

Strategic Performance Measurement System: Its Impact On Firm Performance In The Covid-19 Pandemic Era

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Abstract

This study aims to analyze the effect of The Strategic Performance Measurement System (SPMS) on company performance in the Covid 19 pandemic era. The study also analyze the relationship between performance measurement and corporate performance for Indonesian Sharia banking. The research design is an explanatory study using survey methods and quantitative methods in Islamic banking. The object of this study is Indonesian sharia bank. The sampling technique is based on a purposive sampling method, and the data used are raw data. Research data processing adopts structural equation model. The alteration between this study and previous studies is that this study conducted in the covid 19 pandemic era then investigates the impacts of the strategic performance measurement system and performance of the Indonesian Sharia Bank.

As part of the performance evaluation system, the Strategic Performance Measurement System (SPMS) is a performance measurement system that combines strategy, business operations, and financial conditions to measure the extent to which the company achieves its goals, visions and missions. Implementing a successful strategy in a company should follow two important matters. First, understand the company cycle that connects strategy and operations, and second, understand the strategy used at each stage of the company. The performance measurement system encourages managers to consider how the company's activities are suitable for other parts of the company from a strategic point of view and assist the company in the management of business activities. Inadequate management and supervision of the performance measurement system puts the company at risk of failure. A proper performance measurement system can protect the organization from potential losses and improve the effectiveness of the organization.

The results show the impact of the SPMS on company performance shows supported in the covid-19 pandemic era. This finally extends the body of knowledge in this subject and suggested that managers and policymakers should focus on strategic performance measurement system characteristics to enhance firm performance, that company should concern to strategic performance measurement which gives guidance for business strategy and company operations, reward systems, feedback and recommendations.

Keywords: Strategic performance measurement system, Islamic Bank, Firm performance, Covid-19.

INTRODUCTION

A performance evaluation system is a tool commonly used to monitor the success of an organization (Neely, 2005; Bustinza et al., 2010). The performance measurement system encourages managers to strategically consider the relationship between the company's activities and other departments of the company, and assist the company in managing its business activities (Abushaiba and Zainuddin, 2012; Ullrich and Tuttle, 2004; Choe, 2003). Improper management supervision in the performance measurement system puts the company at risk of failure (Turner et.al, 2017). Previous research such as Munir et al., (2013); Neely, (1995); Otley, (1999); Sharma, (2000); Chenhall, (2005); Soltanizadeh, (2016); Nashwan, (2017) stated that an appropriate performance measurement system can improve organizational performance. Bustinza et al. (2010) stated that companies should focus on activities that lead to sustainable competitive advantage to achieve higher levels of performance. The performance evaluation system can be used as a means of monitoring, a means of motivating, monitoring performance, encouraging learning within the company (Neely, 2005). Management accounting practices can also be used for financial reporting and control activities that help management in the formulation and implementation of organizational strategies (Wadan et al., 2019). Research on the connection between strategic performance evaluation systems, competitive strategies, also corporate performance still gives different or inconsistent results. Baird et al. (2017), Burney et al. (2009), and Chenhall (2005) make an essential contribution to strategic performance evaluation systems in achieving organizational performance. Baird et al. (2017) discussed the relationship between SPMS and organizational effectiveness. The results of the article by Baird et.al (2017) explain that SPMS is more focused on performance achievement related to performance-related outcomes, the focus on workers tends to be less.

Nashwan, et.al (2017); Bourne et.al (2013); Bisbe and Malagueno, (2012); Adler, R (2011); Gimbert et al., (2010); Hyvonen (2007); Li et al., (2009), provide evidence that there is a strong positive relationship between performance measurement systems, business strategies, and company performance. However, different empirical findings were

provided by Ittner et al. (2003). Ittner et al. (2003) concluded that the performance measurement system has a negative effect on performance. Moreover, the research findings from Kihn (2007); Braam and Nijssen (2004) stated that the strategic performance measurement system does not affect firm performance. The results of Hall's (2011) study indicated that learning has a positive association with company performance. His research examines whether the process of updating and changing mental (learning) models helped to explain how the performance measurement systems affect performance. Hall's (2008) research investigated performance and found that an effective performance evaluation system improves managerial performance through role clarification and psychological empowerment. This study used a contingency theory approach because it considers situational factors in implementing a performance evaluation system. The performance evaluation system is expected to be related to company strategy (Adler, 2011; Baird, 2017; Gimbert et al., 2010; Beal, 2000). Management accounting research is usually carried out in the manufacturing sector while this research is conducted in service sector companies, namely the Islamic banking sector. There are still few studies on management accounting in Islamic banking. Previous studies have focused more on manufacturing companies. Previous studies in the banking sector (service companies) were mostly carried out in conventional banking.

LITERATURE REVIEW

2.1 Strategic Performance Measurement System

The strategic performance measurement system (SPMS) is part of the performance evaluation system. SPMS is a performance evaluation system that combines strategy, business operations, and finance to measure how well a company achieves its targets/vision and mission. To be able to find out to what extent a company's success in running its business requires a performance measurement. Performance measurement shows the relationship between the planning set by the company and the results that have been achieved. Performance measurement also shows whether a company needs to make improvements and adjustments to plan and control activities. The definition of performance according to Drucker (2002) is "The level of achievement or actual results achieved which is used to obtain a positive result". Performance is also defined as the four aspects of personnel successfully achieving strategic goals: finance, customer service, process, and learning and growth (Mulyadi, 2007).

A performance evaluation system was formed as a strategic direction designed to provide information to improve quality of the company's strategy in achieving company success (Abushaiba and Zainuddin, 2012). The characteristics of the information expected from the design of the performance measurement system are to have complete information. Completeness of information in the design of a performance measurement

system has two components. Firstly, information which has a general aspect that can understand the causal relationship between company operations and the company's strategic objectives, and between all aspects of the value chain (Kaplan and Norton, 2001; Malina and Selto, 2001). Secondly, the measurement part involves the provision of measurement in finance, customers, business processes, and long-term innovation (Kaplan and Norton, 1996a; Sharma, 2000; Elshishini, 2001; Malmi, 2001).

Performance measurement systems have an essential role of translation in the implementation of the corporate strategy into company operating activities to achieve the desired goals (Chenhall and Langfield-Smith, 1998; Kaplan and Norton, 2001; Ittner, et al., 2003; Chenhall, 2003). According to Hambrick (1983); Srivastava (1983) and Chenhall (2005), the researcher's strategy emphasize that access to information will provide potentially useful ideas related to internal and external companies, opportunities, and threats related to formulating innovation strategies to gain a competitive advantage. Roslender and Hart (2002) explained that the current emphasis was on efforts to produce accounting information that raises the competitive advantage of a sustainable company.

2.2 Company Performance

Dessler (2012) defines work performance, namely the comparison between the work results and the set standards. According to Gaspersz (2006), performance is the control of behavior changes in organizations to execute or implement strategies. Sanchez and Marin (2003); Aragon (2003) states that performance is measured by return on investment (ROI) and can be measured using quantitative and qualitative indicators. According to Carpenter and Sanders (2002); Desphande et al., (1993); Hill and Jones, (2005), performance is measured by return on assets (ROA); business profitability; and sales growth (Mavondo and Farrell, 2003). Gopalakrishnan (2000) stated that company performance is related to efficiency, effectiveness, financial outcomes, and employee satisfaction. Meanwhile, Olson (2005) explained that organizational performance is based on the performance assessed by the organization and its competitors.

2.5 Hypothesis Formulation

2.5.1 The Effect of Strategic Performance Measurement Systems on Company Performance

Performance Measurement System offers information to executives to strategically consider how the company's business activities are suitable for other departments of the company and assist the company to manage its business operational activities (Lillis and Anne, 2002; Ittner, et al., 2003. ; Fullerton and McWatters, 2002; Ullrich and Turtle, 2004). A performance measurement system can be defined as a process of quantifying the

efficiency and effectiveness of the company. An appropriate performance measurement system (PMS) can protect organizations from potential losses and increase organizational effectiveness (Turner et al., 2017; Munir et al., 2013). Without adequate and precise management control, namely with a performance measurement system, the company will be at risk of failure (Turner et al., 2017). Several studies have explained that the use of PMS is expected to improve organizational performance (Kaplan and Norton, 1996b; Hoque and James, 2000; Ittner et al., 2003). A concise performance measurement system will support the organizational decision-making process by collecting, processing, and analyzing the measured information about performance, and delivered in the form of a summary (Neely et al., 1995; Henri, 2006).

Chenhall's research findings (2005) showed that there were still few studies that reveal the characteristics of information that can help the system how to provide positive benefits for the company. Chenhall (2005) examined the relationship between PMS and competitive advantage an indicator of the competitive strategy of firms with a business focus on product differentiation and low-cost strategies. Chenhall (2005) states that strategic performance measurement systems have a positive effect on improving performance. Research by Hoque and James (2000) provides the same results that strategic performance measurement systems have a positive relationship with organizational performance. Meanwhile, Ittner et al. (2003) and Yuliansyah et.al (2012) give different results that strategic performance measurement system has the opposite effect, or has a negative effect on performance.

H1: The strategic performance measurement system has a positive effect on company performance

Figure 1. Conceptual Framework



METHODS

3.1 Data Collection

The industry chosen in this study was the banking industry because studies in banking are part of financial institutions that actively argue that performance measures can increase the value/effectiveness of companies. The banking industry is also a reflection of successful organizations. Researchers send more than two questionnaires to one organization. A preliminary study was conducted before the questionnaires distributed. The first preliminary study was conducted to ensure the accuracy of the English translation into the Indonesian language. The second preliminary investigation aimed to determine the level of reliability also validity of the questionnaires so that the questionnaires are ready to be distributed.

The sample of this research was using the purposive sampling method. Determination of sample members from the population by this method was carried out with certain considerations. The city that is considered representative for sampling in this study is Jakarta, the capital city of Indonesia. Respondents of this research are all elements of leaders/managers in Islamic banks because they are considered to have extensive knowledge about the management of Islamic banks which is their responsibility. Individuals who were given the questionnaire in this study were all managers/department heads who were considered to understand the scope of the questionnaire given. The questionnaires returned and can be processed are 142 sample questionnaires.

The determination of the minimum sample size refers to the statement from Sugiyono (2012) for the determination of the minimum sample size is as follows: "The minimum sample size that is feasible in a study is 30-500 if the sample is divided into categories of the number of sample members, for each category the number of sample members each category is at least 30. If in a study, the analysis uses more than two involved variables, statistical studies that study behavior and the relationship between two or more variables, and then the minimum sample size is 10 times of the used variables (Hair, 2010).

The data analysis used in this study was to use structural equation modeling (SEM). One of the reasons for choosing SEM was its ability to model multiple relationships, which is the advantage of latent variables SEM over multiple regression and path analysis (Baines & Langfield-Smith, 2003). The data analysis tool used was SmartPLS 3.0 full version and the model estimation technique used was the variance matrix. Partial Least Square (PLS) is an analytical tool that is considered appropriate for testing the variables in this study. According to Hair et al. (2013), Partial Least Square (PLS) has the advantage that in the relationship between latent variables, reflective and formative measurement models are not a problem, whereas in covariance-based SEM it can only be done for reflective models.

The structural model in the PLS technique identifies the relationship between constructs, while the measurement model determines the relationship between the indicator and the construct it represents (Chenhall, 2005). PLS is a powerful analytical method because it is not based on many assumptions (Wiyono, 2011). The research findings by Smith and Langfield-Smith (2004) stated that in analyzing SEM using two steps, namely measurement model and measurement structural model. Besides, PLS-SEM has advantages over ordinary regression for the following reasons (Birkinshaw, Morrison, & Hulland, 1995). These are PLS estimates individual items better in the context of the theoretical model. Then PLS considers all coefficients simultaneously which allows all direct, indirect, and spurious relationships.

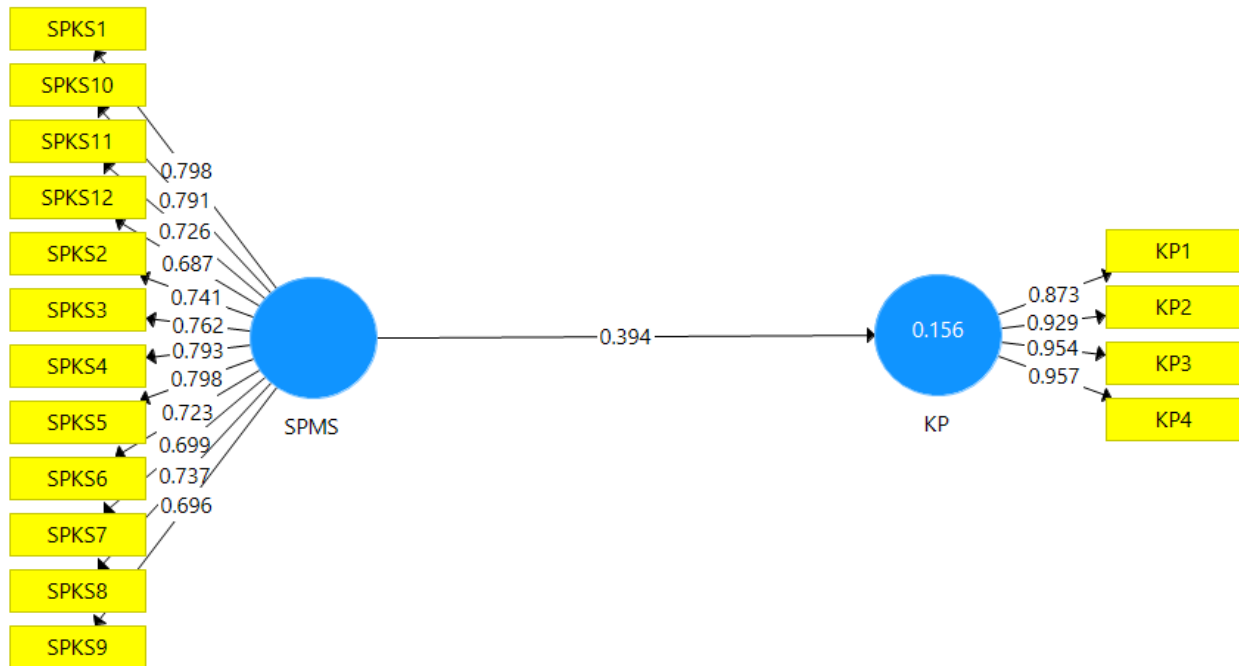
RESULTS

4.1 Data Analysis

Table1. Measurement Model

Construct	Dimension	Items	Cross Loading	Composite Reliability	Average Variance Extract
Firm Performance	ROA	Y1.1	0.873	0.962	0.863
	Income/Revenue	Y1.2	0.929		
	ROI	Y1.3	0.954		
	Profit	Y1.4	0.957		
Strategic Performance Measurement System	Operating Guidance	X1.1	0.798	0.938	0.558
		X1.2	0.741		
	Strategy	X1.3	0.762		
		X1.4	0.793		
		X1.5	0.798		
		X1.6	0.723		
		X1.7	0.699		
		Evaluation	X1.8		
	X1.9		0.698		
	Recommendation	X1.10	0.791		
		X1.11	0.726		
		X1.12	0.696		

Figure 2. Outer Model Original Sample Values



The evaluation of the measurement model or Outer Model is used to test validity and reliability (Camison and Lopez, 2010; Hulland, 1999). Outer models with reflective indicators are evaluated through convergent validity and discriminant validity from latent construct-forming indicators and composite reliability and Cronbach alpha (Ghozali and Latan, 2015). Based on the estimation results of the average variance extracted in table 1, it had a value above 0.50 which indicates good validity. The factor loading value was also greater than 0.50, which means that all indicators confirmed good validity.

Measurement of reliability can be valued by Cronbach Alpha, Rho_A, and composite reliability which was above 0.70. Table 1 above shows that all of the measurement of reliability firm performance, strategic performance evaluation system, and Islamic professional ethics variable was above 0.70 which forecasted a good result. The reliability of all of the variables and indicators of the instrument was satisfactory.

4.2 Structural Model

After a careful examination of the measurement model in Tables 1, the assessment of the structural model is conducted in this section. The assessment of the structural model allows this study to test the hypothesis. This structural pattern evaluated with Goodness of Fit which measured by Stone-Geisser Q-Square's predictive relevance to measuring how well is the parameter estimation and the observation value derived from the model. The value of $Q^2 > 0$ indicates that the model has predictive relevance, otherwise if the Q-Square value ≤ 0 shows that the model doesn't have a predictive correlation. Measurement of Q-Square is based on the method:

$$Q^2 = 1 - (1 - R_1^2) (1 - R_2^2) \dots (1 - R_p^2)$$

Which $R_1^2, R_2^2 \dots R_p^2$ are the R-square of the endogenous variable from the model. The value of Q^2 has a range value of $0 < Q^2 < 1$, the closer to 1, the better the model. This Q^2 value was in line with the coefficient of determination. The result of the R-square from the structural model was 0.184 which means that firm performance could be explained by strategic performance evaluation system. In addition, we could see how good the observation value by calculating: $Q^2 = 1 - (1 - 0.184) = 0.184$. The result shows that Q^2 had a value in the range $0 < Q^2 < 1$, where closer to 1 means the model was getting better.

A hypothesis test of the estimated parameters will provide useful information on the relationship between the research variables. The basis for testing the hypothesis was the output result from the inner weight test. The t-statistic value between the dependent variable and the independent variable assesses the importance of predictive models in testing structural models, which can be seen in the path coefficient table on the SmartPLS output. The limit for rejecting and failed to reject the proposed hypothesis is if the t-count value is \geq or \leq t table value. The hypothesis testing was conducted by using a bootstrapping method which was intended to minimize the issue of data abnormalities. The result of the bootstrapping method is used as the basis of the hypothesis testing result.

DISCUSSION and CONCLUSION

Based on the findings, the results of the hypothesis show that the effect of variables strategic performance measurement system towards company performance is confirmed supported. This is in line with the previous study Nashwan, et.al (2017); Bourne et.al (2013); Bisbe and Malagueno, (2012). In addition, the relations of strategic performance evaluation system variable against firm performance shows positive results. This shows the same results from the relationship between strategic performance evaluation system

variable and firm performance. The association between the strategic performance measurement and company performance shows positive results, that company should concern to strategic performance measurement which gives guidance for business strategy and company operations, reward systems, feedback and recommendations.

Moreover, the results showed that the predicted relevance value for the model was 0.184 which demonstrated that the research model has adequate predictive relevancy. The result of the R-square from the structural model was 0.394 which means that firm performance can be explained by the strategic performance evaluation system by 39.4% in the Covid-19 pandemic era. This finally extends the body of knowledge in this subject and suggested that managers and policymakers should focus on strategic performance measurement system characteristics to enhance firm performance.

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