indonesian Stock Exchange. Path analysis is used as the data analysis method. The research results show that one of the technical factors that significantly influences the investment decision and the company value is the stock price. Meanwhile, one of the fundamental factors that influences the investment decision and the company value is the PBV. The hypothesis testing showing that the stock price factor and the PBV factor have positive effects on the value of agricultural sector company is proven or accepted. On the other hand, the other variables, according to *theorem trimming*, are proved to be not includable in the path calculation if the path is proved to be insignificant, in this case the DER and the trading volume variable.

**Keywords:** *Debt Equity Ratio (DER), stock price, company value, investment decisions, Total Volume Activity (TVA) and Price Book Value (PBV)*

### Introduction

As a large agrarian country, Indonesia certainly has significant economic opportunities, especially in the agrarian sector. It is called an agrarian country because more than 40% of the Indonesian population either directly or indirectly, depend their lives on the agricultural sector. Therefore, the agricultural sector plays an important role in the national economy.

This sector also becomes a primary sector for many other sectors. It is simply because the products produced by the agricultural sector are also needed by the other sectors. Considering this condition, the agricultural sector certainly provides more opportunities for investors to make their investments through the capital market. Capital market is one of investment media that connects the investors, the party who have funds and hopes of gaining profit, with the companies, the party who are in need of capital for development.

Investors certainly expect maximum financial profit of their investment shares. That is why they, including those investing in the Indonesian Stock Exchange (BEI), will choose companies with great future prospects. To view the companies' prospects, the investors can do it by assessing their stock value. Recently, assessing and investing in the agricultural sector seems to be very promising.

Despite being profitable and interesting, stock investment is also classified as a high risk investment. Public company share is highly sensitive to changes, either good or bad, due to

changes in politics, economics, and monetary in foreign or domestic scope. Such changes can have a positive impact which means increasing the stock exchange, or a negative one which leads to the contrasting result. For that reason, in stock investment, an investor should conduct an analysis of factors that may affect a company, in order to minimize losses that could arise from the fluctuation in the growth and the development of the company in concern. In analyzing and selecting the stocks, there are two aspects or approaches that are often used, namely fundamental aspects and the technical aspects.

According to Rifman (2002), in a technical analysis, an investor tends to act pragmatically. To make an investment, an investor does not have to bother to review the various fundamental factors (such as the interest rate, the level of ownership, the financial ratio, the balance sheet, and etc.). In order to obtain the expected return, the indicator used is the movement pattern of the previous stock price and trading volumes. Technical analysis users believe that things like a sense of optimism, pessimism, and anxiety have been reflected in the stock price.

The fundamental aspects are identified to be able to affect the stock price that reflects a company's performance. A fundamental analysis is done by investors by using the company's financial data to calculate the stock value. Therefore, financial report is a very essential information. It is because a financial report describes the fundamental aspects of a company that is quantitative. An investment selection depends on several factors. One of the influential factors is the price of financial conditions that is described in financial ratios. By conducting a fundamental analysis, an investor can project and assess a company that can benefit the investor.

Fakhrudin (2008) explains that financial ratios, based on the purpose, are classified into five types, namely liquidity ratio, leverage ratio, activity ratio, profitability ratio, and stock ratio (common stock ratio). Liquidity ratio is a ratio that is intended to measure a company's liquidity, such as current ratio, cash ratio, quick ratio, and net working capital. The more a company is liquid, the more its stocks will be demanded, and that fact will obviously rise the price. Leverage ratio is a ratio that is intended to measure how far a company's assets are financed by debt, for example: debt to total assets, net worth to debt ratio, debt to equity ratio, time interest earned ratio, fixed charge coverage ratio, and debt service coverage. The more a company is able to pay its debts is, then the more its stocks will be demanded, and thus the share price will also rise.

Share ratio describes the parts of a company's profits, dividends and capital that are distributed to each share. Share ratio includes price earnings ratio, earning per share, dividend per share, dividend yield, payout ratio, price to book value, and book value per share. The greater the dividends are distributed, then the higher the share price will increase. The increase and the decrease of the company's ability indicated in the financial ratios may affect the demand and supply of the company's stock. As the result, it affects the stock price changes. An investor must have a strategy to invest his wealth in the stock market. The strategy is useful for arranging a portfolio. The portfolio arrangement is primarily aimed to reduce the level of risk faced by the investor.

In several studies conducted in the Indonesian capital market, most of the researches conducted studies relating to the fundamental and technical analysis only. A research by Fernandez-Rodriguez (1999) states that more than 90% of investors give a higher tendency to use technical analysis than fundamental analysis in buying and selling stocks. This can occur due to the investors' short-term-oriented tendency to buy or sell stocks.

An analysis of shares must be carefully conducted, especially regarding the level of return and risk. The analysis is expected to be the basis of decision making. The right decision will be able to provide an optimal result. Investors will be able to know stocks from many different sectors. If we look further, the stock performance of agribusiness in the stock market shows a rapid growth.

This is shown by the indexical movement graphic of the agricultural sector, which is higher on the stock exchange, compared to other sectors or to the IDX composite movement in the same period of time (Sugiartawan et al, 2013). Agribusiness companies are likely to produce greater returns than other companies or other issuers, so that investment eligibility in the agricultural sector, especially in the form of shares, will affect the generated investment returns.

The agricultural sector contributes 25.7% toward the company value in Indonesia's trade balance in 2008 until 2013 (<http://agriwarta.fp.ub.ac.id>). It is also noted that in 2013, the total export of agricultural products reached 23.89 million tons that was valued at US\$ 22.2 billion (<http://www.antaranews.com>). The following table shows the share price development in agricultural sector in 2009-2013.

**Table 1. The Average Stock Price of Agriculture (in IDR) (Years 2009-2013)**

No.	Sector	Years				
		2009	2010	2011	2012	2013
1	Agriculture	1,913.647	2,344.57	2,456.066	2,248.026	2,139.96

Source: [www.idx.co.id](http://www.idx.co.id) (processed)

Table 1 shows that the average stock price of agriculture sector fluctuated from 2009 to 2013. Table 1 also shows that agriculture sector decreased consistently for over the last five years. Although agricultural sector experienced a decline in stock price, agricultural sector is important for the Indonesian economy.

Based on this background, this study aims to analyze the influence of technical variables, which consists of shares and Total Volume Activity (TVA), and the fundamental variables which consist of Price Book Value (PBV) and Debt to Equity Ratio (DER), on the investment decisions and the company value in the agricultural sector, which is listed in the Indonesia Stock Exchange.

### **Theoretical Framework and Hypothesis**

Fischer and Jordan (1991) defined that “an investment is a commitment of funds made in the expectation of some positive rate of return”. It means that an investment is made based on a hope of obtaining a positive rate of return from the investment activities of the committed funds. Francis (1991) defined that “an investment is a commitment of money that is expected to generate of additional money”. It means that an investment is the company’s value on the money invested in the hope of obtaining additional money from the investments. Based on those statements, thus investment is allocating money or funds with the hope to obtain additional or certain advantages over those money or funds.

Based on the movement of the stock price index, the agricultural sector has a very fluctuating share price index movement. The movement fluctuation also influences the generated stock returns. The investor’s decision is strongly influenced by the value of the received return value. Return has become the main indicator of a company’s ability to create value for the investors in the form of dividend payments or capital gain.

To make a profit is the main reason for people to invest. In investment management, the investment profit rate refers to *return*. Thus, it is very reasonable if an investor demands a certain level of return on the funds he/she has invested. The expected return is a compensation for the opportunity cost and the risk of declining purchasing power due to the effects of inflation.



Investment process is a series of profitable activities in a purchase of tangible assets/securities. An investment process revolves around investment decisions relating to maximizing the wealth of an investor. An investment process should be based on the results of a technical and a fundamental analysis. According to Rode et al, (1995), the basic theory of technical analysis is a trading technique that uses some data in a specific time period that can be used for making an investment decision. So the object of technical analysis is to create a prediction, from a time-series data, by using an accurate prediction calculation method. Fundamental analysis is an analytical tool that is highly correlated with a company's financial condition. Darmadji (2006) showed that fundamental analysis is one way of conducting stock assessment by studying or observing the various indicators related to the macroeconomic conditions and the industrial condition of a company. Fundamental analysis is an analysis based on real data to evaluate or project the value of a stock.

A technical analysis can be based on the stock price and the trading volumes. The stock price formed on the market has already reflected all the available information. Factors, like the interest rate, the concentration of ownership, the company size, the profitability, the GMS (General Meeting of Shareholders), the growth, and so on, do not need to be analyzed quantitatively. The stock price is more like a function of demand and supply of the shares. The stock price that is formed individually or overall on market tends to follow the trend direction for a relatively long period of time. There are price patterns that will recur in the future. Indeed, the stock price movement patterns, that is based on the past price-movement observations, is contradicting the efficient market hypothesis, that says the stock performance in the past will not affect the stock performance in the future. The stock price is used by approximately 90% of the stockbrokers (Van Eyden, 1996 in Lawrence, 1997).

According to Ang (1997), the total volume activity of the stock price is determined by the demand and supply. This approach emphasizes the importance of the future investor's behavior based on the past, so that the analysts study the stock price changes by using the trade historical data. A technical analysis can also be done by using a stock assessment of the statistical data generated from the trading activity, such as the stock price, the trading volume, the demand and supply of a particular stock, or the overall market. One way that is frequently used by the analysts is charting (images and graphics). According to the graphics, how are the market trends, the securities, and the future commodities that will be selected in an investment are all clearly viewed. The analysts conduct a study using a chart with intention that they can find a price movement pattern, so that they can exploit it for profit. This technique ignores matters relating to the financial position of the company.

In addition to observing the stock price and the trading volume, performance measurement is also one of the important factors that are useful for the company's financial planning. Debt to Equity Ratio (DER) reflects the company's ability to meet all obligations. It is indicated by how much personally-owned capital is used to reduce the debt. DER shows balance between the debt burden and the personally-owned capital. DER also provides a guarantee on how much debt is guaranteed by the company's personally-owned capital. The selection of additional alternative capital usually comes from the debt, because in general the debt has several advantages (Brigham and Gapenski, 1997). Firstly, the interest will reduce the tax, so that the cost of debt is low; secondly, the creditors obtain limited return, so that the shareholders do not have to share the profits when the business conditions are improving; thirdly, the creditors do not possess the voting rights, so that the shareholders can control the company with the inclusion of small funds. More use of debt, which are reflected by the increasing debt ratio (the ratio of debt to total assets), at the same Earnings Before Interest and Tax (EBIT) will result in a greater earning per

share. If the earning per share increases, it will also have an impact on the increase of the stock price increase or the stock return. Theoretically, DER will have a positive influence on the stock return.

An investment decision can be influenced by the DER and PBV as the company's source of fund ability and the company's profitability in gaining profit. When investors want to invest their capital stock, especially in agriculture, they also have to consider Price per Book Value (PB or PBV). PB or PBV is a kind of ratio that is also often used by investors to assess a certain company, which is measured by PER. By using the ratio between the price and the net income (price earnings ratio - PER) to determine the market price and the earnings per share, the investor can calculate the share PER. Greater earnings lead to lower the share PER and vice versa. However, it should be understood that because stock investment is more associated with expectations, the net income used in the calculation is usually projected for the current year. Thus, it is also understood that if the issuers can gain a huge profit, then the shares will be pursued by the investors, because the projected profit for the current year is likely to rise. The PER magnitude will change following the price change in the market and the net profit projection. If the price rises and the profit projections remains the same, then practically the PER will also rise. On the contrary, if the projected earnings rises, and the market price does not move then the PER will go down. PER is often used as an indicator by the investors to make investment decisions in the stock. There is an assumption saying that lower PER means cheaper price of the stock concerned.

The hypotheses formulated in this study are the variables that have been defined as having influences on the value of agricultural enterprises. The hypothesis in this study are:

H<sub>1</sub>: The stock price has a positive and significant impact on the investment decisions

H<sub>2</sub>: The stock trading volume has a positive and significant impact on the investment decisions

H<sub>3</sub>: PBV has a positive and significant impact on the investment decisions

H<sub>4</sub>: The Debt to Equity Ratio has a positive and significant impact on the investment decisions

H<sub>5</sub>: The share price has a significant and positive effect on the firm value

H<sub>6</sub>: The stock trading volume has a significant and positive effect on the firm value

H<sub>7</sub>: The PBV has a positive and significant effect on the firm value

H<sub>8</sub>: The Debt to Equity Ratio has a positive and significant effect on the firm value

H<sub>9</sub>: the investment decision has a positive and significant effect on the firm value

### **Research Methodology**

The study was conducted by collecting the secondary data from 22 companies in the agricultural sector whose shares are listed on the Indonesia Stock Exchange, which consists of three sectors namely: plantations, fisheries, and other agricultural sectors as listed in table 2.

**Table 2. The List of Agricultural Sector Issuers in the Indonesia Stock Exchange (BEI) 2014**

No.	Stock Code	Name of Issuer
Plantation Sub-Sector		
1	AALI	Astra Agro Lestari Tbk
2	ANJT	Austindo Nusantara Jaya Tbk
3	BWPT	Eagle High Plantations Tbk
4	DSNG	Dharma Satya Nusantara Tbk
5	GOLL	Golden Plantation Tbk
6	GZCO	Gozco Plantations Tbk
7	JAWA	Jaya Agra Wattie Tbk
8	LSIP	PP London Sumatra Indonesia Tbk
9	MAGP	Multi Agro Gemilang Plantation Tbk
10	PALM	PT Provident Agro Tbk
11	SGRO	Sampoerna Agro Tbk
12	SIMP	Salim Ivomas Pratama Tbk
13	SMAR	Smart Tbk
14	SSMS	Sawit Sumbermas Sarana Tbk
15	TBLA	Tunas Baru Lampung Tbk
16	UNSP	Bakrie Sumatra Plantations Tbk
Fisheries Sub-Sector		
17	CPRO	Central Proteina Prima Tbk
18	DSFI	Dharma Samudera Fishing Industries Tbk
19	IIKP	Inti Agri Resources Tbk
Other Sectors		
20	BISI	BISI International Tbk
21	BTEK	Bumi Teknokultura Unggul Tbk
22	CKRA	Cakra Mineral Tbk

Source: the Indonesia Stock Exchange, 2014

One of sampling techniques included in non-random sampling is the purposive sampling. In this research, sampling was done by using an approach through purposive sampling method, where data is taken based on certain considerations, and the requirements made as the criteria need to be fulfilled by the sample in order to obtain a representative sample (Sugiono, 2004).

The sampling was done by using purposive sampling method with the purpose to obtain a representative sample using the following criteria:

1. The agricultural companies in the plantation sector are listed in the Indonesia Stock Exchange and were active in doing transactions during 2010-2014 period.
  2. The Companies completed their annual financial statements in the period of 2010-2014.
- Based on the sampling criteria as mentioned above, the samples used in this study are 8 companies, as listed in table 2 below:

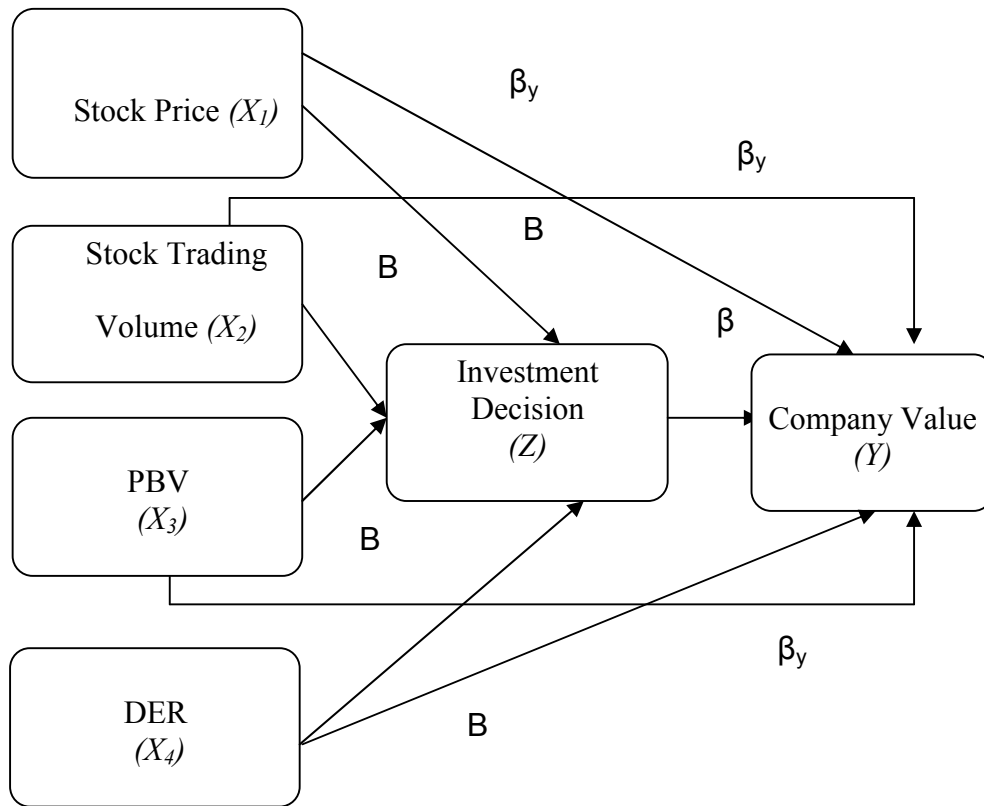
**Table 2. Sampling Process Research**

No.	Description	Company
1	Agricultural companies listed in the Stock Exchange in 2014	22
2	Agricultural companies not consecutively registered in 2010-2014	16
3	Agricultural companies in the plantation sector listed in the Stock Exchange in 2014	16
4	Agricultural companies in the plantation sector listed in succession in 2010-2014	8
5	Companies completing annual financial statements in the period 2010-2014	8
6	Companies consistently presenting financial statements of each observation period, namely 2010-2014	8
7	The company research samples	8

Source: The Indonesia Stock Exchange

Based on the process of sampling, there were 8 companies involved. The research was conducted during the period of 2010 to 2014

**The Research Design**



**Figure 1. Research Conceptual Framework**

**Path Analysis**

Path Analysis is an analysis to determine the contribution of the effects of each variable  $X$  and  $Y$  that use standardized variables. By using path analysis, the causal effect between the variable and the position of each variable in the pathway, either directly or indirectly, will be estimated. The model significant appears based on beta coefficient ( $\beta$ ), which is significant to the path.

Based on the results, these coefficients can be described as follows.

$$Z: \beta_0 = \beta_{zx1} + \beta_{zx2} + \beta_{zx3} + \beta_{zx4} + \varepsilon 1 \dots\dots\dots(\text{Equation 1})$$

$$Y: \beta_0 = \beta_{yx1} + \beta_{yx2} + \beta_{yx3} + \beta_{yx4} + \beta_{yz} + \varepsilon 2 \dots\dots\dots(\text{Equation 2})$$

Note:

$Y$  = company value

$Z$  = investment decisions

$X_1$  = stock price

$X_2$  = stock trading volume

$X_3$  = PBV

$X_4$  = DER

$\beta_0$  = intercept

$\varepsilon 1, 2$  = residual variable / error

The result of the new structure are recalculated at each path coefficient. Based on the result, the direct and indirect effect, as well as the total effect, can be seen. The calculation step is to calculate the direct and indirect effects, as well as the influence of technical and fundamental factors toward the company value through intervening the investment decision variable ( $Z$ ) and then calculating the remaining residual variable, that is variables other than the independent variables and intermediate variables that also affect the dependent variables, but are not included in the research model.

## Discussion

### 1. The Descriptive Statistics of the Research Variables

Table 3 summarizes the results of the calculation of descriptive statistics on the variables used in this study.

**Table 3. Descriptive Statistics Result**

Variable	Minimum	Maximum	Mean	Std. Deviation
Stock Value ( $X_1$ ) (IDR)	50.00	26,200.00	4,901.57	7,620.86
Stock Trading Volume ( $X_2$ ) (million IDR)	3.00	25,229.00	6,182.17	7,181.46
PBV ( $X_3$ ) (%)	0.14	5.72	2.14	1.31
DER ( $X_4$ ) (%)	0.16	4.52	1.17	0.94
Investment Decision ( $Z$ ) (million IDR)	-0.68	2.65	0.21	0.43
Company Value ( $Y$ )	-7.17	66.55	14.34	11.82

Source: Processed data, 2016

Table 4.8 shows that the average price of the companies' shares in 2010 until 2014 was IDR 4,901.57. The stock price value was in the range of IDR 50 to IDR 26,200. Meanwhile, the average price of the companies' shares in 2010 until 2014 was IDR 4,901.57, and the standard deviation was IDR 7,620.86. This indicated that the standard deviation value is away from the average value and the data dissemination is getting smaller. The standard deviation value indicates that the sample companies have stock prices that tend to be high, reflected through the companies' stock prices that is away from the average value and its variation is greater.

The average of the companies' trading volumes in 2010 until 2014 is IDR 6,182.17. The trading volume is in the range of IDR 3 million to IDR 25,229 million, whereas the standard deviation of the company's assets in 2010 until 2014 is IDR 7,181.46 million. It means that the sample companies tend to have low stock trading volumes, viewed through the sample companies' stock prices that moved close to the average value and its smaller variations.

The average PBV of those companies, from 2010 to 2014 is 2.14%. The PBV value is in the range of 0.14% to 5.72%. Whereas, the PBV standard deviation of the companies in 2010 to 2014 is 1.31. This indicates that the standard deviation value is away from the average value and the data distribution is getting greater. The DER average of the companies from 2010 to 2014 was 1.17%. The DER value is in the range of 0.16% to 4.52%. Whereas, the DER standard deviation of the companies from 2010 to 2014 was 0.94%. It means that the sample companies have a trading volume that is likely to be low, seen on the companies' stock prices that approach the average value and their variations get smaller.

The average investment of the sample companies from 2010 until 2014 is IDR 0.21 million. The investment value is in the range of negative IDR 0.68 million to IDR 2.65 million. Whereas, the

standard deviation of the investment decisions from 2010 until 2014 is IDR 0.43 million. The average value measured by the companies' PER from 2010 to 2014 is 14.32%. The PER value is in the range of negative 7.17% to 66.55%. Whereas, the PER standard deviation is 0.43%.

After conducting the descriptive analysis, the next step is to develop an empirical model by performing data processing stage, including data normality and hypotheses test. The hypotheses testing is conducted by formulating the null hypothesis ( $H_0$ ) and the alternative hypothesis ( $H_a$ ) first, to test the effect of stock price, trading volume, PBV and DER on the investment decisions and the value of the companies. The data analysis was performed by using data normality test and path analysis.

## 2. The Analysis Result of the Inferential Statistic Data

The data normality testing used in this study is the Kolmogorov-Smirnov test. This test is used to determine whether the operational variable data in the empirical model tested has a normal or abnormal distribution. The Kolmogorov-Smirnov testing condition is when the two comparisons or one have a significance level (two-tailed) that is greater than 0.05, which means the data has a normal distribution. If both comparators have a significance level (two-tailed) that is less than 0.05, then the data distribution is abnormal. The data normality test result is shown in Table 4 below.

**Table 4. Normality Test Data with the Kolmogorov-Smirnov**

Variable	K-S Z*	Significance	Description
Stock Price ( $X_1$ )	1.290	0.121	Normal Distribution
Stock Trading Volume ( $X_2$ )	1.461	0.128	Normal Distribution
PBV ( $X_3$ )	0.431	0.992	Normal Distribution
DER ( $X_4$ )	0.890	0.406	Normal Distribution
Investment Decision ( $Z$ )	1.162	0.121	Normal Distribution
Company Value ( $Y$ )	1.155	0.139	Normal Distribution

Source: Processed data

Note:\* K-S Z: Kolmogorov-Smirnov test

Table 4 shows that the stock price variable ( $X_1$ ), the stock trading volume ( $X_2$ ), the PBV ( $X_3$ ) and the DER ( $X_4$ ) as well as the investment decision ( $Z$ ) and the enterprise value ( $Y$ ) have a normal distribution. The Kolmogorov-Smirnov test calculation shows normal distribution in all variables (significance value  $> 0.05$ ).

The next step to conduct is the path analysis where it will describe each path in the model by using a path analysis. Each path tested shows that there are direct and indirect influences of the stock prices, the trading volume, the PBV and the DER factor, toward the investment decision, and the value of the agricultural sector companies. Before testing whether there is any direct or indirect influence, each path significance needs to be tested first.

Based on the result, we all know how much the influence (either direct or indirect) and the total effect of factors, such as: the stock price ( $X_1$ ), the stock trading volume ( $X_2$ ), the PBV ( $X_3$ ), and the DER ( $X_4$ ), as the independent variables on the company value ( $Y$ ), as the dependent variable, through investment decisions ( $Z$ ), as the intermediate variables. We also calculate the residual variable ( $e$ ) that is an independent variable other than the free variable or the intermediary, which also influences the dependent variable but was not included in the research model. The results of the path analysis and the hypothesis testing are described in table 5 below.

**Table 5. Path Coefficient and Hypotheses Testing Value**

Hypothesis	Free Variable	Bound Variable	Beta ( $\beta$ )	<i>t</i> -calculated	$\rho$ -value
1	Stock Price ( $X_1$ )	Investment Decision ( $Z$ )	0.265	2.175	0.048
2	Stock Trading Volume ( $X_2$ )	Investment Decision ( $Z$ )	0.028	0.169	0.867
3	PBV ( $X_3$ )	Investment Decision ( $Z$ )	0.527	2.376	0.023
4	DER ( $X_4$ )	Investment Decision ( $Z$ )	-0.015	-0.089	0.930
5	Stock Price ( $X_1$ )	Company Value ( $Y$ )	0.280	2.272	0.012
6	Stock Trading Volume ( $X_2$ )	Company Value ( $Y$ )	0.050	0.296	0.769
7	PBV ( $X_3$ )	Company Value ( $Y$ )	0.566	2.606	0.013
8	DER ( $X_4$ )	Company Value ( $Y$ )	-0.013	-0.079	0.937
9	Investment Decision ( $Z$ )	Company Value ( $Y$ )	0.265	2.686	0.010

Source: Processed data

Note: \*\* = Significant at  $\alpha = 5\%$

Based on the result of the coefficient regression, the modeling can be described as follows.

$$Z = 0.265X_1 + 0.028X_2 + 0.527X_3 - 0.015X_4 \dots\dots\dots (1)$$

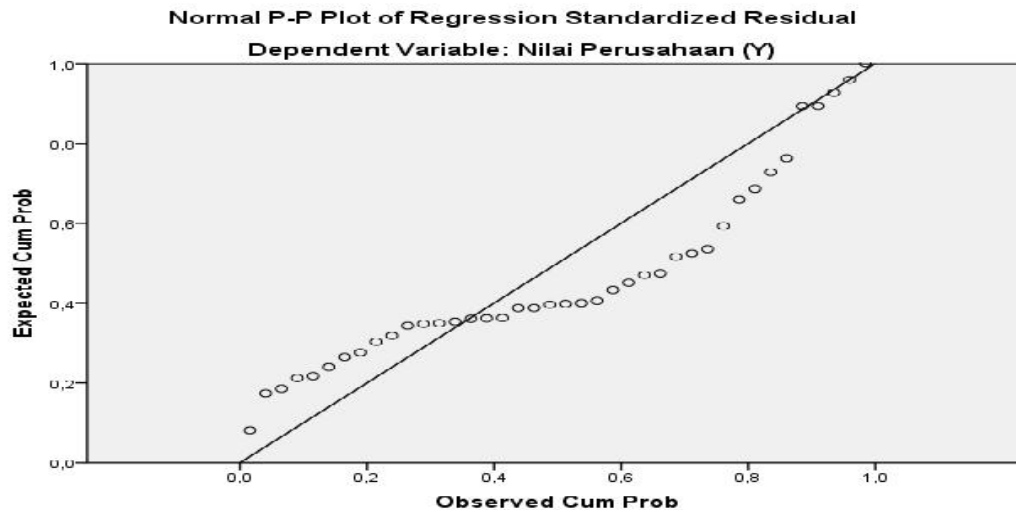
$$Y = 0.280X_1 + 0.050X_2 + 0.566X_3 - 0.013X_4 + 0.265Z \dots\dots\dots (2)$$

After obtaining a multiple linear regression model, the next step is to test whether the model developed is BLUE (Best Linear Unbiased Estimator). BLUE assumptions that must be addressed include: no multi-collinearity, homoscedasticity, and no autocorrelation. The classical assumption testing performed on the two linear regression models are described as follows:

a. Normality Test Model

A data normality test is performed to determine whether the model obtained has a normal distribution or not. The path analysis result model must meet the assumptions of normality conducted on the samples by using the chart plots described in Figure 1 below.





**Figure 1. The Result of Normalcy Model Assumptions**

Figure 1 shows that the model in regression is able to meet the normality assumption in the model. This is shown through the data spread which is around the diagonal line and follows the direction of the diagonal line, so that the model meets the normality assumption model.

b. Multicollinearity Test

One assumption underlying the linear regression model is the absence of a perfect linear relationship between some or all of the independent variables. That means the regression model does not violate the assumption of no multicollinearity. The presence or absence of multicollinearity can be seen in the Variance Inflation Factor (VIF). Santoso (2000:234) stated that an indication of multicollinearity will not occur among the independent variables if the VIF is less than 5. The result of the multicollinearity in this study can be seen in table 6.

**Table 6. Multicollinearity Test Results**

No.	Variable		VIF	Conclusion
1	Stock Price ( <i>X1</i> )	Investment Decision ( <i>Z</i> )	2.129	No Multicollinearity
2	Stock Trading Volume ( <i>X2</i> )	Investment Decision ( <i>Z</i> )	1.145	No Multicollinearity
3	PBV ( <i>X3</i> )	Investment Decision ( <i>Z</i> )	2.051	No Multicollinearity
4	DER ( <i>X4</i> )	Investment Decision ( <i>Z</i> )	1.191	No Multicollinearity
5	Stock Price ( <i>X1</i> )	Company Value ( <i>Y</i> )	1.238	No Multicollinearity
6	Stock Trading Volume ( <i>X2</i> )	Company Value ( <i>Y</i> )	2.076	No Multicollinearity
7	PBV ( <i>X3</i> )	Company Value ( <i>Y</i> )	1.191	No Multicollinearity

8	DER ( $X_4$ )	Company Value ( $Y$ )	1.085	No Multicollinearity
9	Investment Decision ( $Z$ )	Company Value ( $Y$ )	1.238	No Multicollinearity

Source: Processed Data

According to table 6, there is no multicollinearity among the independent variables for VIF is less than 5. It means that there is not a perfect linear relationship between some or all of the independent variables.

c. Autocorrelation Test

The purpose of this test is to determine whether in a linear regression, there is a correlation between the linear regression error in the period  $t$  and the error in period  $t-1$  (previously). If it happens, then there is a problem of autocorrelation in the regression model. The regression model must not violate the assumption of no autocorrelation. The presence of autocorrelation in the regression model can be detected by observing the magnitude of Durbin Watson (DW). If the DW coefficient is between -2 to +2, then it means no autocorrelation (the investment decision = 1.802 and the company value = 1.902).

d. Heteroscedasticity Test

Heteroscedasticity Test is conducted through a scatter plot graphic test, and in the test result there is no clear pattern, and there is a point spreading wide above and below zero on the  $Y$  axis. It means that there is no heteroscedasticity among the variables of this study.

The basis for decision making among others are:

1. If there is a pattern like dots (points), which form a certain regular pattern (wavy, widened and then narrowed), then there is a heteroscedasticity.
2. If there is no clear pattern, as well as the points spread above and below zero on the  $Y$  axis, then there is no heteroscedasticity.

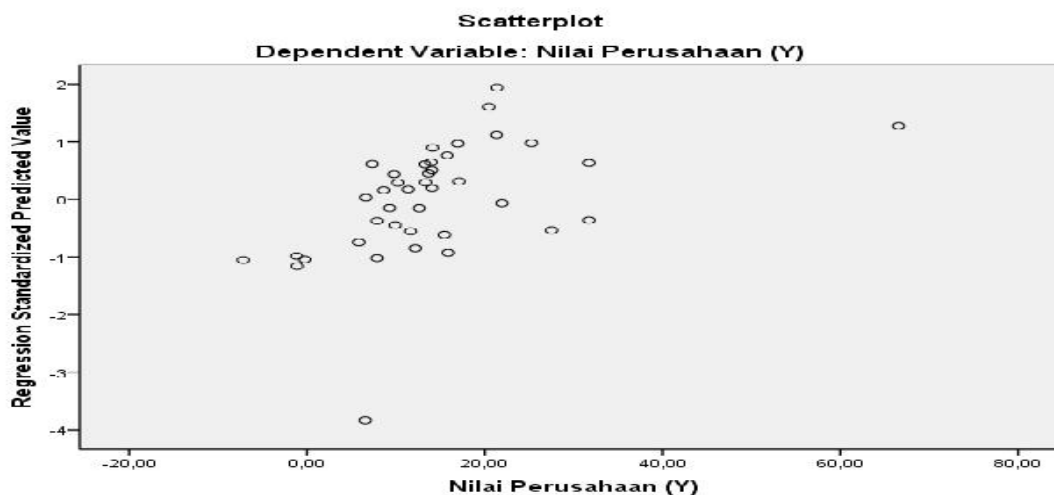


Figure 2. Scatter Plot

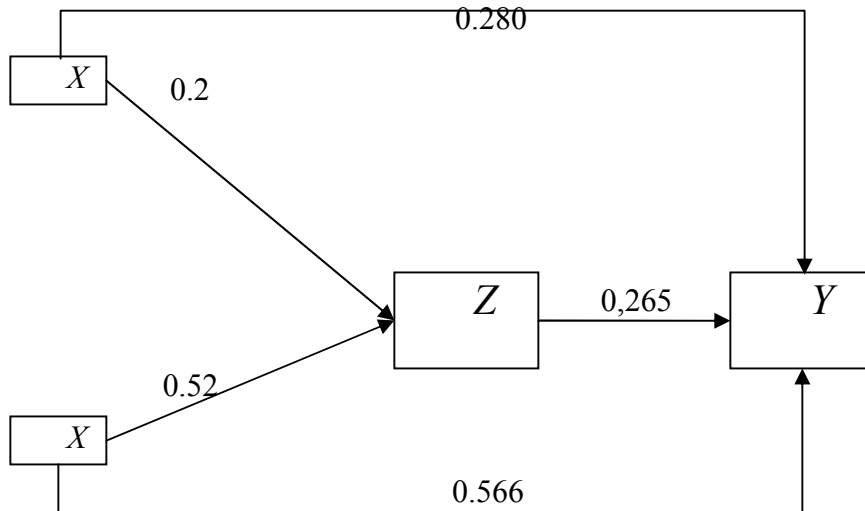
The graphic shows that the data distribution does not form a specific line, or in other words it distributes in random. This means that the independent variable does not form a heteroscedasticity.

Having performed the classical assumption test, a hypothesis test on each path is the next thing to carry out. Table 6 shows the stock price with beta coefficient ( $\beta$ ) of 0.265 and  $\rho$ -value of 0.048. Since the  $\rho$ -value  $< \alpha$  or  $0.048 < 0.050$ , the  $H1$  is accepted. Thus, the hypothesis stating that the stock price has a positive influence on the investment decision is accepted. From the stock trading volume, it is known that the beta coefficient ( $\beta$ ) is 0.028, with  $\rho$ -value of 0.867. Since the  $\rho$ -value  $> \alpha$  or  $0.867 > 0.050$ , then  $H2$  was unaccepted. Thus, the hypothesis stating that the stock trading volume factor positively influences the investment decision is unaccepted.

It is also known that the PBV ( $X3$ ) has beta coefficient ( $\beta$ ) of 0.527, with a  $\rho$ -value of 0.023. Since the  $\rho$ -value  $< \alpha$  or  $0.023 < 0.050$ , the  $H4$  is accepted. Thus, the third hypothesis which states that the PBV positively influences the investment decisions is accepted. While the DER ( $X4$ ) has a beta coefficient ( $\beta$ ) of -0.015, with a  $\rho$ -value of 0.930. Because the  $\rho$ -value  $> \alpha$  or  $0.930 > 0.050$ , the  $H4$  is unaccepted. Thus, the fourth hypothesis, which states that the DER positively influences the investment decision, is unaccepted.

The stock price has beta coefficient ( $\beta$ ) of 0.280, with a  $\rho$ -value of 0.012. Because the  $\rho$ -value  $< \alpha$  or  $0.012 < 0.050$ , it means the  $H5$  is accepted. Thus, the hypothesis stating that the stock price has a positive effect on the company value is accepted. The trading volume has coefficient beta ( $\beta$ ) of 0.050, with a  $\rho$ -value of 0.769. Because the  $\rho$ -value  $< \alpha$  or  $0.769 > 0.050$ , then  $H6$  is unaccepted. Thus, the hypothesis stating that the stock trading volume factors has a positive effect on the company is unaccepted. The PBV ( $X3$ ) has beta coefficient ( $\beta$ ) of 0.566, with  $\rho$ -value of 0.013. Because the  $\rho$ -value  $< \alpha$  or  $0.013 < 0.050$ , the  $H7$  is accepted. Thus, the seventh hypothesis which states that the PBV has a positive effect on the company value accepted. Meanwhile, the DER ( $X4$ ) has beta coefficient ( $\beta$ ) of -0.013, with  $\rho$ -value of 0.937. Because, the  $\rho$ -value  $< \alpha$  or  $0.937 > 0.050$ , then  $H8$  is unaccepted. Thus, the hypothesis which states that the DER eight has a positive effect on the company value, is unaccepted. The investment decision ( $Z$ ) has beta coefficient ( $\beta$ ) of 0.265, with the  $\rho$ -value of 0.010. Because the  $\rho$ -value  $< \alpha$  or  $0.010 < 0.050$ , then the  $H9$  is accepted. Thus, the hypothesis which states the DER nine has a positive effect on firm value is unaccepted.

Based on Table 6, it is known that not all pathways are significant, so that some paths are eliminated. The paths that are significant to the investment decision and the company value are only the stock price and the PBV. Similarly, it is proven that the investment decision path affects the company value significantly. Figure 3 displays the hypotheses along with the path coefficients.



**Figure 3. Path Analysis Model**

According to figure 3 (the path analysis model), the direct or indirect influences of the stock price factor, and the influences of the PBV to the company value (*Y*) can be calculated. Table 7 displays the effect intensity based on the cross coefficient calculation of each variable.

**Table 7. The Calculation of Direct, Indirect, and Total Influences**

Explanation	Direct Influence (A)	Indirect Influence (B)	Total Influence $C = A + B$
<b>Influence of <math>X_1</math> to <math>Z</math></b>			
$X_1 \rightarrow Z$	0.265	-	0.265
Residual ( $\epsilon I$ )			0.928
<b>Influence of <math>X_3</math> to <math>Z</math></b>			
$X_3 \rightarrow Z$	0.527	-	0.527
Residual ( $\epsilon I$ )			0.931
<b>Influence of <math>Z</math> to <math>Y</math></b>			
$Z \rightarrow Y$	0.265	-	0.265
Total Influence	0.265	-	0.265
<b>Influence of <math>X_1</math> to <math>Y</math></b>			
$X_1 \rightarrow Y$	0.280		0.280
$X_1 \rightarrow Z \rightarrow Y$	-	$0.265 \times 0.265$	0.070
Total Influence	0.280	0.070	0.350
Residual ( $\epsilon I$ )			0.911
<b>Influence of <math>X_3</math> to <math>Y</math></b>			
$X_3 \rightarrow Y$	0.566		0.566
$X_3 \rightarrow Z \rightarrow Y$	-	$0.527 \times 0.265$	0.139
Total Influence	0.566	0.139	0.705
Residual ( $\epsilon I$ )			0.888

Source: Processed data

Based on the calculation of cross coefficients in Table 7, it appears that the total influence of the stock price ( $X1$ ) factor toward the investment decision is 26.5%, which is a direct influence, and the total influence of the PBV ( $X3$ ) toward the investment decision is 52.7%, which is also a direct influence. Meanwhile, the investment decision variable has a direct influence on the total company value ( $Y$ ) of 26.5%, and the total influence of the Stock Price variable ( $X1$ ) to the company value ( $Y$ ) of 28%. Next, the total influence of the PBV variable ( $X3$ ) to the firm value ( $Y$ ) is 56.6%. Thus, the hypothesis stating that the stock price and the PBV factor have positive effects on the company value, especially for companies in agricultural sector, is proven or accepted. Meanwhile, the other variables, according to *theorema trimming*, are proven to be unable to be included in the path calculation if the path is proven to be insignificant, in this case the DER variable and trading volume variable.

The analysis result showed that any reduction on the stock price growth rate by one percent Rupiah will increase the growth rate of the investment decision and the company value. The positive relationship direction between the stock price variable and the investment decision variable shows that the higher the stock price will lead to higher investment decision. This relationship direction is in accordance with the expected relationship direction in the hypothesis. This study is not consistent with the findings of several previous studies because of differences in the research object, the time of the research, and the variable measurement used. This study is also consistent with Putra (2005), whose research concluded that the stock price, the trading volume, and the PER have influences on the investment decision.

The trading volume does not significantly influence the investment decision. This suggests that any increase in the stock trading will not necessarily raise the growth rate of the investment decisions. Thus, the stock trading volume variable does not affect the investment decision-making. The relationship direction of the result is consistent with the expected relationship direction in the hypothesis. Thus, the result of this study is also consistent with Nurrahman (2004) who researched about the effect of stock price, trading volume, and growth rate on the investment decision, concluded that the stock price, the trading volume, and the growth rate variable have significant influences on the investment decision. This research is not consistent with several previous studies because of differences in the research object, the research time, and the research variable measurement used.

The DER does not have a significant effect on the investment decision. This means that any increase in the growth rate of the DER by 1% will not increase the investment decision. Despite the fact that the DER variable is not significant, it has a positive sign to the investment decision. The implication is that in spite of the higher DER, the companies tend to improve the use of debt even further. In other words, even though the sample companies in this study have a high DER, their use of debt is also high. It is because of the high level of debt as the result of fluctuations in IDR exchange rate against USD, which sharply raise the corporate debt. Another explanation is that the companies increased the debt by not paying attention to their DER, as long as the creditors still put trust on the companies, and provide loans. The test result in this study is not consistent with a previous study conducted by Sofiati (2001). In her study concerning the effect of interplay between the debt and the equity on the investment decision of go-public companies in the Jakarta Stock Exchange (JSX), she concluded that the stock price

significantly influences the investment decision and the debt positively affects the equity. However, this positive coefficient is insignificant and it indicates that the company's growth does not relate to the company's investment decision-making. In addition, this research is also not in line with Ravid (2009), who states that the DER has a positive effect on the debt. That is because of differences in the research object, the research time, and the research variable measurement used.

The company value significantly influences the investment decision. This means that any 1 million rise in the growth rate of the company value will increase the investment decision. The positive relationship direction in the result is in line with the expected relationship in the hypothesis. This finding means that a larger company in agricultural sector in BEI will have an investment decision with a greater proportion of debt. The investment decision policy with a funding proportion from a larger debt can cause a higher financial risk. It means that companies in agricultural sector in the BEI is very vulnerable to monetary crisis affecting the financial distress. The result of this study is supportive and consistent with the Pecking Order Theory by Myers (1984). This theory is based on the asymmetric information and explains that when a company conducts financing by issuing new shares, it will cause the earnings per share to fall because the number of shares will increase and the company will not take advantages on the CR income from the debts. Therefore, the Pecking Order Theory describes that the funding sequence should come from the retained earnings as the first alternative, the debt as the second alternative, and the new share issuance of as the last alternative. The result of this study is also consistent with a previous study conducted by Putra (2005). In his study, he analyzes factors that influence the investment decision in manufacturing Industries. It is also consistent with Wahidahwati (2002) who stated that the company has a significant influence on the company investment decision ratio. However, this study is not consistent with Ariyanto (2002) who stated that the company value has a negative effect on the company investment decision.

### **Conclusion And Recommendation**

The research result shows that the stock price is a technical factor that significantly influences the investment decision and the company value. Meanwhile, a fundamental factor that influences the investment decision and the company value is the PBV. The hypothesis stating that the stock price and the PBV have positive influences on the company value in the agricultural sector is proven or accepted. The other variables, corresponding to *theorem trimming*, are proven to be unable to be included in the path calculation if the path is proven to be insignificant, in this case the DER and trading volume variables.

Suggestions that can be proposed in this research are:

- a. Companies need to be careful in creating an investment decision. Investment decisions should be based on the result of technical and fundamental analysis that can be taken into consideration for investors in deciding a profitable investment.
- b. It is admitted that this research still needs to be improved and followed up by further researches. In order to achieve a better result than the previous studies, further researchers and academia are expected to pay attention on some following details:
  1. The research variables should be added with other study variables that may influence the investment decision (e.g. macro variables such as the exchange rate, the inflation, etc.).

2. The research time should be extended in order to obtain an accurate research results for a long term.
3. The research population needs to be extended by including industries from various backgrounds or adding more variables to gain a better result. Population that is extended by adding other industry sectors will produce a more generalizable result that can be applied to other research objects.

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**RELATION BETWEEN ECONOMIC GROWTH AND INCOME INEQUALITY  
AMONG THE REGION  
(STUDY CASE ON LAMPUNG PROVINCE)**

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**Abstract**

The high economic growth rate was allegedly not accompanied by equal distribution of income. The high growth in a region believed to actually has a high income discrepancy. This study was conducted to prove this and to determined district/city anywhere that possess high growth but growing or not growing well and the inequality of income that occurred using Gini ratio analysis and Klassen typology. The analysis begun with calculating the income inequality between district/city using Gini ratio. Gini ratio results are then linked with economic growth rates using Klassen Typology Quadrant. As a case study used in this study was the case of Lampung province which has particularly 16 districts/cities. The results indicated that there are 8 districts which were in the quadrant I with the districts/cities that its economic growth rate were relatively lower than the provincial average and have a low level of income inequality. There are five districts/cities that were in quadrant I with the districts that the economic growth rate is relatively lower than the provincial average with the level of low average income inequality. There are two cities that were in quadrant III, district/city whose economic growth is relatively higher than the average of Lampung province but with the high level of income inequality. Thus it is proven that high economic growth was not accompanied by equal distribution of income so low that because there was limited budget, then there must be one policy priorities which to prioritize region with high inequality through the policy of reducing income inequality first and then increase growth and improve the quality of growth for region which already had high growth.

*Keywords: gini ratio inequal income, economic growth, klasentypology*

**Background**

Income inequality is a major issue for national development. The ideal development policy is a policy of inclusive development policies that resulted in high quality, fair and equitable development. But until now the policy of regional development in Indonesia allegedly still not able to actualize the inclusive development. There are still high income inequality between areas where areas with high growth typically have high income inequality. Income inequality is bad for development due to inequal region which will halt the economic growth of other regions. While the low growth areas usually have low income inequality because nothing can be shared among communities. This matter is supported in the research by Esmara (1975) who found that low income gap occurs in areas where growth is too low.

To assess income inequality, Ardani (1996) utilized Williamson index and found that at the early stages of development there will be income gap between regions, but with the passage of time, the gap will be reduced. While other approaches used to calculate inequality between the regions used the Gini index or Gini Ratio.

Uneven economic growth, is suspected as the cause of this income inequality. Klassen typology is one approach that connects the two phenomenon which included in the four



quadrants. Klassen typology in this study is modified by dividing the quadrants based on two indicators: the average economic growth as the vertical axis and the average income per capita as the horizontal axis. The area is divided into 4 (four) classifications, namely (a) the fast forward and fast-growing area, which are areas that have high levels of economic growth and a higher income than the average growth of the province. (b) advanced but suppressed areas, which is the area that has higher per capita income but its economic growth is lower than the average growth of the province, (c) developing region which is an area that has a high economic growth but the level of per capita income is lower than the average income per capita in the province, (d) relatively underdeveloped area which is area that have lower growth and income rates than the provincial average.

Lampung Province as explained in advance has 15 districts/cities. There are several districts/cities including underdeveloped areas with high poverty and several other districts/cities which had made progress, but an exact number has not been obtained. The following are the number of poor between districts in Lampung which presented in the table below.

**Table 1. The Amount of Poor and Poverty Line in Lampung Province  
Year 2012**

District/City Name	Poor Resident Amount (Person)	Poverty Line (Rp/Cap/Month)
Lampung Barat	67.900	269.670
Tanggamus	92.700	250.134
Lampung Selatan	177.700	256.153
Lampung Timur	189.500	257.284
Lampung Tengah	187.000	271.262
Lampung Utara	155.800	274.291
Way Kanan	72.500	241.330
Tulang Bawang	40.700	256.793
Pesawaran	77.100	251.723
Pringsewu	43.000	269.212
Mesuji	15.300	256.185
Tulangbawang Barat	18.100	253.773
Bandarlampung	121.600	359.948
Metro	19.000	225.231

*Source: Lampung Dalam Angka 2013*

Based on Central Bureau of Statistic data in 2013 as much as 32.26% of the population in Lampung are in the category of disadvantaged or region with high inequality. A large number of the poor is a result of inequality of development among regions.

The research question is whether the income gap between regions have relation with economic growth. On the territory of which this is the case and what policies are appropriate to the characteristics of each region. Districts/cities which included in the group of successful development are areas or regions with high economic growth but lower inequality or lack of proper development policies with the districts/cities with high economic growth and also high inequality.

The purpose of this study was to investigate the conditions of inequality between districts/cities in Lampung province using the Gini Ratio and how the relation between

income inequality with economic growth and which districts/cities that were on the criteria referred by Klassen typology. The end of this research is the proposal of regional development policy recommendations for each districts/cities in accordance with the conditions of inequality and economic growth. Policy priorities should be done because of the current budget constraints of regional development the local government must choose whether to do growth policies first or equalization.

## Literature Review

### 1. Income Distribution and Income Inequality

National income distribution theory basically questioned the percentage of overall labor income and compared it to the percentage of total revenue. Income distribution patterns can influence the demand for various kinds of goods. A certain number of public income will inflict different pattern of public demand if the certain income distribution pattern were changed. Economists distinguish two principal measure of income distribution used (Tadaro and Smith, 2006) which are size distribution of income and functional or factor share distribution of income per share of production factors. Size distribution of income can directly calculate the amount of income received by each individual or household. According to this measure, how much earning an individual received, regardless of its source. In addition, the location of the source of income (rural or urban) and the business sector into the main employment was also ignored. While functional or factor share of income distribution focuses on a part of the total national income received by each of the factors of production such as land, labor and capital.

### 2. Gini Coefficient (Gini Ratio)

Gini Coefficient (Gini Ratio) is one measure that is most frequently used to measure the overall level of income inequality. The general formula of Gini coefficient were shown in the following equation, whereas the calculation as follows:

$$GR = 1 - \sum_{i=1}^n [fP_i(F_{Ci} + F_{Ci} - 1)]$$

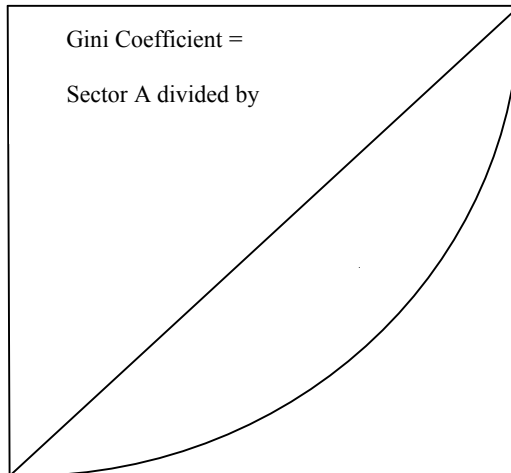
Where:

GR : Gini Coefficient (Gini Ratio)

fP<sub>i</sub> : Resident Frequency in expense class-i

fC<sub>i</sub> : Cumulative frequency from total expense in expense class-i

fC<sub>i-1</sub>: Cumulative frequency from total expense in expense class-i  
(i-1)



Source: Todaro and Smith (2006)  
 Figure 1. Lorenz Curve

A distribution of income were said to be more equitable if the value of the Gini coefficient were close to zero (0), while an increasingly inequal distribution of income then the coefficient Gini value will be closer to one. Criteria based on the Gini coefficient of income inequality (Susanti, 2007) are as follows:

- Lower than 0,4 then its inequality is low
- Between 0,4-0,5 then its inequality is high

### 3. Economic Growth

Economic growth is the increase in the growth of the value of goods and services in a country during one year of observation. One approach to obtain the economic growth rate is to use a figure of Gross Regional Domestic Product (area) constant value at t year reduced by Gross Domestic Product figures of the previous year or the GDP t-1 divided by the Gross Domestic Product or GRDP previous year t- 1 or by the formula as follow:

$$G_t = \left( \frac{G_t - G_{t-1}}{G_{t-1}} \right) * 100\%$$

### 4. Klassen Typology

Klassen Typology basically divide areas based on two main indicators, namely regional economic growth and per capita income of the area. Through this analysis, there are four characteristics of the pattern and structure of economic growth modes: local fast-forward and fast-growing (high growth and high income), developed regions but depressed (high income but low growth), the fast growing area (high growth but income), and relatively underdeveloped area (low growth and low income) (Kuncoro and Aswandi, 2002: 27-45) and (Radianto, 2003: 479-499).

**Table 2. Klassen Typology Matrix**

	Y1>y	Y1
r1>r	Fast forward and fast growing area	Fast growing area
r1	Developed but suppressed area	Relatively underdeveloped area

### Methodology

This research is descriptive quantitative and qualitative research. Quantitative study was done using various size ratios to determine the category of regions and qualitative analysis used to describe precisely the properties of an individual, state, symptom, or a particular group, or to determine the frequency or the spread of a phenomenon or the frequency of particular relation within a certain symptom and other symptoms in the community. Data used in this study is a cross-section data. The data used for calculating the Gini coefficient, the economic growth using raw data that comes from the data of Susenas 2015. These data published by Central Bureau of Statistic which was performed by the data sorting, categorizing and coding. To determine the category of regions based on their economic condition used GRDP data, the total population, the number of kindergartens etc. issued by Central Bureau of Statistic from various periods.

Research stage begins with the calculation of income inequality between the regions first. Then connect between income inequalities with economic growth. To connect inequality and economic growth are used Klassen Typology.

### Result and Discussion

Gini Coefficient (Gini Ratio) is one measure that is most frequently used to measure the level of income inequality. Initialized by determining resident frequency in expense class-i, cumulative frequency from total expense on class expense-i, and calculating cumulative frequency from total expense on class expense (i-1). Based on the Gini Ratio calculation results are as follows.

**Table 3: District/City Name of Lampung Province and Gini Ratio Coefficient**

Region Code	District/City	GR
1	Lampung Barat	0,3409
2	Tanggamus	0,3182
3	Lampung Selatan	0,3427
4	Lampung Timur	0,3687
5	Lampung Tengah	0,3608
6	Lampung Utara	0,3165
7	Way Kanan	0,3473
8	Tulang Bawang	0,3550
9	Pesawaran	0,3199
10	Pringsewu	0,3425
11	Mesuji	0,3093
12	Tulang Bawang Barat	0,3404
13	Pesisir Barat	0,2948
14	Bandar Lampung	0,3934
15	Metro	0,4002

#### 1. Relation between Inequal Incomes with Economic Growth

The next step is to link the value of the Gini coefficient ratio with an economic growth rate of each district / city with the following results.

**Table 4: Relation of Gini Ratio (GR) with Economic Growth  
 in Lampung Province**

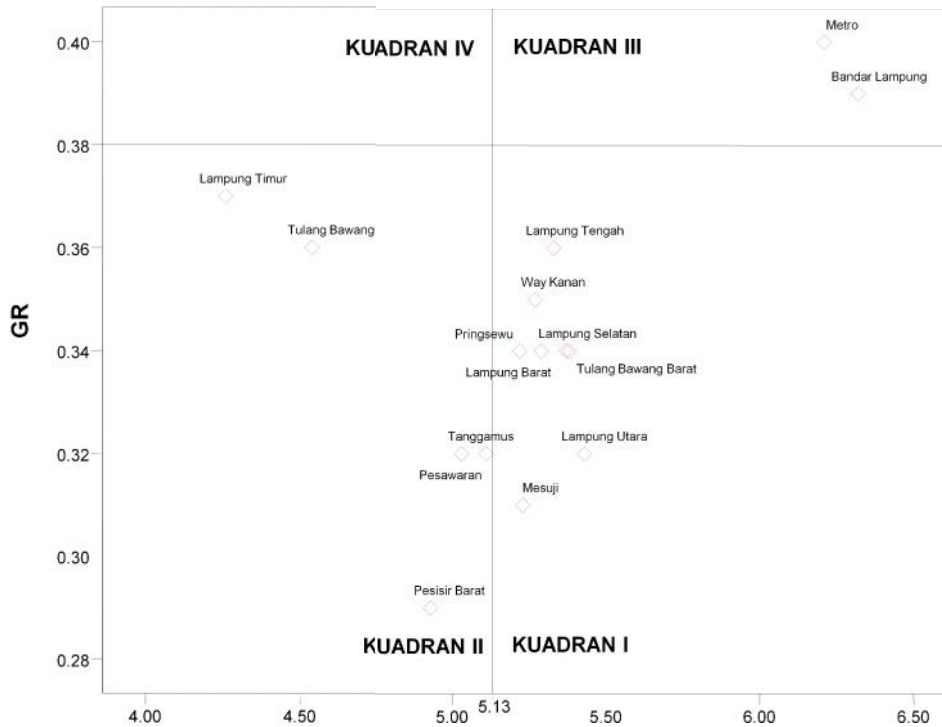
Region Code	District/City	GR	Economic Growth
1	Lampung Barat	0,34	5,29
2	Tanggamus	0,32	5,03
3	Lampung Selatan	0,34	5,37
4	Lampung Timur	0,37	4,26
5	Lampung Tengah	0,36	5,33
6	Lampung Utara	0,32	5,43
7	Way Kanan	0,35	5,27
8	Tulang Bawang	0,36	4,54
9	Pesawaran	0,32	5,11
10	Pringsewu	0,34	5,22
11	Mesuji	0,31	5,23
12	Tulang Bawang Barat	0,34	5,38
13	Pesisir Barat	0,29	4,93
14	Bandar Lampung	0,39	6,32
15	Metro	0,40	6,21
16	Prov. Lampung	0,38	5,13

## 2. Klassen Typology Analysis

Typology Klassen is one method for connecting between income inequalities with economic growth. The best district is when economic growth was high but equitable distribution of income is evenly distributed. Instead of districts/cities that bad if low economic growth and high income inequality. In detail the division of the quadrants as follows.

- Quadrant I Areas that have more Higher Economic Growth and Lower Gini Ratio than the Province
- Quadrant II Areas that have more Lower Economic Growth and Lower Gini Ratio than the Province
- Quadrant III Areas that have more Higher Economic Growth and Higher Gini Ratio than the Province
- Quadrant IV Areas that have more Lower Economic Growth and Higher Gini Ratio than the Province

### 3. Klassen Typology Result



Based on Klassen Typol **Economic Growth** ed on several districts/cities in Lampung province, located on the 4 Klassen quadrant, with the following results.

**Table 5. District/City of Lampung Province Located on 4 Klassen Quadrant**

Quadrant I	Lampung Tengah
	Way Kanan
	Lampung Selatan
	Pringsewu
	Lampung Barat
	Tulang Bawang Barat
	Lampung Utara
	Mesuji
Quadrant II	Lampung Timur
	TulangBawang
	Tanggamus
	Pesawaran
	Pesisir Barat
Quadrant III	Metro
	Bandar Lampung
Quadrant IV	-

From the 15 districts/cities in Lampung province there are 8 districts which are in the Quadrant I which is the region that has economic growth rate higher than the average throughout the province of Lampung with lower inequality. The districts meant is Lampung Tengah, Way Kanan, Lampung Selatan, Pringsewu, Lampung Barat, Tulang Bawang Barat, Lampung Utara and Mesuji district. From the eight districts, there are 7 districts that are relatively new into the New Autonomous Region (DOB). With DOB existence is still wide open forms of development policy areas that can be implemented as a standalone. The euphoria policy creation of independent development opportunities policy challenges inclusive local development.

There are five counties that are at Quadrant II, namely Lampung Timur, Tulang Bawang, Pesisir Barat, Tanggamus and Pesawaran. The hallmark of these five district is based on Klassen Typology is a district that have low economic growth and low inequality. Lower economic growth compared with the average growth in Lampung province due to production productivity which had been managed conventionally have not been able to move significantly. Increasingly narrow land conditions, are no longer fertile and less touched by high technology, the age of the plants that are old and replaced, HR with unproductive workers, the number of incoming investments that do not increased significantly since limited infrastructure and high rates of criminality is suspected to be the causes of the low rate of economic growth at these 5 districts.

Klassen Typology quadrant based on results obtained or there are two town located in Quadrant III which are the region that has an average economic growth higher than the average economic growth of Lampung Province but with the average level of income inequality higher than the average of Lampung province. These 2 city located in Quadrant III which are the city of Metro and Bandar Lampung. Seeing these characteristics on the Quadrant III of region development policy in 2 cities should receive more attention from the provincial government. Primarily is a regional development policy to reduce the income gap. This 2 area is the area of town. Bandar Lampung city is the administrative center and the capital of Lampung province. A city have its own affinity for the people around to improve the standard of living. Migration to cities will be very high. Then the policy should be a policy priority to create jobs as much, access to technical and capital assistance. The poverty rate in the city is more severely affected due to poor households when not getting the food can not be working on its own (subsistence) as in the countryside. Poverty is perceived themselves. For that we need additional social safety nets programs. It concluded that the high economic growth have not been able to overcome the existing income inequality. Seeing these results turned out to urban areas for development policies that focus to spur high economic growth was not accompanied by equal distribution of income so that the high growth in fact have a high gap. The economic growth rate was only enjoyed by a small proportion of people, it is seen from a high index of inequality is still going on in the districts with relatively high growth. While there are five districts that have low economic growth and its inequality which also low because there is nothing to share more, but income inequality can be solved by the residents with subsistence farming.

### **Conclusion and Recommendation**

Economic development policy which focuses on effort to achieve high economic growth is not yet able to make an effort and equitable development policies carried together, is unable to be conducted, so that local governments have to choose whether to carry out a policy of

growth in advance or first equalization policy. So that the development of policy recommendations given are for district with average high economic growth but higher-income inequality, the policy needs to be given is the policy of reducing income inequality in advance, because high inequality will increase the insecurity and instability in the economy. For districts that the economic growth rate is still low, should its development policy with more emphasis on improving the economic growth first to overcome the lag far to be run in conjunction with other districts that are more advanced. After high economic growth were achieved then the subsequent development is policy on income distribution policy.

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## DEVELOPING THE SUCCESSFUL MARKETING STRATEGIES FOR CLICK CAFÉ

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### ABSTRACT

The purpose of this research is to provide a better understanding and analysis as to what happened with the current practice of Click Café since it has opened over a year ago. The research attempt to find the solution of the business issue that Click Cafe is currently facing which is increasing their sales revenue. In order to make this study more structured and to organize the ideas, the writer uses the conceptual framework as the analytical tool to support the process Data collecting conduct by the qualitative analysis method using one-on-one in-depth interview along with quantitative analysis method using customer satisfaction survey. It can be concluded that there is the shifting of Click Cafe's marketing strategy from STP (Segmenting Targeting, and Positioning which include price, place, promotion and distribution) method to the new marketing wave (communitization, conversation, and communal activation).

### INTRODUCTION

#### Background

Currently, coffee is the most favorite hot drink in the world. The survey has stated over 2.250 Billion cups coffee have been consumed every day in the world. This is such a big number compare to other hot drinks. The majority of coffee consumption is from people of developed nations, while the main suppliers of coffee are from the developing countries. Many people have known coffee since a long time ago, and coffee was not only famous for the drink during winter time to make our body warm, but also as the medicine. It happened in the Arabian culture during the classical period.

The history about coffee itself has started since a long time ago in the year of 850 AD where an Ethiopian man named Kaldi just noticed that his goats were 'so hyperactive' after eating "red cherries". The moment after this experience, Kaldi was doing the experiment with the 'fruit' also and began to feel energized.

In the year of 1100 M, the coffee trees were cultivated on the Arabian Peninsula. This coffee was roasted and boiled by the Arabians, and was called "Qahwa". The name was taken from Arabic word, which means "the Wine of Islam." Once after this happened, the first coffee shop was open in Constantinople in 1475, and followed by the other two in 1554. After it was opened, then it shut down in 1511 as per the instruction of Khair Bey – the Governor of Mecca due to his paranoid for taking over his power. This was happened only for a weeklong "reign of terror", then the sultan had announced that coffee was such a blessed therefore it shouldn't have been shut down in the first place.

In the year of 1600, coffee has entered the European continent. It went there initially through Port of Venice where the first Italian Coffee House was opened in Italy in

1683. By 1607, this drink was introduced to the New World (now, it is called the United States) by Captain John Smith who was also the founder of Virginia at Jamestown. In 1652, the first coffee house was opened in England, but sadly the coffee house was forbidden for women to enter. They only let the men to enter and have coffee in this coffee shop. No clear justification why it happened. Mostly, it was because the level of women in the society was lower than men, as per their opinion at that time.

Above is the slight overview regarding the history of coffee in the world. Now, how did coffee actually enter Indonesia? It was started in 1658, the Dutch transported and

cultivated coffee plants commercially, and in 1683, the Ottoman Army was being defeated and left many bags of coffee, which were taken by Franz Georg Kolshitzky – the Hero for Vienna’s victory. He received the coffee as his reward and established Central Europe’s first Coffee House. This was led to the opening of the first Parisian Café Le Procope in 1686.

As stated previously, the Dutch transported coffee from Java to Dutch Guyana in South America. This was initially introduced how to cultivate coffee in America. Also in 1616, the Netherlands East India Company (VOC) introduced coffee to Batavia, and then it became a valuable and very profitable trade commodity. In 1696, they planted the first seedlings that were brought from Batavia in Java. That was how coffee being introduced at the first time in Indonesia. Currently, Indonesia itself is one of top 4 producers for coffee, and we are the number 3.

Now, it is important to review how the development of Coffee Industry in Indonesia. Indonesia is very famous for Arabica Coffees such as Sumatra Mandailing and its specialty coffees e.g. Kopi Luwak. This country has the microclimate, which is very ideal to grow and produce coffee, and usually it will make the coffee’s taste richness, full body, and mild acidity coffee (Source: International Coffee Organization(ICO)Website).

Below are Indonesia Coffee Varieties along with its single origin production:

**ARABICA:**

- ▼Arabica Aceh Gayo (Bener Meriah, Takengon, Central Aceh)
- ▼Arabica Sumatera Mandheling (North Sumatera)
- ▼Arabica Sumatera Lintong (North Sumatera)
- ▼Arabica Java (Central Java and East Java)
- ▼Arabica Preanger (West Java)
- ▼Arabica Bali Kintamani
- ▼Arabica Flores (Bajawa, Ngada)
- ▼Arabica Toraja
- ▼Arabica papua (Wamena, Nabire)

**ROBUSTA:**

- ▼Robusta Sumatera (Lampung, Bengkulu, Jambi, Palembang)
- ▼Robusta Java (West Java, Central Java, and East Java)
- ▼Robusta Flores

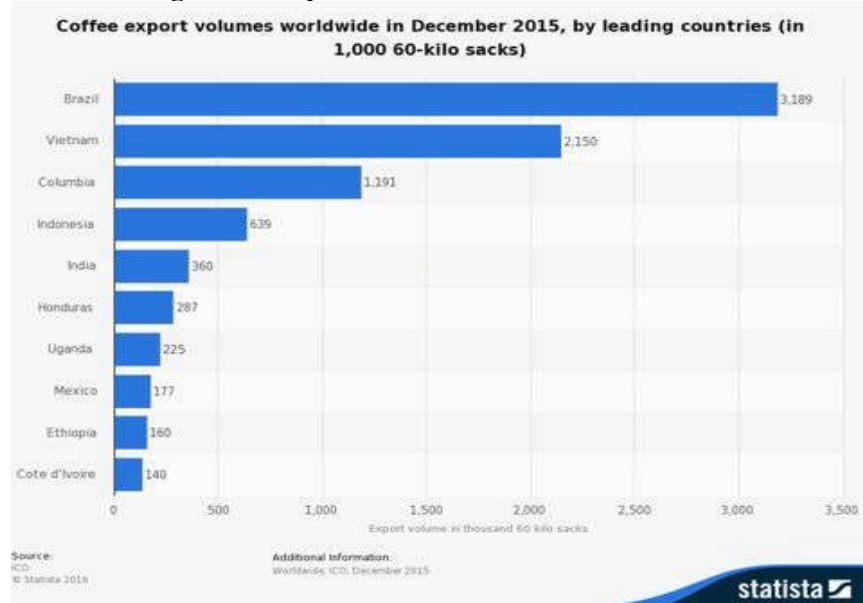
**LIBERICA** (Tanjung Jabung, Jambi - South Sumatera and Central Kalimantan)

**EXCELSA** (Meranti Island – Riau Province)

(Source:[https://en.wikipedia.org/wiki/Coffee\\_production\\_in\\_Indonesia](https://en.wikipedia.org/wiki/Coffee_production_in_Indonesia))

Also, Indonesia is the third biggest coffee producing country in the world, and also one of the leading countries for coffee export volume worldwide in December 2015 as per below:

**Table1.1. Leading Coffee Export Countries and Volumes worldwide in Dec 2015**



(Source: International Coffee Organization (Statista2016))

**Table1.2. Top 5 Coffee Bean Producers and Exporting Countries in 2014  
 Top 5 Coffee Bean Producers in Crop Year 2014 (in each Bags of 60 kilogram):**

1. Brazil	45,342,000
2. Vietnam	27,500,000
3. Colombia	12,500,000
4. Indonesia	9,350,000
5. Ethiopia	6,625,000

**Top 5 Coffee Bean Exporting Countries in 2014 (in each Bags of 60 kilogram):**

1. Brazil	36,420,000
2. Vietnam	25,298,000
3. Colombia	10,954,000
4. Indonesia	5,977,000
5. India	5,131,000

(Source: International Coffee Organization (ICO))

Indonesia is always the top Ten of Coffee Producing Countries, and below is regarding the coffee consumption trends per Kg / Capital / Year locally:

**Table1.3. Domestic Coffee Consumption Indonesia**

Domestic Coffee Consumption Indonesia:

	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014 <sup>1</sup>
<b>National Consumption</b> (bags of 60 kilogram)	1,890,000	1,940,000	1,700,000	2,380,000	2,470,000	2,500,000

<sup>1</sup> indicates forecast

Source: United States Department of Agriculture (USDA)

(Source: United States Department of Agriculture (USDA) Website)

Based on the data above, Indonesia's coffee consumption is expanding rapidly. It is supported by the development of the coffee processing industries (coffee products), and also the growth of home and middle coffee industries. Not only that, there is a new life style for people especially in the big cities for hanging out in the café or coffee shop to have the work meeting or even just meeting their friends – only to chat. One important thing is the increasing numbers of coffee shops has happened not only in the big cities but also in the suburb areas, including in Bintaro Jaya – Tangerang Selatan, Banten.

Bintaro Jaya City has been established and developed since 1979 by PT. Jaya Real Property Tbk, one of subsidiaries of PT. Pembangunan Jaya – one of the oldest and largest Developer and Real Estate Company in Indonesia. Most of its shares are owned by DKI Jakarta City Governmental Office.

Bintaro Jaya City was initially introduced with “Park City” concept, then in the last 10 years, it has been changed and introduced itself as “The Professional City” since there are more than 20 office big buildings has been built in the areas. This is one of the reason Bintaro has become one of “Central Business District” in southern part of Jakarta (Source: <http://www.jayaproperty.com/en/history-milestone>).

Currently, there are so many shopping malls, private hospitals and many other attraction places can be found in Bintaro Area, including various coffee shops from the small one, middle size until the premium ones.

Saudagar Kopi and Kopi Manyar are two of them. They are brand new coffee shops; just less than three years, and can not be categorized as the premium coffee shops. Actually, what kind of coffee shops are they?

### 1. Saudagar Kopi

It is located in Bintaro Sector 9, and in the housing complex area. They have less than 10 employees, and the size of this seating capacity is approximately 60 visitors. Their coffee shop's theme is “*Very Homey Coffee Shop*”.



### Figure1.1.Saudagar Kopi Coffee Shopping Bintaro Sektor9.

#### 2. Kopi Manyar

It is located in Bintaro Sector 1, and in the housing complex area, too. Kopi Manyar also has less than 10 employees. The space of this coffee shop is almost the same as Saudagar Kopi which is +/- 60 visitors. The owner of this coffee shop is the architect couple and their friends.



Figure1.2.Kopi Manyar Coffee Shopin Bintaro Sektor1

These two coffee shops are being the benchmark for our case study of this final project, *Click Café*; a very brand new and small coffee shop in Bintaro area. This is based on the assumption and consideration that they are fairly comparable in term of seating capacity size, the location since they are not located in them all or shopping centers area, and the number of employees which is less than 10.

#### Company Profile

Click Café has been opened over a year ago, which was around end of April 2015. The mission is to offer broad variety of Coffee Drinks, a selection of Indonesian and Western Main Menu, pastry products and local snacks or appetizers at a competitive price to meet the demand of the university students and employees around the area, and also some middle income local market area residents with *photography themed coffee shop experiences*. Click Café is really designed not only for 'hanging out' place for friends and families over a cup of coffee, but also the meeting point of photography communities. In fact, it has been broadened to the meeting point of various communities, too including Old VW Classic Cars Community and Class Moms Communities.

When the owner planned to open Click Café, actually it was not on their priority list previously. Late 2014, the manager of the company where the owner used to work (Weatherford—a Service Company for Oil and Gas Industry) was sent back to his own country, in the United States. He called and told the owner about the situation of their office in Indonesia, especially in the oil and gas industry. He suggested the owner to have some other plan beside working in oil and gas industry, and also he would help her to ask the region office to give her some severance payment although she resigned voluntarily since she has worked there more than 9 years. Fortunately, the region office accepted this proposal and she was given the severance payment. She was thinking about opening a small business where she has some passion in it. Since she is a coffee drinker and love to enjoy the free time

reading a book in a quiet and comfy coffee shop, suddenly, there was a ‘crazy’ dream in her mind along with some whispering voice “to open the Coffee Shop”.

She discussed this plan with her husband, and got the positive response. Her husband and their second child love photography, and also love to hang out with their photography ‘buddies’ after working especially in the coffee shops around Bintaro area. After over five months preparation, in April 2015– they have opened their small coffee shop in one of *Small Office Home Office (SOHO)* Complex in Ruko Sentra Menteng Bintaro Sector 7.



Figure1.3.Grand Opening Click Café Bintaro–end of April 2015.

They have named this small business “Click Café”, to represent the “Photography Themed” Coffee Shop. They feel their shop’s name is a very promising name and bring the photography themed as Coffee Shop Image. They have created the Logo of their Coffee Shop as below – with coffee, lens, the picture of Camera and letter of “Click Café” in it.



Figure1.4.Click Café Logo

The couple are the owner of this coffee shop, and have their close friend managing this small business daily. He has been assigned as the Operations Manager, and is supported by one staff leader, five coffee shop staffs and one experienced chef.

### Figure 1.5. Click Café Staffs and Indonesian TV Series Stars

As the owner of the place, they are lucky that Click Café does not need to rent the place. This small coffee shop has two floors, which can accommodate 25 people on the 1<sup>st</sup> floor and 35 people on the 2<sup>nd</sup> floor. Their main customers are College Students in the area of Bintaro and nearby (Indonesian State College of Accountancy, Pamulang University, Pembangunan Jaya University & Mercu Buana University), and the office workers in this SOHO complex.

Click Café has provided 24-hours Wi-Fi in the shop, and they have been the host for more than 7 photography events since the opening. The last event that they conducted was “*Photography Book Review and Discussion: On Street Photography and the Poetic Image by Alex Webb and Rebecca Norris Webb*”.



Figure 1.6. Photography Book Review and Discussion at Click Café

A few Bintaro Local Magazines have covered this unique Coffee Shop, one month after it opened. There were some journalists who wrote some review about this coffee shop. One of them was from Kicau Bintaro Magazine— a Local Bintaro Residents Monthly Magazine in June 2015. Unfortunately, it is in Bahasa not English (*Appendix. A*).

As mentioned above, this cafe would like to be defined and differentiated as being the “Photography Themed” Coffee Shop, so the owner has decorated their outside and inside Click Café interior with full of Photography items such as various pictures on the wall, the Black and White color of the couches, the color of the wall itself, and the drawing of photographic items on the wall.





**Figure1.7.Click Café from outside**

There are 10 seating outside for the smoking area, and parking lot from this SOHO Complex. While inside this coffee shop consists of two floors. The first floor is suitable for approximately 25 guests, and second floor for +/- 35 guests.

It has many artistic pictures on its wall which is called "Click Café – Wall of Fame". Every month they change the pictures on the wall and replace them with the new ones. The contributors of this "Click Café – Wall of Fame" can be anybody from the Coffee Shop's owners until the customers.



**Figure1.8.Click Café–First Floor interior**



**Figure1.9. “Click Café–Wall of Fame”**

To show the “Photography Themed – Coffee Shop”, The decoration on first and second floor are full of Photography items which some of them are painted directly to the walls. This 2<sup>nd</sup> floor is suitable for more than +/-35 guests. Usually, this 2<sup>nd</sup> floor is reserved for any gathering such as *Arisan Ibu-ibu*, Seminars from Photography topic, Book Review Club and others, and also Birthday Party Events.



**Figure1.10. Click Café from 2<sup>nd</sup> Floor**



Figure1.11. One of customer reservation events in Click Café–Arisan Ibu-ibu

Click Café has also offered various food both Indonesian and Western Styles. The menu and the opening hours are available in this flyers.



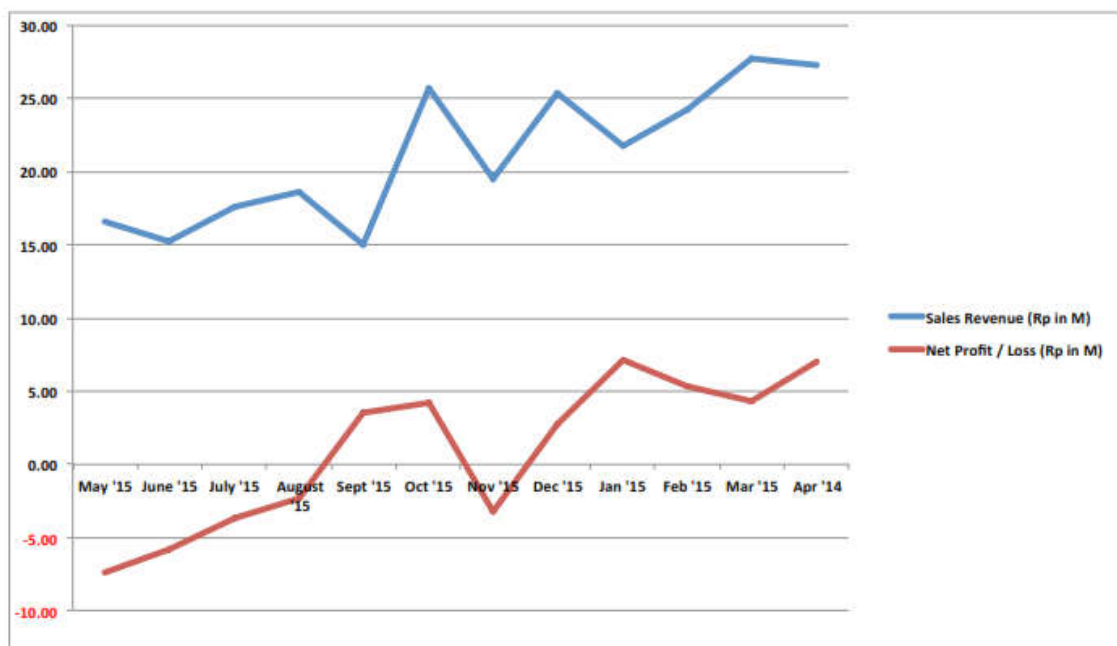
Figure1.12. ClickCaféFlyers

It is important to see how the condition of Click Café's financial during the first year of its operation. Below is their Sales Revenue and Net Profit / Loss Monthly.



Table1.4.Click Café-1<sup>st</sup> Year Sales Revenue & Net Profit/Loss Monthly

1stYear (May '15-April'16)	May '15	Jun '15	Jul '15	Aug '15	Sep '15	Oct '15	Nov '15	Dec '15	Jan '15	Feb '15	Mar '15	Apr '14
Sales Revenue (Rp in M)	16.57	15.23	17.57	18.58	15	25.7	19.5	25.32	21.8	24.2	27.71	27.3
Net Profit/ Loss (Rp in M)	-7.4	-5.8	-3.7	-2.3	3.57	4.2	3.27	2.75	7.1	5.3	4.3	7.05



### Problem Identification

Based on the above financial data, the writer has recognized that Click Café has Revenue Problems which will definitely impact to their net profit. According to the article from Small Business Chronicle, "the average small coffee shops' total net profit should equal to 7 – 25% of their annual sales. Some successful ones can be higher than 25%". (Source: <http://smallbusiness.chron.com/average-profits-small-cafe-30768.html>). Meanwhile Click Café only has net profit for 4.64% of their annual sales during the first year. It is still under the average of other coffee shops' annual net profit.

This is the main issue they are currently facing. It is caused by their number of sales, so it is extremely important for Click Café in order to survive in this business to increase their sales revenue. This is not an easy project, and will lead to a very important question: How to do this? How to Increase Click Café's sales Revenue to reach double digit growth rate for future year and 10% until 18% base profit margin respectively?

### **Study Objectives, Scope and Limitations**

In aligning to the above question, the objectives of this study would be:

1. To find out the customers' opinion regarding Click Café's products and services.
2. To evaluate the current situation of Click Café based on the customer's opinions.
3. Finally, the logic further objective would be to come up with the marketing strategies which enable Click Café to solve the issue they are facing.

The above are the objectives of this study which mainly focus to Click Café Bintaro to research and to develop their best successful marketing strategies for next two until three years.

### **Business Issue Exploration**

#### **Conceptual Framework**

The goal of this research is to find the solution of the business issue that Click Cafe is currently facing which is increasing their sales revenue. In order to make this study more structured and to organize the ideas, the writer uses the conceptual framework as the analytical tool to support the process. The conceptual framework was originally introduced by Isiah Berlin in 1953 through his essay "*The Hedgehog and the Fox: An Essay on Tolstoy's View of History*".

On this case, we have started this process by reviewing and analyzing their internal factor analysis using STP (Segmentation, Targeting and Positioning) and Marketing Mix methods and external factor analysis method using PESTEL and Competitor's analysis – Porter's 5 Forces Model. These methods are to evaluate how the condition of Click Café's business situation currently to define their SWOT (Strengths, Weaknesses, Opportunities and Threats) to identify which one are the positive and negative factors from Click Café (Source:[https://en.wikipedia.org/wiki/SWOT\\_analysis](https://en.wikipedia.org/wiki/SWOT_analysis)). This is the first part of the framework, and has used the various data available from Click Café, the literature for marketing methods that has been implemented on this study, and also the result of the market research that the writer has conducted.

Revision

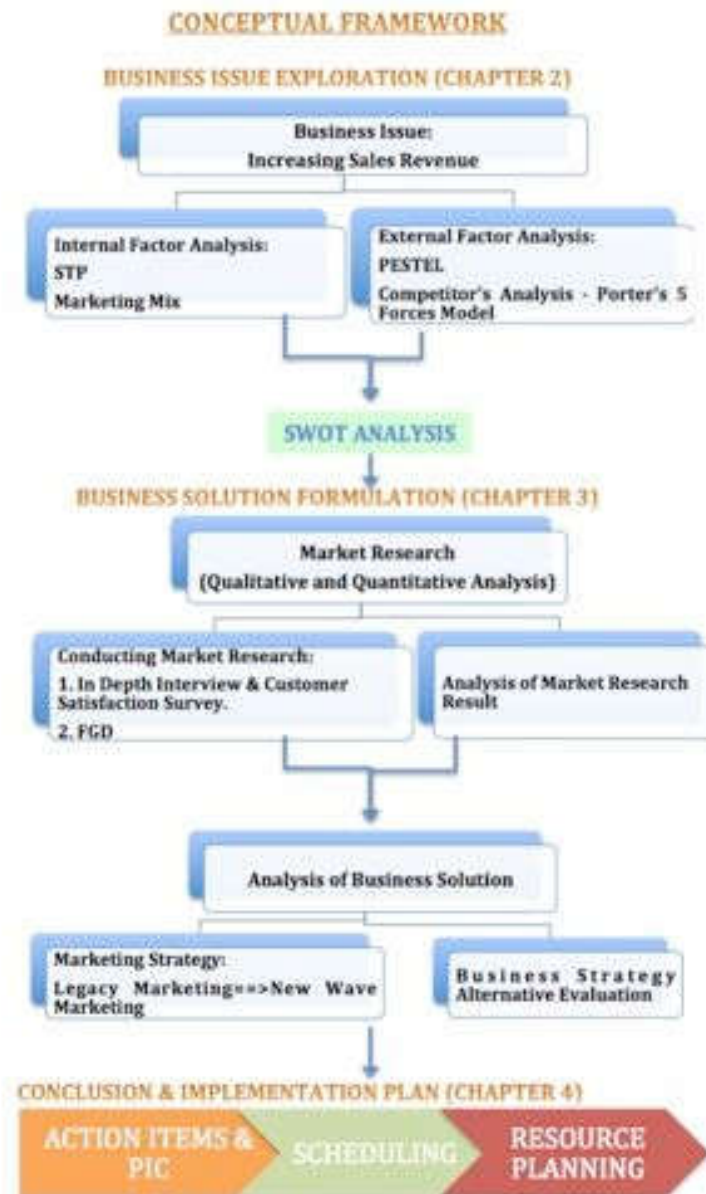


Figure 2.1. Conceptual Framework

The second part on this framework is Business Solution Formulation. This stage basically has described about the market research process both qualitative and quantitative, and the analysis of the results. Then combined with the result of the evaluation of current business situation in the first part, so we can start the analysis of the business solution of the issue.

In this study, we have conducted three market research which are One on one In-Depth Interview combined with online Customer Satisfaction Survey then complete it with Focus Group Discussion. Once we have the result of the marketing research, we can utilize and analyze them to come up with the analysis of business solution. To have more accurate and scientific result, it is very important to combine with some marketing literature. This marketing literature is basically as the theoretical marketing background which can support

the accuracy of the marketing data that we use or the result of the process that we have conducted. For this case, we use the literature for legacy marketing and new wave marketing. The purpose is to analyze the marketing issue and to come up with the business solution and the business strategy – alternative evaluation for Click Café.

The last part on this framework is the conclusion which will summarize and conclude the business solution explained in the second part and the action items, the PIC, the scheduling and the resource planning of their implementation plan.

### Analysis of Business Situation

In order to develop the successful marketing strategies for Click Cafe, it is very important to review and analyze the current business situation or their business practice. The current business situation are affected by their internal and external factors. The internal factors mean the variety factors which influence the business within the business itself, and we are still able to control and manage these. The situation analysis methods such as STP (Segmentation, Targeting & Positioning) Marketing Model and 4Ps - Marketing Mix Model are considered under the internal factor analysis to assess the business situation (Source: Dr. West. Market Analysis and Strategy; Fisher College of Business, OSU; 2014).

On the other hand, the external factors are described as the variety factors which impact or heavily influence the business from outside of the company/the business. It is hard to control this. As a lot of people said that we do not have pretty much control over it. PESTEL Analysis and Competitor's Analysis – Porter's Five Forces Model are on this external factors analysis category (Source: Dr. West., Market Analysis and Strategy; Fisher College of Business, OSU; 2014).

### Internal Factor Analysis - STP

STP (Segmentation, Targeting & Positioning) *marketing model which is originally was introduced by Phillip Kotler on his book "Marketing Management" (December 1987).* This STP approach will help to build the understanding how through segmentation, Targeting and Positioning, it can define the existing markets and plan how our future market is going to be.



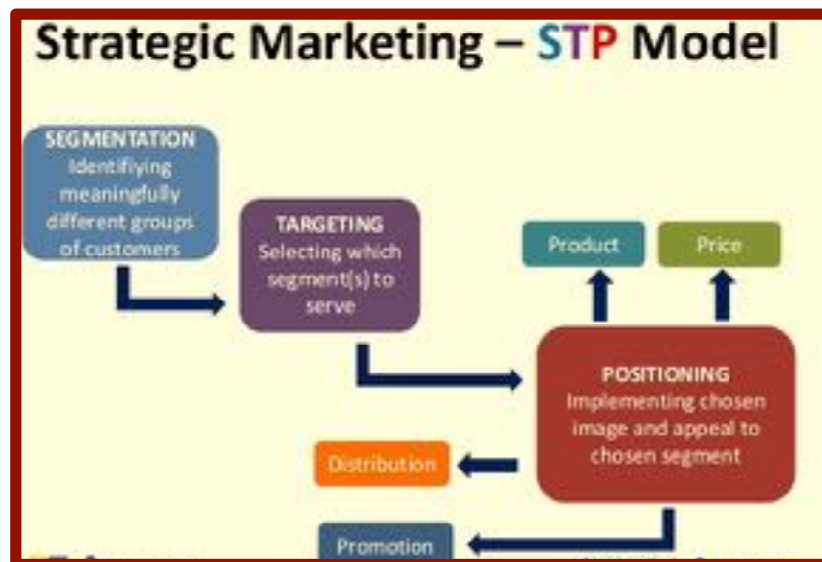
**Figure 2.2. Conceptual Framework Analyzing Current Practice through STP Approach**

(Source: Hanlon, Ann Marie on the Segmentation, Targeting and Positioning Model, 2013)

This model is very popular and mostly used by market practitioners globally, since it can provide the details in order to be able to construct the current market segments, target market and product positioning. This is for review and analysis purposes for Click Café's future improvement, which is one of many reasons why this model is used to be able to develop the successful marketing strategies for Click Café Bintaro.

By using this model, there are three stages in developing the successful marketing strategies. Below are the details related to this marketing model:

1. Thru Market Segmentation; this stage is to identify the meaningful groups or customers based on the variables in segmenting the market; such as geography, demography, industry sector, age of customers, frequency of purchase etc. Once they are identified, then the stage is to develop the profiles of these resulting segments. This information is provided by market research and analysis of customer data. For this case, one-on-one IDI and Online Customer Survey are used.
2. Thru Market Targeting; this stage is to evaluate and analyze which segments are potential, commercially attractive and can give optimal contribution to the business. In other words, this stage is to choose which segment should be served in order to obtain more contribution to the business.
3. Thru Product Positioning; this stage is to identify and describe how one business is different from others based on its product, price, place and promotion. This is known by the term Marketing Mix (4Ps – Product, Price, Place, Promotion), and was originally introduced by Phillip Kotler on his book "Marketing Management" (December 1987).



(Source: Kotler, Phillip–Marketing Management: Universidad de Ibaguè-2015)



### a. Market Segmentation

In defining the current market based on the segmentation, it is important to use the survey that has been done since the data should be accurate and up-to-date. The segmentation for this current consumer markets based on the survey, will be described based on five main variables below:

1. Geographic – it is based on the area.
2. Demographic—it is based on the population characteristics, such as age, occupation, marital status etc.
3. Psychographic – it is based on our consumer’s lifestyle, interests and opinions.
4. Benefits sought—it is based on the specific benefits that our customers are seeking from us.
5. Behavioral – it is based on the customers’ relationship with us.

Below is the Market Segmentation Data for Click Café:

1. Geographic: Bintaro Area (Tangerang – Banten).
2. Demographic:
  - a. Age: 10 – 60 years old.
  - b. Occupation: College Students, Mothers, Workers, and others.
3. Psychographic: Full Time Mothers, Photography Communities, Old VW Classic Cars Fan Clubs, and others.
4. Benefits Sought: Click Café’s customers see this coffee shop as the comfortable place to wait for their kids taking the lessons from some Math / English Lesson Places in the neighborhood, and also to wait for Bersih Sehat’s Family Massage place or The Dentists Clinic next door.
5. Behavioral: University students around the area (Indonesian State College of Accountancy, Pamulang University, Pembangunan Jaya University & Mercu Buana University) has created this café as their ‘Student Lounge’ or “*Base Camp*” for studying and meeting their friends.

Coffee shop itself actually is about building communities, and thru networking; it can start to establish the consumer’s markets for Click Café. The owners belong to the communities where they can connect these communities to their own business.

There are various ways in connecting this coffee shop business and the communities which the owners are belong to. One of the examples is by conducting Moms Beauty Class in Click Café where the Beauty Consultant and the Beauty Class Participants area group of Moms under Parent-School Group (PSG) of Binus International School Serpong in which the owner is the member of this school community.

*Moms Beauty Class – Click Café Bintaro*



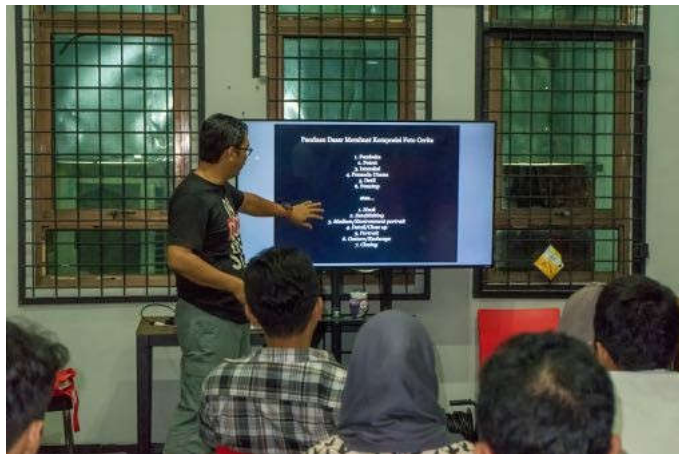
**Figure2.4.Moms’Beauty Class at Click Café Bintaro**

### **b. Market Targeting**

Click Café Current Target Market are:

- College Students around Bintaro area.
- Mothers whose children go to the courses in the places around the neighborhood.
- Photography Communities.
- VW Classic Cars Communities.
- Workers whose offices inside this SOHO Complex area.

Click Café has targeted those communities thru the owners’ relationships and hobbies. Below are the pictures from some photography events which were conducted in Click Café Bintaro where the owner is the member of these groups.

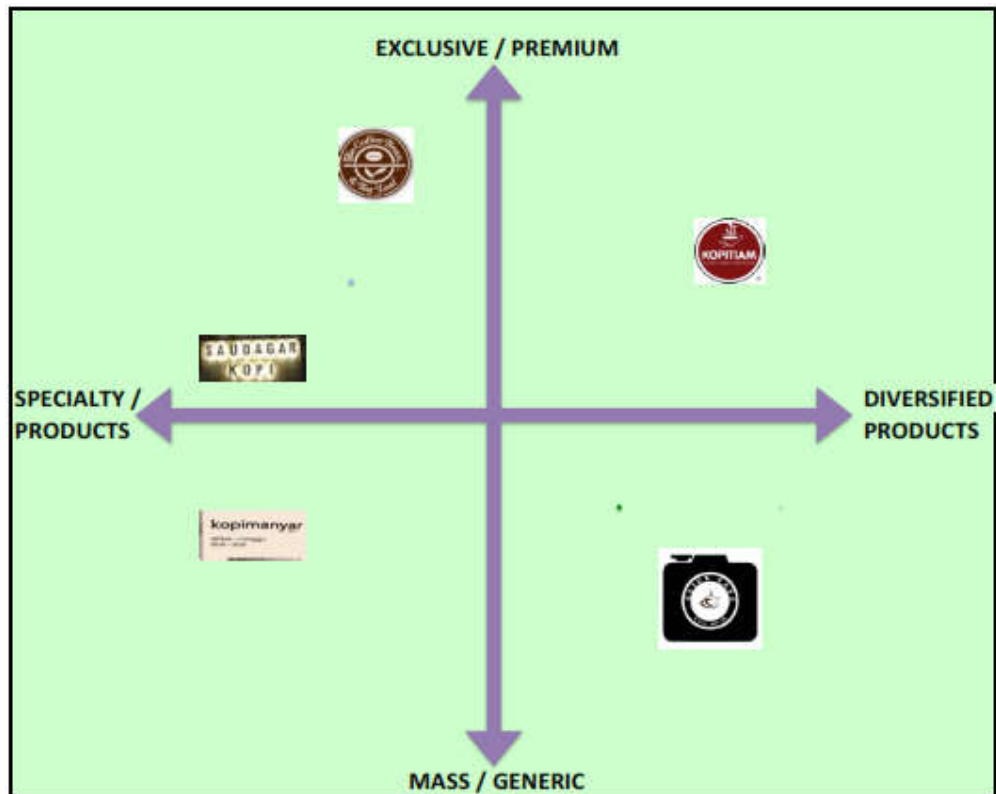




**Figure2.5. Photography Events held in Click Café Bintaro**

### **c. Product Positioning**

Product Positioning was first introduced by Peter Drucker on his book *“The Practice of Management”* in 2007. It was discussed as the Perceptual Mapping which shows where the business’ positions are located in terms of pricing, product itself, promotion and place. In regards to this Positioning, Click Cafe position will not change in regards to the “Pricing” and “Location”. This positioning will be based on the “Products” itself. The current product positioning shows that Click Café offers many diversified and mass products. It is definitely not under premium category which its coffee shop has some aesthetic design, high-end technology, elegant lighting, skilled and extensive knowledge of Barista, premium selection of exclusive sweet delicacies, or specialty, rare, premium brand, highest grade coffee, and of course with premium price. Click Café has given more choices to its customers to choose any products in the Café. Below are the mapping of Click Café and other Coffee Shops in Bintaro as for our comparison.



**Figure 2.6. Click Café and other Coffee Shops in Bintaro - current product positioning (Source: The Perceptual Mapping – First introduced and explained by Peter Drucker on his book *The Practice of Management 2007*).**

The above is Click Café and other coffee shops in Bintaro area - current product positioning. Click Café is categorized under Mass / Generic and Diversified Products.

The Coffee Bean is under Premium and Specialty Products category, while Kopitiam is under Premium and more diversified Products category. In the comparison with Click Café, how about Kopi Manyar and Saudagar Kopi Product Positioning? Based on the above picture.

Saudagar Kopi is under Specialty Products and a little bit more exclusive than Click Café, while Kopi Manyar is under Specialty Products and less Mass / Generic Products category.

Being under more diversified products positioning, Click Café offers many assorted menus from Indonesian Food until Western, and from Coffee products until non Coffee products such as Teh Tarik, Banana Split, Milk Shakes and others including Hot and Cold types. Click Cafe is considered not as Premium Coffee Shop (Exclusive) category due to their Target Market. Click Cafe is considered as Mass / General or Regular coffee shop.



**Figure 2.7. The Coffee and Non Coffee Products of Click Café**

***Internal Factor Analysis – Marketing Mix – 4Ps***

The other internal factor analysis is The Four P' soft he Marketing Mix which is one of the tools to understand the current market environment. Marketing Mix-4Ps which consist of Products, Price, Promotion and Place as per Phillip Kotler is “*the variables that can be manageable to be adjusted to influence the target market*” Below is the **Marketing Mix – 4Ps** for Click Café:

- **Price:** Click Café has very affordable prices even cheaper than other coffee shops in the area.
- **Product:** It has very diverse products from Indonesian to Western menu.
- **Promotion:** 10% Discount for group reservation. Local magazines advertising and free coverage.
- **Place:** Avery comfy coffee shop, but not a great access to get to the Café. Also, it is not in the high traffic area.

These STP and Marketing Mix – 4Ps Methods are very important especially in the marketing strategy planning phase, but it still can be used for the evaluation phase to find out whether Click Café has really “*promoted the right products at the right price and the right place*”(Greenspan, Roberta “*Starbucks’ Coffee Marketing Mix Analysis*”, 2015)

***External Factor Analysis – PESTEL***

As explained above, the external factor analysis are the factors that can influence the business from outside of the company which we do not have any control over. This PESTEL analysis method consist of Politic, Economic, Social, Technology and Legal. This analysis can describe the external environment and the macro environment that will affect the business, as well. The result of this analysis will become the part of the SWOT analysis (Kotler, P, Principles of Marketing, 2005).

Below is the PESTEL Analysis (Porter; 1985) for Click Café:

- Political Influences: Local Autonomy Regulation or controls, Bad Politics in Indonesia which really can threaten the economy of Indonesia (source: <http://www.amcham.or.id/fe/4261-indonesia-where-bad-politics-threatens-a-good-economy>). For Click Café, to open the business, they should apply the permit and report the local taxes from the city office in South Tangerang due to the regulations are under Banten Province not Jakarta. Nowadays, Jakarta is more structured and transparent in term of local autonomy regulation compare to Banten.
- Economic Influences: Bad economic performance in Indonesia which is shown by large pool of unemployment, inflation. This condition has really impacted Click Café, as well due to more people are trying to tight their budget due to this economic condition by reducing the spending for going out to the coffee shop or having dinner in the restaurant. This can be a threat for Click Café, too.
- Social Influences: Changing trends in a healthy lifestyle. More people are trying to reduce their caffeine consumption due to health concerns. This will affect people not to come to the coffee shop to enjoy the coffee. This can be a threat for Click Café.
- Technology factors: Changes in mobile technology can be the opportunity for Click Café to use this to promote the coffee's shops products.
- Environmental Factors: More people are really concerns regarding to Green projects and Saving Energy Project for the future. This will reduce the cost for electricity of Click Café if this saving energy project has really been implemented in Click Café by the staffs.
- Legal Factors: Minimum wage for employees in South Tangerang will impact Click Café's revenue, as well. It will impact the fix cost of the monthly income statement.

#### ***External Factor Analysis – Competitor Analysis – Porter's 5 Forces Analysis***

The other external factor analysis that we use is the Competitor Analysis–Porter's 5 Forces Analysis (Porter, 1985). This analysis method will explain the micro economic external environment factors which really impact to the business. This Porter's 5 Forces diagram will be the basis for competitive strategy originated by Michael Porter which describe the rules of the competition in any industry, and will show the attractiveness of the industry.

Below are Click Café Porter's Five Forces Model:

- Threat of new entrants – High.
  - It is easy to open the coffee shop in Indonesia.
  - For small coffee shop, it only requires small amount of capital.
  - This is the threat for Click Café since there are so many new players in the industry, and still plenty for the existing players, as well.
- Buyers Power – High.
  - Variety of products.
  - Variety of choices for services or places.
- Supplier's Power – Medium.
  - A few big suppliers with so many choices of materials.
  - The coffee shops still can choose the suppliers or even can choose the super market and the Modern Local Market in Bintaro to provide the raw materials for the coffee shop.

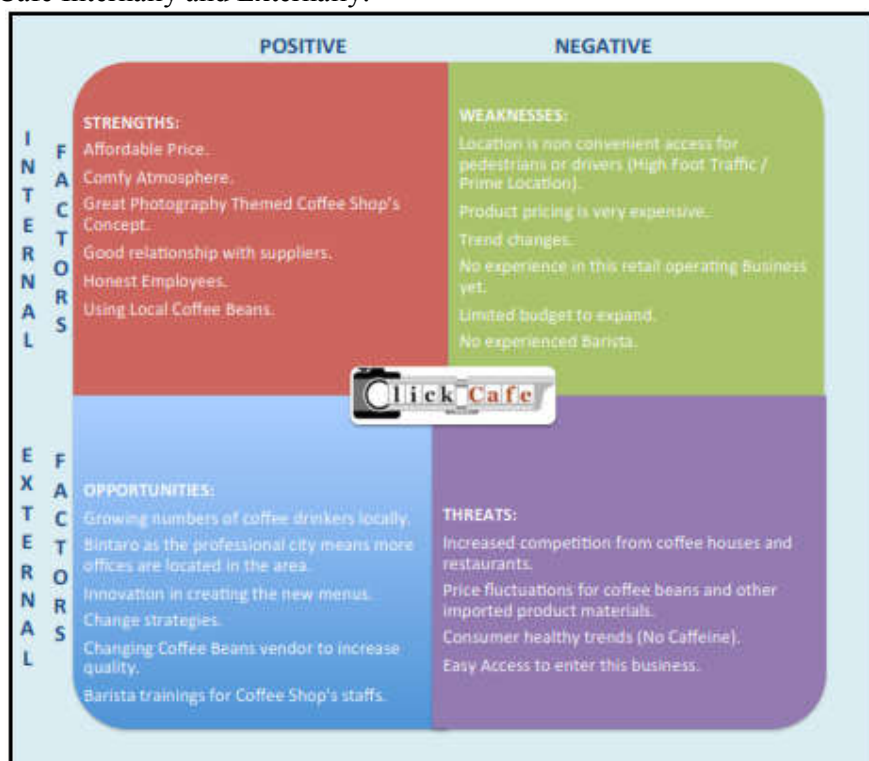
- Threat of Substitutes – High.
  - Customers can choose not only the other coffee shops, but also the fast food restaurants since they provide many coffee products, as well.
  - The customers can choose other comfy places to hangout not only coffee shops.
- Industry Rivalry - High
  - There are many local coffee shops and International coffee chain such as Starbucks, Coffee bean etc.

The above report is very important in assessing the strength of the coffee shop, and the position in the industry. Also we can see how Click Café's position compares to the other competitors. Once we evaluate the result of this report, we can make the improvement of this coffee shop to become more profitable.

**SWOT Analysis**

Based on the above Internal and External Factor Analysis, we can summarize those analysis and mapped them into SWOT Diagram. This SWOT Diagram will explain the current business situation internally and externally. Using this SWOT (Strengths, Weaknesses, Opportunities and Threats) Method which was introduced the first time by Albert Humphrey in the 1960's. The reasons behind this due to through SWOT, it is easier to understand the current business environment, evaluate the favorable and unfavorable factors to improve the business situation in the future.

Below is the Diagram that shows the SWOT analysis of current business situation for Click Café Internally and Externally:



**Figure2.8.ClickCaféSWOTDiagram**

(Source: Humphrey, Albert– SWOT Analysis for Management Consulting, December2005)

Creating SWOT diagram for this Coffee Shop has described how the business situation for Click Café is; its current status and position. The internal business situation for Click Café will be observed by its strengths and weaknesses while the

external business situation will be based on the opportunities that Click Café has and the threats that they are facing.

Based on the survey that has been conducted in regards to the current business situation, Click Café's strengths can be considered that they are directly impacted by internal factors such as:

- Its affordable price. Click Café has targeted college students as their main customers. Most of the prices are cheaper than other coffee shops.
- Click Café has a great ambience. Their customers love the comfy atmosphere of this Café.
- They have set their interior with the concept of Photography Themed Coffee Shop. Most people love this place and choose this as the place for their events such as seminars, one of Trans TV Series shooting place, and also for *selfie and wefie* with friends.
- Click Café is very fortunate to have honest employees working for their café. This is one of their strengths, too.
- They have great relationship with most of their vendors/suppliers. This is a great thing in doing business.
- This coffee shop has used Aceh Gayo Arabica Coffee beans. This local coffee beans is one of the strengths.

The other business situation that has been affected by internal factors is the weaknesses. There are some internal factors that have been considered as weaknesses which are:

- Their location is not in the representative area or in "High Foot Traffic/Prime Location" area where it is easy to be accessed by many people, and always crowded. As it is already public knowledge that any coffee shop's sustainability really depends on customer traffic. This customer traffic is affected by many factors such as how easy it is to access the coffee shop, and the type of location itself whether it is prime location or not. On this case, prime location means 'crowded' business area, and unfortunately Click Café is not on this location.
- Some of our materials are very expensive due to they are imported by other countries such as "Matcha" Japanese Green Tea Powder which is imported by Japan, and Mozzarella Cheese which is imported by New Zealand.
- The trends in this coffee shop industry are easily to be changed.
- The owners still do not have any heavy experiences in operating the coffee shop. They are still on learning curve.
- Their expansion budget is very limited.
- They still do not have any experienced Barista yet. This is really one of their weaknesses, as well.

The other two important keys of the situation analysis are impacted by external actors. They are Opportunities and Threats, and below are the details.

The Opportunities for Click Café are:

- The number of local coffee drinkers are more likely increasing every year.
- Bintaro has changed its trend setting to the professional city where more offices are located in this area.
- Innovation for new Menu for us will be one of the opportunities to increase the number of sales.
- Change strategies in our marketing.
- Increasing quality of the coffee by changing to new vendor who is more likely to have higher quality of the local coffee beans.
- The competencies for their employees especially in Barista skills will be the other opportunity, as well.



The Threats for Click Café are:

- There are likely more increasing competition from coffee houses and restaurants.
- Price fluctuation (inflation) for coffee beans and other imported materials.
- Nowadays, people are more likely shifting to new healthy lifestyles, and one of them is “No Caffeine” healthy life style.
- More new players in this industry due to it is very easy to enter the market.

By assessing this SWOT structured planning method, it explains how and where Click Café currently stands. Then, this data can be used for future planning and to develop the marketing strategies for this Cafe which can help them to achieve their growth and success.

This SWOT analysis has described the complete details business current situation and assessment of its Strengths, Weaknesses, Opportunities and Threats. Through its strengths; it will be able to show the advantages of Click Café itself compares to other coffee shops, and thru its opportunities; it will identify the opportunities in order to develop the successful roadmap via strategic planning. These are considered as favorable factors.

But how about Weaknesses and Threats? Why are they also important? They are important due to based on the weaknesses, it is easy to analyze and understand this coffee shop in order to find the effective solutions for future strategic planning. Also, threats will help them in identifying how they are impacted to the business, and help them trying to find the strategies how to deal with them in the future. Although they are very important in this analysis, but they are considered as unfavorable factors from both internal and external of the business.

Thru SWOT, any business owner can analyze which items should be reduced and which actions should be completed in order to improve the performance. In other words, the business owner or practitioners should eliminate the negative internal factors or decrease the negative external factors, and improve the positive internal and external factors. These are the standard guidelines in SWOT analysis.

### **Business solutions**

In chapter 2, the review and analysis of Click Café’s current practice using Segmentation, Targeting and Positioning marketing model, and the discussion about the current business situation and problems have been completed. The discussion in analyzing this business situation using SWOT structured planning method is also being conducted in order to gain the clear pictures and understanding of what happened with Click Café’s current business situation both internally and externally. Then, in this chapter, the discussion will start regarding the solutions of the problems stated in the previous chapter. Market research is primarily required in order to solve these problems.

The marketing research will be reviewed in this chapter, and should be based on the questioning research designs using both qualitative and quantitative marketing research. After gathering the data from the research or survey which is called data collection process, some analysis and discussion will be performed to develop the theories which should be implemented as the new successful marketing strategies for this coffee shop. This would be the final product of the research.

### **Conducting Market Research**

As stated above, in performing this market survey, the process will start with gathering the data by conducting the Qualitative Analysis method using One on one In-depth Interview along with Quantitative Analysis method using Customer Satisfaction Survey. This research design was introduced by Creswell, J. W. on his book “*Research design: Qualitative, quantitative, and mixed method approached.*” Then, analyzing and using this combined data to be discussed further into Informal Focus Group Discussions.

This One on one In-depth Interview and Customer Satisfaction Survey to any random respondents (both loyal customers and others who rarely came to the coffee shop) have been conducted. This customer satisfaction survey were conducted online to our various respondents. The number of respondents from One on one In-depth Interview was about 70 customers, and from customer satisfaction survey was more than 50 respondents.

The other qualitative analysis that has been completed was Informal Focus Group Discussion. This FGD would be better than the other two market research due to the result will reveal in-depth information and analysis, clear discussion results and covers various opinions towards any topic. In this case, there are three FGD shave been conducted to three different groups, and they are:

1. FGD with our existing customers
2. FGD with our Café's staffs.
3. FGD with 'random' people who haven't visited Click Café but already know what and where Click Café is.

The reasons why these three different market research have been completed, it is due to obtaining a better understanding as to what happened with the current business situation is. Once they truly understand their business situations and the problems they are facing, then it is easy for them to analyze and try to find some solutions based on the results of this research. These solutions would be their new marketing strategies which are expected to enable them in delivering the success of this coffee shop. This is the final conclusion and the main purpose of this research. In preparing the process of market research, it should start with the explanation of each method first in details.

#### ***One-on-one In Depth Interview (IDI)***

##### ***(The Questionnaire Model for Qualitative Market Research)***

One on one In-depth Interview is a qualitative research tool, and one on one 'interview' between the respondent and the moderator which should be more structured and require more active and knowledgeable moderator. For this study, there was one-on-one IDI has been done to +/- 70 customers who have been to Click Café less than 5 times and more than 5 times. The interviews were held in Bahasa Indonesia, but it has been translated in English for this Final Report purposes. This One on one IDI were a little bit different from the general one due to they were taking only short time and had a lot of respondents. One interview took about +/- 15 – 20 minutes, and the total of the respondents were 70 customers, while others usually took about 40–60 minutes and between 12 and 15 respondents (*One on one Interview: McIntyre*).

The one-on-one IDI process has been done in the Café, and the writer was the one who directly interviewed their customers. The respondents of this IDI have got one free drink each for their contributions. Although sometimes it was a little bit biased since the respondents may not really more open in answering the questions, but they were definitely more detailed and structured. They are generally open ended questions which require the participants' opinions and personal views. This One on one In- depth Interview are more private, and should be able to observe the participants, as well. They can gather the data by observing their participants and their answers. Once the data collection process is done, then it is time to analyze and interpret the data.

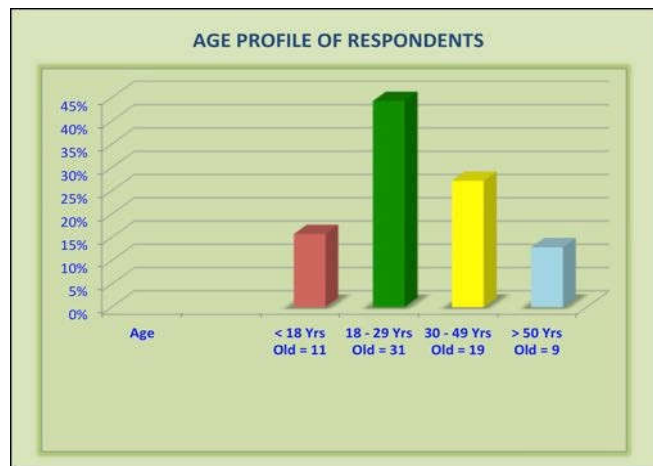
The result of this data analysis and interpretation would be used to generate the main questions / topic to be discussed in the Focus Group Discussion. This process should be more comprehensive to develop the successful marketing strategies which fit their business.



**Figure3.1. The Cycle from One on One In-Depth Interview (IDI) and Customer Satisfaction Survey to Focus Group Discussion (FGD)**

*(Source: Creswell, J.W. "Research design: Qualitative, quantitative, and mixedmethodapproached." 2003–Sage)*

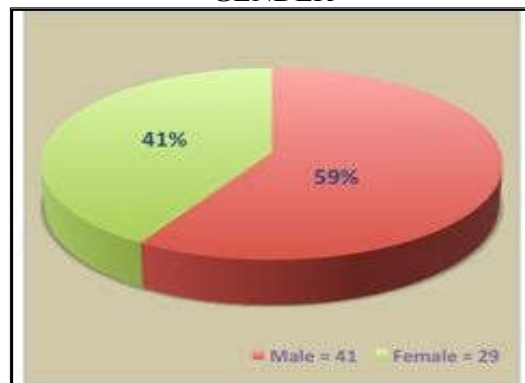
Below are the profiles of the respondents and the summary of one on one IDI. The profiles are as follow:



**Figure3.2. Age of Respondents Profile**

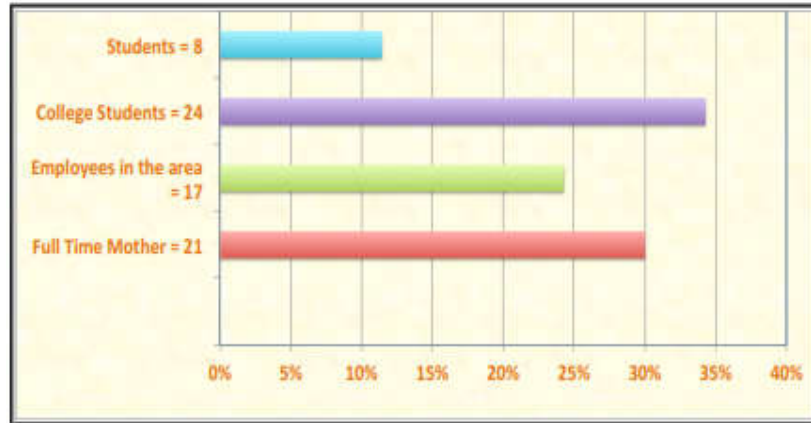
Respondents under 18 years old are 11 people, between 18–29 years old are 31 people, between 30 – 49 years old are 19 people and above 50 years old are 9 people.

GENDER



**Figure 3.3. Gender of the Respondents**  
These respondents are 41 Male and 29 Female.

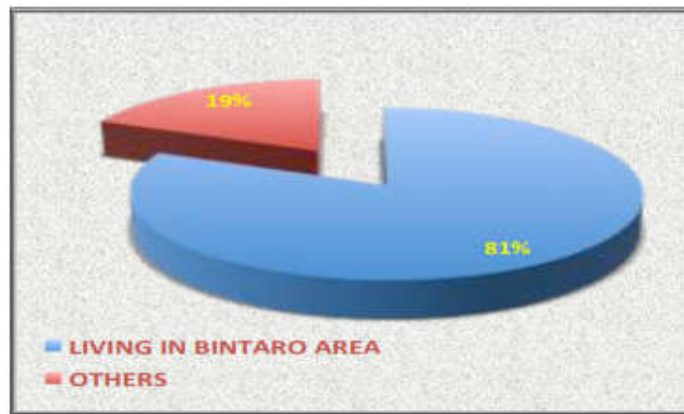
OCCUPATION



**Figure 3.4. The Occupation of the Respondents**

The occupation of the respondents are students for 8 people, college students are 24 people, employees around the neighborhood are 17 people and 21 people are full time mothers.

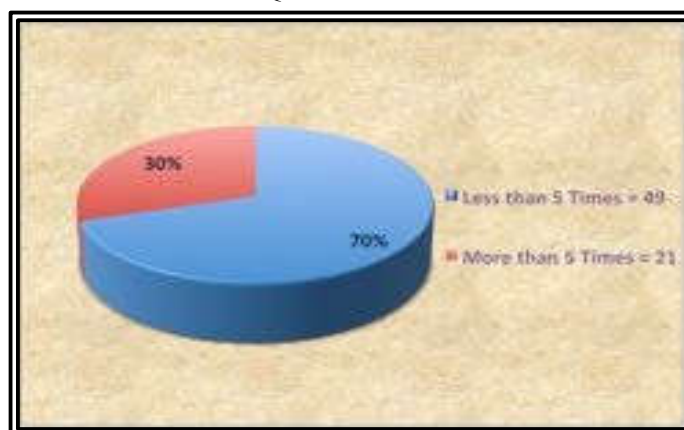
DEMOGRAPHICS



**Figure 3.5. The Demographics of the Respondents**

While 57 people are living in Bintaro Area, and the remaining are from outside of Bintaro.

FREQUENCY OF VISIT

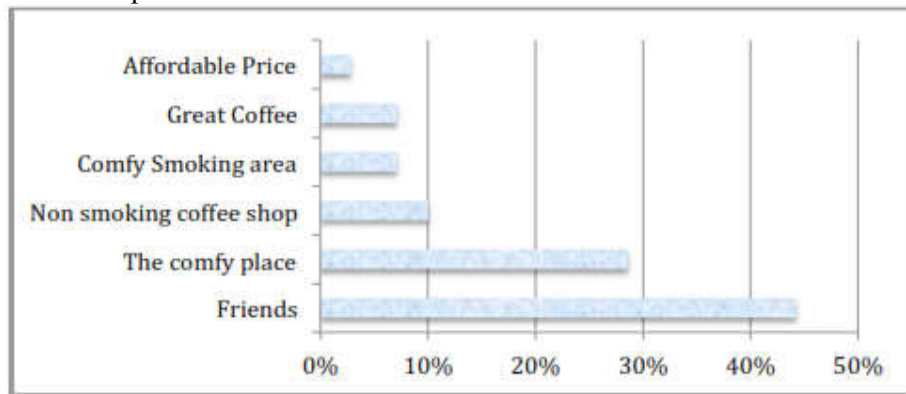


**Figure 3.6. The Respondents' Frequency of Visit**

The respondents who have visited Click Café more than 5 times are 21 people and less than 5 times are 49 people.

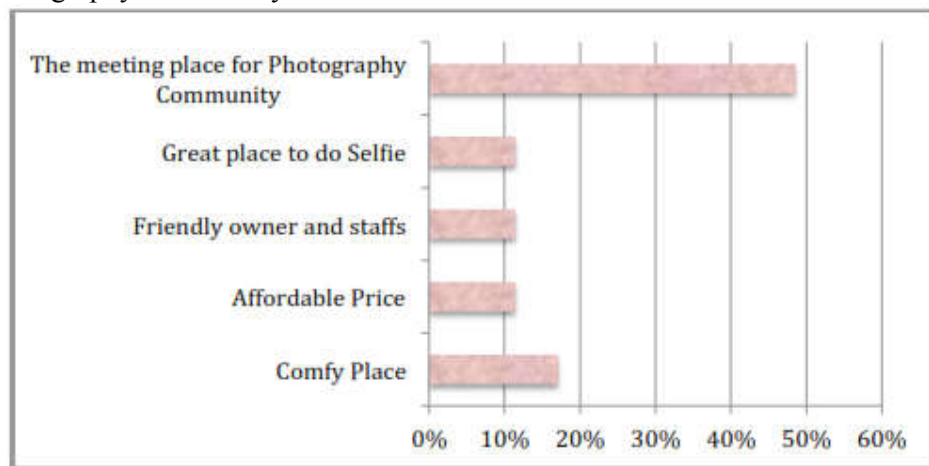
There are about 70 respondents completed this one-on-one IDI from mid-April until early June 2016. It has 13 open ended questions with some proposed choice answers given to the respondents. When the question is asked, and the respondents were confused how to answer these, there were some *self help tips* given to answer the questions, but the respondents still answer the questions based on their own opinions. Below are the summary of these one-on-one IDI answers:

The most important items when visiting any coffee shop are actually Friends with whom we spend in the coffee shop. It is 44%.



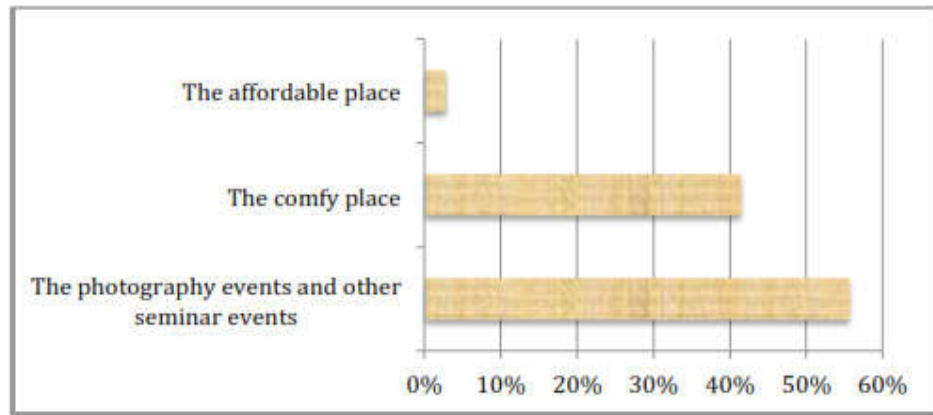
**Figure 3.7. The Most important items when visiting Coffee Shop**

The reasons why people visit Click Café are mostly due to Click Café has been the meeting place for Photography Community which is 49%.



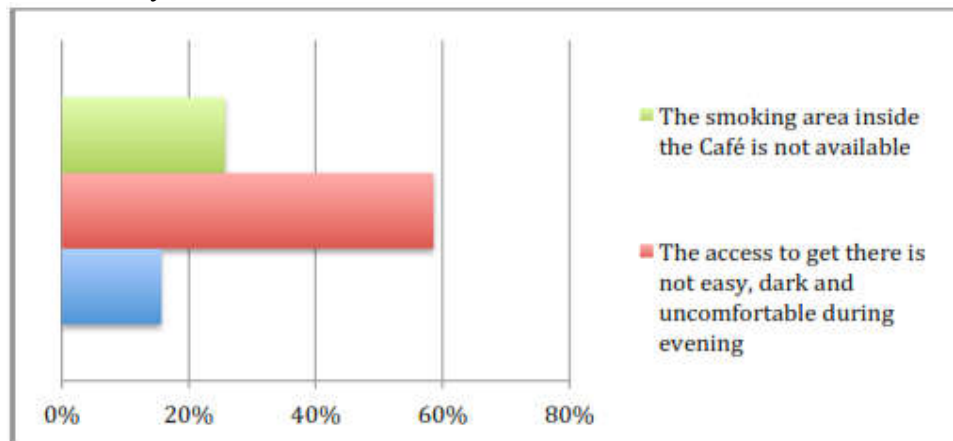
**Figure 3.8. The Reasons why People Visit Click Café**

The items that most people like about Click Café are the photography events and seminars conducted in this coffee shop. It is about 56%.



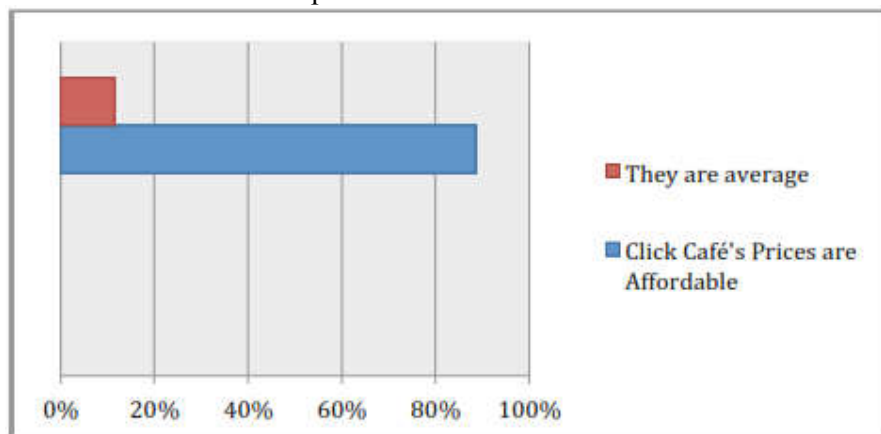
**Figure 3.9. What do the Respondents like from Click Café**

The next question is about what the respondents don't like from Click Café, and apparently most people do not like the access how to get to this coffee shop especially during night time since it is dark and very uncomfortable.



**Figure 3.10. What you don't like most about Click Café**

Then, when the respondents were asked about Click Café's price, most people answered that they are affordable. It is about 89% respondents.



**Figure 3.11. The Price of Click Café's Products**

The respondents have also answered that Click Café’s food and drink quality should be increased. 30% respondents have commented this.

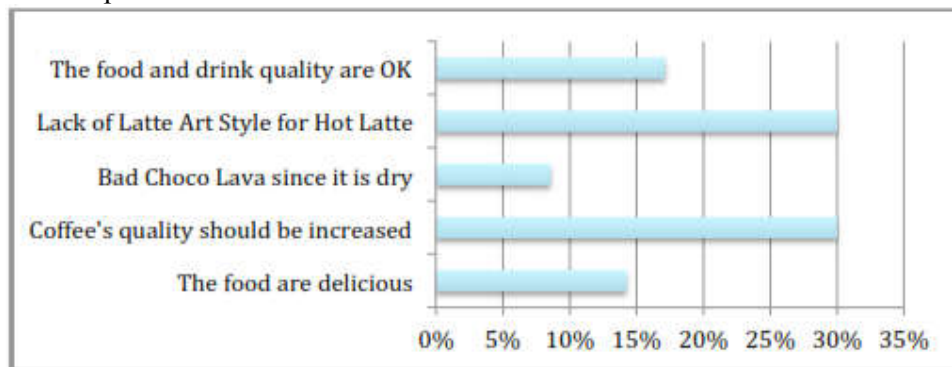


Figure 3.12. The Quality of Click Café’s Products

While the comment about the service of Click Café’s is more ‘relieving’, and the photography events are definitely expected and required by the customers.

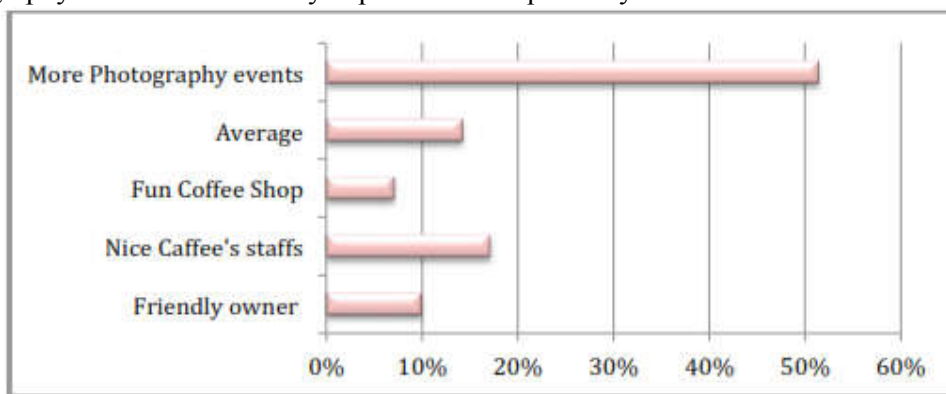


Figure 3.13. The Service of Click Café’s Products

The respondents have suggested Click Café to have the staffs to take more trainings so they can be dependable and knowledgeable.

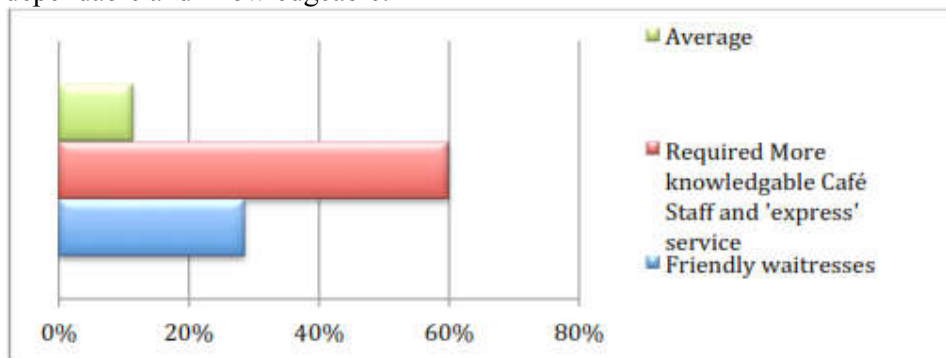


Figure 3.14. The Quality of Click Café’s Staffs

The respondents feel it is hard to find Click Café since the location is at the back of this SOHO Complex and has only one access. Also the parking fee is not cheap either.

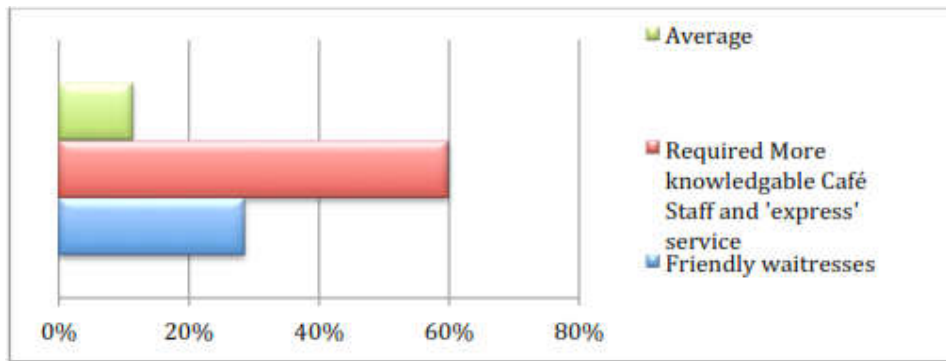


Figure 3.15. The Access How to get to Click Café

Most people love Click Cafés due to it is comfy to study and to work, and also the coffee shop's theme is very unique which is photography.

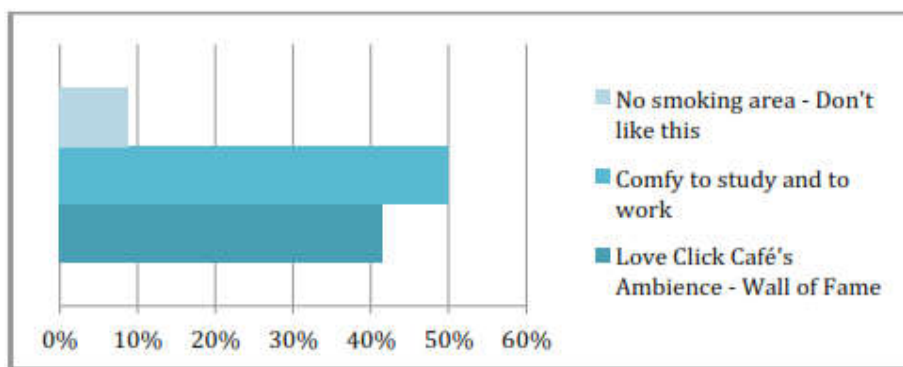
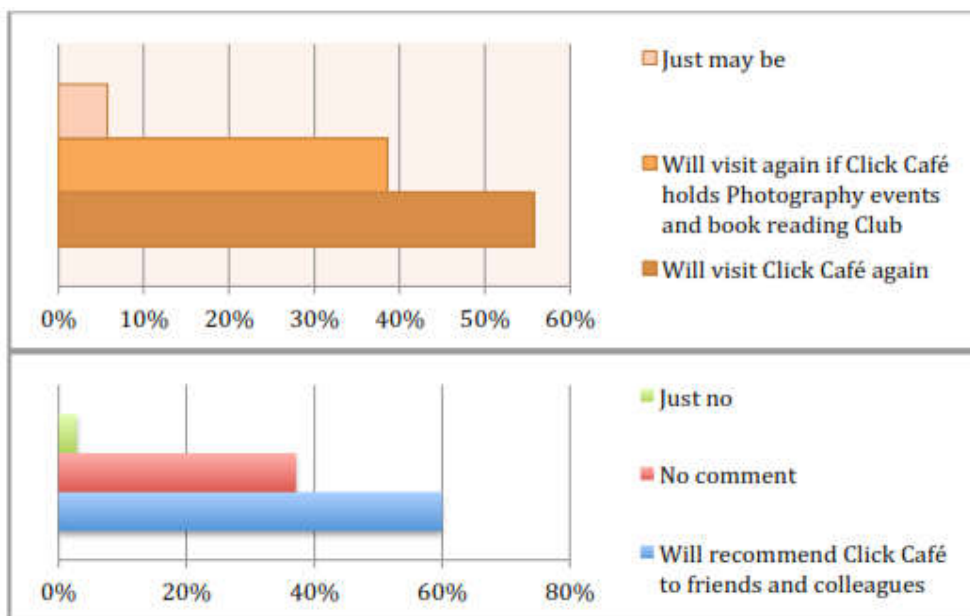
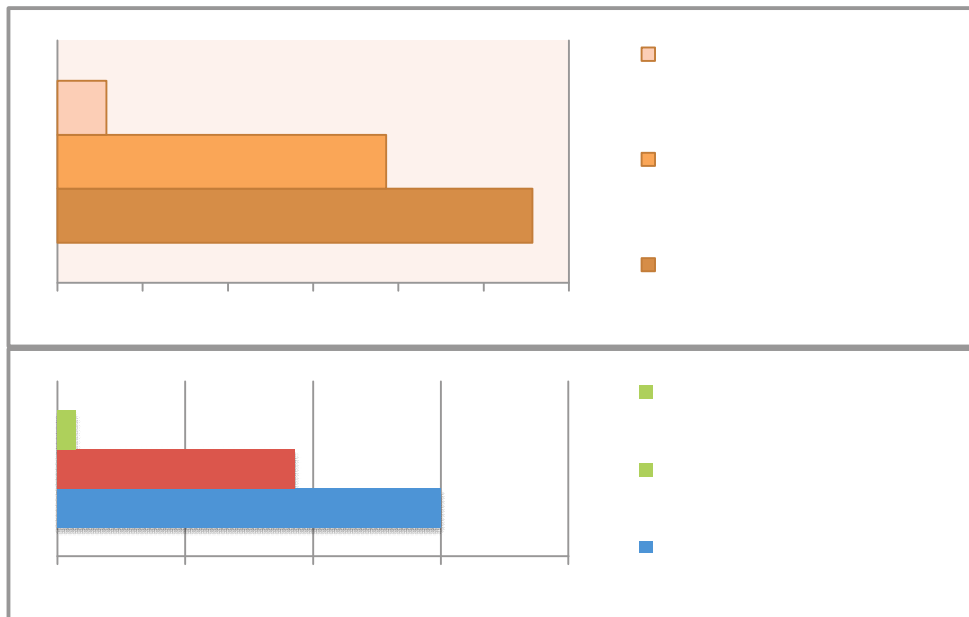


Figure 3.16. Click Café's Ambience

The customers would love to visit Click Café again and recommend this coffee shop due to they have some connection with the owners, and some customers from the photography community also would like to visit this coffee shop only if it holds some photography events or seminars.







**Figure 3.17. Customer's willingness to go back and recommend Click Café**

The last question from this one-on-one IDI was the suggestions from the respondents regarding the future improvement for Click Café, and the highest response is related to requesting Click Café to hold more photography events such as seminars, book reviews and others. The other suggestions are improving the competencies of the Barista and coffee drinks quality. The qualities of products are very important not only to increase the sales volume which leads to the increase of their profit margin, but also to increase the customers' awareness and loyalty towards Click Café.

As stated above the result of One-on-one IDI (*The complete of One-one-one IDI Result will be attached on Appendix. B*) combined with the result of Customer Satisfaction Survey would be used to generate the main questions or topic to be discussed in the Focus Group Discussion.

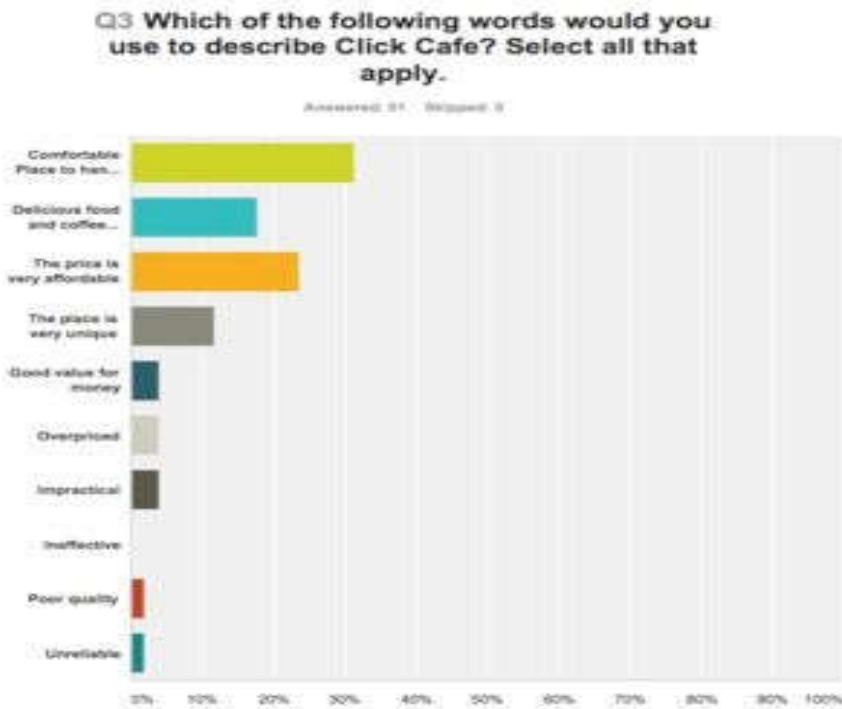
This Customer Satisfaction Survey result will support and complement the IDI data, and generate more accurate questions or topic to be discussed in the FGDs. Also, using this quantitative analysis will help the research to be more up-to-date and objective. This aspect is really important to be able to generate the more accurate result to find the most effective solutions. Below is the detail of the quantitative analysis using online customer satisfaction survey.

### ***Customer Satisfaction Survey***

This research was originally introduced by *NK Malhotra* on his book "*Marketing Research: An Applied approach*" in 2007. The second marketing research that has been conducted is using quantitative analysis approach which is online Customer Satisfaction Survey. It is an effective survey in assessing how satisfied the customers of Click Café are. Happy customers are definitely valuable to Click Café since they can increase the number of sales and create loyal customers by visiting this coffee shop repeatedly.

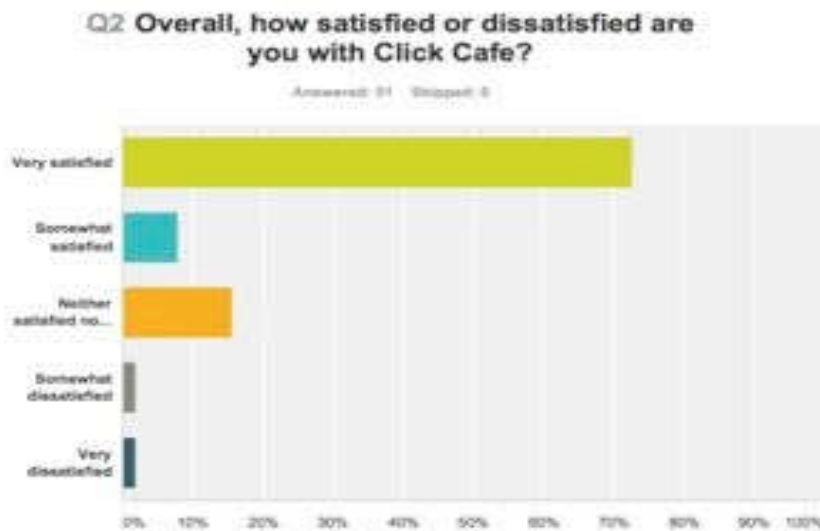
From the result of this survey, it can help this coffee shop to identify the satisfaction of the customers, and to track the number of happy and unhappy customers. On this case, the Customer Satisfaction Survey has been designed using Survey Monkey

(The complete Customer Satisfaction Survey will be attached on Appendix. C). (Source: NK. Malhotra, Marketing Research: An Applied Approach, 2007)



**Figure 3.18. The result of Customer Satisfaction Survey to describe what “CLICK CAFÉ”**

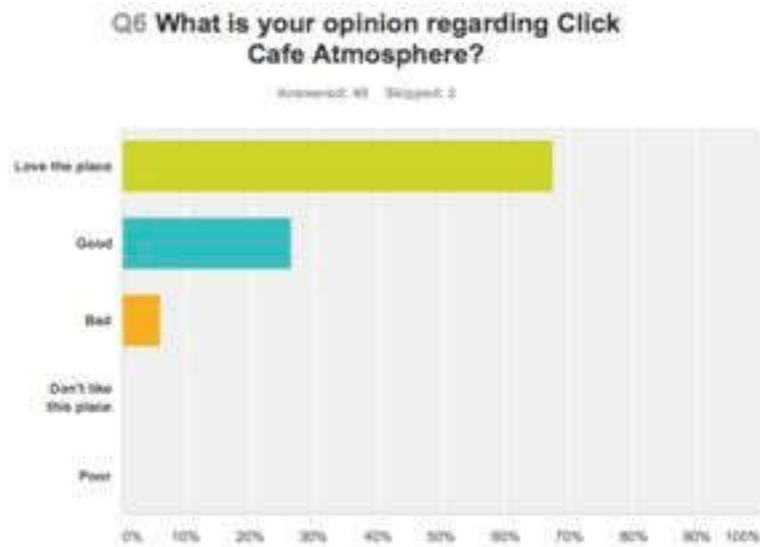
From the above result, there are many reasons and the percentage to describe how customer look at this coffee shop. This will support the question from one-on-one IDI which is “*Why do you visit Click Café?*” to be discussed further into the FGDs.



**Figure 3.19. The result of Survey regarding customer’s satisfaction**

Based on the above survey result, there are more than 70% happy customers for Click Café, and a few unhappy customers. Due to this is only quantitative survey, it is unable to track and follow up the reason why they are unhappy. But this survey will support the question from

IDI which is “*How is Click Café’s Services and Quality of Products?*” to be one of the sub-topic in the FGDs.



**Figure 3.20. The result of Survey regarding Click Café’s Atmosphere**

Almost 70% are happy with Click Café’s place and ambience. There are a few that do not like Click Café’s place, but it is unable to follow up to find out what the reason is. The result of this survey again has supported the questions to be followed up in the FGDs about “*How is Click Café’s Place?*”

In conclusion, the one-on-one IDI and the Customer Satisfaction Survey result will complement each other to produce more structured, accurate and objective questions or topics to be discussed further in the FGD, so it will create the more effective proposed solution.

(Source: Creswell, J.W. “*Research design: Qualitative, quantitative, and mixed method approached.*” 2003–Sage)

### ***Informal Focus Group Discussion (3 Different Groups)***

Another question has come up as to why should we conduct this FGD after we have completed both one-on-one IDI and Customer Satisfaction Survey? One of the reasons is due to FGD is more effective in soliciting feedback from the respondents to understand what they think about Click Café, how and why they think like that to Click Cafe.

Now, it is the time to get the feedback from the respondents regarding the questions or topic to be discussed in Focus Group Discussion. The choices of topic or questions were from One-on-one IDI and Customer Satisfaction Survey questions which have got the highest rate answers comparing to others. Also, it has been added some new questions in order to strongly support the data analysis.

The list questions are as follow:

1. a. Why do you visit Click Café ?
- b. Why do you visit any Coffee Shop?
2. How is Click Café’s Services & the Quality of Products?
3. How is Click Café’s Place?
4. Would you still buy from Click Cafe even though they increase the price for 25%?
5. What are the Priorities for Click Cafe to Improve their Quality and Services?

6. What do you think should be their Strategies to increase the Sales and Profit?
7. Do you have any other comments / suggestions?

These three sessions of FGD were divided based on the 'internal stakeholders' of this Café, their loyal customers who have frequently been in Click Café more than 5 times, and the last group which was chosen from random people who have not been to Click Café previously.

The first FGD were conducted on June 3<sup>rd</sup>, 2016 at 19:30–21:00 hrs. The members of FGD were the owners and Café's staffs (Pak Hendy, Pak Brawijaya, Pak Ady, Mas Tommy and Mas Fahmi)



**Figure 3.21. First FGD with the owner and the café's staffs (June 3<sup>rd</sup>, 2016)**

The second FGD were conducted in the café, as well with Click Café's loyal customers (Class Moms Group from Mentari International School Bintaro – Ibu Milka, Ibu Vera, Ibu Ratih, Ibu Hani, Ibu June and Ibu Angela). It was on June 11<sup>th</sup> during Breakfasting Ramadhan Dinner started from 19:00 – 20:45 hrs.



**Figure 3.22. Second FGD with Click Café's loyal Customers (June 11<sup>th</sup>, 2016)**

The last FGD that has been conducted was with random people, and it should be the first time for them to visit this coffee shop. This was conducted on June 17<sup>th</sup>, 2016 at 16:00 until 17:30 hrs. They were two new students from Indonesian State College of Accountancy (Mas Ardia and Mas Fikri) and three Tax Office Employees from BSD Office (Pak Eko, Pak Bimo and Pak Lucky).



Figure 3.23. Third FGD with Click Café’s new guests–Random people (June 17<sup>th</sup>, 2016)

The details of the summary result from these 3 FGDs are as follow:

No.	Questions	FGD #1	FGD #2	FGD #3
1	The reasons why they visit Click Café?	N/A	Great friends - Meeting other Moms	They will visit the café to study.
			Their Base Camp for Class Moms Meeting	Free WIFI
			Waiting place to wait for their kids from school since they live in Jakarta area – far away from the school.	Comfy Place
			WIFI Reasons	
			Comfy Place	
2	How are the service and quality of Click Café's Products?	N/A	The service is great due to they can talk to the owner if they have any complaints.	No Comment Yet
			Increase the quality of the products and services by increasing the skills of the staffs.	
			Experienced Barista is Urgently required.	
			Delicious and healthy food since it does not contain MSG, freshly homemade and halal.	

3	What do you think about the accessibility to go to Click Cafe?	No Problem since this place is owned so do not	No Problem. They already know the area, and they feel comfortable to stay there	Very Homey
		Far from home for the staffs but it is still manageable. OK.	Very Homey	Comfy as the Study place for the students
			Comfy	Too far to work there from BSD
			Feel Click Café is like their 2nd home	Will manage to visit there if there are some photography events or book review clubs etc.

No.	Questions	FGD #1	FGD #2	FGD #3
4	What do you think if Click Café increase the price until 25% of their current prices?	Must increase the price due to inflations	No problem as long as the quality is still good.	No problem.
		The price of Product materials are more expensive	Click Café Is still cheaper than others.	Click Café is still cheaper than others.
5	The priorities to improve the quality and services of Click Café?	Barista Skills	Supported the collaboration with ROSSO MICRO ROASTERY to be the consultant of Click Café.	Supported the collaboration with ROSSO MICRO ROASTERY to be the consultant of Click Café.

		Replacing the coffee machine from automatic to the manual ones in order to increase the quality of coffee drinks products.	This would attract Random People to come to the coffee shop.	This would attract Random People to come to the coffee shop.
		Planning to Re-layout for Cooking place on the 2 <sup>nd</sup> Floor.	Getting the other Communities to join and to be Click Café's loyal customers.	
		Coffee's Barison the first floor.		
6	New Strategies to boost the sales?	RE-CONCEPT:	Agree	Agree
		STP TO COMMUNIZATION		

		PROMOTION TO CONVERSATION (Strengthening connection in the communities with Social Media and more active in promoting Click Café with events for example. Group WA, Facebook Fanpage)		
		PLACE TO COMMUNAL ACTIVATION (More active and frequent in holding some communities events in Click Café Bintaro)		
7	Do you think Click Café will be successful in the future?		Very optimist that Click Café will be successful (more loyal customers, more profit and one of best coffee shop in Bintaro and BSD Area.	Very optimist that Click Café will be successful (more loyal customers, more profit and one of best coffee shop in Bintaro and BSD Area.
			It is important for Click Café to be engaged with many communities.	



### Figure 3.24. The Result of 3FGD

#### **Marketing Strategy: STP to New Wave Marketing**

Based on the above market research, there are important items that should be the main focus of Click Café's improvement which will lead to the achievement of their objectives. Click Café should focus on:

- The quality of products.
- The Service of Click Café's staffs.
- Strongly fostering and engaging the communities.
- Strengthening their Unique Selling Proposition as "Photography Themed" Coffee Shop.
- Attracting more random people by creating new Layout in Click Café area.

In regards to the quality of the products and the service of Click Café's staff, Click Café should increase the quality of Click Café's products, and improve the service of their staffs by collaborating with ROSSO MICRO ROASTERY to be the vendor and also the consultant for Click Café.



**Figure 3.25. ROSSO MICRO ROASTERY–Pasar Modern BSD**

Rosso is the coffee shop in BSD area which owns its roaster service inside their shop, and their owner is one of The Best Skilled Baristas and Coffee Experts in Indonesia. That is the reason why the owner of Click Café has requested to have the working collaboration with Rosso. The contract with Rosso will be for Consultation, Training, Quality Control Service, The Purchase of La Marzocco Coffee Machine and Mazzer Grinder including the Complete Barista Tools.

Rosso will be their supplier for the fresh local roasted coffee with special grade and higher quality to increase the coffee drinks quality. To improve the service and barista skills, Click Café has requested Rosso to provide the training for the staffs. Also, Click Café will replace their automated Seico coffee machine with the manual one. This is in order to improve the quality of Click Café's products, too.



Figure 3.26. La Marzocco Linea Classic EE2 Manual Espresso Machine and Grinder  
Mazzer

Click Café have used Social Media more frequently to strongly fostering and engaging with the communities they belong too. Click Café treats their customers as the subject of the communities, too by *“communitizing through listening, talking, energizing, and helping.”* (Kertajaya, Hermawan, 2008, *New Wave Marketing*, Gramedia Pustaka Utama). This coffee shop has started to use the social media to understand their customers. They do not need to spend their budget for making flyers or paying to advertise their coffee shops in the magazines or local newspapers.

The changes above are a part of Re-Concept process where there have been some shifted in the Strategic Marketing concept from Segmentation, Targeting and Product Positioning which involves Price, Product, Distribution and promotion to New Wave Marketing Concept. What does it really mean? It means that there is some shifting from Segmentation to Communitization in order to achieve the objectives since according to. Welcome to The New Wave Marketing Era in which there is the shifting from STP (Segmentation, Targeting and Positioning) to Communitization. (Kruseman, Eduard Nov 23, 2010 <http://www.slideshare.net/YESFoundation/trends-in-marketing-and-business-development>)

Accessed on August 5<sup>th</sup>, 2016.

Although it has just opened only a year ago. There are so many customers who would love to visit Click Café, due to their comfy and *‘selfie + wefie’* place, and some community events that are held frequently in Click Café. There is a strong bond between Click Café owners and Customers which are mostly due to Communitization as well.

What is actually the Communitization in regards to this Coffee Shop? In regards to Click Café, their communitization means their *“markets will be based on groups of people with the same passion or interest from all walks of life from anywhere around the world as communities.”* (Kertajaya, Hermawan, 2008, *New Wave Marketing*, Gramedia Pustaka Utama). It means coffee shop basically is about communities and building communities around us, and the owners of Click Café have used their community connection and networking to create *“Click Café Loyal Customers”*, for example with their involvement in their old classic VW Cars, School Moms or Parents School Groups organization and Photography Communities which have been the target of their market segment.

This is more powerful than segmentation itself due to Communitization on this case means connecting the communities where the owners’ belong to and have gained the trusts and love of communities so it is easier to market this business. This is *“low budget and high impact”*. There are also some suggestion from the respondents that will strengthen the opinions in regards to Click Café and Communitization which is more requests from the photography communities to Click Café to hold more events frequently and announce them online and offline. There are Facebook fan page, Instagram, Twitter, Whatsapp Broadcast Message, and

even creating the Whatsapp Group among the communities members as tools to promote these events. This is a part of fostering and engaging with the communities. They are listening, caring and talking to their customers. This is what New Wave Marketing called as Conversation. Promotion has been shifted to Conversation in this New Wave Marketing era. Below are the implementation:

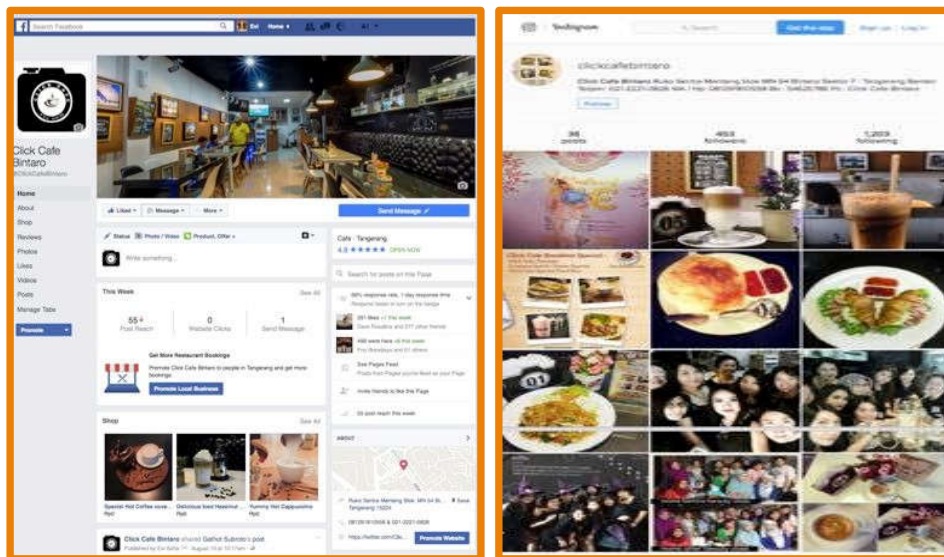


Figure 3.27. Click Café Facebook Fan Page and Instagram

The above Facebook Fan Page and Instagram are their conversation tools to ‘chat’ with their customers so it will be both ways instead of one way. This is the social media connection and building communities offline and online.

In order to succeed, Click Café must change the paradigm of segmenting the customers into communitization, promotion activities into conversation, and more active in creating the community events in Click Café frequently which is called communal activation. Click Café has started to implement this approach as per the announcement that has been posted to Click Café Facebook Fan Page and also Bintaro Photography Community members’ Facebook last week.



**Figure 3.28. ClickCafé –Communal Activation  
 (Monthly Photography Book Club Review Event)**

Due to some changes that will be done in Click Café, there will be some movement in Click Café’s product positioning, as below:



**Figure3.29.Click Café and other Coffee Shops–New Product Positioning for Click Café**  
 (Source: The Perceptual Mapping–First introduced and explained by Peter Drucker on his book *The Practice of Management* 2007).

Click Cafe will emphasize more on creating the “Premium” coffee with “Great Barista Skills”, a brand new high quality coffee machine, special higher grade local coffee beans and more Photography and other community Events frequently and on schedules. Now, the product positioning of Click Café will be similar to Saudagar Kopi Coffee Shop.

### ***Business Strategy Alternative Evaluation***

#### **Re-Layout**

The other improvement would be Click Café’s plans to Re-layout for more exclusive Coffee Bar and special cooking place. The coffee bar will be on the first floor to attract random people to visit Click Café, and getting other new communities to join to be Click Café’s loyal customers, too. Also, the cooking place on second floor to give some special space on first floor to strongly connect the image of “exclusive Coffee Bar” and a great “Photography Themed” Coffee Shop.



**Figure3.30.PlantoRe-LayoutClickCafé’s1<sup>st</sup> Floor**  
(Source: The Coffee Bar–La Marzocco California Coffee Shop-  
<http://www.lamarzoccousa.com/>)



Figure 3.31. Planto Re-Layout Click Café's 2<sup>nd</sup> Floor Kitchen  
(Source: <http://retaildesignblog.net/tag/serbia/>)

### Re-Costing

Since there are some investment in the Barista's skills, new coffee machine, change the local coffee beans to the higher grade and special high quality, it is required for Click Café to do the price strategy to optimize the value of the product and achieve the other objective which is increasing the profit. Also, there are some comparison has been done to compare Click Café's prices with other coffee shops around Bintaro. The results are this coffee shop's prices are much cheaper than others.

<b>minum kopi</b>	
espresso	26
espresso machiato	32
caramel machiato	32
piccolo	32
black coffee	29 / 32
cappucino	35 / 41
coffee latte	35 / 41
vanilla latte	35 / 43
caramel latte	35 / 43
affogato	50
kopi tubruk/kopi susu	29
siphon	45
plunger	45
slow coffee kinto	45
<b>minum lain</b>	
chocolate	35 / 39
green tea latte	35 / 39
iced tea	25
iced lemon tea	29
iced lychee tea	35
cookies & cream blend	43
strawberry smoothies	45
fresh orange juice	45
fresh strawberry juice	45
earl grey	32
green tea	32
wild berries	32

Figure 3.32. Prices of Kopi Manyar Coffee Shop (Source: Kicau Bintaro Magazine 2016)

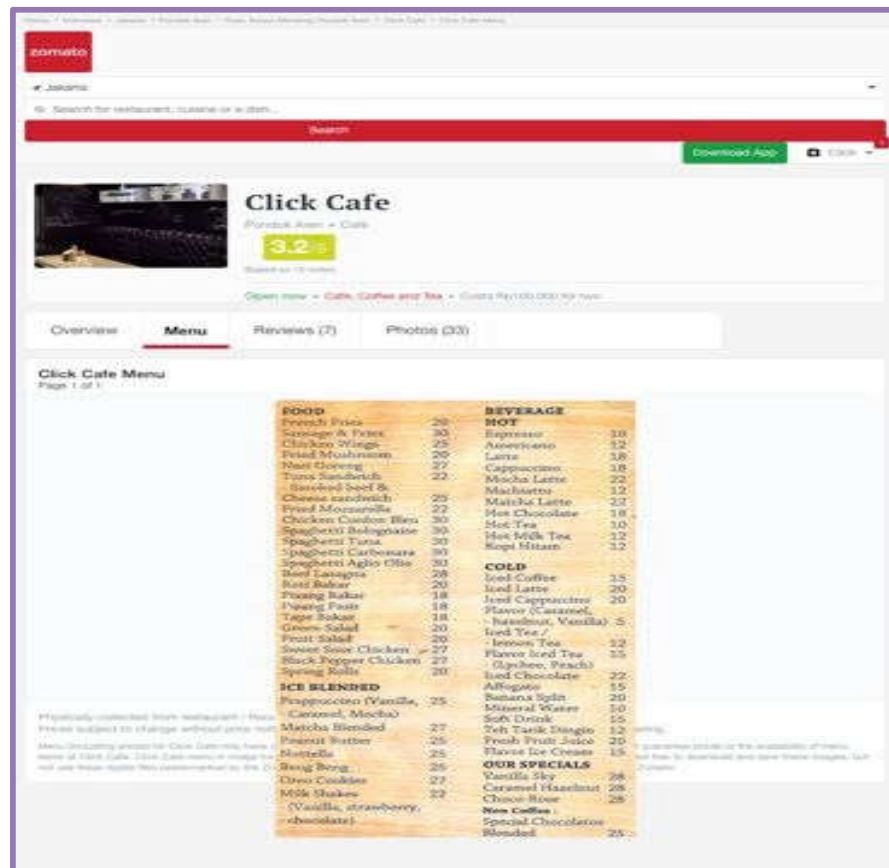


Figure 3.33. Prices of Click Café in Zomato (online flyer of Click Café)

There will definitely be some price changes to optimize the profit as long as Click Café keeps maintaining, increasing their quality of the products, and also improving their services as per the result of survey. The customers will not be affected by the increase of prices in Click Café even until 25% increase of the current prices.

### Conclusion and Implementation Plan

#### Conclusion

This final project is completed to provide a better understanding and analysis as to what happened with the current practice of Click Café since it has opened over a year ago. This analysis has covered the Internal (STP and Marketing Mix) and External (PESTEL and Competitor’s Analysis – Porter’s 5 Forces) Factor Analysis and their SWOT method in order to enable us to view the issues that Click Café is facing comprehensively so it can develop the marketing strategies which can help Click Café to achieve below objectives:

1. To find out the customers’ opinion regarding Click Café’s products and services.
2. To evaluate the current situation of Click Café based on the customer’s opinions.
3. Finally, the logic further objective would be to come up with the marketing strategies which enable Click Café to solve the issue they are facing.

After conducting the marketing research quantitatively and qualitatively, there are some aspects that Click Café should focus on in order to sustain its business growth:

- The quality of products.
- The Service of Click Café’s staffs.
- Strongly fostering and engaging the communities.

- Strengthening their Unique Selling Proposition as “Photography Themed” and “Community” Coffee Shop.
- Attracting more random people by creating new Layout in Click Café area. It can be concluded that there is the shifting of Click Café’s marketing strategy from STP (Segmentation, Targeting and Positioning which include Price, Place, Promotion, and Distribution) Method to New Wave Marketing (Communitization, Conversation and Communal Activation) to response to the above concerns. Also, there are some alternative business strategy that we recommend which are “Re-Layout” and “Re-Costing”. These are the strategies that will make Click Café a successful business in Restaurant and Coffee Shop Industry.

### Implementation Plan

There are main action items as the implementation plan for Click Café to be successful in this coffee shop industry as follow:

- Strengthening the Unique Point of Sales as “Photography Themed” Coffee Shop and “Community” Café thru:

- Communitization
- Conversation
- Communal Activation



- **Post more information about Click Café in Social Media including Group WA from new menu and new events.**
- **Weekly events for Photography Seminars / Book reviews / Classes.**
- **Monthly Women Talk Session or Classes.**
- **The Total Budget for these events are Rp. 2,500,000 for 5 months Period.**

- Upgrading the Coffee Bar to be more Exclusive / Premium than before: Click Café has signed the contract with Rosso Micro Roastery to provide the upgrading coffee bar area. They are from the Consultation for daily operations of Click Café for 6 Months period after the new opening after renovation and training for Click Café Staffs to be Barista, Quality Control Service during the daily operations, and Coffee Machine purchasing process.

Below are the total budget:

1. Consultation for daily operations of Click Café & Training for Click Café’s staff to be a Barista	Rp. 20,000,000.
2. Quality Control Service during daily Operations	Rp. 5,000.000.
3. La Marzocco Coffee Machine Linea Classic EE including the Grinder, Consultation, Training& daily Operations Quality Control.	<u>Rp. 115,500,000.</u>
<b>Total Budget</b>	<b>Rp. 140,500,000.</b>



- **Re-Layout**

- **1<sup>st</sup> Floor Renovation to create Exclusive Coffee Bar.**
- **Enlarging more space in front of main door for smoking area with the Fan.**
- **2<sup>nd</sup> Floor Kitchen Area and Prayer Room Area Renovation.**

Until this time, Click Café is still searching the contractor to complete the above projects. The budget for these renovations for first and second floors are for the amount of Rp. 350,000,000.

- **Re-Costing**

The resources that will be required for this phase is only the data from the total cost of all expenses, the calculation of the profit expectation, and also the service charges estimation to get the products. There are few items that Click Cafe should consider when setting up the price for the products:

1. Knowing all the cost of the products in order to find out the profit that we expected.
2. As per the survey, the customers of Click Café do not mind when this coffee shop increase their prices until 25%.
3. Click Café should check regularly the competitors' price. In order to succeed, Click Café should provide more value to their products much more than the competitors' values.
4. Odd number pricing makes it more interesting to Click Café's target customers. They see Rp. 39,500. is more appealing than Rp. 40,000.

(Source: <http://quickbooks.intuit.com/r/pricing-strategy/things-consider-pricing-your-product/>)

The Timeline planning for the above action items are as follow:

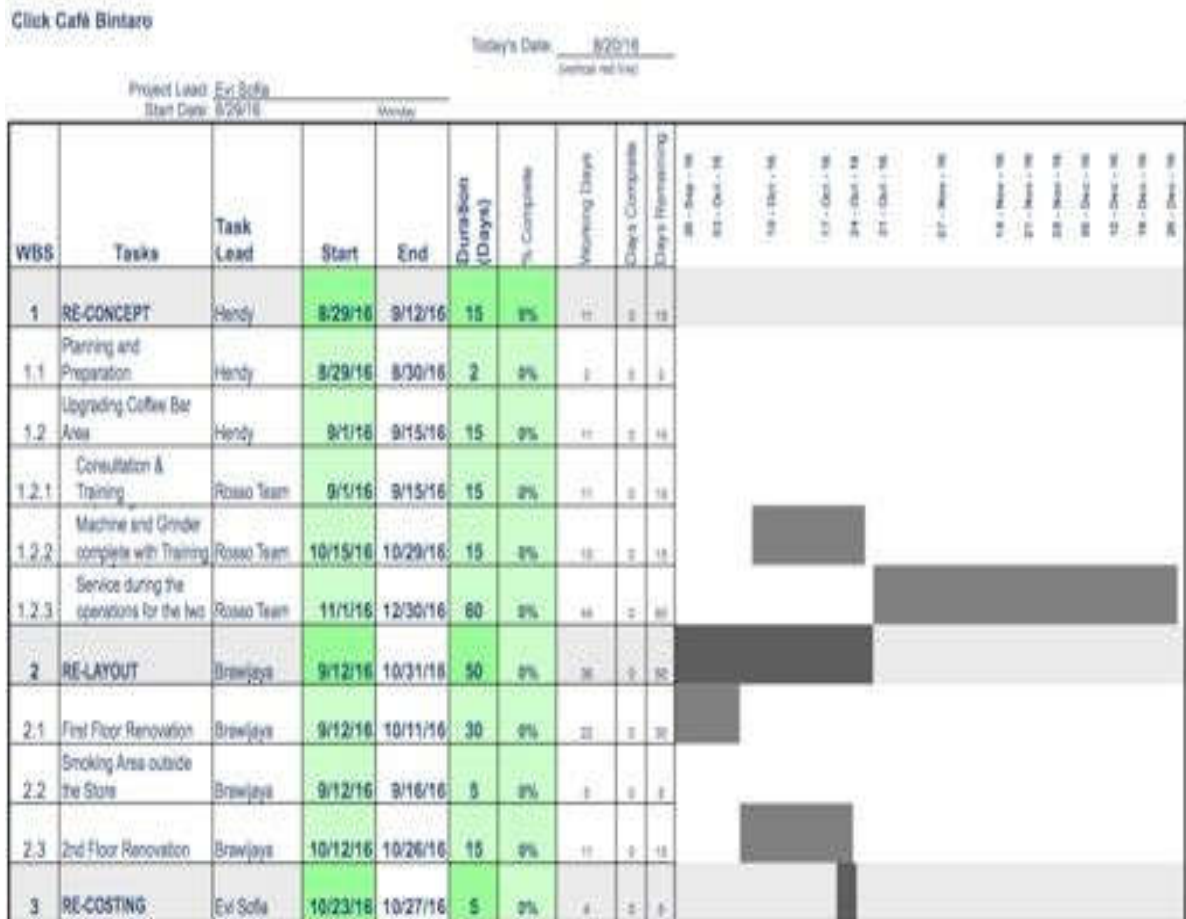


Figure 4.1. The Project Timeline

In implementing these marketing strategies, it will benefit Click Café in achieving their success.

## AN APPLICATION OF PROBLEM BASED LEARNING ON ACCOUNTING SYSTEM SEMINAR COURSE

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### Abstract

This research aims to describe how the application of problem based learning can improve student skills in solving problem on accounting system in small and medium size enterprises, and encourage student social skill. Participants of this research are eighty accounting department students who take accounting system seminar course. This study is designed as classroom action research, and implement Curt Lewin model of classroom action research. Result of this research demonstrates the implementation of PBL improve student skill in solving problem facing small and medium size enterprises as well as improve student skill in preparing and presenting their report.

**Keywords:** Problem Based Learning, Action Research, Accounting System Seminar Course

### Preliminary

Accounting system seminar is a compulsory subject for undergraduate student who study at accounting department in Universitas Panca Marga. The objective of the course is to provide student with knowledge in accounting system applied in a company, produce report related to the application and present it in the classroom. Focus of the report should be problem in accounting system facing small and medium enterprises (SME). By enrolling in this course student will have problem solving skill in accounting system and personal skill of communicating their ideas. In general, accounting system can be defined as the forms, scripts, procedures and tools which are used to process the data about the economic activity. The purpose is to produce a report used as feedback needed by management to control their business. The report is also useful for shareholders, creditors, and government agencies to assess the results of the operation. Prerequisite of the course is accounting system. Students who take accounting system seminar should have been passed accounting system course.

To achieve this objective course, the lecturer needs to implement learning models which help the students to have the skill. At the beginning of the course, the students were given tasks by the lecturer to observe and interview with small and medium enterprises on issues related to accounting system, and then report their finding to the class.

However, this teaching strategy does not work well. It is found from the preliminary study conducted in the first semester of academic year 2014-2015 that the students take a lot of time to identify and analysis and give alternative solution of the problem facing SME. This weakness make the students could not present their report timely. Less than fifty percent of the student did not produce their report properly. Student ability to prepare report related to the problem was less than expected. Accordingly, students often have difficulty in accomplishing the academic task. They still lack of skills in identifying problem facing a company in its accounting system, solving the problem, and communicate the cases in front of the class. As a result, some students have to take remedial in the next semester. These problems partly arise because the teaching model implemented by the lecturer does not encourage students to get the skills. Considering this weakness, we structure problem based learning to help student have skill according to the objective of the course. The implementation of this model to improve student skill is based on literature indicating problem based learning can help student to have thinking and problem-solving skills (Arends,

2012). Therefore the purpose of this research is to describe how the application of problem based learning can improve student skills in solving problem on accounting system in small and medium size enterprises, and encourage student social skill.

### **Problem Based Learning**

Problem-based learning (PBL) is a learning model which encourages knowledge construction by starting each learning experience with a complex real-life problem that is typically presented to a small group of students in a tutorial setting (Smith & Harland, 2009). Students take responsibility for their own learning as they identify what they already know about the problem and then ascertain what they need to find out, what questions are relevant to their inquiry and what actions they need to take. Members of the student team tend to work independently as they research different aspects of the problem before bringing their findings back to the group and to the tutorial in order to co-construct new knowledge (Smith & Harland, 2009). Problem-based learning aims at promoting student-centered learning and enhancing the development of students' higher-order thinking and fostering students' social skills. The latter allows students to function as a member of a team and to learn cooperatively by sharing his or her newly acquired knowledge. In PBL, students work collaboratively to solve ill-structured problems, identify their learning needs, and locate relevant information to address their needs. Students first encounter a problem followed by a systematic inquiry and reflection process (Barrows & Tamblyn, 1980).

The problem comes first to stimulate and focus students' curiosity leading to an exploration and activation of pre-existing knowledge. Guided discovery with a tutor helps students to identify the edge of their knowledge, a zone between what they know and what they need to know. Discussion, self-directed learning, elaboration, timely feedback and reflection are processes characteristic of small-group PBL (Norman & Schmidt, 1992).

Studies in cognitive psychology envision three roles for PBL: (1) the acquisition of factual knowledge in a context in which it will ultimately be used; (2) learning general principles and concepts in such a way as to facilitate transfer to new, similar problems; (3) the acquisition of prior examples that can be used for problem solutions on the basis of similarity or pattern recognition (Norman & Schmidt, 1992).

PBL initially was promoted as an approach to developing overall problem-solving skills (Barrows & Tamblyn, 1980), however, subsequent research has shown that problem-solving skills and expertise are highly content and context dependent and do not generalize across subject domains (Norman & Schmidt, 1992).

Problem-based learning has been widely used in both medical and health education courses (Barrows & Tamblyn, 1980, Caplow et al. 1997) as well as in non-health disciplines such as management education (Sherwood, 2004), business communication (Pennel & Miles, 200) and accounting (Johstone & Biggs, 1998).

Arends (2012) summarize five phases of problem-based learning and required teacher behaviors for each phase as presented in Table 1.

**Table 1: Syntax for Problem Based Learning**

	Phase	Teacher Behavior
1.	Orient students to the problem	Teacher goes over the objectives of the lesson, describes important logistical requirements, and motivates students to engage in problem solving activity.
2.	Organize students for study	Teacher helps students define and organize study task related to the problem.
3.	Assist independent and group investigation	Teacher encourages students to gather appropriate information, conduct experiments, and search for explanations and solutions.
4.	Develop and present artifacts and exhibit	Teacher helps planning and preparing appropriate artifacts such as reports, videos, and models, and helps them share their work with others.
5.	Analyze and evaluate the problem solving process	Teacher helps students to reflect on their investigation and the process they use.

Source: Arends (2012:411)

### Research Method

This research was designed as a classroom action research. Mills (2003) define action research is any a systematic inquiry conducted by teacher researchers, principals, school counselor, or other stockholders in the teaching /learning environment to gather information about how their particular schools operate, how they teach, and how well their students learn. The purpose of an action research is

Participants of this research are 80 students who take accounting system seminar course in the odd semester of 2015-2016 academic year. They are the seventh semester students of Accounting Department of Universitas Panca Marga located in Probolinggo city.

This research uses classroom action research method of Kurt Lewin model. This model consists of four components: 1) planning; 2) action; 3) observation and 4) reflection. In the planning phase, the researchers orient students to the problem and organize students for study. The researchers go over the objectives of the lesson, describe important logistical requirements, and motivate students to engage in problem solving activity. Researchers also help students define and organize study task related to the problem. The academics tasks that student would be accomplished are identify, analysis, and solve problem in accounting system facing small and medium size enterprises, prepare a report and present their finding in the classroom. To accomplish this task the students are divided into small group of five students. They will do the academic task collaboratively. In the action phase, the researchers assist independent and group investigation. The researchers also encourage students to gather appropriate information, conduct experiments, and search for explanations and solutions. The next stage is observation. This was conducted by monitoring how the students work. The students identify the application of accounting system in small and medium size enterprises

and then try to find problem that need to be overcome. They prepare a report to be presented in the classroom.

## **Result and Discussion**

### *Improving students' ability to solve the problems*

The application of problem based learning in accounting system seminar course has provided the students with ability to solve problems facing small and medium size enterprises. Before the application of problem based learning in accounting system seminar course, most students have some difficulty in identifying, analyzing and solving accounting system problem. Based on observation conducted before the application of this teaching model, students have no enough experience to identify problems. However, after the application of problem based learning most students skills in identifying, analyzing and solving problems have been improved. Most of the students can accomplish the task properly. This is possible because at the start of the problem based learning lesson, researchers communicate clearly the aims of the lesson, established a positive attitude toward the lesson, and describe what the students are expected to do. For example the researchers explain that the aims of the lesson is students would be able to produce a report based on problem facing small and medium size enterprises on accounting system, and discussing the problem and the solution in the classroom. The topic of the discussion is the process of preparing the financial statement, software usage in preparing the financial statements, the health practice in the company. The researchers also explain the model's processes and procedures in some detail. With the explanation the students have clear understanding about what to do.

In addition, improving the students skills in solving a problem is also encouraged by the researchers who develop collaboration skills among students and help them to investigate problems together, and assist the group to investigate the problems.

### *Improving students' skill in preparing and in presenting the report*

The implementation of problem based learning in accounting system seminar course has improve students skill in preparing the report related to accounting system problem facing small and medium size enterprises. All groups engaged in this learning process accomplish the academic task of preparing a report of a case on accounting system. Before the implementation of problem based learning model, the students have some difficulties in preparing a report. The lack of skill in writing is a burden for students to prepare the report. The students have difficulty in organizing data as result of their observation and interview with the owner or management of SME. The researcher solve the problem by assisting the students in writing the report step by step.

Presenting problem and the solution encourage discussion in classroom. Discussion is thought to be a useful teaching technique for developing higher-order thinking skills that enable students to interpret, analyze, and manipulate information (Arends, 2012). The students explain their ideas and thoughts, rather than merely recount or recite memorized facts and details. When they were presenting their report, they explain the problem, how data were collected and analyzed to produce solution. Students support idea with evidence, where their opinions are subject to challenge by their peers as well as the lecturer researchers, and where the lecturer's ideas are equally open to criticism.

This activity encourages students to engage in a discussion. During discussion the students are not passive recipients of information that is transmitted from the other. Rather, the students are active participants. As they interact during the discussion, students construct an understanding about the topic by expanding each student information on the topic with information from other student. The discussion also fosters different perspectives on a topic; provide opportunities to present alternative ideas about a topic; provide opportunities for other

student to criticize, accept, or refute these alternative ideas; and encourage mutual modifications among the students' opinions to produce a group decision or consensus. Group interaction is the important component for each of these as it shapes and directs the exploration of a topic (Larson, 2000).

### Conclusion and Suggestion

Based on result of the research, it can be concluded that the implementation of investigated group model is extremely help the students in understanding the problems of Accounting System implemented by SME. Lecture is a facilitator who assist students actively for solving their problem. The small groups used in PBL encourage the students to work collaboratively in expressing their opinion, holding out their argument about the problems during discussion in the class. This method also makes the students more active in discussion and solving the problem, and can create more conducive environment in the classroom.

This method can improve students' understanding on accounting system. However, there are considerations when applying PBL. PBL methods should be implemented only after basic technical accounting knowledge has been acquired, appropriate problem solving strategies should be explicitly taught, and innovative approaches for teaching problem solving skills should be encouraged. A teacher teaching in PBL classes should possess expert technical knowledge of the subject area.

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## EDUCATION AND ENVIRONMENTAL EFFECT OF COMPETITIVE ADVANTAGES AND PERFORMANCE OF WOMEN ENTREPRENEURS IN MALANG

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### Abstract

In the culture of Indonesia, where the position of men in the public realm is more dominant than the women, began to crumble slowly. Changes in culture and social system gives greater space for women to participate economically in society. Research involving 120 respondents in the city of Malang women entrepreneurs is aimed to determine the effect of education and the environment against the competitive advantage and business performance. Data analysis was performed with path analysis, and generate some conclusions. Environmental contribution to competitive advantage is greater than education. Good business performance is driven by the high competitive advantage

**Keywords:** education, environment, competitive advantage, business performance, business women.

### Introduction

Entrepreneurial and business world in this decade is no longer dominated by men. Based on research conducted by the National Foundation for Women Business Owners (NFWBO), the number of women business owners (women-owned business) in the world increased by 31.5% between 1997 and 2002. In many countries the average growth of women entrepreneurs is higher than average growth male entrepreneurs (Reynolds et al., 2002). Many well-known companies with the characteristics of entrepreneurs, their motivation, family background, educational background, work experience, as well as the problems of employers of men and women.

The patriarchal system that has long been grown in a culture of Indonesia, where the position of men in the public realm is more dominant than the women, began to crumble slowly. Changes in culture and social system gives greater space for women to participate economically in society. In this case Tinaprilla (2007) stated that the phenomenon of women's businesses is the impact of the program by the government to improve gender equality. Women were given the role of a more plural and enjoy a higher education. Thus, many women who appear and was instrumental in the life of the state, nation and society that one of them is as a woman entrepreneur.

Performance of a company depends on the fit between the collection of own resources and external environment. If there is good agreement between the resources with the outside environment, the company will gain superior performance, but if conformity is bad, then the performance will be worse (Hisrich, 2008). Women entrepreneurs can create a business that will provide the basis for the company's high performance for a long period through sustainable competitive advantage. Competitive advantage is a factor which a company may be superior than its competitors in a competitive environment.

The potential success of women entrepreneurs and their equal access of women to men, it is necessary and important for the government to formulate strategies and develop programs to empower women in the economic field, especially as an entrepreneur. Although structurally



and culturally women are not sufficiently fair treatment, and even personal characteristics, women also do not quite have the confidence to succeed, but the reality shows that the number of women who choose a career as an entrepreneur and proven successful in increasing numbers (Jati, 2008).

### **Theoretical foundation**

Entrepreneurship is a dynamic process in creating additional wealth. Wealth generated by individuals who bear the main risk in terms of capital, time, and / or commitment to a career or provide value for some product or service. Products or services may be visible or may not be unique, but in many ways the value will be generated by a businessman with receiving and placing the skills and resources needed this.

### **Education**

Education limits suggested by experts depending on the viewpoint used. In Act No. 20 of 2003 on National Education System stated that: Education is a conscious and deliberate effort to create an atmosphere of learning and the learning process so that learners are actively developing the potential for him to have the spiritual power of religion, self-control, personality, intelligence, morals noble, as well as the skills needed him, society, nation and state. Education takes place continuously or lifetime implemented in a variety of environments both an environmental family, school and society. According to Umar T (1995), classified in three groups, namely education informal education, formal and non-formal.

### **Environment**

Environmental dynamism shows the level of turbulence products, technologies and demand for the products on the market (Miller, 1998). A company in the business environment, as well as in other organizations, is the pattern of all external conditions and influences that affect the life and development of the company. Relevant environmental affect on operations strategy decisions. Pearce and Robinson (1991) identified three types of business environment is an environment far as economic, social, political, technological and ecological, industrial environments such as barriers to entry, power suppliers, buyer power, substitutes, and competition, and the operating environment such as competitors, creditors, consumers, workers, and suppliers.

Porter (1980) suggests that the business environment can be divided into two categories: external and internal environment. The external environment is divided into two categories namely: general environmental and industrial environments, while internal environment are aspects that exist in the company. Environment far include political factors, economic, social and technological. Environmental industry include aspects contained in the concept of competitive strategy (competitive strategy) covering aspects of barriers to entry, aspects of the bargaining power of suppliers, bargaining power of buyers aspect, the aspect of the availability of substitutes and competition aspects in the industry. Internal environment includes aspects of finance, human resources, marketing, operational and management aspects. The business environment can affect all aspects of the business both at the level of organizations and individuals. Important components of the internal environment, namely:

1. Resource
2. Capabilities
3. Core Competencies

### **Competitive Advantage**

A company is said to have a competitive advantage when the company has something that is not owned by a competitor, do something better than other companies, or be able to do something that is not able to be done by another company (Mudrajad Kuncoro, 2004). Competitive advantage as defined by Man, et al., (2002) is the knowledge (knowledge) adequate, expertise (skills), and the ability (ability) are adequate to meet the needs, such as the effective performance of a job. Baum et al., (2002) developed a number of variables that explain the competitive advantages of business, in example knowledge, cognitive ability, self management, administration, human resources, decision skills, leadership, opportunity recognition, and opportunity development.

Competitive advantage is the company's ability to formulate strategies for achieving profit opportunities through maximizing revenue from the investments made. There are two basic principles that need to be owned by a businessman to gain a competitive advantage that is the view of customer value and uniqueness of the product.

### **Performance**

Hunger and Wheelen (2001) argue that the performance of the company is the end result of corporate activities. The measurements are used to assess the performance is dependent how the organizational unit will be assessed and how the objectives will be achieved. The target set at the stage of strategy formulation in a strategy management process (with respect to profitability, market share, and the measurement of costs) should be used to measure the performance of the company during the implementation of the strategy. The company's performance is measured by respondents' assessment and market share, the self assessment relative to competitors, Return On Assets (ROA), sales growth (growth in sales), and the success of new products (Astuti, in Perspective, 2003).

### **Research Methods**

This type of research is explanatory research. According Sugiyono (2005) study by the level of explanation is research that intends to explain the position of the variables studied and the relationship between one variable to another variable. This research includes studies associative or relationship, with the research method used was survey method using a questionnaire instrument as a means of data collection. The time horizon of this study was cross sectional namely research or data collection at a certain time span. The population in the study distinguished between the target population and the population of access. Target population in this study were women entrepreneurs. While the population in this study is the access of women entrepreneurs in Malang, which has a small License with net worth or paid up capital in the deed of establishment / change with a value of up to US \$ 200,000,000.00 (two hundred million rupiah). Total population known for certain access based on data obtained from the Department of Cooperatives and SMEs Malang. Tools of analysis in this study using the Path Analysis. According to Hair et. al. (2006) determination of the number of respondents who required that a proportional sample as many as 14-20 times the number of variables. Variables examined amounted to 4, then the number of samples used in this study were at least 80 respondents and the number of respondents who obtained is 120 entrepreneurs. The research variables were four, two exogenous and two endogenous. Exogenous variables are education (X1) and the environment (X2), whereas endogenous variables are the competitive advantages (Z) and performance (Y). Analysis of the data used in this study using path analysis (Path Analysis) with the help of calculation by SPSS.

## Research

### Characteristics Sample

Data were obtained from questionnaires distributed to respondents. The number of respondents involved in this study amounted to 120. Characteristics of respondents in this study consisted of districts of origin, commodity, age, marital status, years of becoming an entrepreneur, the activity before becoming entrepreneurs, the main source of family income, number of employees, as long as the investment fund, the reasons starting a business, the problems in the business. The characteristic feature of the respondents below is a representation of the population. While the diversity of characteristics of the respondents could be a source of differentiation plays fourth assessment of the variables studied.

Distribution of respondents in five districts, mostly from districts Lowokwaru ie 48 respondents (40%), while in four other districts have almost the same proportion is about 14-20 respondents or 11.7% - 16.7%. The large number of respondents from district Lowokwaru because in this region is an area with a number of college education at most, so the business potential in this region is the greatest.

Commodity option work done by women in Malang most in the segment of food or beverages (34.2%) and followed by convection or garment (15.8%). In addition to these two main commodity, the work done is craft commodities (10.0%), beauty (9.2%), trade (10.8%), contractor (5.0%) and other commodities (15%) as children's education, maternity hospitals and laundry services.

Composition of respondents by marital status, most were already married by the number of respondents 109 (90.8%). Whereas in 11 others unmarried status (5.8%) and widowed (3.4%). The distribution of respondents by age at most in the range of 41-50 years with a total of 47 people (39.2%) then the next group is aged up to 30 years (13.3%), 31-40 years (33.3%), and more than 50 years (14.2%). The high number of respondents aged 31-50 years could mean that among these economic problems have started to become a major problem in the family, so many women who decide to take to open a business that can support the family economy. The number of respondents based long been the most widely ranged businessman 6-10 years (35.8%). The new small part of doing business for less than one year (5.0%), while 26.7% of respondents had been running the business more than 10 years.

The education level of respondents who studied are diverse ranging from elementary school (SD) to graduate S-2. Educational composition of respondents uneven with dominance at the level of high school education and diploma, amounting to 78 people (65.0%). Before becoming an entrepreneur, most of these women are working purely as housewives (47.5%), while on the other is never an employee or employees (30.8%) and 21.7% was recently completed to be a student or students ,

Business carried on female entrepreneurs, most of the sources of investment are from the husband (42.5%), get a loan from banks (31.7%) or assisted by other family members (10.8%). Reasons behind among women become entrepreneurs for two that want to find a side income (38.3%) or economic factors (29.2). Also found an excuse to continue the family business (9.2%). The issue is currently running the business entrepreneurs is the difficulty in dividing time between attempted and responsibilities in the family (54.2%). Problems trouble finding capital loans and develop innovation in their business will still be a problem faced by women entrepreneurs.

**b. Path Analysis**

Estimation path coefficient which shows the influence of education and environment variables for competitive advantage is done by using multiple linear regression analysis. Path coefficient obtained from the standardized regression coefficients (beta). Table 4.12 describes the test results simultaneously and partially the effect of the independent variables on competitive advantage. In the F test values obtained calculated F= 53.421 (greater than F-calculated) and coefficient of determination of 47.7%. This explains that the test results simultaneously obtained the significant influence of the two independent variables on competitive advantage with a contribution of 47.7%.

**Table 1 Result of Path Coefficient Test to Competitive Advantage**

VARIABLE	Beta	t-calculated	p	EFFECT
education	0.367	4.902	0.000	Positive and significant
environment	0.443	5.923	0.000	Positive and significant
critical value :				
$(R^2) = 47,7\%$		$t_{table} = 1,986$		
F-calculated = 2,042		= 53,421		$F_{table} =$

Partial effect of education on competitive advantage with path coefficient of 0,367 positive effect on the competitive edge. T-test results for this path coefficients are significant. It is evident from the value t count = 4,902 bigger than t table = 1.986 ( $p < 0.05$ ). This result explains that the competitive advantage of diversity can be explained by education.

Partial effect of the environment on competitive advantage with path coefficient of 0.443 positive effect on the competitive edge. T-test results for this path coefficients are significant. It is evident from the value t count = 5.923 greater than t table = 1.986 ( $p < 0.05$ ). This result explains that the competitive advantage of diversity can be explained by the environment.

Estimation path coefficient which shows the influence of the variables of education, environmental and competitive advantages on the performance of the business is done by using multiple linear regression analysis. Path coefficient obtained from the standardized regression coefficients (beta). For more details, description of the regression analysis results obtained are presented in Table 2

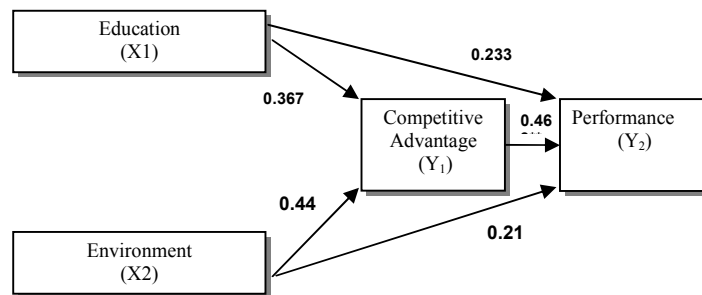
**Tabel 2 Result of Path Coefficient Test to Performace**

VARIABLE	Beta	t- hitung	P	PENGARU H
Education	0.23 3	3.288	0.001	Positif dan signifikan
Environment	0.21 7	2.952	0.004	Positif dan signifikan
Competitive Advantage	0.46 9	5.884	0.000	Positif dan signifikan
Critical Value				
$(R^2) = 61,5\%$		$t_{table} = 1,984$		
F-Calculated = 61,672		$F_{table} = 3,938$		

The table above describes the test results simultaneously and partially the effect of three independent variables on the performance of the business. In the F test values obtained F-cal = 61.672 (greater than F-table) and coefficient of determination of 61.5%. This explains that the test results simultaneously obtained the significant influence of three independent variables on the performance of the business with a contribution of 61.5%.

Partial effect of education on the performance of the business with a path coefficient of 0.233 positive influence on business performance. T-test results for this path coefficients are significant. It is evident from the value t count = 3.288 greater than t table = 1.984 ( $p < 0.05$ ). This result explains that the diversity of business performance can be explained by education. Partial effect of the environment on the performance of the business with a path coefficient of 0.217 positive influence on business performance. T-test results for this path coefficients are significant. It is evident from the value t count = 2,952 bigger than t table = 1.984 ( $p < 0.05$ ). This result explains that the diversity of business performance can be explained by the environment. Partial effect of competitive advantage to the business performance path coefficient of 0.469 with a positive effect on business performance. T-test results for this path coefficients are significant. It is evident from the value t count = 5.884 greater than t table = 1.984 ( $p < 0.05$ ). This result explains that the diversity of business performance can be explained by the competitive advantage.

The fifth track on the model of the whole track is a significant hypothesis. The dominant role of the competitive advantages derived from education, while the dominant influence on the performance of the business comes from the competitive advantage. In particular the two predominant pathways to be interesting because a determinant of high performance businesses. For more details on the analysis overall track can be presented in Figure 4.1.



Notes: \* = Significant at  $\alpha = 0.05$

The accuracy of the model hypothesis of the research data measured from the relationship of two coefficients of determination (R<sup>2</sup>) in both equations. In the first equation obtained value of 0.477 R<sup>2</sup><sub>1</sub> and R<sup>2</sup><sub>2</sub> at 0.615 in the second equation.

Results of the model accuracy is:

$$\begin{aligned}
 R^2 \text{ model} &= 1 - (1 - R^2_1) (1 - R^2_2) \\
 &= 1 - (1 - 0.477) (1 - 0.615) \\
 &= 1 - 0.201 \\
 &= 0.799 \text{ or } 79.9\%
 \end{aligned}$$

Results of the model calculation accuracy of 79.9% explained that the contribution of the model to explain the causal relationship of the four variables studied was 79.9% and the rest is explained by other variables not involved in the model. Direct influence on the competitive advantage comes from education and the environment. Then there is also the direct influence of education, environmental and competitive advantages to business performance. So there is the indirect effect of education and environmental variables on the performance of credit business through competitive advantage

## Discussion of Results

### Influence Education Against Competitive Advantage

Research data supports that women entrepreneurs will have a competitive advantage if it has a background appropriate if formal and informal education sufficient. Of two coefficient lines connecting the two variables against a competitive advantage, the path coefficient of education is greater, namely 0.308. The results are consistent with research conducted by Lee (1997), the research results show that education has a strategic role in shaping attitudes and directs entrepreneurial intentions. Women who are educated, have strong incentives to be successful and have the advantage.

Research on the difference between those with low and high achievement requirements in relation to the level of success has been a lot going on. A person with a high level of achievement needs, tend to be more active and dynamic in doing any work entrusted to him. Education is able to develop one's potential, so as to realize the personality, intelligence and the skills required. According Zahara Idris (1992) suggested that education is a series of communication activities between an adult human with students face-to-face, using the media in order to provide assistance to the development of the students completely in order to develop their potential as much as possible in order to become mature and responsible human beings. Potential herein include potential physical, emotional, social, moral, knowledge and skills.

Opinions Ngalim Purmanto M. (1993) says that education is any deliberate effort given by adults to children in the physical and spiritual growth in order to be useful to themselves and society. The opinions above explains that education is a series of activities or efforts of adults towards their students consciously and deliberately to help develop good personal spiritual boost potential (knowledge and attitudes) and physical (skills) in order to become a responsible adult who useful to themselves and society. Education is a conscious and deliberate effort to create an atmosphere of learning and the learning process so that learners are actively developing the potential for him to have the spiritual power of religion, self-control, personality, intelligence, noble character, and skills needed him, society, nation and state.

Female entrepreneurs can increase competitive advantage through education. Formal education is certainly not easy to go through because it will take time and the cost is quite high. The role of non-formal education would be an appropriate alternative in supporting business performance. Education takes place continuously or lifetime implemented in a variety of environments both an environmental family, school and society. Informal education is a process that actually happened a lifetime because each individual acquire attitudes, values, skills, knowledge of everyday experience and environmental influences that come from family, friends association, and society. Informal education cannot be ignored because it is very important in the personal formation. The influence of family and friends could determine the attitudes and values that are used in the guidelines of his life.

The basics of education provided family like character, adhering to the norms of society. If a family has a business sector, the explanation of the knowledge of the management of the business will be known directly unnoticed. Entrepreneurial knowledge and skills absorbed from the environment or family without going through formal and non-formal education. While formal education is held in the school education / specific place, structured, has a degree / level, runs from primary school to university. Formal education a person can be reached through educational institutions elementary, junior high, high school, PT with level / specific learning period, systematically planned with a specific time period through the stages.

A company is said to have a competitive advantage when the company has something that is not owned by a competitor, do something better than other companies, or be able to do something that is not able to be done by another company (Mudrajad Kuncoro, 2004). Every company needs to improve its internal strengths in dealing with competition. Basically the necessary competitive advantage are the hallmarks that are constantly so that the company can survive and thrive in its environment. Competitive advantage is the company's ability to formulate strategies for achieving profit opportunities through maximizing revenue from the investments made. There are two basic principles that need to be owned by a businessman to gain a competitive advantage that is the view of customer value and uniqueness of the product. Competitive advantage will occur if there is a customer view that they obtain a certain value of economic transactions with the company. The uniqueness is characterized by the products cannot be easily imitated by competitors. The characteristics of uniqueness among other things: the ability of financial and economical, demonstrated by the ease of entrepreneurs to obtain financial resources relatively quickly with a relatively lower interest rate than the market rate. Moreover, it can be a company's ability to press the price of a product that is cheaper than the price of the same products from other entrepreneurs. The ability to create strategic product, the shape and form of the advantages of this unique type of product features compared to similar products from other companies. Among others, can be seen from the aspect of flavor, size, appearance and product safety as well as the atmosphere of the business environment .. The ability of technology and processes, the company should have different characteristics in

making and presenting products to customers compared to other companies. Organizational ability, characterized by an excess of the company in the management of organizational systems commensurate with the needs of customers.

Porter (1980) states that a company will have a competitive advantage when the company was in the favorable conditions of the five principal competitive factors, namely the entry of new entrants, threat of substitute products, bargaining power of buyers, bargaining power of suppliers, and rivalry among existing competitors. Competitive advantage will be achieved if companies know the product or service unique and valuable by the market response (Mintzberg and Quinn, 1996). Achieve competitive advantage means doing a comparative analysis of closely related to organizational processes and improved performance to achieve success.

### **Environmental influences Against Competitive Advantage**

Data analysis to produce research results that support the environment will strengthen the competitive advantages of women entrepreneurs. Path coefficients of the environment to a competitive advantage is 0.423. The results are consistent with research that has been done by Bitange Ndemo (2007), in his research revealed that women entrepreneurs in making decisions influenced by the environment. The environment is a social system that provides guidelines that direct perception, attitude and behavior of members of the community group. An enterprise environment are all conditions that affect the development of enterprises .. An entrepreneur needs a strong environmental support in every phase of the business, because the environment provides information, advice, and guidance on matters such as organizational structure, revenue sources necessary financial and marketing.

A company is said to have a competitive advantage when the company has something that is not owned by a competitor, do something better than other companies, or be able to do something that is not able to be done by another company (Mudrajad Kuncoro, 2004). Competitive advantage must be owned by a business is knowledge (knowledge) adequate, expertise (skills), and the ability (ability) are adequate to meet the needs, such as the effective performance of a job (Man, et al., 2002). Every company needs to improve its internal strengths in dealing with competition. Basically the necessary competitive advantage are the hallmarks that are constantly so that the company can survive and thrive in its environment.

Competitive advantage is the company's ability to formulate strategies for achieving profit opportunities through maximizing revenue from the investments made. There are two basic principles that need to be owned by a businessman to gain a competitive advantage that is the view of customer value and uniqueness of the product. Competitive advantage will occur if there is a customer view that they obtain a certain value of economic transactions with the company. Competitive excellence is also characterized by the resulting product can not be easily imitated by competitors. The characteristics of the uniqueness of the competitive advantages include financial viability, creating strategic products, technological capabilities in process and organizational ability. Financial and economic capabilities, demonstrated by the ease of entrepreneurs to obtain financial resources relatively quickly with a relatively lower interest rate than the market rate. Moreover, it can be a company's ability to press the price of a product that is cheaper than the price of the same products from other entrepreneurs. The ability to create strategic product, the shape and form of the advantages of this unique type of product features compared to similar products from other companies. Among others, can be seen from the aspect of flavor, size, appearance and product safety as well as the atmosphere of the business environment. Technological capabilities and processes, the company should have different characteristics in making and presenting products to customers compared to other companies. Organizational ability,



characterized by an excess of the company in the management of organizational systems commensurate with the needs of customers.

Porter (1980) states that a company will have a competitive advantage when the company was in the favorable conditions of the five principal competitive factors, namely the entry of new entrants, threat of substitute products, bargaining power of buyers, bargaining power of suppliers, and rivalry among existing competitors. Competitive advantage will be achieved if companies know the product or service unique and valuable by the market response (Mintzberg and Quinn, 1996). Achieve competitive advantage means doing a comparative analysis of closely related to organizational processes and improved performance to achieve success.

### **Effect of Competitive Advantage Of Business Performance**

Research data supports that business performance will be strengthened if women entrepreneurs can choose the appropriate competitive advantage to compete in the market. The results are consistent with research that has been done by Brienley (2005) that the competitive advantage in the low will hinder the performance, so it is necessary to establish some policies to encourage the growth of women entrepreneurs.

The success of the business's performance can be viewed from two aspects, namely: qualitative and quantitative. In the quantitative performance of a company can be seen from the achievements of the company compared to what was done in the past or compare with its competitors in a number of factors, such as net income, the return of capital, market share, sales growth, production costs and efficiency, employee turnover (turn over), and employee satisfaction index. Qualitative measure, in the form of questions to determine the goals, strategies and plans are integrated and comprehensive of a company has been consistent, precise and can run or not.

Hunger and Wheelen (2001) argue that the performance of the company is the end result of corporate activities. The measurements are used to assess the performance is dependent how the organizational unit will be assessed and how the objectives will be achieved. The target set at the stage of strategy formulation in a strategy management process (with respect to profitability, market share, and the measurement of costs) should be used to measure the performance of the company during the implementation of the strategy.

### **Education Influence on Performance of Business**

Research data supports that business performance would arise if women entrepreneurs have sufficient levels of education. Path coefficient from education to business performance is 0.330. The results are consistent with research that has been done by Katherina Sarri (2005) in his research that analyzes the characteristics and motivations of women entrepreneurs in Greece, found that education levels affect a woman entrepreneur creativity, autonomy and self-reliance in developing business ideas, make plans and expand their business activities.

Women have a need for achievement as men, even more access to information have also begun to gain equality. In fact, the need for women's achievement even higher since they are aware catch up with men. Women are encouraged to constantly improve themselves and show themselves that they too can be successful as men.

Education is able to develop one's potential, so as to realize the personality, intelligence and the skills required. According Zahara Idris (1992) suggested that education is a series of communication activities between an adult human with students face-to-face, using the media in order to provide assistance to the development of the students completely in order to develop their potential as much as possible in order to become mature and responsible human beings. Potential herein include potential physical, emotional, social, moral, knowledge and skills.

Opinions Ngalim Purmanto M. (1993) says that education is any deliberate effort given by adults to children in the physical and spiritual growth in order to be useful to themselves and society. The opinions above explains that education is a series of activities or efforts of adults towards their students consciously and deliberately to help develop good personal spiritual boost potential (knowledge and attitudes) and physical (skills) in order to become a responsible adult who useful to themselves and society.

### **Environmental Influence on Performance of Business**

Research data supports that high environmental support will even become a factor driving business performance. The results are consistent with studies that have been conducted by Friederike Welter (2004) in research on environmental influences on the productivity of women entrepreneurs in Germany, stated that many environmental constraints that limit the creativity of women entrepreneurs to develop their businesses.

Competitive advantage becomes the most important aspect in an attempt to win business competition. Competitive advantage can be created in a competitive environment, and competitive advantage influence the productivity and performance of women entrepreneurs (Friederike Welter, 2004). An enterprise environment are all conditions that affect the development of enterprises .. An entrepreneur needs a strong environmental support in every phase of the business, because the environment provides information, advice, and guidance on matters such as organizational structure, revenue sources necessary financial and marketing.

Environment is the basis of public officials. The role of the family describe a set of interpersonal behavior, nature, personal activities associated with certain positions and situations. The elements in a good family, cultural, economic and even family size greatly influenced the treatment and thinking entrepreneurs. Family environment to prepare potential for growth and the formation of the entrepreneur's personality. Family environment is quite important factor in influencing the development of the business.

In addition to the family, women entrepreneurs also need an environment that supports the organization. The work environment is a context that can be perceived characteristics, have the supporting factors and inhibitors for entrepreneurs. Work environment refers to things that are around and covers the work of entrepreneurs. Women entrepreneurs should be more sensitive in reading the business environment that is being executed. The internal environment encompasses human resources, financial, management, market (market). The organization's progress is determined by human resources, where the threat or external influences will affect the organization's progress and destruction. While the external environment, employers must be able to accurately recognize the macro environment. Macro environment, which comes from outside and are indirect. Microenvironment consists of: supplier (supplier / provider of a wide range of needs), customer (user / user), competitors (competitors) and substitute (replacement).

Business performance can be viewed from two aspects, namely: qualitative and quantitative. In the quantitative performance of a company can be seen from the achievements of the company compared to what was done in the past or compare with its competitors in a number of factors. Qualitative measure, in the form of questions to determine the goals, strategies and plans are integrated and comprehensive of a company has been consistent, precise and can run or not. The performance of the company is the end result of activities of the company (Hunger and Wheelen, 2001). The measurements are used to assess the performance is dependent how the organizational unit will be assessed and how the objectives will be achieved. The target set at the stage of strategy formulation in a strategy management process (with respect to profitability, market share, and the measurement of

costs) should be used to measure the performance of the company during the implementation of the strategy.

#### Conclusion

Based on the analysis and discussion and its relevance to the research objectives will be obtained several conclusions. Education significant effect on the competitive advantages of women entrepreneurs in Malang. Education significant effect on the performance of women entrepreneurs in Malang. Competitive advantage mediate the effect of education on the performance of women entrepreneurs in Malang. Environmentally significant effect on the competitive advantages of women entrepreneurs in Malang. Environment on the performance of women entrepreneurs in the competitive Malang. Advantage City mediate environmental influences on the performance of women entrepreneurs in Malang. Education and environment significantly influence competitive advantage and performance of women entrepreneurs in Malang.

Modeling results in the four variables studied resulted in some suggestions. For academics or other similar research, the results of modeling in this study is expected to become a factor in planning and developing a small business performance. In a normative perspective Economic Sciences (economics which holds that moral norms and should be an integral part of economic practices in the community) the contribution of this study is significant because it supports studies of fair economic practices in the form of small business empowerment, especially among women. The study provides an explanation of the factors that influence the success of the business for the community whether sourced internally or externally of self merchants in the form of regulations issued by the government. It required the efforts of continuous learning in order to improve the independence and progress of the business for the group of small businesses through the development of training modules that simple according to the needs of the target communities and adaptive training curriculum and models of innovative learning.

For financial institutions in the banking sector and micro scale related to the empowerment of the community can utilize the research results to be used as consideration in the improvement of the empowerment program that is now being implemented or in the future, especially the training curriculum that emphasizes practices needed namely entrepreneurship training oriented to public service as well as a variety of motivational training and negotiation techniques to expand the network of small businesses.

For the association of small business operators and investors in credit financing small results of this study can be used as a reflection of the phenomena that occur in the field as well for consideration undertake strategic steps to prepare a realistic business plan for the development of small businesses making the micro enterprises bankable , For small business partners on these results become the reference in mentoring activities by implementing methods principled advocacy and promoting participatory local knowledge and to consider aspects of leadership and entrepreneurship so as to foster social capital and the achievement of the target program.

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# HOW TO ACCELERATE THE PERFORMANCE OF A RESEARCH CENTER: A CASE STUDY

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## Abstract

Scientific publication in reputable journals as an outlet to disseminate research and proposition has been widely considered to be a main measure of individual and institutional reputation. This paper provides an insight on how to accelerate the performance, especially with regard to scientific publication, of a relatively small research group in university located in an emerging country. Our research center in banking and finance which was established in the end of 2013 has performed progressively. We have accelerated the number of scientific publication in reputable international journals. Our strategies are mainly on the collaboration with international scholars, introducing research group members to the international environment, research collaboration with industry and regulator and providing technical assistance and some guidelines especially for our junior researchers and extensive networking with scholars in the same fields from domestic and overseas universities.

**Keywords:** Research group, scientific publication, international journals, networking, technical assistance

## Introduction

The fundamental concept of a research center in a research-based university is to serve a research mission, is set apart from the departmental organization and to solve complex interdisciplinary problems (Sabharwal and Hu, 2013; Bozeman and Boardman, 2003). More sophisticated, in some countries especially in Europe and the US, research centers are the main army to bolster the number of scientific publications. They are facilitated by substantial budget and facilities. They may also hire PhD students with scholarships.

In the recent years, the Indonesian government has paid much more attention to accelerate the quantity and quality of scientific publications, especially in the universities, as it could be considered to reflect the competitiveness of a country. However, the importance of research centers in universities has not been revitalized.

Indonesian universities contribution to international research environment especially with regards to scientific publication and innovation is far behind some neighboring countries for example Thailand, Malaysia and Singapore. To bolster the quality of research centers or research groups within a university which is ultimately expected to accelerate the publication in international reputable journals; it needs a strong commitment, budget policy, good governance and strong network. Revitalization and restructuring of research centers/ groups could be an appropriate strategy particularly in the social sciences and humanities.

In this present paper, we provide a case study of managing and accelerating the performance of a research group which is the research group of Governance, Banking and Finance (CGBF). This

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research group is under the Faculty of Economics and Business, Universitas Sebelas Maret (UNS), Indonesia. UNS is a state (public) university which recently occupies 6<sup>th</sup> for top Indonesian universities (awarded by the 4International Colleges and Universities/4ICU). UNS has established its vision to become a center for knowledge, technology, and art which is leading at international level based on noble values of national culture. It is generally known that to be internationally recognized, scientific publications at the international level should be the main priority. UNS has provided a substantial budget to boost the quality of research and scientific publication in international reputable journals.

Although the research group of CGBF is relatively very young, it has performed very well especially in scientific publication compared to many others research center in the same field in Indonesia. Moreover, this group is the best research group in areas of the social sciences and humanities in UNS.

We expect that our success story could be a benchmark for other research groups or research centers in Indonesia particularly with regards to the policy of Indonesian government to accelerate the number of scientific publication in international reputable journals.

### **Research Group Strategies**

Research group of Governance, Banking and Finance (CGBF) which is under the Faculty of Economics and Business of Universitas Sebelas Maret has a long-term goal to be an internationally reputable research center in the areas of governance, banking and finance. The original name was the Center for Corporate Governance (CCG) which was established in 2012. The research group received its first research project from the USAID through the SEADI (Support for Economic Analysis Development in Indonesia) project on a research entitled “Local governance, rent-seeking and regional economies” in the latter half of 2012.

In the end of 2013, following the policy of UNS to establish research groups within the schools (faculties), our research group then renovated and extended its scope to Governance, Banking and Finance. At that time, the group is strengthened by 10 internal members (only 4 members hold PhD degree). Most of them are junior faculty members with limited experiences in research and publication. The members have diversity in their research interests including banking, corporate finance, corporate governance, Islamic finance, accounting, strategic and human resources management.

Our main strategy, to be much more competitive especially in the international environment, is first, we continuously strengthen our governance and network particularly with regard to the research collaborations and joint papers with overseas reputable scholars. Research collaboration with reputable scholars can help the members of research group to access to expertise, learning tacit knowledge about a technique and methodology, enhancing productivity, pooling knowledge for tackling large and complex problems, obtaining prestige or visibility and access to data sources (Rijnsoever and Hessels, 2011; Bozeman and Corley, 2004).

Taking advantage of the network of some research group members, we have more than 30 partners even though some of them are not actively be optimized. More specifically, this research center is supported by 3 external experts (2 experts from US universities and 1 expert from the Indonesia Deposit Insurance Corporation) and 32 international partners and advisers mostly from reputable overseas universities. By doing such collaborations, we have published 6 joint papers in reputable international journals with scholars from University of Limoges France, Purdue University Calumet USA and Universiti Sains Malaysia. We have also some working joint

research projects with University of Twente, University of Limoges, Universiti Sains Malaysia and Purdue University Calumet which will lead to publication in reputable international journals. Moreover, we also attempt to collaborate with industries and regulators in policy research especially to access to data sources and to get funding. As explained by Kafouros et al. (2015), research collaboration with industry could facilitate funding as well as could lead to innovation. In addition, research collaboration with regulators could be optimized for scientific publication as well. We have done collaboration with some financial regulators in Indonesia including the Central Bank of Indonesia, the Indonesia Financial Services Authority and the Indonesia Deposit Insurance Corporation (see table 1 for the details).

The other strategy is to extensively provide technical assistance to our junior members and provide and facilitate them with opportunities to present their working papers in international conference. During two years (2013-2015), 31 papers have been presented by the group members in international conferences. By doing so, it is expected that the members, especially junior members, will be familiar and having more international exposure.

Moreover, we also include those junior faculty members in the joint paper projects which subsequently will bring some benefits for them (getting published in journals, having network with international scholars, familiar with scientific writing and publication.....). In addition to publication, we also continuously organize a working paper forum to facilitate members to present their first draft of papers to get inputs and comments from other colleagues before getting ready to be submitted or presented in international conferences. Trainings on methodology and econometric tools have also been conducted. In 2014, we invited Dr. Yun Zhu from Fordham University USA to deliver technical assistance on STATA for research in finance.

After two years of the establishment of this research group, almost all members have published papers in Scopus-indexed journals.

### **Outcomes**

Performance of Research Group of Governance, Banking and Finance in 2013 - 2015 is impressive. 23 papers have been published and accepted to be published in Scopus-indexed Journals; some of them are getting published in higher rank journals. The policy of Indonesian government and UNS is to benchmark Scopus in order to justify the quality of international journals.

Moreover, in 2014 and 2015, this group has received a substantial amount of research funding both research grants from UNS and the Directorate of Higher Education in Indonesia (DIKTI) and research collaboration with regulators and industry. We collaborated with Bank Indonesia, Indonesia Financial Services Authority (OJK) and Indonesia Deposit Insurance Corporation (LPS) in some policy researches including Financial Inclusion and Literacy, Micro Credit and Bank Liquidity. CGBF is also the best (with highest group index/ performance evaluation indicator) and the most active research group at the Faculty of Economics and Business of UNS. Most of publications of this school in Scopus-indexed journals are contributed by this research group.

Moreover, this group has actively organized a number of international and reputable events. In 2013, we held a Conference on Risk, Banking and Financial Stability in collaboration with the Journal of Financial Stability. Furthermore, we organized the 2014 Annual Conference of Asian Finance Association in collaboration with the Asian Finance Association (Asian-FA). In January 2015, we hosted the First Conference and Declaration of Indonesian Finance Association (IFA) in collaboration with Indonesian Finance Association (IFA), two larger Indonesian universities



(Universitas Indonesia and Universitas Gadjah Mada) and the Indonesia Deposit Insurance Corporation.

Table 1 exhibits the summary of performance of Research Group of Governance, Banking and Finance for the period of 2012-2015.

### **Conclusion**

We have provided a case on managing and accelerating the performance of a research group in the context of Indonesia. During almost three years of this research group, it has performed significantly especially in scientific publication to disseminate the research findings. 23 papers have been published and accepted to be published in Scopus-indexed journals. Almost all of research group members have contributed in writing those papers.

Moreover, this group has successfully granted many research grants from the university, the Directorate of Higher Education in Indonesia (DIKTI) and some international agencies such as the USAID. In addition, research collaboration with industry and regulators have also been done. However, to be more competitive in the international environment, this research group should accelerate the capabilities and skill of research group members. Extensive international partnership will also be bolstered.

**Table 1. Performance Indicators 2013-2015**

<b>1. Research Activities</b>				<b>2. Scientific Publication</b>				<b>3. Conference</b>	
Research grant funded by the university	Research grant funded by Directorate of Higher Education (DIKTI)	Research grant funded by Foreign institutions	Research Collaboration with Industry/ Regulator	Scopus Indexed Journals	Non-Scopus international journals	Nationally Accredited Journals	Non-accredited National Journals	Papers presented in International Conference	Papers presented in National Conference
15	9	3	5	23	2	3	2	31	5

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## DYNAMIC MARKETING CAPABILITY IN HOTEL

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### Abstract

The hotel industry has shown significant growth and gain greater attention in today's business environment. Hotel industry becomes important when the government decided to further push the service sector and to increase the tourism sector. In competition, the hotel industry should be able to offer innovative services to guests through utilize their service innovation capabilities and do the proper marketing strategy in accordance with its market segment in a dynamic market through utilizing dynamic marketing capabilities in providing excellent service. This study addresses to explore how the hotel industry in Bandung (3-star to 5-star) can survive and succeed in achieving their service excellence using the capabilities of the dynamic marketing and generates proposition: dynamic marketing capability will support service excellence. The proposition generated from the descriptive case study that involved five hotels (3-star to 5-star) then tested in an explanatory case study involved three hotels (3-star to 5-star). The key informants in all case study stated that dynamic marketing capability works to achieve service excellence. The results of the study indicate that the dynamic marketing capability in the eight hotels show some similarities in all activities of market sensing, learning, The difference lies in the marketing strategies, which are tailored to the target markets and occasions.

**Keywords:** dynamic marketing capability, service excellence, hotel industry

### Introduction

Bandung is the biggest city and the capital of the West Java province. The city is located 140 km southeast of Jakarta, and is the third largest city in Indonesia after Jakarta and Surabaya. The city is geographically located in the centre of West Java province. Thus, Bandung has a strategic value to the surrounding areas. Bandung is a very interesting destination for culinary, shopping, spa, golf, and so on. Most traffic from Malaysia and Singapore reached 40% [1]. As a weekend destination for local tourists, Bandung is also an attractive place for foreign tourists who need a hotel to stay. It has an impact on the growth of the hotel industry. The tourists visited Bandung shown in Table 1.1 below. There is an increasing trend over the period 2010-2011, a decrease in 2012 then increased again in 2013.

**Table 1. Number of tourists visiting Bandung 2010-2013**

Year	Foreign Tourists	Domestic Tourists	Total	Number of Guests Stay	Occupancy Rate (%)
2010	685,347	14,854,317	15,539,664	9,615,807	62
2011	676,755	19,461,717	20,138,472	12,228,216	61
2012	530,565	15,241,752	15,772,317	10,541,115	67
2013	529,296	16,164,876	16,694,172	11,692,287	70

Source: Bandung Culture & Tourism Department, 2014

Currently, in order to survive, hotels in Bandung performed with a limited promotion in order to adapt to rapidly changing market, do not have a network or international co-operation in particular local hotels, and limited service innovation. In competition, the hotel industry should be able to offer innovative services to guests through utilize their service

innovation capabilities and do the proper marketing strategy in accordance with its market segment in a dynamic market through utilizing dynamic marketing capabilities in providing excellent service. To survive in the business competition and qualify the operational, the hotel occupancy rate should be at the least of 70%. The occupancy rate of hotel is the measurement of success in attracting visitors to a particular hotel which the number of rooms sold divided by number of rooms available.

From the above conditions, raises the questions of how they innovate in serving their customers and what can be learned from their marketing capabilities. The hotel industry in Bandung has to utilize their capabilities to create new value to customers through dynamic marketing and deliver value. This study addresses to: (1) explore how the hotel industry in Bandung (3-star to 5-star) can survive and succeed in achieving their service excellence using the capabilities of the dynamic marketing, (2) test the conceptual framework that emerged from the review of literature that illustrates how dynamic marketing capability works through the activities in the hotel industry in Bandung that will support in achieving service excellence and confirm in the other hotels.

The conceptual framework serves as a tool for hotels in Bandung to identify their dynamic marketing capability and determine the gaps between the current state and the desired state of dynamic marketing. Therefore, this framework helps the hotel industry in Bandung to be more adaptive to market changes and encourage them to be more innovative in achieving service excellence for their customers.

### **Dynamic Marketing Capability**

Dynamic marketing capability (DMC) idea emerges from the strategic management theory and gives another translation on how companies in the environment that change quickly get their competitive advantage [2] [3]. The stress in the resource-based strategy literature is presently on the creation and exploitation of dynamic capabilities. While dynamic capability by and large are the capacity to create new resources in changing markets, dynamic marketing capabilities are the ability to create new marketing resources to identify, respond to and exploit change. For example, in using the technology for customer's database to facilitate the hotel to serve their market target or combining the artists and designers to design the hotel's amenities. Guaranteeing evolutionary fit between market needs in a dynamic competitive environment and market offers is the quintessence of effective strategic marketing. As indicated by the typology recommended by [4], [5] grouping dynamic capabilities into three principle sorts: absorptive, adaptive, and innovative capability. "Absorptive capabilities are the processes that enable firms to recognise the value of new information from the market and to assimilate it. These processes focus on knowledge acquisition and assimilation [5]. The absorptive capabilities comprise of two capabilities, for example, market sensing and learning. Market sensing is a firm's ability to take in their customers, collaborators, and rivals to sense, process, and use data and in addition to act persistently on trends and events in prospective and present markets [6]; [7]. Particular capabilities incorporate the ability to embrace (or viably commission) marketing research and competitor analysis, and the ability to guarantee dissemination of the ensuing information all through the organization as a premise for decision making. Market sensing infers being near the customer, encountering products and services in the same way that the customer encounters them. Firms working in B2B markets may have specific customers that they are particularly close to whom they will discuss new product development opportunities with.

Learning capability empowers firms to keep up long-term competitive advantages over opponents, to make due in dynamic and competitive environments, and to be responsive to acquiring and assimilating external knowledge [5]. Learning empowers to recognize new opportunities, take into account redundancy to incorporate information from the external

environment in quest for improved effectiveness [8]. As [5] said that “adaptive capabilities centre on the firm’s ability to identify and capitalise on emerging market opportunities. Adaptation implies doing things differently in response to external stimuli”. Market targeting and positioning capabilities incorporate the ability to identify alternative opportunities and afterward select appropriate market target, where the firm’s resources and capabilities are adjusted for the best impact. Positioning is not only a marketing decision, notwithstanding. In adjusting resources and capabilities to changing markets, the competences of all parts of the business (including operations, finance and R&D) and marketing need to be considered. As market change, so might the positioning adopted need to change. As [9] stated that capabilities coordinate tasks and also present a functional dimension. In this respect, marketing represents an important area of functional knowledge in a firm’s value chain [10]. As [8] stated that dynamic capabilities are different from operational capabilities. Marketing capabilities help firms acquire a living in harmony by satisfying current customers, exploiting existing products and distribution channels, and promoting existing brands. In [6], for example, keeps up that channel bonding is a marketing capability that fortifies the association with wholesalers. In [11] found that a particular sort of marketing capability that he calls customer competence permits firms to serve certain customers. Dynamic marketing capabilities, rather, help firms at present transforming from their stationary process. Actually, dynamic marketing capabilities are particularly centred about discharging and incorporating market knowledge that helps firms evolve. Under dynamic marketing capabilities, this study intend to incorporate what others have marked market sensing [6], learning [8] and market targeting and positioning [5].

### **Service Excellence**

Organisations are increasingly providing service excellence as an integral part of their superior service to win the customers’ hearts and stay competitive in the market [12]. Service excellence, which is viewed as being “easy to do business with” [13], delivers promises and is as an expression of very high satisfaction [14]. This suggests that the service organisation does not only need to satisfy the customers but has to delight them as well [15].

Service excellence in this study is based on service process and delivery, service-scape, customer participation, and customer responsiveness. Flexibility and customization in service process and delivery are highly appreciated by customers [16]. Well planned and designed service delivery may directly contribute to the whole service excellence. Service-scape is related to the style and appearance of the physical atmosphere and environment in a service organisation that has some impacts on customers’ experience [17]. As [18] also confirmed the importance of architecture and design as key value drivers that influence the customers’ perceptions of service excellence.

Customers’ participation increasingly plays active and even leading roles in service production and delivery processes [19] in most of the service organisations. The nature of service characteristics that is highly simultaneous requires customers to be part of the service transaction or as a co-producer. The customer’s engagement in service as a co-producer is important in the cost reduction and service quality improvement [20]. Thus, the degree of service success may depend very much on the customer’s participation to make the service happens. In other words, in some services, the customer is acting as a partial employee of the organisation.

### **Dynamic Marketing Capability And Service Excellence**

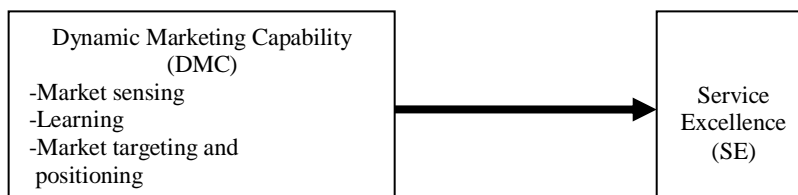
Hotels are competing for the market share and develop new strategies to leave their competitors behind. In order to improve their image and increase their profit, hotels should put more effort into investigating the needs and expectations of their target groups. Only with

a deep understanding of their customer’s desires can the hotels keep their customers loyalty [21]. The study conducted by [22] reveals that market sensing and learning play their roles as determining factors in service excellence. The evolutionary fit between market needs and market offers is the essence of effective service excellence. Sensing captures the effectiveness in order to generate, disseminate, and respond to customers’ needs. Firms with higher absorptive capability demonstrate greater ability to learn, integrate external information, and transform it into their embedded knowledge [23].

**Table 2. Research position compare to previous studies**

Study	de Farias (2010)	Hou (2008)	This research
DMC→SE	Review and synthesis the literature using internal marketing (programme, product, price, communication and distribution) and service excellence (committed employee).	Conceptual model with hypothesis using market orientation and dynamic capability.	Conceptual model with propositions DMC→SE using market sensing, learning, and market targeting and positioning. Using case study 8 hotels 3-Star to 5-star in Bandung.

Considering the Table 2 above, this research proposes a conceptual framework that involving the dynamic marketing capability in achieving service excellence as shown in Figure 1 below. This study identified and explored the specific activities using the case study in the hotel industry context.



**Figure-1.** Conceptual framework for DMC and SE

## Research Methods

To explore and test the propositions, this study gathered data from 5 hotels in descriptive study (stage 1). To test the propositions, this study re-gathered data from 3 current hotels in stage 1 in order to confirm the activities in both capabilities and service excellence and add the 3 new hotels as a comparison. These data were collected as part of a wider study of hotels. Case study methodology was used in this study [24], as it allows the questions what, why, and how to be answered. Cases were selected from hotels based on literal replication logic, that is, cases were chosen that were expected to lead to similar results [24]. The replication logic requirement of the multiple-case design provides suggestions to determining the number of cases. The initial decision regarding a satisfactory number of cases is between six to eight for a theoretical replication and three to four for a literal replication [25]. For a theoretical replication, that prescriptive number of cases is considered satisfactory when "rival theories are grossly different," however, the number needs to be increased when "rivals have subtle difference," [25]. The final decision about the number of cases is usually a judgmental decision made by the researcher and is positively influenced by the indifference between rival theories, the high degree of certainty the researcher wishes to attain and the differences between the cases [25].

In the preliminary literature review has resulted two constructs for conceptual framework: the dynamic marketing capability and service excellence. In order to explore the existence the constructs and indicators, the case study research was used through descriptive study (stage 1) and generate the propositions. To test the propositions, the case study research (stage 2) was used through within-case and cross-case. Finally, from the both stages, this study concluded the results.

Our main criteria for case selection based on:

- (1) Hotel star classification from 3-star to 5-star with independent or chain network,
- (2) Hotel star classification from 1-star to 2-star not include in this study. Based on the preliminary interview, the activities for dynamic marketing in both the hotels classification are rarely done and not have procedures and processes are well documented.
- (3) The key individuals have had considerable experience in the hotel business with a variety of work that have ever dealt with,
- (4) The hotel located in Bandung and surroundings areas. The study have sent a participation letter to 17 hotels but only 5 hotels that provide answers and are willing to be interviewed. This study does not involve consumer of hotels directly due to the time limitation. Comments and reviews from guests who have stayed from Trip Advisor and Agoda will be taken as a basis for data triangulation. From the hotels that have contacted, five hotels agreed to participate in the study stage 1 and six hotels in stage 2. All of the hotels in our final list were tested with an expert to confirm that they were fulfilled as 3 to 5 star hotel classification. This study Descriptions of the chosen hotels are provided in Tables 3.

In order to guide the execution of the case study research, a research protocol was created before data collection started. The research protocol uses the English but overall the answers from informants in Indonesian. The content of the protocol includes the following aspects:

- General questions about the hotel;
- Formation phase: about the current hotel industry environment, marketing and service innovation strategy;
- Operational phase: about the activities of dynamic marketing capability (DMC);
- Evaluation phase: about service excellence (SE) compare to direct competitors.

The primary data collection was interviews with managers involved in the hotels studied. The data were collected via semi-structured interviews using a research protocol (consist of competition, dynamic marketing and service excellence) during 2012 and 2013 for



stage 1 and during 2013 and 2014 for stage 2. Overall, 5 interviews were conducted typically lasting 1 to 1.5 hours each in stage 1 and six interviews in stage 2. Interviewees came from a variety of positions in the organizations, and their job titles included corporate operational manager, general manager, sales director and business development director. In the interviews, the propositions were not addressed directly in order to prevent leading questions.

The overall text on the interview for each hotel thoroughly readable using narrative analysis to get the main idea of each of the constructs contained in the case study protocol. The results of narrative analysis are used to see whether the activity of each capability found in each hotel and in what form. Within-case analysis is used to explore the characteristics, uniqueness, and insights from each hotel. Then detailed analyses are done using the case description and the collected data. Detailed analysis is used with the help of the variables that have been operationalized in the case study protocol. For the specific questions of each construct, the results of interviews of each informant will be given mark bold, underlined, or coloured to indicate that there are those activities in the hotel. The results of the narrative analysis of each indicator on both the capabilities and the interaction then matched with the indicators contained in the case study protocol, and then compared with the indicators contained in the service excellence, the results of the reviews from guests who have stayed, and evidence of internal documents such as photos, sales kits, hotel profile, and others.

**Table-3. Description of case study**

Hotel	Star	Position	Experience	Network
Scarlet Dago	3	Corporate Operational Manager	25 years	Local chain
The Ardjuna	4	General Manager	11 years	Independent
Golden Flower	4	Sales Director	13 years	Local chain
Grand Preanger	5	General Manager	17 years	Local chain
Aston Primera	4	General Manager	26 years	International chain
D'Best	3	General Manager	25 years	Independent
Gumilang Regency	4	General Manager	12 years	Independent
Papandayan	5	Business Development Director	25 years	Local chain

Operationalization of variable is the process of translating or defining a variable so that it can be measured. Dynamic marketing capability and service excellence are operationalized and discussed below. Dynamic marketing capability is operationalized through a market sensing, learning, and target market/positioning. Market sensing is measured as the capacity to learn the external environment with respect to demands, customers, and competitors appropriately, the purpose of which is to guide a firm's actions [6]. Learning is measured as the ability of the organization to implement the appropriate management practices, structures, and procedures that facilitate and encourage learning [8].

Market targeting or positioning is measured as the ability to identify alternative opportunities before selecting appropriate market targets that are aligned for the best effect [5].

Service excellence is operationalized through service delivery, service-scape, customer's participation, and service responsiveness. Service delivery is measured as the method and sequence in which the service operating systems work to create the service experience and outcome [16]. Service-scape is measured as the style and appearance of the physical elements encountered by customers at service delivery sites (items based on [17]). Customer participation is measured as the actions and resources supplied by customers during service production and/or delivery [19]. Service responsiveness is measured as the ability of a hotel to respond individual guest's requirements [26].

## Results and Discussions

The findings of the five hotels in descriptive study are summarized in Table 4. The market sensing in all case studies uses the guest comments, internal data (sales reports and profitability analyses) to sense the trends and events in the market which are used as the basis for marketing decision making. The information exchange is done with the competitors, PHRI, Riung Priangan, Trip Advisor and Agoda. The General Manager monitors customers' wants and complaints by using different IT-systems. The Aston Primera Pasteur is using the REVINET tool to monitor the customer's complaint. The tools using for hotel assessment. By using the advanced technology, the Aston Primera Pasteur move a step forward compared to the other hotel in order to anticipate their target market. The market sensing allows the hotel to respond customers quickly, to deliver the best service by involving customers to participate, and to offer the best facilities according to customer expectations. Several hotels classified into Riung Priangan. This is a group classified hotel for 3-star up to 5-star. Through this group, the exchange of information such as occupancy rate, room availability, and current trend can be implemented. The market sensing enables the hotels to analyse data from the market to design and prepare the service delivery and process and service-scape (rooms, facilities, and amenities). The better service delivery and process will facilitate the customers to participate and it will make staffs eager to response the guest's requirements.

Mostly hotel in descriptive study encourage and support their staff to take the responsibility in various manners. The sharing idea carried-out in formal meeting such as morning briefing, monthly meeting, and general meeting. The learning process in the hotel allows the staffs will get and manage the relevant information that needed in achieving excellent service. The dedicated staffs will serve the guests better. The sharing idea forum as a formal meeting will give the staff flexibility to process and deliver services.

Market targeting or positioning of one hotel is different from another and has its own unique differentiation. Grand Preanger Hotel, for example, is focused on the heritage hotel for tourists especially for the European, Japanese and Indonesian. Aston Primera is more focused on big oil, gas, and mining companies. Golden Flower is more focused on convention hotel and tourists from Southeast Asian countries. The ability of each hotel to sort the appropriate segments and communicate its own positioning in customer's minds makes the service delivery of each hotel in accordance with the target market. By engaging customers and responding quickly to fulfilling customer expectations, each hotel achieves its own desired service excellence.

The explanatory study involved the six hotels as a sample. In this study the three hotels are current hotel in the descriptive study such as: The Ardjuna Boutique Hotel and Spa, Grand Preanger Hotel, and Scarlet Hotel Dago. The current hotel is being used as a comparison in order to confirm the propositions. The additional of three hotel are The Papandayan Hotel, D'Best Hotel, and Gumilang Regency Hotel. Three new hotels as additional in explanatory study are used in order to see whether the proposition put forward

in chapter 4 is supported or not. Respondents from all three hotels are general manager with various experiences over 12 to 25 years in the hotel industry. The data analysis of case study in stage 2 only carried-out for 3 hotels as additional case. The data analyses for the current case refer to previous data analyses which describe same condition in descriptive study.

The findings of the eight hotels in descriptive and explanatory study are summarized in Table 4. The market sensing in all case studies uses the guest comments, sales reports, and profitability analyses to sense the trends and events in the market which are used as the basis for marketing decision making. Papandayan using the guest experience manager (GEM) to bridge the related departments with marketing. Mostly the information exchanges are done with the competitors, PHRI, Riung Priangan, Trip Advisor, Agoda and Pegipegi.com. The General Manager monitors customers' wants and complaints by using different IT-systems. This market sensing allows the hotel to respond customers quickly, to deliver the best service by involving customers to participate, and to offer the best facilities according to customer expectations.

Market target or positioning of one hotel is different from another and has its own unique differentiation. Papandayan hotel, for example, is focused on the convention hotel for big MICE market while D'Best hotel focus on small MICE market. Gumilang Regency hotel is more focused on family and group. The ability of each hotel to sort the appropriate segments and communicate its own positioning in the minds of customers makes the service delivery of each hotel in accordance with the target market. This is according to stage 1 in descriptive study. By engaging customers and responding quickly to fulfill customer expectations, each hotel achieves its own desired service excellence.

**Table 4. Case study observations**

Observation	P: DMC→SE	Market Sensing	Learning	Target and Positioning
Hotel Scarlet Dago	√	√	√	√
The Ardjuna	√	√	√	√
Golden Flower	√	√	√	√
Grand Preanger	√	√	√	√
Aston Primera	√	√	√	√
D'Best	√	√	√	√
Gumilang Regency	√	√	√	√
Papandayan	√	√	√	√

Note: A √ indicates that one or more examples of that activity were found in a particular case study hotel. The absence of an v indicates that such examples were not observed in the hotel studied. P = propositions.

In aggregate, these points motivate the following testable proposition based on theoretical framework and interview results of descriptive study.

**Proposition:** Dynamic marketing capability that involving market sensing, learning and market target and positioning will support in achieving service excellence.

The explanatory study involves the six hotels as a sample. In this study the three hotels are current hotel in the descriptive study such as: The Ardjuna Boutique Hotel and Spa, Grand Preanger Hotel, and Scarlet Hotel Dago. The current hotel is being used as a comparison in order to confirm the propositions. The additional of three hotel are The Papandayan Hotel, D'Best Hotel, and Gumilang Regency Hotel. Three new hotels as additional in explanatory study are used in order to see whether the proposition put forward in chapter 4 is supported or not. Respondents from all three hotels are general manager with various experiences over 12 to 25 years in the hotel industry. The data analysis of case study in stage 2 only carried-out for 3 hotels as additional case. The data analyses for the current case refer to previous data analyses which describe same condition in descriptive study.

The market sensing in all case studies uses the guest comments, sales reports, and profitability analyses to sense the trends and events in the market which are used as the basis for marketing decision making. Papandayan hotel used the guest experience manager (GEM) to bridge the related departments with marketing. Mostly the information exchanges are done with the competitors, PHRI, Riung Priangan, Trip Advisor, Agoda and Pegipegi.com. The General Manager monitors customers' wants and complaints by using different IT-systems. This market sensing allows the hotel to respond customers quickly, to deliver the best service by involving customers to participate, and to offer the best facilities according to customer expectations.

Market target or positioning of one hotel is different from another and has its own unique differentiation. Papandayan hotel, for example, is focused on the convention hotel for big MICE market while D'Best hotel focus on small MICE market. Gumilang Regency hotel is more focused on family and group. The ability of each hotel to sort the appropriate segments and communicate its own positioning in the minds of customers makes the service delivery of each hotel in accordance with the target market. This is according to stage 1 in descriptive study. By engaging customers and responding quickly to fulfilling customer expectations, each hotel achieves its own desired service excellence.

The findings from this study will be presented within the context of research proposition. The responses extrapolated from the interview phase of research were analysed by initially extracting common themes from the data collected and then categorizing these in terms of the specific research propositions that they related to. With regard to the presentation of qualitative data, the term 'statement' was utilized where the direct responses of interviewees were cited. Construct was used to indicate an interpreted response.

The market sensing plays the role in order to achieve service excellence. Through the guest' comments, revenue report, yield analysis as the basis of marketing decision to sense trends in the market. Skills in market sensing enable the hotels to attract the customer participation into their service delivery and process. Those skills also may hotel's staff to response the customers quickly and design the amenities of hotel according to their target market. All the informant support the process in order to achieve service excellence in hotel through providing training, the conducive environment to generate, present and share the staff' ideas to all staff. Through learning make the hotel can response quickly to market dynamic and implement their program that suitable with their customer and environment

Each hotel has the specific and unique selling point in the market. By offering their uniqueness and communicate their brand according to the above statements. It support that selection of the appropriate segment will be facilitate the hotel to design and prepare the service delivery and process, to response quickly, to design the concept of service-scape in order to achieve service excellence. From the three factors above that involving market sensing, learning, and target market and positioning, all the statements from respondents

support that dynamic marketing capability will support in achieving the service excellence in the hotel.

The dynamic marketing capability work and exist in all hotels in descriptive study and explanatory study. The existence of the activity the capability in all hotels varies depending on the type and classification. Classified hotel 4-star and 5-star indicate that there is a clear standard operating procedure (SOP) in each service process. All hotels have the same mechanism in anticipation of changes in the market using various sources such as competitors, PHRI, Riung Priangan, and the media. Hotels with more budgets attract the customers through telemarketers and sales offices. Otherwise the hotel with a limited budget is only able to do so through the traditional promotion. The usage of Revinet technology in Aston Primera for managing and respond to the market quickly in order to anticipate and respond to customer's needs.

## Conclusions

The conceptual model described in this study examines the existence of activities in all case studies. All of activities work for each hotel through specific ways according to hotel classification, the management system, their positioning, and target market.

The service excellence are highly depend on how the hotels able to sense trends and events, respond the market demands through the learning process, sorts out the right target markets, and communicate with the customers. The service excellence is achieved by defining the services, participants, and physical facilities clearly; continuously performs the audit services; and conduct market test for the new services.

This exploratory research does not seek to draw statistical inferences, therefore is subject to the following limitations arising from the case study methodology. The application of the dynamic marketing capability and service excellence in hotels is limited in Bandung area only. The coverage of case study and findings are based solely on the eight unique classified hotels (3, 4 and 5 star-hotels), which may not be generalizable to the other classified hotels (1 and 2 star-hotels), non-classified hotels, and in the other areas. All hotels were very welcome to share their insights, company profile and sales kit. This study just explored the activities that related to dynamic marketing capability and service excellence. The information about financial and accounting performance does not explored in this study.

This model contributes to the existing literature in several ways. The first key contribution of this work is its inclusion of the concept of dynamic capabilities; that hotels are able to compete not only due to their ability to exploit their existing competence and capabilities, but also thanks to their ability to renovate and develop their organizational capabilities. Therefore, this study argue that in order to maintain service excellence it is not enough for hotels to be in possession of valuable capabilities; hotels also require dynamic capabilities to develop and renovate their organizational competence and capabilities. The application of dynamic capability theory has been done in the various industries. This study applied the dynamic capability theory for marketing in the hotel industry context.

This study seeks to provide the empirical data for the hotel industry to reveal variables dynamic marketing capability such as: market sensing, learning, and market targeting and positioning. The previous study conducted by [22] that link internal marketing (programme, product, price, communication and distribution) with service excellence (committed employee), this study revealed the dynamic marketing capability support the service excellence.

The findings of this work also could improve current firms' management by enabling these hotels to achieve their objective of achieving service excellence. This study expected to contribute to the development of conceptual model in dynamic marketing capability to achieve service excellence for hotel industry in Bandung. For the practice, this study is aimed

at helping hotel industry to better plan and move towards effective and intense dynamic marketing and greater service innovation implementation. This study will hopefully provide insights on some of the factors of dynamic marketing capability which would assist hotel industry in Bandung to prepare and create the activities to achieve service excellence through the co-ordination and communication among department in the hotel and finally to satisfy the customer and make the customer loyal. This study could be the basis for policy makers to prepare the regulation in the hotel industry in Bandung.

The presented study need to be further research. The following recommendations are made for further research. Further research could apply this conceptual framework to analyse hotels for 1-star and 2-star hotels and non-classified hotel. Therefore, research on other industries (financial service, airlines, consulting, etc.) possessing interaction capabilities is needed. The confirmatory quantitative research is needed to test the model and the causal relationship through statistical inference by generating and testing the hypothesis. From the case studies, the strong brand names of the three hotels seemed to contribute to their service excellence. It is recommended that further research on the causal relationship between capability and service excellence to the hotel performance could be applied.

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## SERVICE QUALITY IMPROVEMENT FOR ACCOUNT OPENING PROCESS IN STATE-OWNED BANKS

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### Abstract

This study aims to gain the affectivity of existing account opening process in State-owned bank in Bandung area. The study conducted by distributing questionnaires to 365 customers of state-owned bank. In order to find the root causes of the problem in account opening process, some analysis were conducted. Servqual method is used to measure the service quality by using the service quality dimensions. After that, Important-Performance Analysis (IPA) matrix is used to find important factor that should be considered by bank in order to meet customer's expectation. Based on the analysis, it was found that the root causes lies in human capital, technological, technical, and procedural aspects. This study suggests an online account opening facility for prospective customer in order to improve service quality in state-owned bank.

**Key words:** service quality, servqual method, Important-Performance Analysis (IPA)

### Introduction

In the current competitive business world, companies strive to improve the quality of products or services in order to maintain existing customers or to attract new customers. Banking industry is one of business industry that is growing rapidly. In order to compete, the use of technology is a must. State-owned banks have been utilizing advances in information technology to improve the quality of service. This facility is known as electronic banking (e-banking). By the rapid development of information technology, it is also increasing customer expectations of excellent service quality. Although there are various types of banking transactions that can be accessed through e-banking anytime and anywhere, unfortunately, it does not provide account opening for prospective customer yet. Prospective customers still keep coming to state-owned banks branch for account opening process. By the rapid development of information technology, it is also increasing customer expectations of excellent service quality. This causes companies vying to improve the service quality by developing a wide range of banking facilities including e-banking facilities. State-owned banks have developed various types of banking transactions that can be accessed through e-banking anytime and anywhere. State-owned banks expand its e-banking through Internet Banking, Phone Banking, SMS Banking and additional ATM outlets. State-owned banks also lead the improving of service quality to *branchless banking*, where the customer does not need to come to the branch for account opening. But unfortunately, State-owned banks account opening facility is only accessible to existing customers. For prospective customers, they still have to go to bank in order to open an account. Existing process of account opening state-owned banks takes about 30 to 40 minutes. Based on survey of Marketing Research Indonesia (MRI), this time delivery service is still showing unsatisfactory. This is because the time expectation for account opening process is about 15 minutes.



Therefore, necessary to develop an online account opening facility for prospective customers, so that the use of online service is really satisfying customer expectations. This study aims to gain the affectivity of existing account opening process in state-owned banks, especially in Bandung area and analyze the benefit of online account opening facility for prospective customers to improve the service quality in state-owned banks.

## **Literature Review**

### **Service Quality**

According to Kotler, et.al (2002:83), the service quality is any action or activity that can be offered by one party to another, which is essentially intangible and does not result in any ownership. In general, a high level of service will generate high satisfaction and repeat purchases more frequently. Therefore, perceived service quality is good and satisfying if the services received exceed the customer's expectations. Following are service quality dimensions as shown in Table 1.

### **E-service Quality**

According to Zeithaml et.al (2000:11), e-service quality is comprehended both from pre and post web site service perspectives. It can be understood as the valuation of the efficiency and effectiveness of online shopping, purchasing, and delivery products or serves. Following are dimensions of e-service quality as shown in Table 2.

**Table 1. Item of Service Quality**

<b>Service Quality Dimensions</b>	<b>Items Scale</b>
<b>Reliability</b>	Providing service as promised Dependability in handling customer's service problems Performing services right first time Providing services at the promised time Maintaining error-free records
<b>Responsiveness</b>	Keeping customer informed as to when services will be performed Prompt service to customers Willingness to help customers Readiness to respond to customer's requests
<b>Assurance</b>	Employees who instill confidence in customers Making customers feel safe in their transactions Employees who are consistently courteous Employees who have the knowledge to answer customer's questions
<b>Empathy</b>	Giving customers individual attention Employees who deal with customers in a caring fashion Having the customer's best interest at heart Employees who understand the needs of their customers Convenience business hours
<b>Tangibles</b>	Modern equipment Visually appealing facilities Employees who have a neat, professional appearance Visually appealing materials associated with the service

Source: Parasuraman et.al in Kotler and Keller, 2012:414

**Table 2. E-Service Quality Dimensions and Descriptions**

<b>E-Service Quality Dimensions</b>	<b>Descriptions</b>
<b>Reliability</b>	It is included correctness of order fulfillment. Prompt delivery, and billing accuracy.
<b>Attentiveness</b>	It is included individualized attention, personal thank you notes from online retailers and availability of a message area for customer questions or comments.
<b>Easy to use</b>	It is related to easy to remember URL address, well organized, well structured, and easy to follow catalogues, site navigability, and concise and understandable contents, terms, and conditions.
<b>Access</b>	It is included the list of the company's street and email address, phone, and fax number, accessibility of service representatives, availability of chat room, bulletin board, and other communication channels.
<b>Security</b>	It is included security of personal information and minimal online purchase risks.
<b>Credibility</b>	It refers to the business history of online retailers, special rewards or discount, and referral banners on other web site.

Source: Yang et.al, 2004

### **Service Quality in Banking**

Chun and Zheng state in their research that “*there are 18 dimensions of service quality in banking: access, aesthetics, attentiveness, availability, care, tidiness, comfort, commitment, communication, competence, courtesy, flexibility, friendliness, functionality, integrity, reliability, responsiveness, and security (2006:23)*” (Johnston, 1995). They continued that security and reliability were considered most important dimensions; responsiveness, communication, and competence were important for customers. Other dimensions such as comfort, cleanliness, and aesthetics were not worth much attention. Additionally, Nantel (2000) proposed six underlying key dimensions in retail banking. These dimensions were effectiveness and assurance, access, price, tangibles, service portfolio, and reliability (ibid). Research about service quality in banking was also conducted by Najjar and Bishu (2006). They found that reliability and responsiveness are two most critical dimensions of service quality and they are directly related with overall service quality. This research supported previous work by Zeithaml and Parasuraman.

### **Research Methodology**

Data was collected from 365 state-owned bank customers who active internet banking facility by spread the questionnaire in Bandung area. Besides that, this study also used documents to get information about company and observation to collected facts and evidence. Finally, interview was also conducted to state-owned banks employees in order to confirm the collected. In analyzing, Servqual method is used to measure the quality of service then Importance-Performance Analysis (IPA) matrix is used to determine attributes that should be

improved to increase service quality in state-owned. Following is service quality dimensions that used in this research related e-banking facility:

**Table 3. Service Quality Dimensions to Develop and Formulate**

<b>Service Quality Dimensions</b>	<b>Measurement Criteria</b>	<b>Sources</b>
<b>Reliability</b>	It concerns the ability to keep service promise accurately and consistently. It includes correct service, service promise, and accurate record.	Jun and Cai, 2001; Santos, 2003; Raman, et.al, 2008; Lau, 2013.
<b>Responsiveness</b>	It means prompt service, quick problem solving, and convenience services.	Jun and Cai, 2001; Baksi and Parida, 2012; Lau, 2013.
<b>Security</b>	It means low risk associated with online transaction, personal information safety, and online transaction safety.	Yang et.al, 2004; Baksi and Parida, 2012.
<b>Communication</b>	Keeping customer informed and communicating in a language they can understand. It consists of various contact method and language choices.	Santos, 2003; Raman, et.al, 2008.
<b>Access</b>	It consists of availability of help; phone access, email access, and account access when abroad.	Jun and Cai, 2001; Raman, et.al, 2008; Baksi and Parida, 2012.

## Results and Discussion

### Analysis of Respondent Profile

Following is the data of respondent who participate in this research:

**Table 4. Respondent Profile**

<b>Sex</b>	<b>Number</b>	<b>Percent</b>
Male	192	52.6
Female	173	47.4
<b>Total</b>	<b>365</b>	<b>100</b>
<b>Age</b>	<b>Number</b>	<b>Percentage</b>
< 18	2	0.5
18-25	219	60.0
26-35	83	22.7
36-45	47	12.9
> 45	14	3.8
<b>Total</b>	<b>365</b>	<b>100</b>
<b>Education</b>	<b>Number</b>	<b>Percentage</b>
High school	61	16.7
Bachelor	278	76.2
Master	26	7.1
Doctor	0	0
<b>Total</b>	<b>365</b>	<b>100</b>
<b>Occupation</b>	<b>Number</b>	<b>Percentage</b>
Students	194	53.2
Housewives	3	0.8
Entrepreneurs	9	2.5
Military/police	0	0
PNS (Civil Officer)	10	2.7
Private employees	50	13.7
Employees of BUMN/BUMD	95	26.0
Professional	4	1.1
<b>Total</b>	<b>365</b>	<b>100</b>
<b>Using Internet Banking Period</b>	<b>Number</b>	<b>Percentage</b>
1-3	216	59.2
3-5	114	31.2
> 5	35	9.6
<b>Total</b>	<b>365</b>	<b>100</b>

Based on the data above, the comparison between male and female is almost equal. From 365 respondents, the number of male is 52.6% and female 47.4%. Based on age, that the most respondent are in the range 18-25 years old and the least was under 18 years old. If we compared to Internet users in Indonesia, the largest user also is in range 18-25 years old

(Sapriyanti, 2015). From education data, the most respondent education is bachelor degree (76.2%) and none of the respondent was educated doctorate. However, this data shows that the respondent can be considered to have enough knowledge in term of understanding the question on the questionnaire given. Based on occupation, the most respondent is students (53.2%) and least is housewives. This data describes that the state-owned banks as the bank that manages colleges and schools has the majority of the customers are students. The last, based on using internet period, most of respondent have been using internet banking for 1-3 years. It can be assumed that the respondent has been adept in using the internet banking and will be easy to understand the development of the features in this facility.

### Servqual Calculation

Servqual calculation is conduct based on the result of questionnaire data. The questionnaire was developed to determine customer's perspective on service quality of existing account opening process in state-owned banks and their expectation for future improvement. For more detail comparison, then compiled the following table.

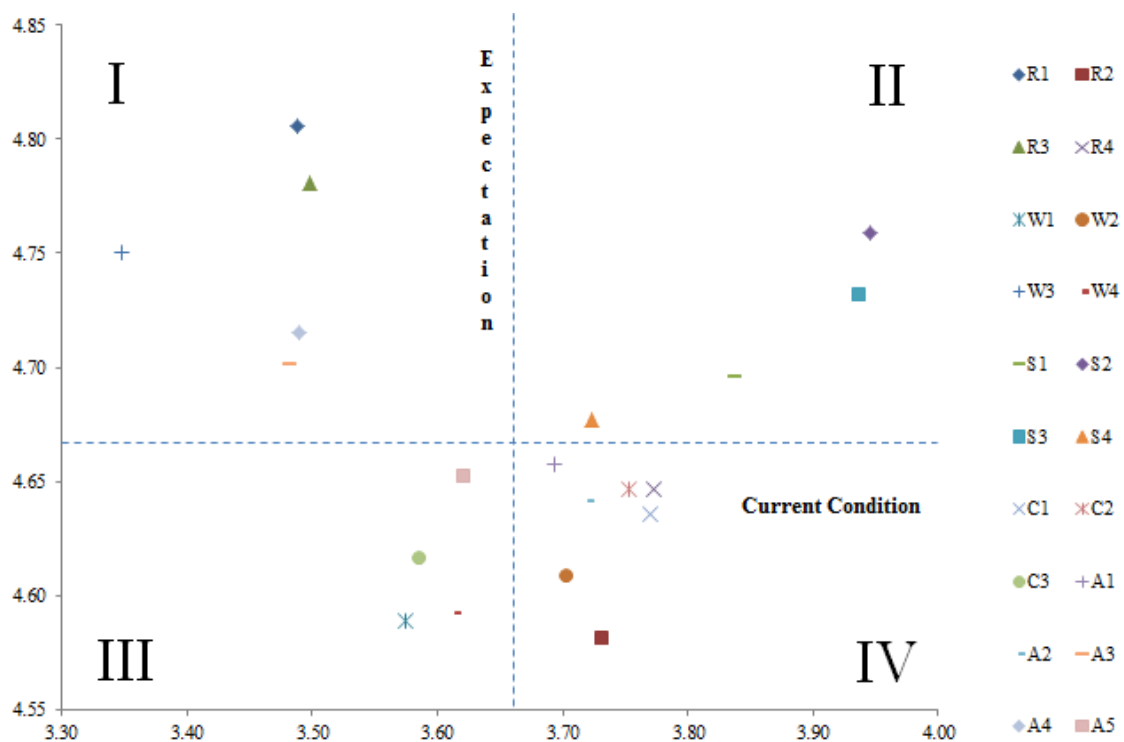
**Table 5. Servqual Calculation on Account Opening Process in State-owned Banks**

Dimensions	Code	Current	Expect	Average Current (C)	Average Expect (E)	Gap (C-E)	Ratio (C/E)
Reliability	R1	1273	1754	3.49	4.81	-1.32	0.73
	R2	1362	1672	3.73	4.58	-0.85	0.81
	R3	1277	1745	3.50	4.78	-1.28	0.73
	R4	1377	1696	3.77	4.65	-0.87	0.81
Responsiveness	W1	1305	1675	3.58	4.59	-1.01	0.78
	W2	1352	1682	3.70	4.61	-0.90	0.80
	W3	1222	1734	3.35	4.75	-1.40	0.70
	W4	1319	1676	3.61	4.59	-0.98	0.79
Security	S1	1401	1714	3.84	4.70	-0.86	0.82
	S2	1440	1737	3.95	4.76	-0.81	0.83
	S3	1437	1727	3.94	4.73	-0.79	0.83
	S4	1359	1707	3.72	4.68	-0.95	0.80
Communication	C1	1376	1692	3.77	4.64	-0.87	0.81
	C2	1370	1696	3.75	4.65	-0.89	0.81
	C3	1309	1685	3.59	4.62	-1.03	0.78

Access	A1	1348	1700	3.69	4.66	-0.96	0.79
	A2	1358	1694	3.72	4.64	-0.92	0.80
	A3	1271	1716	3.48	4.70	-1.22	0.74
	A4	1274	1721	3.49	4.72	-1.22	0.74
	A5	1322	1698	3.62	4.65	-1.03	0.78

Based on the data above, it can be seen that there is a gap and ratio between real or current condition and expectation in each statement. The value of gap sign negative which means each dimension needs to be improved to meet customer's expectations.

The next step is mapping all attribute into Importance-Performance Analysis (IPA) quadrants. IPA is a patterned descriptive statistical method. Following is the data mapping of servqual attributes:



**Figure 1. Importance-Performance Matrix of Servqual Attributes on State-owned Banks**

Based on the Figure 2 above, it can be explained that the first quadrant is the upper left quadrant, the second quadrant is the upper right quadrant, the third quadrant is the lower left quadrant, and the fourth quadrant is the lower right quadrant. Refers to the theory of Martilla and James in IPA Matrix, the first quadrant contains attributes which have high expectation but perceive to have low satisfaction value by customers (Silva & Fernandes, 2010). Therefore the attributes in this quadrant become the main priorities to be improved.

## Discussion

Based on the calculation of data, the root causes are the attributes in first quadrant which become the main priority to be improved. The attributes are:

- R1 : Time delivery of account opening process
- R3 : Account opening form design
- W3 : Occurring of network interruption
- A3 : Sufficiency of customer service officers in state-owned banks
- A4 : Effectiveness of account opening queue to customer service

The causes of each attribute above can be classified in following aspects:

- a. Human capital aspect
  - Lack in number of customer service officer;
  - Lack in number of human capital staff;
  - Lack in number of technician;
  - No regular training schedule for preparation of customer service candidates.
- b. Technological issues aspect
  - Separate application in account opening process;
  - Different queuing system in each sub-branch;
  - Server is not restarted regularly;
  - Lack of advance technology, such as e-ID card reader, customer's finger print, and other security devices.
- c. Technical aspect
  - Account opening form is not simple and unfriendly;
  - Supervisor's authorization mechanism;
  - Unpredictable of time delivery service impact to the queuing time.
- d. Procedural aspect
  - Service standard of MRI;
  - Account opening rules according domicile;
  - SOP account opening form filling.

This study proposes an alternative solution which can solve problems in all aspects above. The alternative solution is a facility that can facilitate customers to open an account anytime and anywhere. This solution is an **online account opening facility**. This facility is suitable to support *branchless banking* system. So, with developed an online account opening facility, state-owned banks can improve service quality of account opening process. There are some benefits gained by developing an online account opening facilities. These benefits are not only obtained by the bank but also by the customers. Following are benefits of online account opening facility.

### A. Benefits for Bank

Some benefits that obtained by bank are:

- Online account opening facility can be a way to attract new customers even more than branch customers and also attract different customer types, in particular, younger generations and tech-savvy customers;
- Bank that implement online account opening facility can capture funds more quickly through the workflow with automated processing;
- This facility can reduce processing errors and costs associated with the manual handling of applications, then automatically decrease operational costs;



- Providing solutions to problems related the account opening process, especially the limited number of customer service officers and time delivery service.

#### B. Benefits for Customers

Some benefits that obtained by customers are:

- Customers who have made online data inputting can be served quickly than filling out the form manually;
- Short time delivery service provides can improve cross selling products by officers;
- The waiting time for customers who also want to go to customer service become shorter as an impact of short time delivery service;
- Enhance the customer experience as users of bank services especially for customers who demand self-service option.

In order to improve the service quality in opening account process, the state-owned banks have to consider as follows:

- The bank must collect a lot of information on appropriate technologies to be improved to encourage the success of this online account opening facility;
- Important to concern about security and fraud prevention. The customer ID-verification step relies heavily on innovations in multifactor identity verification. By automatic customer ID-verification, it will be possible approval processed without manual intervention, leaving only the exceptions for bank staff to handle manually;
- Attention to compliance with the rules or regulations governing the development of online banking facilities and account opening process;
- Bank must ensure that the support facilities are available equally in every branch. Or else for early stage, bank can anticipate by providing a list of some branches that have been supported to continue the process of this online account opening;
- Provide complete information about bank products that can be opened through online facility so that customer can be easier to choose the appropriate product;
- Online account opening form is designed in a simple and friendly so easily to be understood by customers, but still qualify from Know Your Customer (KYC) principle.

#### Conclusions

Based on data of this study, it can be conclude that the account opening process in State-owned banks especially in Bandung area are not fulfill the customer's expectation. All attributes of Servqual dimension that used in this study have negative gap value between current condition and expectation. Important-Performance Analysis (IPA) is used to determine the priority of improvement. After mapping the Important-Performance matrix, the priority to be improved is the quadrant I. In this quadrant, the performance or the current condition value is low while the expectation value is high. There are five attributes that was taken as priority in the quadrant I. The attributes are:

R1 : Time delivery of account opening process

R3 : Account opening form design

W3 : Occurring of network interruption

A3 : Sufficiency of customer service officers in each sub-branch of state-owned bank

A4 : Effectiveness of account opening queue to customer service

After conducted deep analysis of the root cause which led these attributes have low performance, then obtained some causes which can be classified in four aspects, namely human capital, technological, technical, and procedural.

State-owned banks have to review of SOPs regarding employee, ranging from regulation of the recruitment process, employee training schedule, and maintenance schedule for technician, and also review of SOPs regarding account opening procedures such as MRI standards, use of ID cards to be appropriate domicile, account opening form design, etc. Improve technological system by develop an online account opening facility for prospective customer that can be solve the problems of all aspect, human capital, technological, technical, and procedural; and integrate menu for internet banking activation. In this study, there are some limitations that exist as follows: this study is limited to determine the affectivity of existing account opening process and benefit of online account opening facility for prospective customers to improve the service quality in state-owned banks; customer who becomes the object study is the individual customers and the account opening process is for saving account; this study is not explain about types and features of saving products that offered by state-owned banks; and this study does not study other aspects of this account opening facility such as, financial advantages, investment analysis, design of online feature, and risk management.

Further research should be done on an object and a wider scale by taking a particular region, such as each province and it should be able to examine the different variables associated online account opening facilities, such as risk management or investment costs analysis to develop online account opening facility. The recommendations above are expected to improve service quality in state-owned, especially in Bandung area. In order to apply these recommendations, following are suggested implementation scheme.

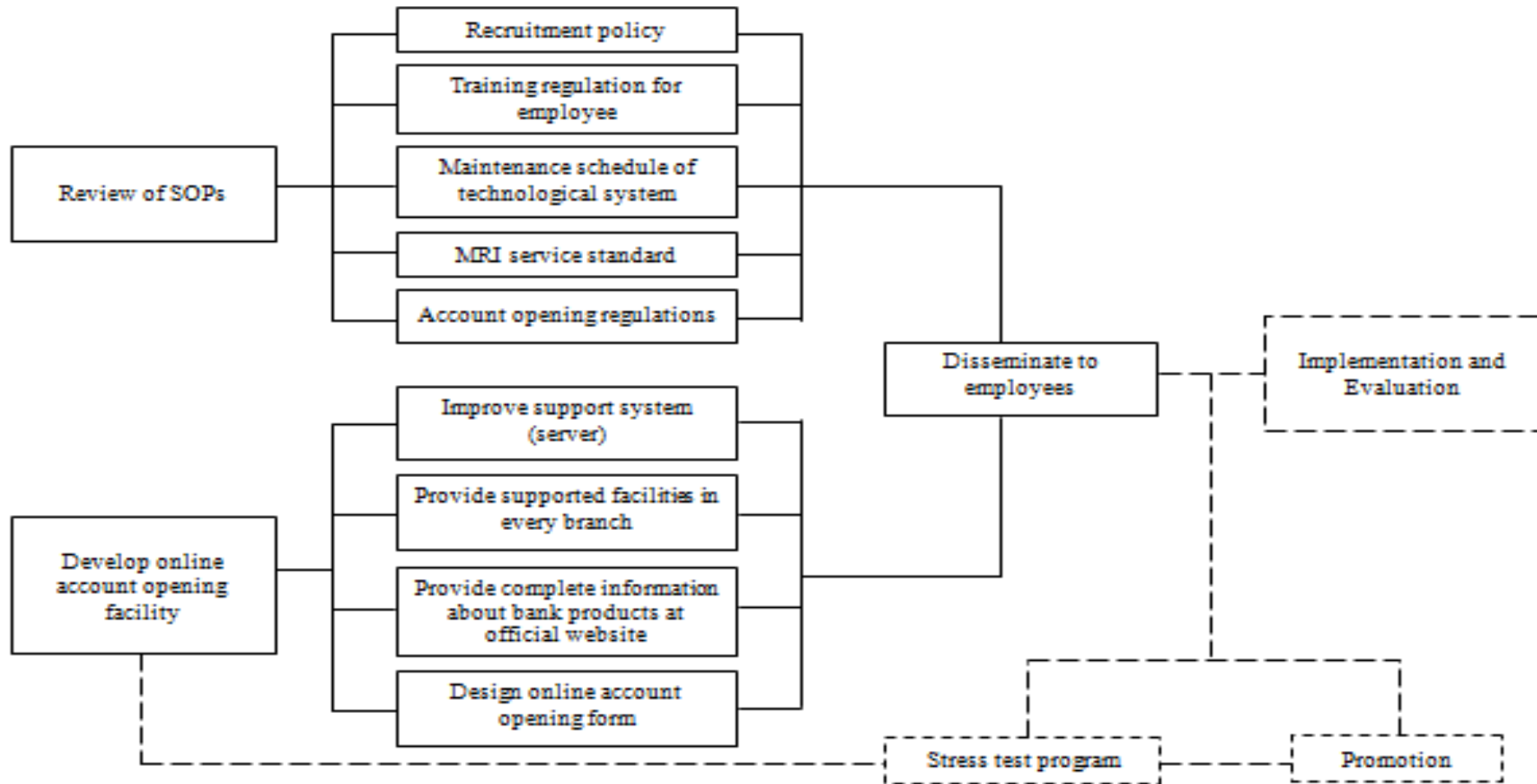


Figure 2. Proposed Activities as Solution

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**DETERMINANTS OF OCCUPATIONAL DIVERSIFICATION  
AS STRATEGY FOR DISGUISE UNEMPLOYMENT IN SWAMP LAND FARMER  
HOUSEHOLDS: LESSON LEARN FROM KANDIS AREA**

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**Abstract**

Limited working time allocated to paddy farming households make farmers tend to have a lot of leisure time and accidentally became underemployed. Some studies show farming households have economic and social rationality to increase income through the occupational diversification. The research objective to analyze: (1) the allocation of work time and income received by households of swamp lowland paddy farmers to diversify their work structure, (2) determinants of occupational diversification of household of swamp lowland paddy farmers in Ogan Ilir. This research was conducted in the Miji village Kandis Subdistrict Ogan Ilir district. The research method is the survey. Sampling method is simple random sampling. The data obtained were processed tabulation, mathematical calculations, and is described descriptively. In swampy areas occur underemployment 270.47 HOK. Occupational Diversification led to an increase of working hours, 626.01%, a 56.08 % decrease in underemployment, as well as increased income 256.41%. The behavior of occupational diversification in paddy farming is significantly affected negatively by non-farm income and non-rice farm income, and positively by age variable. The behavior of occupational diversification except in paddy farming is significantly affected positively by non-farm income, farm income and non-paddy land. Occupational diversification causes a threat to the swampy area's role in food security.

**Keywords:** Occupation, Diversification, Determinants, Disguise Unemployment

**Background**

Improved food security is one of the objectives of national development. This is understandable because food shortages can cause extensive impact economically, socially and environmentally. One of the factors that guarantee food security is land. From the economic side, according to the Utama (2006) land is the main input of the various productions, not only on agricultural commodities but also for non-agricultural. According Dwipradnyana (2014), demand of land affected by two types of demand, namely direct demand and derived demand. On direct demand, land serves as consumer goods or for residential and directly provide utility. Through a derived demand, the increase in the population will increase demand for goods and services as a satisfying needs. To produce goods and services required land as a factor of production, which does not only provide direct but also derived from the consumption of goods and services. Because the supply of land is fixed, while the demand continues to grow, so there will be competition in the use of land for various activities (Dwipradnyana, 2014)

Wetland conversion constitutes a serious threat to food security because of the impact of land conversion is permanent. A wetland that has been converted to other has very little chance to turn back into a wetland. The substance of the problem of land conversion is not only came from the land conversion, but also from compliance with zoning, economic impact

and environmental benefits in the long term and other alternatives that can be taken, so that the benefits outweigh the impact (Pakpahan *et al.*, 2007).

Food security requires agricultural land, especially paddy fields with sufficient quantity and quality in a sustainable way. As one of the key factors in the food production system, the availability of land gives a severe challenge to agricultural development to this day because of its limiting. These conditions have pushed swampland use as one of the potential land for paddy cultivation.

Swamp land agro-ecosystem is one of the potential natural resources. It has been used as farmland potentially. Swamp land area in 2012 reached 24 % (33.4 million ha) of the total land area in Indonesia, consists of 59.8 % (20 million ha) tidal lands and 40.2 % (13.4 million ha) swamp lands. Constraints in swamp lands include puddles, low pH, toxicity Fe, pyrite and salts.

One of the provinces in Indonesia, South Sumatra, has swamp land and tidal land. The tidal land consists of 71% (379 450 ha) of potential land and 29% (156 763 ha) functional land. Swamp land consists of 72% (129 062 ha) of potential land and 28% (45 992 ha) of functional land. Utilization of swamp land in South Sumatra, especially for paddy farming is growing from year to year as well as production. Production of swamp land in South Sumatra has a great contribution to the food needs in South Sumatra and improving the economy of the area.

Ogan Ilir is a regency in South Sumatra Province, which has the second largest swamp land, which amounted to 63 503 ha, after Ogan Komering Ilir Regency with amounting to 90 221 ha. Most of the population are rice swamp land farmers. However, the production of food crops (paddy), and horticulture still not up, especially rice farmers can only plant paddy once a year.

Farming by farmers in Ogan Ilir are still rudimentary and can be cultivated and planted only once a year in the dry season. While the rainy season, the land is followed because the land was inundated by high water and it is not possible to do paddy cultivation. So that the results achieved are still unfavorable and would affect income. With limited working time that can be allocated on paddy farming, they tend to have a lot of leisure time and accidentally became disguise unemployment. It further impact on low income households. To overcome this, farmers do occupational diversification from outside of paddy farming. According Adriani (2015), in such conditions, the domestic farmers will have economic and social rationality to increase household incomes through occupational diversification of. Economic rationality, which is caused by the low income of rice farming, has encouraged the growth of social rationality (through occupational diversification). Occupational diversification has a positive impact on the reduction in disguise unemployment of 49 percent and an increase in revenues of 187 percent. While the Occupational diversification impact of a decrease in disguise unemployment at 69 percent and increase income by 267 percent.

Nghiem (2010), shows three kinds of motives behind the occupational and income diversification, which is (a) Risk motivation, (b) Poverty motivation, poor households in developing countries faced with the constraints of the market, and resources, (c) Economic expansion motivation. This motivation explained diversification as part of the efforts undertaken households to expand its economic base. Furthermore, according Bekti *et al.*, (2014), diversification of income is motivated by poverty, households want to meet basic needs and to overcome the difficulties. Thus, poverty is the driving motivation of farmer households in swamp areas to diversify.

Kandis Area is one of the areas of land dominated by swamp lands. Paddy farming implemented by farmers in this area is still on a small scale where many constraints faced by farmers, such as land use is still limited where the land use is only once a year, labor is



sometimes insufficient, lack of capital owned by farmers so that the means of production used are still very few, and the lack of understanding of farmers on cropping patterns should be applied. Farmers will choose a commodity that they have earned as a commodity, they enjoy without supported by economic calculations in the pursuit of farming. Therefore, with increased utilization time allocation of swampy lands working, expected revenue received by farmers can be increased so that the farmers' welfare is also increasing. In that regard, it is considered necessary to do research to assess the allocation of work time farmer in the Kandis village Ogan Ilir subdistrict.

Results of previous studies show farmer households do social and economic rationality to overcome the problem of low income from paddy farming. The social and economic rationality embodied in the occupational diversification. Until now there has been no study that analyzes the determinants of changes in the occupational diversification. Therefore, this study aimed to analyze: (1) the allocation of working time and income received by households, farmers in swamp land with occupational diversification (2) the determinant of the behavior of occupational diversification chores paddy farmers in swamp land, Ogan Ilir.

By knowing the behavioral determinants of occupational diversification chores paddy farmers in swamp land, then we can know whether the occupational diversification supports or threatens food security.

### **Theoretical Framework**

The prevalence of occupational diversification has begun to be recognized in the early to mid-1990s, and by the end of the decade was firmly established (Reardon, 1997; Ellis, 2000; Barrett et al., 2001). It was found that the main figures of between 40 per cent and 60 per cent of rural household income deriving from non-farm activities and transfers were commonplace. Later consolidated evidence this understanding: in South Asia, the mean proportion has been Often around 60 per cent, while in Sub-Saharan Africa it converges on 50 per cent, and in Latin America average figures of around 40 per cent growing niche to be observed.

Occupational and income diversification are often associated with a reduction of risk, opportunity and uncertainty of income. Household level, diversification through business diversification and asset utilization, besides aiming for value-added capital also to reduce instability household income (Pakpahan, 1990; Stafen and M. Zeller, 2005). Diversification can be done in agriculture, non-agricultural, or both. The diversity of the environment as a push and pull factors of households to diversify income. The main factors or reasons of farm households to diversify revenue is increasingly limited land areas, causing farmers are not able to maximize agricultural production, so that the acceptance of the farming sector was not optimal and cannot face the basic needs. This has led to domestic farmers must undertake diverse activities that can generate an income in order to survive. Social, cultural, economic and also causes differences in diversification of farmers. Besides the limiting factor of income diversification, it is a factor of skill or expertise of a person (Gatoet and Handewi, 2002; Handewi et al., 2003; Susilawati et al., 2002).

### **Hypotesis**

Expected that land area, income other than paddy farming, non farm income, age and number of family members have real impact on the occupational diversification for paddy swamp land farmers.

**Research Method**

This research was conducted in Kandis Area, Ogan Ilir Region. The location determination is done intentionally (purposive) on the basis that this area is swamp lowland paddy production centers in Ogan Ilir. The data collected from February to April 2016. The research method is a survey method. Sampling method is the simple random sampling method with 30 farmers of 397 KK This research uses two kinds of data sources are primary data and secondary data. The data obtained in the field processed by tabulation, mathematical calculation and systematic description. The first objective (1) to calculate the allocation of working time, will be calculated the amount of time each activity for one year and then be explained descriptively (Hernanto, 2002):

$$JK \text{ total} = JO \times HK \times JK$$

$$HOK = \frac{JK \text{ total}}{JKS}$$

Where:

- HOK = Total Amount of Work day (Weekdays)
- JO = Number of Persons (person)
- HK = Work Day (the day)
- JK = Hours of Work (hours)
- JKS = Standard Hours of Work (hours)

As for counting the number of time allocation of labor swampy paddy farmers, using the formula:

$$W_K = W_P + W_{LPS}$$

$$W_{LPS} = W_{USP} + W_{NU}$$

Where:

- WK = Number of household labor time allocation for various activities (HOK / yr)
- WP = Working time allocation of paddy farming activities (HOK / yr)
- WLPS = Allocation working time outside of paddy farming activities (HOK / yr)
- WUSP = Allocation of working time farming other than paddy farming (HOK / yr)
- Wnu = Allocation of work time for non-farming activities ( HOK / yr )

Allocation of working time to farming is the principal (WUP) is determined by the formula

$$W_P = \sum_{i=1}^8 W_i$$

Where:

- WP = Allocation of paddy farming working time ( HOK / yr)
- Wi = Allocation of paddy farming working time ( HOK / yr)

Disguise unemployment are those who are of working age, but his working time was below its potential. Disguise underemployment is calculated by estimating the potential of working hours available and compare it with the actual working hours. Potential farm household labor is the amount of potential labor available to family farmers. If the potential is higher than the work hours of actual work, then there is underemployment. According Hernanto (2002), the potential of the male labor force to work is 300 days (HOK / yr), 226 days for women workers (HOK /yr) and 140 days for children (HOK / yr).

To calculate the amount of income from farming uses the following formula:

$$\begin{aligned} P_nUT_p &= Y \times H_y \\ PdUT_p &= P_n - BT \\ \sum Pd &= PdUT_p + PdUL + PdNUT \end{aligned}$$

Where:

$P_n$	= Revenue received by farmers ( Rp / year )
$P_d$	= Income (Rp / year)
$Y$	= Production (kg)
$H_y$	= Output prices (Rp / kg)
$BT$	= Cost ( Rp / kg )
$NUT$	= Non Farming
$UL$	= Other farming
$UTP$	= Paddy farming

To answer the third project, which analyzes the determinants of work time allocation behavior in swamp land paddy farmers used a multiple regression equation as follows:

$$\begin{aligned} \ln CH U_{Pi} &= \ln a + b_1 \ln PdU_{Pi} + b_2 \ln Pd_{LPSi} + b_3 \ln Pd_{NUi} + b_4 \ln U_i + b_5 \ln P_i + b_6 \\ &\quad \ln JAK_i + b_7 \ln LH U_{Pi} + \mu_i \\ \ln CH_{LPSi} &= \ln a + b_1 \ln PdU_{Pi} + b_2 \ln Pd_{LPSi} + b_3 \ln Pd_{NUi} + b_4 \ln U_i + b_5 \ln P_i + b_6 \\ &\quad \ln JAK_i + b_7 \ln LH_{LPSi} + \mu_i \end{aligned}$$

Where:

$CH UP$	= Occupational Diversification in paddy farming (HOK / yr)
$CH LPS$	= Occupational Diversification from outside the paddy farming, that is another s farming than paddy farming and non-farming (HOK / yr)
$PdUP$	= Income of Paddy farming ( Rp / yr )
$PdLPS$	= Income from outside the paddy farming ( Rp / yr )
$PdNU$	= non-farming income ( Rp / yr )
$U$	= Age (yr)
$P$	= Education (yr)
$JAK$	= number of family members (people)
$LHUP$	= paddy farming land area (ha)
$LHLPS$	= non-paddy farming land area (ha)
$\mu$	= standard error

## Results and Discussion

### a. Diversification Work and Income Structure

Table 1 presents a case of disguise unemployment of 628,25 HOK is found in swampy areas. Paddy farming can only absorb 7.17 percent of the available potential labor. This has an impact on lower income farmers in the region. As shown in Table 2 , the household income of paddy farmers is only Rp 9,919,083.73 (Rp / lg / Year) .

Table 1. Potential, Allocation Working Time for Paddy Farmings, and Disguise Unemployment on Swampy Land of Kandis Village, 2016.

No	Classification	Man		Woman		Children		Total (HOK)	Allocation (%)
		HOK	(%)	HOK	(%)	HOK	(%)		
1	Potential Hours of Work							666.00	
2	Allocation Working Time for Paddy Farmings	29.54	13.04	14.72	8.99	3.49	57.78	47.75	7.17
	Disguise Unemployment	270.46	43.75	211.28	34.17	136.51	22.08	628.25	92.83

Occupational diversification done by farmers in order to cover the low farm income. Selection of the job is the work of non-paddy farming and non farming (labor, the private sector, civil servants, trade). Based on Table 2 shows that that the total household labor time allocation to farmers amounting to 226.58 HOK for men than for women in the amount of 163.72 HOK and for the allocation of working time of 6.04 HOK for children. In this case, the allocation of working time of man greater than women and children because the man is a head of household who is obliged to meet the needs of his family. Allocation of working time greatest, namely on non-farming activities amounted to 270.00 HOK, then amounted to 76.70 HOK for non-paddy farming and by 47.75 HOK for paddy farming.

Table 2. Occupational Diversification in Swamp Land of Kandis Village, 2016

No	Occupational Structure	Man		Woman		Children		Total (HOK)
		HOK	(%)	HOK	(%)	HOK	(%)	
1	Paddy farming	29.54	13.04	14.72	8.99	3.49	57.78	47.75
2	Non paddy farming	50.78	22.41	23.37	14.27	2.55	42.22	76.7
3	Non farming	146.26	64.55	125.63	76.73	0	0	270.00
	Total	226.58	100.00	163.72	100.00	6.04	100.00	394.45

Time working allocation for non Farming activities are biggest. This is caused by the non- farming activities has uncertain time. It can work for more than 8 hours per day such as trade, drivers and laborers. One thing that draws attention to the occupational diversification has led to an increase in the actual hours worked by 626.01 percent and a decrease in disguise unemployment amounted to 56.08 %. Research results are consistent with research Adriani (2015).

The total income is a combination of all revenues received from all income received by farmers, either from paddy farming, nor from non-paddy farming and non-farming. The total income of farmers in detail can be seen in Table 3.

Table 3. Income Diversification of Farmer in Swamp Land Kandis Village, 2016

No	Income Structure	Amount (Rp/lg/th)	Percentage (%)
1	Paddy farming	9,919,083.73	21.91
2	Non paddy farming	18,808,785.06	41.55
3	Non farming	16,543,750.00	36.54
Total		45,271,618.79	100.00

Based on Table 3 is known that the largest source of the total income of farmers derived from 41.55 percent non-paddy farming, non-farm that is equal to 36.54 percent, while paddy farming by 21.91 percent. The The biggest revenue sources are from outside of paddy farming activities amounted Rp.35, 352,535.06 per year. Thus, occupational diversification has increased household income of farmers amounted to 256.41 percent. This study is consistent with research Adriani (2015) that the occupational diversification can increase total income of farm households. Ersade (2003) also found that rural households growing niche to have a more diversified portfolio of income, compared to reviews their urban counterparts and the degree of diversification decrease with the level of urbanization. However, there are important differences in the level of diversification within the rural and urban areas depending on wealth.

## **b. Analysis of Occupational Diversification Determinants**

### **1. Diversification Work on Paddy Farming**

The results of multiple regression analysis showed that the coefficient of determination or  $R^2$  are 0.546 for the allocation of work time paddy farmers. The results of a partial analysis explain the behavior of working time allocation is influenced by variables in Table 4.

Testing violation of classical assumptions results: (1) autocorrelation can be seen the value of Durbin Watson rice farming amounted to 2,044 which in this case is not autocorrelation, (2) multicollinearity can be seen from the results output regression in the form of VIF (Variance Inflation Factor) where the regression equation multicollinearity obtained does not happen because the average VIF is less than 10, and (3) Heterocedasticity test used to determine the presence or absence of classic assumption deviation Heterocedasticity namely inequality variants of residuals for all observations in the regression model. The testing method used is Glesjer Test, in this case the regression results obtained are not going Heterocedasticity for all independent variables with absolute residuals greater than 0.05.

Based on the F test statistic, obtained an F value of 3.775 as compared to the F-table is significant at the 1 % level. From the F test results are known non-farm income, age, and number of family members giving real effect jointly to conduct the allocation of working time farmers. Based on t-test conducted on the regression equation, there are three variables were not significant on the behavior of the allocation of working time farmers on paddy.

Table 4. Parameter Values of Multiple Regression Equations of Working Time Allocation Farmer Households on Paddy Farming in Swamp Land: *Lesson Learn from Kandis Village*

Variable	Parameter	Standard Error	T-stat	Prob-t	Note
Intersep	-1,099	4,913	-0,224	0,825	-
Ln paddy farming land (LnLH)	0,123	0,222	0,552	0,587	-
Ln paddy farming income (LnPDUP)	0,174	0,278	0,627	0,537	-
Ln non-paddy farming income (LnPDLPS)	-0,004	0,011	-0,344	0,134	Significant
Ln non-farming income (LnPDNUT)	-0,017	0,011	-1,518	0,143	Significant
Ln age (LnU)	0,630	0,334	1,886	0,073	Significant
Ln education (LnP)	-0,158	0,156	-1,014	0,322	-
Ln number of family member (LnJAK)	0,363	0,142	2,553	0,018	Significant
$R^2 = 0,546$ F-stat = 3,775					

The analysis revealed a number of factors need to be attentive to make farmers still allocate her time for paddy farming. If we hope to materialize food security, then some of these factors need to be a concern. Land use, education and income of paddy farming is not an important factor that encourages farmers allocate their work time on paddy farming.

Factors that influence the allocation of work time on rice farming is outside of non-paddy farming and non-farm income. The estimation results show a negative relationship between them. This means that if an increase in non-paddy farming and non farming income, the working time allocation of paddy farming will decline. These results give a serious signal to the sustainability of food security in swamp land. Occupational diversification performed farmer households to overcome Disguise Unemployment, it led to a new problem that is a threat to food security. With an opportunity to diversify the work on the fields outside of paddy (non-rice farming and non farming), farmers tend to abandon paddy farming. It is dangerous if it is associated with aspects of food security. In the future, it is caused to decrease food production and food security is not achieved.

The parameter values for age at 0.630 and prob-t value of 0.073, which means significantly positive at  $\alpha = 1\%$ . This means that in case of a 1% increase in the age, the working time allocation of farmers will increase by 0.630%. Age becomes the deciding factor for farmers in paddy farming. A positive value indicates paddy farming would be dominated by the older workers; while a young age worker is more like working on outside of paddy farming. It also bodes no good for the development of food security. Opportunities to diversify the job from rice farming into non-rice, instead of decreasing interest of young people in paddy farming.

The estimation results also show that the number of family members a real positive effect on the behavior of the allocation of working time farmers amounted to 0,363. This

means that if there is an increase in the number of family members by 1%, then the behavior of the allocation of working time farmers will be increased by 0,363%. This is as expected, due to the increasing number of family members then increasing the allocation of working time farmers. In this case the number of family members more will influence the farmer's decision to allocate work time due to the number of family influence on the amount of labor.

The results of this study are consistent with Ersado (2003), Households with a more diversified income base are better-able to withstand the unfavorable impacts of the policy changes and weather shocks. The fact that are relatively better-off Households have a more diversified income base following the shocks implies that the poor are more vulnerable to economic changes Unaccompanied by a well-designed safety nets.

## 2. Diversification Work with Outside of Paddy Farming

The results of multiple regression analysis showed that the coefficient of determination or  $R^2$  of 0.871 for the allocation of non-rice farmer working time. Here are the results of a partial analysis that explain the behavior change work time allocation is influenced by variables in Table 5.

Table 5. Parameter Values of Multiple Regression Equations of Working Time Allocation Farmer Households on Outside of Paddy Farming in Swamp Land: *Lesson Learn from Kandis Village*

Variable	Parameter	Standard Error	T-stat	Prob-t	Note
Intersep	-1,084	5,668	-0,191	0,850	-
Ln paddy farming income (LnPDUP)	0,219	0,296	0,739	0,468	-
Ln non-paddy farming income (LnPDNUT)	0,116	0,018	6,595	0,000	Significant
Ln non-paddy farming income (LnPDLPS)	0,024	0,017	1,357	0,189	Significant
Ln non paddy farming land (LnLH)	0,381	0,197	1,932	0,066	Significant
Ln age (LnU)	0,295	0,528	0,559	0,582	-
Ln education (LnP)	0,112	0,255	0,437	0,666	-
Ln number of family member (LnJAK)	-0,226	0,216	-	0,307	-
		$R^2 = 0,871$		F-stat = 21,270	

The results of multiple regression did not occur autocorrelation and Multicollinearity, as obtained Durbin Watson out of 1,255 rice farming which in this case is not autocorrelation. Multicollinearity can be seen from the results of the regression output in the form of VIF (Variance Inflation Factor) where the regression equation obtained multicollinearity not happen because the average VIF outside the rice farm is less than 10. Heterocedasticity test gained nothing happens Heterocedasticity for all independent variables with absolute residuals greater than 0.05.

Based on the rules statistict F-test results, obtained an F value of 21.270 as compared to the F-table is significant at the 1 % level. From the results of the F-test can be analyzed that the variable land area outside of the paddy farming, income beyond non-paddy farming and non-farming income effect jointly to conduct the allocation of working time farmers on outside of rice farming. Based on t-test conducted on the regression equation, there are four variables were not significant on the behavior of the allocation of working time farmers.

Paddy farm income did not significantly affect the behavior of the allocation of working time farmers. Paddy farming income is smaller than the non-farm income. This is due to farming activities and labor costs compared to the non-farming activities were just a little cost and effort. So that the allocation is used tends to non-farming activities due to a larger income than paddy farming. So the paddy farm income did not significantly affect the behavior of the allocation of working time farmers. Age, number of family members, and education also had no significant effect on the behavior of the allocation of work time. Thus, age, number of family members and education are no longer a consideration when entering the labor market. In rural areas, the poverty issue is becoming a driving factor to enter the labor market. As stated by poor households are trying to diversify since the total amount of revenue generated from all resources is apparently greater than the revenue gained by utilizing all the resources focused only on a single income option. This motivation by Ellis (2000), called "necessity" or "push-distress diversification". These results are also in line with Rafhael and M. Qaim (2009), almost all the households to diversify, the contribution of income earned outside the main farm of more than 50%.

Factors non-paddy farming land has a real positive influence on the behavior of the allocation of working time farmer. This is as expected, due to increased non-paddy farming land, the farmers working time allocation behavior also increased. Paddy farm income factors beyond a positive significant effect on the behavior of the allocation of working time farmers. The estimation results also show that the non-paddy farming income and non-farming income positive significant effect on the allocation of work time non-paddy. This finding is interesting that income into consideration a person to increase their working hours. This is common in poor households. As stated by Ellis (2000) that the Poverty motivation, poor households in developing countries faced constraints and resource markets. As a consequence, they are not able to expand a single activity in order to obtain income to a level which allows basic needs are met.

These results are also consistent with studies Ellis (2004), empirical work shows that at the lowest levels of income per capita, immense Efforts are required in order to 'break through' into opportunities and returns to labor that enable the family to climb out of poverty; on the other hand, at somewhat higher levels just above the poverty line, it Becomes substantially less difficult, to Achieve a virtuous spiral that can lead to higher levels of income and a more secure livelihood. The key to reviews these thresholds traps and lies in the asset status of families, and especially in human capital (education and skills) and flexible assets that can be quite quickly intervening converted into cash or other assets (money itself, credit access, livestock). It might be thought that the attention paid by the better off Households to non-farm activities would result in the neglect and poor performance of Reviews their farming activities. Not so at all. Recent evidence from Sub-Saharan Africa shows how agricultural productivity per hectare rises steeply across the income ranges in parallel with the diminishing reliance on agriculture of the better off. Net farm output per hectare in a series of country samples was between three and six times higher for the top income quartile of households compared to the lowest income quartile.



## Conclusions and Policy Implications

### a. Conclusion

Lesson learn in the swampy areas from Kandis Village, there are cases of disguise unemployment of 618.25 HOK. Occupational diversification has led to an increase in the actual hours worked by 626.01% and a decrease of 56.08% disguise unemployment, and increasing household income of farmers amounted to 256.41%.

The behavior of occupational diversification in paddy farming is significantly affected negatively by non-farming income and non-paddy farming income. With a real positive influence of age, then the paddy farming is dominated by older workers, while younger workers will be more work outside of paddy farming. The behavior of occupational diversification in addition to paddy farming is significantly affected positively by non-farm income, farm income and non-paddy land.

### b. Policy Implication

The results of the analysis give a serious signal about the role of swampy areas on the sustainability of food security. Occupational diversification performed farmer households to overcome underemployment, it led to a new problem that is a threat to food security. With an opportunity to diversify the work in the field of non-paddy farming and non-farming, the farmers tend to abandon paddy farming. In addition, opportunities to diversify jobs from paddy farming to non-paddy farming, instead of decreasing interest of young people in paddy farming. Paddy farmers will be dominated by the elderly.

To overcome this problem, it is necessary the intervention of the government to carry out socioeconomic empowerment and community-based institutions and also local agricultural resources. Development of non-paddy farming and non farming should remain geared to support the development of paddy farming.

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