Effect of Market Share and Firm Size on Efficiency and its Implications to Profitability of Sharia Insurance in Indonesia

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Abstract: Since Indonesia as a developing country which consists of 87.2% of Muslim citizens, sharia insurance plays an important role. However, this presence of sharia insurance does not show significant growth compared to Malaysia. This study aims to determine whether efficiency may serve as an intermediary variable in linking market share and company size to the profitability of Islamic insurance in Indonesia. It employs secondary data to collect data by involving 11 sharia insurance companies with four years ranging from the year 2014 to 2017. The collected data were analyzed through Path analysis and Sobel test with the DEA VRS as an indicator of efficiency. In analyzing the collected data, the Path equation has passed the classic assumption test. The findings reveal that the market share and company size have respectively significant positive and negative influences on efficiency. It indicates that market share is a variable that shows a significant positive effect on profitability compared to the other two variables, whereas the results of Sobel tests show that efficiency cannot serve as an intermediary in this research model.

Keywords: *Company Size; DEA; Efficiency; Market Share; Profitability; Sharia Insurance*

Introduction

Insurance is a non-bank financial institution that has a role in protecting against risks that may be experienced by consumers. Besides, insurance also has a role as a collection and channeling institution for public funds through the mechanism of receiving premiums for insurance and distribute them through investment in the productive sector. Both of these reasons make insurance have an essential role in developing countries like Indonesia. It is because of the

Vulnerability to risk is far greater in Indonesia, so the need for insurance as a risk transfer mechanism becomes fundamentally important (Saad & Idris, 2011).

Along with economic and technological developments, in general, the insurance industry is growing quite well in Indonesia, although not as bright as other financial institutions such as banks. However, sharia insurance in Indonesia tends to leave behind in the insurance industry growth. It is in contrast with the fact that Indonesia consists of a sizeable Muslim population compared to Malaysia. It can be identified from the fact that Malaysia provides more contributions to sharia insurance in the Southeast Asian region.

Table 1. Sharia Insurance Industry Statistics Data

	2014	**2015**	**2016**	**2017**
Market Share	6.0%	5.2%	5.26%	5.84%
Asset Ratio	4.5%	5.2%	5.57%	6.73%
ROA	8%	7%	6%	20%
Operational Costs on Operational Revenues	56%	51%	59%	20%

Source: Insurance Statistics of financial services authority

The data in Table 1 illustrates that the market share of Islamic insurance in terms of gross premiums tends to stagnate even though total assets increase slowly. Along with the growth in the asset ratio, however, the ROA of the sharia insurance industry declined from 2014 to 2016 and jumped sharply in 2017 due to a significant increase in total assets and total operating income of the sharia insurance industry. It has an impact on Operating Cost on Operational Revenue ratio that illustrates the operating efficiency generated by the sharia insurance industry from 2014 to 2016, approximately 50% to 60%, but this ratio declined sharply in 2017 to 20%. This number reveals that operating efficiency becomes more efficient than the previous periods.

Research related to the efficiency of sharia insurance in Malaysia conducted by Saad (2012) provides an overview of the level of efficiency of sharia and conventional insurance operations in Malaysia. Saad's research results (2012) show that most of the efficiency levels of sharia insurance (takaful) are still below conventional insurance. It might be due to the parallel system implemented where Islamic insurance operates under conventional insurance companies. It is consistent with the research of Cummins (1993) and Adu, Andoh & Abor (2012), who concluded that the size of the company influences the level of efficiency of a company's operations. In line with practice in Malaysia, most sharia insurance (takaful) in Indonesia applies a parallel system where sharia insurance (takaful) operates under its conventional insurance.

Total assets indicate the size of a company (Gardner, 1993; Hardwick & Adams, 2002; Chen & Wong, 2004; Malik, 2011; Burca & Batrinca, 2014; Rich, 2015). Indonesian conventional insurance has a larger size compared to the Islamic one. The level of efficiency of a company is influenced by the size of the company, which in turn affects the profitability of the company (Malik, 2011; Burca & Batrinca, 2014; Rich, 2015). It can be assumed that the level of efficiency and profitability of Islamic insurance is still lower than conventional insurance in Indonesia. Other studies conducted by Malik (2011), Sambasivam & Ayele (2013), Burca & Batrinca (2014), and Rich (2015) show a positive influence between company size and company profitability.

Profitability is one indicator of company performance that explains the company's ability to generate profits on the utilization of assets owned. Profitability can measure to what extent the efficiency and effectiveness of the management of activities that have been achieved by the company (Greene & Segal, 2004; Sukarno & Syaichu, 2006; and Alhassan et al., 2015). Efficiency is an indicator of whether the company is operating correctly. Efficiency will affect a company's profitability, which shows whether the company has used all of its production factors appropriately to produce profitability. Profitability performance is shown by the ratio of Return on Assets (ROA) (Jones, 2007; Malik, 2011; Sambasivam & Ayele, 2013), which is the ratio between net income and total assets. ROA ratio illustrates the ability of a company's asset empowerment level to generate profits. It means that the higher the company's efficiency, the higher the ROA value of the company and vice versa. It is because Net Income Margin is linked to Turnover; it involves one of the elements of efficiency, namely Turnover (Jones, 2007).

Research conducted by Cummins (1993) and Cummins et al. (1999) suggested that the

problem of market availability could have an impact on company efficiency. Companies often do mergers to overcome market share problems to reduce costs while increasing revenue, and thus company efficiency will increase. Results of the study by Donni & Fecher, (1997) and Adu, Andoh & Abor (2012) revealed that market share can positively influence company efficiency, while the results of research by Choi & Weiss (2005) and Kripa & Ajasllari (2016) shows that the company's profitability is directly affected by market share.

The Islamic financial system is believed to be able to produce more efficient financial business processes. It is because financial institutions with sharia systems apply a return system based on actual productivity to produce efficiency and a better level of justice (Khaldi & Hamdouni, 2011). Thus the sharia financial system is expected to be a solution to the problems faced by non-sharia financial institutions. The Islamic financial system is expected to be able to maintain the company's financial ratios remain good under challenging situations.

These conditions raise several questions, including whether market share does affect the level of efficiency and profitability of Islamic insurance companies in Indonesia, whether the size of the company does affect the efficiency and profitability of the company, whether the company's efficiency in converting inputs into output affects profitability so that it becomes one of the triggers the occurrence of the phenomenon. Overall, all of these questions refer to whether market share and company size are aspects that contribute positively to the profitability of sharia insurance companies in Indonesia with efficiency as an intervening variable.

This research is expected to be a pioneer to analyze the relationship of market share, company size, and efficiency and relate it to the profitability of Islamic insurance in Indonesia. This research is expected to be able to give a picture both for consumers and for insurance business about the relationship between market share, company size, efficiency, and profitability of sharia insurance in Indonesia. Besides, with the contribution of the economy and the growth opportunities of the insurance industry as previously explained, it will be essential to know the level of efficiency and know its relationship with market share and company size and its effect on profitability in Islamic insurance. That is because there are worried about the emergence of conditions where an insurance company does not utilize existing resources to produce optimal output. It indicates that the company is less efficient in running its business.

Literature Review and Hypothesis Development

Theory of firm

The theory of the firm consists of some economic theories that explain and predict the nature of a firm, company, or corporation, including its existence, behavior, structure, and relationship with the market. The theory of the firm is the basic concept used in most managerial economics studies. The theory of the firm addresses a variety of questions. In the most general scope, this theory discusses corporate behavior towards the market which is then passed down to individual work contracts and work organizations in the smallest production units (Holmstrom, 1989). The theory of the firm is the conceptualization and model of business firms that explain and predict their structure and behavior.

The foundation for each company theory is a set of initial premises that form the basis for the logical development of propositions regarding the structure, behavior, performance, and, existence of a company. Production involves the transformation of inputs into outputs. The fundamental aspect of the knowledge-based theory of companies is the assumption that essential inputs in production are knowledge or the presence of information (Grant, 1996). The theory of the firm recognizes profit maximization as the main target of the company. Although economists use the term 'Theory of firm' in its singular form, there is no single, multipurpose theory. Every company theory is an abstraction of a real-world business enterprise that is designed to overcome a particular set of characteristics and behaviors (Machlup, 1967).

Some researches that became the initial idea of the formation of theory of firm include research that raises the issue of the company in

terms of optimal risk allocation in dealing with individual differential risk preferences (Knight, 1921 in Grant, 1996) which then triggered the development of company transaction cost theory that focuses on the relative efficiency of authority based organization (hierarchy) with contract-based organization (market) (Coase, 1937; Williamson, 1975 in Grant, 1996) which was then continued by Cyert and March (1963) in Grant (1996) by incorporating the theory of corporate behavior into company theory and Nelson and Winter (1982) in Grant (1996) with the theory of corporate evolution.

The Effect of Market Share on Insurance Profitability

Market share is a significant aspect of a company's survival. Market share is one of the fundamental reasons for the establishment of a company in a particular business field. The availability of market share means the availability of income and profit-generating tools for companies. The higher the market share of a company, the opportunity for these companies to obtain greater profits will also be higher and vice versa. The results of research conducted by Choi & Weiss (2005) and Kripa & Ajasllari (2016) show that market share has a direct effect on company profitability. therefore, the hypothesis is proposed as follows:

Hypothesis 1: *There is a positive influence of market share on the profitability of Islamic insurance in Indonesia.*

Effect of Firm Size on Insurance Profitability

The size of the company is generally in line with the company's production capability. Larger companies tend to have the ability to reduce the cost of production that takes place in the company so that it can generate higher sales figures or can also produce higher profit margins and ultimately make the company's profitability even higher. In the case of a financial institution company, production costs can be compared to the cost of funds. The results of research conducted by Malik (2011), Sambasivam & Ayele (2013), Burca & Batrinca (2014), and Rich (2015) show a direct influence relationship between company size on

company profitability where the larger a company is, the higher the level its profitability. Therefore, the hypothesis is proposed as follows:

Hypothesis 2: *There is a positive influence on company size on the profitability of Islamic insurance in Indonesia.*

Effect of Efficiency on the Profitability of Sharia Insurance in Indonesia

Efficiency will affect a company's profitability because efficiency can indicate whether the company has used all of its production factors appropriately to produce profitability. Efficiency implies that the company can reduce the amount of resource use or production costs to produce a certain amount of product or output. Thus the higher the efficiency of the company, the higher the profitability value of the company, and vice versa. Profitability can measure how far the efficiency and effectiveness achieved by the company, the higher the profitability, the more effective and efficient management of activities that have been carried out by the company. Efficiency has a positive impact on the profitability of insurance companies (Greene & Segal, 2004; Sukarno & Syaichu, 2006; and Alhassan et al., 2015). Therefore, the hypothesis is proposed as follows:

Hypothesis 3: *There is a positive effect on the level of efficiency of the profitability of Islamic insurance in Indonesia.*

The Effect of Market Share on the Efficiency of Sharia Insurance in Indonesia

Companies with a significant market share tend to be more efficient since they get more opportunity to save the effort or costs to sell their products although they spend the same expenses. It means that companies that have a larger market share tend to be easier to obtain a more substantial portion of sales with the same resources. A study conducted by Cummins (1993) and Cummins et al. (1999) suggested that the problem of market availability could have an impact on company efficiency. Companies often do mergers to overcome market share issues in order to reduce costs while increasing revenue, and thus company

efficiency will increase. A study by Donni & Fecher (1997) and Adu, Andoh & Abor (2012) revealed that market share is positively influencing company efficiency. Besides, market share competition can also stimulate companies to be more efficient. In other words, market share is the key to the efficiency of the insurance company's operating processes (Saad & Idris, 2011; Adu, Andoh & Abor, 2012). Therefore, the hypothesis is proposed as follows :

Hypothesis 4: *There is a positive influence of market share on the level of efficiency of Islamic insurance in Indonesia.*

Effect of Firm Size on the Efficiency of Sharia Insurance in Indonesia

Previous research shows that the larger the size of the company, the more efficient the company's operations. Larger companies generally have a way to increase efficiency through their high production capability or, in other words, can reduce production costs and through mastery of a larger market share. One of the decisions that can improve efficiency is to consolidate (Cummins, 1993; Cummins & Xie, 2008; Saad & Idris, 2011; Adu, Andoh & Abor, 2012; Saad, 2012). Therefore, the hypothesis is proposed as follows :

Hypothesis 5: *There is a positive influence on company size on the efficiency of Islamic insurance in Indonesia.*

The Simultaneous Influence of Market Share, Company Size, and Efficiency on Insurance Profitability

The results of research conducted by Choi & Weiss (2005) and Kripa & Ajasllari (2016) show that market share has a direct effect on company profitability. Results of research conducted by Malik (2011), Sambasivam & Ayele (2013), Burca & Batrinca (2014), and Rich (2015) show a direct influence relationship between company size on company profitability. Profitability can measure how far the efficiency and effectiveness achieved by the company, the higher the profitability, the more effective and efficient management of activities that have been carried

out by the company (Greene & Segal, 2004; Sukarno & Syaichu, 2006; and Alhassan et al., 2015). Therefore, the hypothesis is proposed as follows :

Hypothesis 6: *There is a simultaneous influence of market share, company size, and efficiency on insurance profitability*

The Simultaneous Influence Of Market Share And Company Size On Insurance Efficiency

Market share and company size are closely related but remain separate because these two concepts have a contribution to improving a company's performance through the mechanism of increasing efficiency. Companies that have a significant market share tend to be more efficient. It can be due to a higher opportunity for the company to spend effort or lower costs to sell the product produced with the same amount of resources compared to companies that have a lower market share. Therefore, the hypothesis is proposed as follows :

Hypothesis 7: *There is a simultaneous influence of market share and company size on insurance efficiency*

Direct And Indirect Effects Between Market Share And Insurance Profitability, Direct And Indirect Influence Between Company Size And Insurance Profitability
Based on the exposure of both partial and simultaneous relationships between market share, company size, efficiency, and profitability of insurance companies, this study tries to develop and test the efficiency model as an intervening variable between market share and company size on the profitability of Islamic insurance companies in Indonesia. Thus this research model suspects that there is a direct or indirect relationship between market share and company size on the profitability of sharia insurance companies in Indonesia by involving efficiency factors. Therefore, the hypotheses are proposed as follows :

Hypothesis 8: *There is a direct and indirect effect between market share and insurance profitability*

Hypothesis 9: *There is a direct and indirect effect between firm size and insurance profitability*

Method

The method used in this research is an explanation. The explanation method is a research method that describes and then explains the relationship or influence of these variables. This research involves the process of collecting data to determine the relationship and the level of relationship between two or more variables. In this study, there are two independent variables namely market share and firm size, one intervening variable namely efficiency, and one dependent variable, namely profitability. This research employs return on assets as an indicator of profitability because it is closely related to efficiency in which to obtain ROA, Net Income Margin is related to Turnover, and Turnover is an element of efficiency in calculating ROA (Jones, 2007). Besides, ROA is also a benchmark commonly used in Bank Indonesia's statistical metadata as a benchmark for company profitability.

The unit of analysis in this study is ROA ratio, total asset, total capital, and total operating expenses, investment income, and tabarru fund from the financial statements of 11 Islamic insurance companies over four years from 2014 to 2017. The population of this study is insurance companies that operate and are registered in Indonesia until 2018. The population of this study consists of 19 life insurance companies of sharia business units, five full sharia life insurance companies, 25 general sharia business unit insurance companies, and three full sharia general insurance companies so that the total population is 52 sharia insurance companies.

Path analysis and Sobel test are used to conduct data analysis in this research where the regression equation has passed the classic assumption test. Path analysis is used to analyze partial and simultaneous relationships, or in other words, it is used to test hypotheses one through seven. Thus two linear regression equations were developed.

Equation 1, $Z = \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$, where;

Z = Profitability
β_1 = Regression coefficient between Market Share and Profitability
β_2 = regression coefficient between Firm Size and Profitability
β_3 = regression coefficient between Efficiency and Profitability
X_1 = Market Share
X_2 = Firm Size
X_3 = Efficiency
e = error

Equation 2, $Y = \beta_4 X_4 + \beta_5 X_5 + e$, where;

Y = Efficiency
β_4 = regression coefficient between Market Share and Efficiency
β_5 = regression coefficient between Firm Size and Efficiency
X_4 = Market Share
X_5 = Firm Size
e = error

Sobel test is used to analyze the presence or absence of conditions of direct and indirect effects between market share and insurance profitability, direct and indirect influence between company size and profitability insurance. In other words, the Sobel test is used to test hypotheses eight and nine. The method used in this research in obtaining efficiency figures is Data Envelopment Analysis (DEA). It is because DEA is a non-parametric approach based on linear programming (Linear Programming), which involves many inputs and outputs at the same time.

The advantage of using DEA analysis is that it can use multiple inputs and multiple outputs, and does not require the assumption of functional relationships between these variables such as regression, so that economic activity in this case insurance companies can be compared directly with other insurance companies, and can also form frontier lines, i.e., as the best efficiency function of the input-output variables of each data used, and the input and output can have different units of measurement. DEA was created as a performance evaluation tool for an activity in an entity unit (organization), from now on, referred

to as the Decision-Making Unit (DMU). DMU is expressed as a ratio: output/input, which is a measurement of efficiency or productivity. In measuring efficiency using DEA, two models are often used, namely Constant Return to Scale (CRS) and Variable Return to Scale (VRS).

The CCR model is the basic DEA model using the assumption of constant return to scale, which has implications for the form of an efficient linear set. This model assumes that the ratio between the addition of input and output is the same (constant return to scale). That is, if there are additional inputs by x times, then the Output will increase by x times. Another assumption used in this model is that each company or decision-making unit operates at an optimal scale (Charnes et al., 1978). On the other hand, the DEA model using VRS assumptions assumes that the company does not or has not yet operated at an optimal scale. This model assumes that the ratio between the addition of input and output is not the same (variable return to scale). That is, the addition of inputs by x times will not cause the output to increase by x times, can be smaller or higher than x times (Banker et al., 1984).

In this study, the efficiency measured using the Data Envelopment Analysis (DEA) method involves two inputs namely total capital and total operating expenses and two outputs namely investment income and total tabarru participants' funds (Saad & Idris, 2011; Adu, Andoh & Abor, 2012) by using the Variable Return to Scale (VRS) model. The choice of the approach based on this assumption is based that the Islamic insurance industry in Indonesia has not yet operated at an optimal scale.

Results

From the results of the descriptive analysis summarized in Table 2, it shows that of the 11 companies sampled, the average market share was in the range of 2.7%. This number is not a good number for the size of the market share. However, the maximum number of market share is 25%. It is consistent with the condition of firm size, as seen from total assets and profitability that experience a significant difference between the average value and the maximum number.

Tabel 2. Descriptive Statistics

	Minimum	Maximum	Mean	Std. Deviation
Market Share %	0,02	25,78	2,6861	7,08543
TOT_ASET Rp Million	28.258	2.633.675	295.640,8	658.895,6
Efficiency%	94,30	100,00	99,1068	1,32039
Profitability %	0,60	72,48	13,5591	12,70453

In total assets, the maximum figure is Rp 2.6 trillion, while the average total assets are only around no more than Rp. 300 billion. Likewise, profitability is identified from the ROA ratio, where the maximum figure obtained from the ROA ratio is 72.48%, while the average ROA is

only around 13.6%. However, for efficiency, it is only slightly adrift between a maximum of 100% and an average of 99.11%. It may lead to allegations that the Pareto principle occurs in the sharia insurance industry in Indonesia.

Table 3. t-Test Model 1

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	39.197	115.412		.340	.736
Market Share %	.911	.338	.508	2.691	.010
SIZE	3.846	1.941	.370	1.982	.054
Efficiency %	-.729	1.028	-.076	-.709	.482

Dependent Variable: Profitability %

Table 3 shows that of the three independent variables, only the market share has a probability value smaller than 0.05 while not with Size and Efficiency. Thus with a 95% confidence level, decisions related to hypothesis 1 are accepted

while rejecting hypotheses 2 and 3, so that the following equation can be constructed: **Profitability** = 0.508**Market Share** + 0.370**Size** − 0.076**Efficeincy** + e

Table 4. F Test Model 1

	Sum of Squares	df	Mean Square	F	Sig.
Regression	4889.314	3	1629.771	31.783	.000b
Residual	2051.100	40	51.278		
Total	6940.415	43			

Dependent Variable: Profitability %
Predictors: (Constant), Efficiency %, SIZE, Market Share %

Table 4 shows that market share size and efficiency have a probability value of 0,000, which means less than 0.05. Thus, with a 95%

confidence level, decisions related to hypothesis 6 are accepted.

Table 5. Correlation Determination Model 1

R	R Square	Adjusted R Square	Std. Error of the Estimate
.839a	.704	.682	7.16083

Predictors: (Constant), Efficiency %, SIZE, Market Share %

Table 5 presents the correlation coefficient for equation 1 in the path analysis, namely the relationship between market share, firm size, and Efficiency as an independent variable on profitability as the dependent variable. R^2 written

0.704, which means that the profitability value is influenced by 70.4% by market share, firm size, and efficiency, while the remaining 29.6% is influenced by other variables not examined.

Table 6. t-Test Model 2

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	110.948	2.696		41.150	.000
Market Share %	.192	.042	1.029	4.585	.000
SIZE	-1.076	.242	-.996	-4.439	.000

Dependent Variable: Efficiency %

Table 6 shows that both market share and companies have a probability value of 0,000, which means less than 0.05. However, the Beta value of the size of the company is negative. Thus, with a 95% confidence level, decisions

related to hypothesis 4 are accepted while rejecting hypothesis 5, so that the following equation can be constructed: **Efficiency** = 1.029**Market Share** - 0.996**Size** + e

Table 7. F Test Model 2

	Sum of Squares	df	Mean Square	F	Sig.
Regression	26.433	2	13.217	11.165	.000b
Residual	48.535	41	1.184		
Total	74.968	43			

Dependent Variable: Efficiency %
Predictors: (Constant), SIZE, Market Share %

Table 7 shows both market share and firm size have a probability value of 0,000, which means less than 0.05. Thus, with a 95% confidence level, decisions related to hypothesis 7 are accepted.

Table 8. Correlation Coefficient Model 2

R	R Square	Adjusted R Square	Std. Error of the Estimate
.594[a]	.353	.321	1.08802

Predictors: (Constant), SIZE, Market Share %

Table 8 presents the correlation coefficient for equation 2 in the path analysis, namely the relationship between market share and firm size as an independent variable on efficiency as the dependent variable. R^2 written 0.353, which means that the efficiency value is influenced by 35.3% by market share and firm size, while the remaining 64.7% is influenced by other variables not examined.

Table 9. Correlation

		Market Share %	SIZE
Marekt Share %	Pearson Correlation	1	.828
	Sig. (2-tailed)		.000
SIZE	Pearson Correlation	.828	1
	Sig. (2-tailed)	.000	

Table 9 is a table that illustrates the correlation or relationship between independent variables in model 2, namely market share and firm size.

Thus, a path analysis diagram can is depicted in Image 1 as follows:

Image 1. Path Analysis Diagram
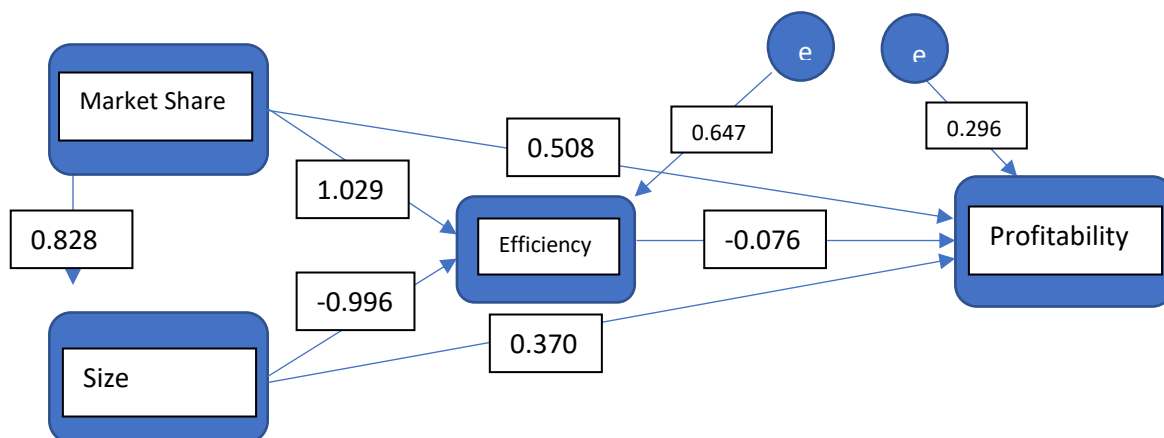
After obtaining the values from the path of analysis, then the beta value and standard error are used to determine whether there is a direct and indirect relationship between market share with profitability and between company size and profitability through efficiency. Tables 10 and 11 show the results of multiple tests for market share and company size successively.

Table 10. Direct and Indirect Effect of Market Share to Profitability

	Test statistics	**Std. Error**	**p-value**
Sobel test	-0.07392	1.078	0.9410
Aroian test	-0.07386	1.0586	0.9411
Goodman test	-0.07399	1.0569	0.9410

Table 11. Direct and Indirect Effect of Firm Size to Profitability

	Test statistics	**Std. Error**	**p-value**
Sobel test	0.07391	1.0240	0.9410
Aroian test	0.07182	1.0538	0.9427
Goodman test	0.07620	0.9933	0.9392

From tables 10 and 11, none shows a smaller p-value than 0.05 or in other words, there is no significant p-value. Thus it can be stated that efficiency does not act as an intermediary variable either for market share to profitability or for firm size to the profitability of Islamic insurance companies in Indonesia.

Discussion

This research aims to determine whether efficiency can act as an intermediary variable in linking market share and company size to the profitability of Islamic insurance in Indonesia. This research is expected to be the first to analyze and be able to give a picture both for consumers and for insurance business actors about the relationship of market share, company size, and efficiency and relate it to the profitability of Islamic insurance in Indonesia.

The results of this research indicate, in the sharia insurance industry in Indonesia using the sample used with the period between 2014 to 2017, that market share has a positive effect on efficiency. It means that the higher the market share, the more efficient the company is running. It is in line with the results of research conducted by Donni & Fecher (1997) and Adu, Andoh & Abor (2012) which show that market share can influence company efficiency positively. Furthermore, Saad & Idris (2011) and Adu, Andoh & Abor (2012) also stated that market share is the key to the efficiency of the insurance company's operating processes. Also, the results of this research indicate that market share has a positive effect on profitability. These results are also in line with research conducted by Choi &

Weiss (2005) and Kripa & Ajasllari (2016), which states that there is a positive relationship between market share and profitability.

On the other hand, this study shows that firm size negatively associated with efficiency. It means that the larger the size of the company, the more inefficient the company is running. Furthermore, this study also shows that firm size and efficiency do not affect profitability. These findings are not in line with previous studies and there are no other references that show similar results. It might occur due to a significant difference between companies that have considerable assets and market share with small ones or, in other words, and there is a Pareto principle that occurs in the Islamic insurance industry in Indonesia. It can be seen at least from the results of a descriptive analysis of market share, total assets and profitability which shows the difference in numbers between the maximum value, minimum value, and average value. The difference in numbers even seen far between the maximum value and the average value.

There are still many sharia insurance companies in Indonesia that have a market share of even under 1%, which can be a cause of company size, and efficiency does not affect profitability. It is because market share is the main profit-producing machine for the company. However, efficient a company is but cannot generate revenue, and then profits will not be created. The same is the case with company size. The larger the company is seen from the total assets, but does not have a market share to generate revenue, the condition will become a burden that erodes the efficiency of the company. In other words, what is needed by most sharia insurance companies operating in Indonesia is

market share. Companies must focus on the strategy of market expansion or market penetration. The fact is that there are still some sharia insurance companies in Indonesia that have negative tabarru funds and investment income.

Considering the results of this study where the sharia insurance industry in Indonesia experiences deficient market share conditions, it is recommended for practitioners of the industry to concentrate on market expansion and market penetration strategies while academics need to develop in the field of the marketing system and efficiency of sharia insurance. As a result, the Islamic insurance industry will run well and accepted by the market.

The availability of data becomes the main obstacle found in this study. Some companies only provided 2014 to 2017 financial reports. It is due to the Financial Services Authority (OJK) circular, SEOJK No.4/SEOJK.05/2013 which was then replaced with SEOJK No. 02/SEOJK.05/2018 explaining an offer without an obligation to publish their financial statements since 2014. As a result, it divided sharia insurance into two types, namely, spin-off and sharia business unit. Due to the regulation released by OJK, the companies are not obliged to make financial statements, so that the data were limited.

For further research, it is recommended to use a qualitative approach or mix method to get a more realistic picture of the research results in addition to overcoming the limitations of data availability. Besides, it is also recommended to increase the number of inputs and outputs for efficiency calculations if using the Data Envelopment Analysis method.

Conclusion

Market share and firm size simultaneously affect the efficiency of Islamic insurance companies in Indonesia. It means that changes in the value of efficiency of Islamic insurance companies in Indonesia are influenced by changes in market share value and firm size. Besides, market share, company size, and efficiency simultaneously influence the profitability of Islamic insurance in Indonesia. It means that changes in profitability

figures of sharia insurance companies in Indonesia are influenced by changes in market share value, firm size and efficiency.

Market share has a positive effect on the efficiency of Islamic insurance, while company size has a negative effect. It means that the higher the market share, the more efficient the company is, but conversely, with the size of the company, where the more significant the company the more inefficient the company. Also, only market share has a positive effect on the profitability of Islamic insurance companies in Indonesia while the efficiency and size of the company have no influence. Furthermore, this research through the Sobel test shows that efficiency cannot act as an intervening variable between market share on profitability and company size on the profitability of Islamic insurance companies in Indonesia. It might be because most sharia insurance companies in Indonesia still have a meager market share.

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