

The Portfolio Returns of Small and Large Companies: Evidence from The Indonesia Stock Exchange

by Sri Hasnawati

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ABOUT IFA

1 The Indonesian Finance Association (IFA) is a non-profit organization established to cultivate a strong network among academics, businesses, regulators, and financial experts in Indonesia, especially in the realms of corporate finance, capital markets, international finance, and financial institutions. The IFA organizes an annual conference to facilitate members and non-members to come together for disseminating their knowledge and experiences in a friendly and helpful environment.

1 The establishment of IFA was initiated by three reputable business schools in Indonesia, i.e., Faculty of Economics and Business Universitas Indonesia (FEB UI), Faculty of Economics and Business Universitas Gadjah Mada (FEB UGM), and Faculty of Economics and Business Universitas Sebelas Maret (FEB UNS). The current President is Prof. Dr. Irwan Adi Ekaputra of (UI) whereas the Chair of Steering Committee is Prof. Dr. Eduardus Tandelilin (UGM). The IFA board is comprised of more than 30 prominent scholars and practitioners in financial fields. Furthermore, this organization is supported by more than 15 international advisors.

The IFA's first conference and declaration were successfully held in Solo, hosted by Faculty of Economics and Business Universitas Sebelas Maret (FEB UNS) in January 2015. The second conference was held in Yogyakarta, hosted by Universitas Gadjah Mada (FEB UGM). The third one was hosted by Universitas Indonesia (FEB UI), held in Depok. The fourth conference was held in Lampung, hosted by Universitas Lampung (FEB Unila). This year, the IFA has appointed Faculty of Economics and Business Universitas Sam Ratulangi (FEB Unsrat) to host the 5th Annual Conference, to be held on August 14-15, 2019 in Manado, Indonesia.

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Mission Statement

1 The IFA is aimed at improving the quality and quantity of research by Indonesian scholars and practitioners in finance and banking. Moreover, the organization yearns to contribute by offering research-based policy recommendations to financial regulators in Indonesia. The IFA's annual conference corresponds with its missions of: (1) enhancing Indonesian financial scholars' contributions to the international academic landscape, and (2) participating in advancing the financial literacy and policies in Indonesia.

The IFA's Objectives

Among other goals and objectives, the IFA elects to emphasize the following purposes:

- Fostering networks among members.
- Promoting its members' experiences and personal development.
- Improving knowledge in the financial fields.
- Publishing in top-tier journals based on robust and rigorous methodology.

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THE CONFERENCE

➤ **THE THEME**

We know that the advancement of digital technology has been reshaping substantially the world of finance. Thus, with the hype of financial technology, the theme taken by IFA for this year's conference is **The Future of Corporate Governance in Digital Economy Transformation.**

➤ **TOPICS**

5

The Conference will cover the following topics of finance:

Asset Pricing Theory, Behavioral Asset Pricing, Banking and Financial Intermediation, Financial Crisis and Stability, Empirical Corporate Finance, Corporate Finance Theory, Derivatives, Empirical Asset Pricing, International Finance, Market Microstructure, Emerging Capital Markets, Islamic Finance, Corporate Governance, Corporate Social Responsibility, and Microfinance.

➤ **PARTICIPANTS**

The Conference is expected to attract and invite participants from all over Indonesia and other countries, in particular researchers, financial regulators, and financial industry from highly-respected institutions. The number of participants in the Conference is approximated to be 100 presenters. The details of the Conference are presented in the following subsection.



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CONFERENCE VENUE

Venue: Sintesa Peninsula Manado Hotel

Jalan Jend. Sudirman, Kota Manado, Sulawesi Utara, Indonesia +62-431-855008

Conference Schedule Program

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CONFERENCE PROGRAM

14-15 August 2019, Manado, Indonesia.

Wednesday, 14 August 2019	
08.00-09.00	Registration & Coffee
09.00-09.20	Indonesia Raya, Prayer and Traditional Dance
09.20-10.00	Welcome Remarks & Opening
09.20-09.30	Governor of North Sulawesi, Olly Dondokambey, SE (Opening)
09.30-09.35	Rector of UNSRAT Prof. Dr. Ir. Ellen Joan Kumaat, MSc., DEA
09.35-09.40	Indonesian Finance Association Prof. Eduardus Tandelilin
09.45-09.50	Dean of FEB UNSRAT Dr. Herman Karamoy, SE., MSi., Ak., CA
09.50-10.00	presenting gift and photo session
10.00-11.00	Keynote Presentation
10.00-11.00	Prof. Hans Van Ees, PhD (Professor at the Faculty of Economics and Business, University of Groningen the Netherlands)
11.00-12.00	Suwandi, Ak., MM (Kepala Kantor Manajemen Strategis dan Perumusan Kebijakan LPS)
12.00-13.00	Lunch
13.00-15.00	Workshop Publication in International Journal 1
	Dr. Irwan Trinugroho (Associate Professor of Finance, Universitas Sebelas Maret, Editor in Chief Int. J. of Economic Policy in Emerging Economies)
15.00-15.15	Refreshment Break
15.15-17.15	Parallel Session 1
18:30-21:30	Gala Dinner (All Delegates)

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Thursday, 15 Agustus 2019	
08.30-09.30	Registration & Coffee
09.30-11.30	Workshop publication in International Journal 2
	Prof. Hans Van Ees, PhD (Professor at the Faculty of Economics and Business, University of Groningen the Netherlands)
11.30-12.30	Lunch
12.30-14.45	Parallel Session 2
14.45-15.00	Refreshment Break
15.00-16.45	Parallel Session 3
16.50-17.30	Closing Ceremony (President of IFA. Prof. Irwan Adi Ekaputra)

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Parallel Session Presentation Schedule

Day 1 (14 August 2019), Session 1 (15.15-17.15)

Day 1 Parallel Session 1 (15.15-17.15)		
Room 1 (Lotus 2)		
Session Chair: Dr. Irwan Trinugroho		
1	Siong Hook Law, Irwan Trinugroho, Ali Kutan	Can financial development enhance transparency in Developing Economies? Threshold and Nonlinear Effects
2	Dennij Mandei, Daisy S.M Engka and Robert Lambey	Measuring the Exposure of Foreign Exchange Risk and its Hedging Action for Foreign Exchange Banks in Indonesia
3	Hizkia H. D. Tasik	Have Past Sins Contributed to Future Lives? The Role of Market Risks during the 2008-2009 Financial Crisis in Altering Indonesian Banks' Financial Performance Afterwards
4.	Sri Hasnawati	The Portfolio Returns of Small and Large Companies: Evidence from The Indonesia Stock Exchange
Room 2 (Jasmine)		
Session Chair: Dr. Bayu Prawira Hie		
1	Bayu Prawira Hie	Impact of Transforming Organizational Culture and Digital Transformation Governance toward Digital Maturity in Banks in Indonesia
2	Ika Rica Candraningrat, Ray Airlangga	Financial Technology and Its Role Against the Development of SME
3	Christofel Mintardjo, Achmad Sudiro, Mintarti Rahayu, Sujatno	Technopreneur Intention to build a new startup: Beginning of fintech startup

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Day 1 (14 August 2019), Parallel Session 1 (15.15-17.15)

Room 3 (Alamanda)		
Session Chair: Dr. Leo Indra Wardhana		
1	Tri Gunarsih, Setiyono Setiyono and Fran Sayekti	Bi-directional in Sustainability Reporting and Profitability. A Study in Banks and Nonbanks Listed Companies in IDX
2	Yosua Lumban Gaol	Analysis of Factor Affecting the Company to Issuing Bonds and Sukuk
3	Mochammad Doddy Ariefianto, Herman Saherudin, Seto Wardono, Irwan Trinugroho	Depositors' Trust: Evidence from Indonesia
4	Leo Indra Wardhana	Do Islamic banks smooth less their earnings?
Room 4 (Frangipani)		
Session Chair: Dr. Wahyoe Soedarmono		
1	Irwan Trinugroho, Sylviana Maya Damayanti, Aurelius Aaron, Wisnu Untoro, Eduardus Tandelilin, Bruno S. Sergi	Banking Concentration and Deposit Rate: Evidence from Indonesia
2	Mochammad Doddy Ariefianto, Herman Saheruddin, Wahyoe Soedarmono	Intertemporal effect of bank market power on risk taking: Evidence from Indonesia
3	Oktofa Yudha Sudrajad, Georges Hubner	The Dynamics of Bank Business Models and Efficiency: Empirical Evidence from ASEAN Banking Sector

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Day 2 (15 August 2019), Parallel Session 2 (12.30-14.45)

Room 1 (Lotus)		
Session Chair: Dr. Joy Elly Tulung		
1	Andika Satria Putra	Analysis of Illiquidity Premium and Illiquid Based Portfolios in Indonesia Stock Exchange within 2013 – 2017
2	I Kadek Rian Mahendra and Ni Ketut Rasmini	Market Reaction to the Increase in Bank Indonesia 7-Day Reverse Repo Rate on August 15, 2018
3	Herman Karamoy and Joy Elly Tulung	The Effect of Financial Performance and Good Corporate Governance to Stock Price In Non-Bank Financial Industry
Room 2 (Jasmine)		
Session Chair: Dr. Mochammad Doddy Ariefianto		
1	Lucky O. H. Dotulong	Traditional Market Traders' Preferences in Using Capital Sources (Phenomenology Study of Traditional Market in Manado City)

**The Portfolio Returns of Small and Large Companies: Evidence from
The Indonesia Stock Exchange**

By Sri Hasnawati

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ABSTRACT

This study aims to analyze the portfolio returns of the small and large companies. The results of previous studies stated that the small companies obtained greater returns compared to large companies. The present study attempted to verify this conclusion by studying the portfolio returns in the Indonesia Stock Exchange using the 80 stocks that have the lowest capitalization and the largest capitalization of the public companies in Indonesia during the 2013 – 2015 period. Based on the theory of portfolio, it was revealed that the portfolio returns of the small companies were, on average, lower than those of large companies, and the portfolio risks of small companies were higher than those of larger companies.

Key words: Small companies, large companies, portfolio returns, portfolio risks

JEL Classification: G11

INTRODUCTION

The Indonesian Capital Market growth is reflected in the Capital Market Composite Index. Since 1984 the capital market composite index has been increasing consistently. This increase can be seen from the stock index 293.548 in 1989 to 5523.290 in 2015 (IDX, Fact Book 2015). In September 2016 10 shares listed in the Stock Exchange yielded the highest returns, namely 14.76% on average per day (www.idx.co.id). This fact shows that this type of investment is very interesting amidst the sluggish economic condition in Indonesia. Although the Indonesian economic growth increased in the second half of 2016 and reached 5.18%, it should be noted that the growth was due to increasing public consumption rather than investment. Based on this situation, the Indonesian

economic growth cannot be confidently said to be good enough. Investing in the stocks market is very promising because of the possibility of obtaining higher returns, but it should be borne in mind that high returns also have high risks. In September 2016, the risks from investing in 10 stocks were, on average, 9.21% per day (www.idx.co.id). Therefore, one needs to be extra careful when managing investments in the capital market.

One strategy in reducing the risks of investing in the capital market or investment is by implementing the portfolio diversification. That is, portfolio investments can be formed using a wide variety of basic assets or certain asset criteria. Various studies on the portfolio in the world markets have been done before. The result of study by Hasnawati (2010) in the Indonesia stock Exchange that the value of glamour stock using the price earning ratio approach. The research concluded the glamour stocks produced higher return than value stocks. Similar study by Saleh (2005) using data from the 1980- 2000 period in the Aman Stock Exchange found that the value of glamor stocks using the book to market approach proved the absence of premium value; it only found the superiority of stocks with small capitalization (small stocks) compared with stock with large capitalization (big capital stocks). Meanwhile, The Brandes Institutes, an organization that actively conducted research on Value - Glamour Investing performed the latest update in 2007 using the data in the US markets (NYSE and NASDAQ) and the observation data in 1968 and 2006. This observation conducted by using an approach that sorts the portfolio stocks using the Price to Book Value parameter into 10 groups (Desile), where Desile 10 (Lowest PBV) is a stock portfolio Value and Desile 1 (highest PBV) is a stock portfolio glamor, produced results that are consistent with previous studies, namely the superiority of the portfolio of Value stocks compared with the portfolio of Glamour stocks. The returns of the cumulative portfolio during 5 years of observation was 72% for stocks with the highest PBV (glamor stocks), while the cumulative portfolio returns with the lowest PBV (value stocks) for 5 years was 160.7%. The other research by Min et al (2009), confirming that value stocks are riskier than growth stocks in bad times. The high risk produced high return supported.

The phenomena that attract investment in several countries showed that it was the small companies that generally yielded returns higher than large companies Ayyagari et al (2007). Bostrom & Petersson (2011) In February 2015, the Wall Street Journal using the Russell 2000 stock index noted that small companies, rather than large companies, showed an increase over the previous three months. In addition, American investors showed a renewed interest on the stocks of small companies because of the prediction that the stocks of small companies would grow along with the growth of the economy. In the fourth quarter of 2014, the value of large-capital stocks had decreased due to the strengthening of the US dollar, falling oil prices and lower incomes of major banks. Because of the lower price of oil, the low-income US consumers had an increasing purchasing power, which in turn benefitted smaller companies (Investopedia <http://www.investopedia.com/ask/answers/022515/average-return-small-cap-companies-better-large-cap-companies.asp#ixzz4JGdX5riQ>). This opinion was reinforced by the results of the research Morningstar stock research, which showed that the performance of the investment portfolio in the small capital stocks for every \$ 1 being invested for 30 years (1975-2005) yielded a higher performance than the medium and large capital stocks in generating returns and minimal risks.

In February 2015, the small stock companies were expected to remain strong at least until the interest rates rose. On the other hand, higher interest rates tend to make investors feel uncertain about the stock market and therefore make small stocks risky because it would be more difficult to have them traded. Tudor et al (2014), who conducted research on portfolio stocks in Bucharest Stock Exchange, found that the average returns of SME portfolio per month were 2.10%, which were greater than the large capitalization portfolio, which reached 1.35%, and the market portfolio, which reached only 0.56%

The option of investing in either value stocks or the glamor stock or investing in either small companies or large companies represents an investment style of its own and has become a strategy used by investors to obtain the best returns while noting tolerable risks. The value investing is an investment style which believes that investing in value

stocks will yield higher returns, especially for long-term investment periods. The same goes with the investment in stocks of small companies compared to those of large companies. A study by Tan (2012) found that size is related to the company profit. Furthermore, they argued that the company size would significantly influence the returns. That is, the stocks of small companies have a tendency to yield lower income (earning) than those of large company stocks. However, there is a dissenting opinion which stated that the large-capitalization companies would give annual returns lower than small capitalization companies Bostrom & Petersson (2011). These different views have provoked a lengthy debate and whether the difference is only temporary or will occur in the long term remains to be seen.

Based on the results of the recent research results, the occurring facts and the estimation made by investor in several world markets, it is interesting to conduct research on the portfolio return performance of small and large company stocks in the Indonesia Stock Exchange during the 2013-2015 period.

LITERATURE REVIEW

Studies define small companies in different ways. Dermott & D'Auria (2014), categorized small companies by looking at the value of the company's stock capitalization. They distinguished the small and large companies based on the median market value of NYSE stocks. However, the definition of companies with small and large capitalization has changed over time. In general, stocks with large capitalization are said to be the feature of big companies while those with small capitalization are considered as small companies. In the 1980s stocks with large capitalization can still be categorized as the feature of large companies but in 2015 the categorization has changed and may be categorized as a feature of the small companies in accordance with changes in the regulations and environments.

In relation with the risks of the investment, the large-capitalization stocks are considered less risky than stocks with small capitalization. This is because stocks with

large capitalization (large companies) are considered to be more established and stable than small companies. Stocks with small capitalization in their early stages of growth are risky because they are financially weaker than large companies. However, small companies have the potential of higher growth. This view is supported by Merkel (2016) who argued that the development of small and large company returns can be seen from the performance history of the US companies since 1926 and the international companies since 1970. That is, the performance of companies with small capitalization had outperformed the companies with large capitalization in the US and the international stock markets. It must be admitted, however, that many smaller companies will carry higher risks than large companies from time to time because they are not established as larger companies. Supported previous studies by Vanden (2015) found that high level of risk will produce high returns as well. In addition, small companies produce higher risks compared to large companies. Why are small companies more risk than large companies? Because several types of risks associated with small companies are difficult to approach funding sources, lower market share or reputable brand names Duy & Phouc (2016). According to the CAPM, small companies will get a higher return. Investments in these companies can be considered to be at the highest level of risk and a higher return.

A small company is a risky loan candidate for banks because it has a smaller operation, a smaller number of employees, a minimal inventory and in general few track records. However, it should be noted that historically the investment portfolio of small and medium-size companies has yielded on average an investment return of 12% per year, which is higher than that of the large companies, which only reaches 9.9% per year. The companies with small capitalization in the US has generated an average return of 2.1% per year higher than the companies with larger capitalization since 1926. With the same criteria for capitalization value, international small companies has also outperformed international companies with large capitalization in generating average returns which has reached 5.8% per year since 1970. On average the returns of international companies with small

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capitalization reach 15% per year, compared with the international companies with large capitalization which reach 9.2% per year (Markel, 2016).

In general, the stocks of small companies tend to yield greater returns than those of large companies. This phenomenon is commonly called the size effect. Research conducted by Bostroom & Peterssson (2011). They are also showed that the size of a company has a negative impact on the company's stock returns. argued that the size of the company can be seen through its market value of equity.

Bearing in mind the differences of views from some of the previous findings, we can conclude that the size of the market capitalization is a risk factor that should be taken into account in calculating the stock returns, as well as the theory stating that small companies or companies with small market capitalization outperforms large companies. To explain the anomaly, we will consider a model consisting of three factors, created by Fama and French, namely the market returns, companies with high book-to- market values, and small capitalization stocks.

To determine which industry yields the highest returns in investments based on the time as well as the value of money, Sage works, a financial information company, recently conducted an analysis of financial statements of private companies. This study tried to use small companies as a sample. There was some initial empirical evidence for the effect of size, namely the tendency that the stocks of small companies yielded higher returns than those of large companies (Banz,1981).

METHODS

This study uses the basic theory of the portfolio with the target investment in the capital market to produce a certain return with a minimal risk. The return per share is calculated based on the difference between the final value and the initial value divided by the initial value. The return does not include dividends because it is calculated on a monthly basis. The individual stock returns will be calculated according to the return of the stock portfolio of the group. The return calculation is not the only main objective to be achieved in this study because there is another important thing that becomes the focus of attention in the present study, namely the risk. As a result, the present study will calculate the risk of individual and portfolio stocks.

³ The investment risks and the expected returns directly affect the stock price. The risk and the return are two key determinant factors of the investment results. Therefore, investors must carefully assess the risk and the rate of return for any investment decisions to ensure that the expected return is in accordance with the level of required risk.

Risk is the possibility of loss or variability of returns, while return refers to the distribution of income on investment plus the change in value compared to the initial value depicted in the percentage. The investment return varies over time for different types of investment. In general, the financial decision makers are risk averse. If they choose an alternative that is more risky, they expect a higher rate of return than expected as compensation for taking a greater risk.

³ The single asset risk is measured in much the same way as the risk asset portfolio. Sensitivity analysis and probability distribution can be used to assess the risk. The range of standard deviation and coefficient of variation can be used to measure risk quantitatively.

The portfolio return is calculated as a weighted average of the returns of individual assets of which the portfolio is formed. The portfolio standard deviation is calculated using the standard deviation of a single asset. The relationship between the two types of asset can be positive, negative, or uncorrelated. In extreme circumstances, the relationship can be a positively perfect correlation (+1) or a perfect negative correlation (-1) [Gitman, 2006].

The research data for the present study was the secondary data with the ratio scale taken from the Indonesia Stock Exchange during the 2013 – 2015 period. Observations on the monthly stock prices were conducted as the basis for calculating the monthly returns. The monthly returns were calculated based on the closing price at the end of each month. The closing price of the previous month became the open price of the following month. The stocks of small companies and large companies were determined based on the value of stock capitalization of companies listed in the IDX (Tudor et. al 2014). Out of all stocks from 513 companies listed in December 2015 (IDX Fact Book, 2015), 50 stocks with the largest capitalization were selected to represent large companies and 50 stocks with the lowest capitalization were selected to represent small companies. The market capitalization value was determined on the basis of the number of outstanding stocks multiplied by the closing price at the end of 2015. On this basis, the stocks selected as the samples of the present study are shown in Appendix 1.

The present study employs the Sharpe Ratio model to measure the performance associated with the risks. The Sharpe Ratio was developed by William Sharpe and was originally known as the Reward to Variability Ratio. The risk free rate as one of the indicators was used to assess the performance of the portfolio using the data rate of the monthly interest rate issued by the Central Bank of Indonesia (Bank of Indonesia) called SBI.

Sharpe Ratio is formulated as follows:

$$SR = \{ R(i) - R_f \} / \sigma$$

Where :

SR = Sharpe Ratio

R(i) = Stock return i

R_f = risk free rate

σ = Standar deviation (risk)

4 In addition to using the portfolio performance tool, this research also examined the coefficient of variation portfolio (CV) to determine the risk level of the small and large portfolio companies (Gitman, 2006), as formulated in the following equation:

CV = Standard deviation portfolio / Expected Return Portfolio. A portfolio or asset with a lower coefficient of variation is better, considering the relative size of the expected return asset and the risks.

RESULT

The present study used the data per 31th December,2015, obtained from 525 companies. The data was used to determine the samples of companies for the purpose of the research. Based on market capitalization, 40 companies with the highest capitalization were selected as large companies and 40 companies with lowest capitalization as small companies were selected. Originally, the study planned to select 50 companies which represented the companies with the highest and lowest capitalization, but due to the extreme constraint only 40 companies that represented each the small and large companies were selected as samples.

Large companies were those that have an average capitalization value of IDR 84.622 trillion, with the highest value being PT HM Sempurna Tbk (IDR 437, 355 trillion) and the lowest PT. Wijaya Karya Tbk (IDR 16.233 Trillion). Small companies were those that have an average capitalization value of IDR 66,633 billion, with the highest capitalization value being PT. Ricky Global Tbk (IDR 102,033 billion) and the lowest capitalization value PT. Wahana Pronatural Tbk (IDR 28,080 billion). The average monthly

return for 3 years for large companies was 1.45% with a risk level of 6.15%, while the average return of small companies -0.32% with a risk rate of 13.72%. By taking these into account, the investment portfolio performance in small and large companies was calculated using the Sharpe Ratio. One of the indicators needed to calculate the portfolio performance with the Sharpe Ratio is the risk free asset. The risk free interest rate uses the average monthly rate issued by Bank of Indonesia as the Federal Reserve bank of Indonesia, which during the research was 0.597%. The performance of portfolio of large companies during the research was 0.138 and the portfolio performance of small companies was - 0.0068%. In addition to the standard deviation, the portfolio risk was assessed by using the coefficient of variation - 42.87 for investment portfolios in small companies and 4.24 for large corporate investment portfolios.

Table 1. Monthly average return, risk, Federal Reserve Bank Rate (BI), and Sharpe Ratio 2013-2015 (40 shares)

	Average Return (%)	Standard Deviation Return (%)	Average of Interest Rate FRB SBI	Sharpe Ratio	Coefficient of Variation
<i>SMALL</i>	-0.32	13.72	0.597588	-0.0668	42.87
<i>LARGE</i>	1.45	6.15		0.138	4.24

Source: Appendix 1, 2

DISCUSSION

Based on the results of the research shown in Table 1 above, the monthly portfolio returns of large companies were found to be greater than those of small companies, namely $1.45 > -0.32$. However, the risks of portfolio in large companies were found to be smaller than those in small companies, namely $6.15 < 13.72$. These results appear to contradict the portfolio theory which states the higher the risk the higher the return. When associated with the risk, large capitalization stocks were less risky than small capitalization stocks.

This was because stocks with large capitalization were considered more established and stable than the stocks of small companies. Stocks with small capitalization in the early stages of growth were more risky because they were financially weaker than large companies, but smaller companies had the potential of higher growth (Merkel, 2016). Furthermore, financial institutions such as banks would consider small companies as a group of companies on loan to be risky, because of their small scale of operations, small guarantees and minimal track records. These results and views are consistent with Beck & Kunt's (2006) opinion who stated that small and medium sized companies are more open to default risks due to their lack of capital and liquidity compared to large companies.

There are various types of investment risks. One important risk that is often considered when one invests in capital markets is the risk of liquidity. The liquidity risk can be seen from. Related the activity of transactions on the stock to this, the investment portfolio of the large companies in this study reached 33% and became the most actively traded stocks in the Indonesia Stock Exchange (Fact book, 2016). None of the portfolio investment in small companies, however, however, became the most actively traded stocks in 2015. Thus it can be concluded that the investors in IDX appeared to consider the liquidity factor to be greater than other risk factors such as interest rate and market risk (Gitman, 2006). This fact was supported by Tudor et al (2014) who stated that whenever the interest rate is high, the investors tend to feel uncertain about the stocks market and therefore would view the stocks of small companies to be more risky because they would become more difficult to be traded. The portfolio returns from large companies observed during the present research reached on average 0.853% higher than the risk-free rate. The portfolio returns from small companies, however, yielded a negative return of - 0.32. Consistent with Sharpe's performance portfolio returns, the performance of large companies was better than that of small companies ($0.138 > - 0.0668$). When associated with the results of the coefficient of variation of the portfolio for small and large companies, the portfolio of large companies also had relatively a lower risk than that of small companies.

CONCLUSION

Based on the results of the data analysis and discussion, the present research arrives at the following conclusions:

- The investment portfolio of small companies in the Indonesia Stock Exchange during the 2013-2015 period had lower portfolio returns than that of large companies.
- The investment portfolio of small companies in the Indonesia Stock Exchange had a bigger investment risk than that of large companies.
- The small companies listed in the Indonesia Stock Exchange had lower liquidity and higher business risks than large companies.

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NO	COMPANY	KODE	Capitalization (IDR000.000.000)	RETURN (%)	RISK (%)
1	PT. HM Sanjaya	HMSP	437,36	2,01	0,6
2	PT. BANK CENTRAL ASIA	BBCA	324,63	0,94	0,36
3	PT. TELKOM	TLKM	312,98	-0,52	0,24
4	PT UNILEVER	UNVR	282,31	0,82	0,92
5	PT BRI	BBRI	279,03	1,66	0,87
6	PT. Astra International	ASII	242,9	-0,39	0,49
7	PT. Bank Mandiri	BMRI	213,67	0,79	0,62
8	PT.Gudang Garam	GGRM	105,82	0,24	0,59
9	PT BNI	BBNI	92,13	1,25	0,87
10	PT Indocement Tungal P	INTP	82,18	0,33	0,74
11	Indofood CBP Sukses Makmur Tbk.	ICBP	78,57210515	1,82	7,78
12	Semen Indonesia (Persero) Tbk.	SMGR	67,619328	-0,58	7,61
13	Perusahaan Gas Negara (Persero) Tbk.	PGAS	66,54294	-0,87	9,43
14	United Tractors Tbk.	UNTR	63,22579056	-0,23	6,12
15	Kalbe Farma Tbk.	KLBF	61,87516119	0,84	6,88
16	Elang Mahkota Teknologi Tbk.	EMTK	58,09233415	3,19	10,78
17	Matahari Department Store Tbk.	LPPF	51,35535821	8,16	37,38
18	Sarana Menara Nusantara Tbk.	TOWR	48,46389375	-0,86	15,7
19	Indofood Sukses Makmur Tbk.	INDF	45,43870714	-0,11	6,7
20	Surya Citra Media Tbk.	SCMA	45,32696383	1,22	7,7
21	PT. Chaaroen Pokhphan	CPIN	42,6348	-0,5733	0,1275
22	PT. Jasa Marga	JSMR	35,53	-0,1433	0,0698
23	PT Mitra Keluarga	MIKA	34,9217664	0,2458	0,0877
24	PT. Bumi Serpong Damai	BSDE	34,64405315	31,99	0,0999
25	PT. Sinar MaS Muliarta	SMMA	32,10620682	-0,0116	0,0798
26	PT. XL Axiata	EXCL	31,1760431	-0,5642	0,091
27	PT Bank Danamon	BDMN	30,36415018	-0,7236	0,0989
28	PT. Indosat	ISAT	29,88663425	-0,3029	0,0896
29	PT AKR Corporindo	AKRA	28,33429194	0,4165	0,0917
30	PT Tower bersama	TBIC	28,17959142	-0,0918	0,0838
31	Mayora Indah Tbk.	MYOR	27,27761366	2,09126	0,095007
32	Media Nusantara Citra Tbk.	MNCN	26,48214417	-0,05033	0,102512
33	Bayan Resources Tbk.	BYAN	26,25000131	-0,07719	0,05148
34	Astra Agro Lestari Tbk.	AALI	24,95970825	0,231671	0,11326
35	Sumber Alfaria Trijaya Tbk.	AMRT	24,08421099	-1,59472	0,171913
36	Pakuwon Jati Tbk.	PWON	23,88716279	3,534523	0,127873
37	Lippo Karawaci Tbk.	LKPR	23,88540876	0,992085	0,118591
38	Summarecon Agung Tbk.	SMRA	23,80418977	1,117939	0,157168
39	Waskita Karya (Persero) Tbk.	WSKT	22,66606383	4,96881	0,156261
40	Bank Mega Tbk.	MEGA	22,57830269	1,928028	0,119947

Appendix 1. Large Companies

Appendix 2. Small Companies

NO	COMPANY	KODE	CAPITALIZA TION (IDR)	RETURN (%)	RISK (%)
1	PT. Sunson Tekstile	SSTM	83.496.000.000	-0,0218	0,0985
2	PT. Bekasi Asri Pemula	BAPA	78.300.000.000	-0,0255	0,05376
3	PT. Jakarta Kyoei Stell works	JKSW	77.355.000.000	-0,0058	0,12818
4	PT. Asia Plast Industries	APLI	76.645.023.840	-0,0022	0,092
5	PT. Dana Supra Era pacific	DEFI	75.527.166.000	-0,0176	0,15377
6	PT. Saham seri B Hanson	MYRTXP	74.799.995.427	-0,0098	0,10928
7	PT. Alaska Industrindo	ALKA	74.626.763.085	0,0195	0,1553
8	PT. Pembangunan Graha Lestari	PGLI	72.752.000.000	-0,0127	0,1103
9	PT. Steady safe	SAFE	72.584.738.844	0,0111	0,13658
10	PT. Zebra Nusantara	ZBRA	71.915.172.756	0,0011	0,1416
11	PT. Citatah	CTTH	68.927.029.976	0,0042	0,0967
12	PT. Ristia Bintang Mahkota	RBMS	64.600.000.000	-0,0255	0,08301
13	PT. Millenium Pharmacom	SDPC	60.887.277.412	-0,0026	0,10058
14	PT. Tempo Intimedia	TMPO	60.000.000.000	-0,0118	0,13783
15	PT. Prima Alloy Steel	PRAS	59.928.960.000	-0,0093	0,17092
16	PT. Inti Keramik ALAMsari	IKAI	56.928.766.440	-0,0032	0,07662
17	PT. Metro Reality	MTSM	56.049.750.000	-0,0227	0,1241
18	PT. Golden Retailindo	GOLD	55.215.844.580	-0,0057	0,06966
19	PT. Kedaung Indah Can	KICI	55.200.000.000	-0,0006	0,06651
20	PT Tanah Laut	INDX	55.192.353.800	0,0476	0,368
21	PT. Mustika Ratu	MRAT	53.089.344.000	-0,0238	0,05478
22	PT. Lionmesh Prima	LMSH	53.000.000.000	-0,0353	0,2231
23	PT. Eterindo Wahana	ETWA	50.602.363.880	-0,0331	0,1098
24	PT. Tira Austine	TIRA	50.588.737.500	-0,0051	0,03704
25	PT. Tirta Mahakam	TIRT	50.025.000.000	-0,0026	0,11466
26	PT. Akbar Indo Makmur	AIMS	46.200.000.000	0,0764	0,50656
27	PT. Intan wijaya International	INCI	44.978.928.000	0,0079	0,0851
28	PT. Kedawung Setia Industri	KDSI	39.392.576.250	-0,0223	0,1073
29	PT. Ricky Putra Globalindo	RICY	35.261.946.630	-0,0021	0,4357
30	PT. Jaya Pari Steel	JPRS	34.500.000.000	-0,0256	0,08743
31	PT. APAC. Citra Centertex	MYTX	33.672.000.000	-0,022	0,2234
32	PT. Asuransi Bintang	ASBI	33.089.226.000	0,0081	0,1536
33	PT. Asuransi Jasa Tania	ASJT	30.100.000.000	-0,018	0,13544
34	PT. Pelangi Indah Canindo	PICO	30.000.000.000	-0,0164	0,0817
35	PT. Nusantara Inti Corpora	UNIT	28.080.000.000	-0,0163	0,23024
36	PT. Primarindo Asia Infra	BIMA	23.112.000.000	-0,0386	0,336598
37	PT. ICTSI Jasa Prima	KARW	21.280.000.000	-0,0174	0,26766
38	PT. Wicaksana Overseas	WICO	20.655.000.000	0,021	0,2371
39	PT. Tri2wira Intanlestari	TRIL	19.609.772.000	0,0096	0,2106
40	PT. Inter Delta	INDT	10.200.000.000	-0,0027	0,01806

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