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Effect of Sharia Financing on Sharia Insurance Premium Growth

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ABSTRACT
This research is aimed to analyze and determine the effect of sharia financing on sharia insurance premium growth, determine the influence of each sharia banking financing, and formulate the strategies needed to increase the growth of general Islamic insurance premiums. Specifically, this research uses the Autoregressive Distributed Lagged (ARDL) model to analyze whether sharia insurance is determined and influenced by sharia financing. This research uses sharia financing forms consisting of *murabaha*, *musharaka*, *mudharabah*, *istisna* and *ijarah* as independent variables and sharia general insurance premium as the dependent variable. This research uses monthly time series data from January 2014 to November 2019.
ARDL model findings show that the financing of *istisna* and *ijarah* did not pass the test. *Musharaka* and *mudharabah* financing are found to have a positive influence. *Murabaha* financing, which is the largest financing in the banking sector, seems not to have an effect, even though the previous 3 periods had a slight negative effect on the growth of sharia insurance. The reasons could be due to the small funding of *ijarah* and *isthisna* so that it did not have an impact on growth. Furthermore, the capacity of sharia insurance is still small, and there is lack of socialization of sharia insurance, as well as the premium that determines the cause of termination of funding due to repayment or claims.
This research encourages the synergy of sharia insurance business with sharia banking, especially in sharia financing, sustainable sharia financial literacy and mutually supportive regulatory policies in the sharia financial industry and an increase in sharia insurance capacity so that all sharia financing can be covered in sharia insurance.

Keywords: *Sharia, Islamic, Insurance, Bank, Financing, Premium, Growth*.

1. INTRODUCTION

Sharia insurance is one of the economic transactions that has developed in line with the development of Islamic economic transactions. The beginning of the establishment of insurance in Indonesia is Family Takaful Insurance (which is the first life insurance and was established in 1994) and General Takaful Insurance (which was established in 1995). Based on the Financial Services Authority (Otoritas Jasa Keuangan - OJK) data sources in the last 5 years, the growth of conventional insurance is around 6% while the growth of sharia general insurance tends to be still small in the range of 3.5%.

Insurance is needed as part of financing risk mitigation, either through banks or through finance companies. Financing risk mitigation can be done through credit insurance (life) or credit guarantee, while risk mitigation of collateral from financing activities can be done through insurance mechanisms. In this case, this research is limited to sharia general insurance, of which one component that needs to be considered in the development of sharia general insurance is financing from banks and multifinance. Insurance and financing are regulated in OJK regulations. Based on OJK Regulation No.35/POJK.05/2018 concerning the Business Implementation of Financing Company, a financing company is obliged to conduct risk mitigation as affirmed in article 26 paragraph 2 (b). It explains that mitigation of financing risk can be done for example by transferring the risk of collateral from financing activities through an insurance mechanism. Whereas in article 46 paragraph 1 (c) OJK Regulation No.16/POJK.03/2014 concerning Assets Quality Assessment of Sharia Commercial Banks and Sharia

Business Units, it is conveyed that collateral must be protected by insurance with banker's clause which has a period of at least the same as the period of binding of the collateral.

There are several articles that discuss the growth of sharia insurance, one of them is the article *Sharia Insurance Growth in the world and Indonesia* [1] which provides an illustration of how insurance development in the world and in Indonesia with constraints on understanding of sharia contracts which at that time without enough understanding. Other articles include *Innovation in the Takaful Industry: A strategy to expand the takaful market in Indonesia* [2], *Factor Analysis articles on Purchasing Decisions of Islamic Insurance* [3], *Islamic Insurance: A Potential Niche Market of Indonesia* [4] as well as the article *Impact of Indonesian Islamic Bank To Build Growth Premium Income Of Shari'a Insurance Companies in Indonesia Market* [5]. This last article illustrates how the increase in sharia insurance premium income in Indonesia is significantly affected by the revenue growth of national Islamic Banks. Another journal about Effect of *Murabaha, Istisna, Mudharabah* and *Musharaka* Financing on Profitability [6] used multiple linear regression analysis to describe the different types of financing which has an effect. In the *Sharia Insurance Economic Outlook* 2016 released by Indonesian Sharia Insurance Association (AASI) in Indonesia Service Dialogue year 2015, it is mentioned that level of dependency of sharia general insurance through bank, multifinance and corporations is still high (around 60%). The same is true for sharia life insurance through investment links.

The research is limited to sharia general insurance. It is expected that the results of this study can provide a positive picture of the impact of bank financing on the growth of sharia insurance. It is also hoped that the research results can provide analysis and formulation of strategies needed to advance the sharia insurance market.

2. LITERATURE REVIEW

Risk management is a scientific approach to risk problems that has the goal of reducing and eliminating risks faced by a person or company. The technique used to accept risk is with risk control and risk financing [7]. Risk financing is to regulate the availability of funds to maintain these risks by applying risk control techniques by managing the risk itself or by transferring it to other parties (by buying insurance). In the meantime, according to OJK, risk management is a set of procedures and methodologies used to identify, measure, monitor and control the arising risks [8].

Based on Law No. 40 Year 2014 about Insurance, the definition of insurance is an agreement between two parties, an insurance company and a policyholder, for receiving premiums by insurance companies in return. The difference between sharia insurance and its conventional counterpart is on the purpose of the agreement made. The goal of conventional insurance companies is to get premiums, while sharia insurance aims to manage contribution funds based on sharia principles in order to help and protect each other.

Referring to the fatwa of the National Sharia Council - Indonesian Ulema Council (DSN-MUI) No.21 concerning General Sharia Insurance Guidance, Sharia Insurance (*Ta'min, Takaful* or *Tadhamun*) is an effort to protect and help one person or party through investments in the form of assets and/ or *tabarru'* which provides a pattern of return to cover risks through a contract (agreement) in complying with sharia rules. Sharia insurance contract is a contract between a participant and a company consisting of a *tijarah* and/or *tabarru* contract. The *tijarah* contract is a *mudharabah* contract, while the *tabarru* contract is a grant.

Based on OJK Regulation No.10/POJK.05/2019 concerning Business Implementation of Sharia Financing Company and Sharia Business Unit of Financing Company, sharia financing is a financing distribution conducted based on sharia rules which are distributed by Sharia Companies. In its implementation, Sharia financing must fulfill the principles of justice (*'adl*), balance (*tawazun*), benefit (*maslahah*), and universalism (*naturalyah*) and do not contain *gharar, maysir, riba, zhulm, risywah,* and *haram* objects. Sharia financing consists of Trade Financing (using the *murabaha, salam* or *istishna* contract), Investment Financing (using the *mudharabah, musharaka, mudharabah musharaka* or *musharaka mutanaqishoh* contract), Service Financing (using the *ijarah, ijarah muntahiyah bittamlik, hawalah, wakalah, kafalah, ju'alah* or *qardh* contract).

According to the Law No. 10 of 1998 concerning Banking in article 1, financing based on sharia principles is the provision of money or claims equivalent to that based on an agreement between the bank and other parties which requires the financed party to return the money or claim after a certain period of time in return or for the results. Based on this explanation, it can be interpreted that financing is the provision of funds from certain parties to other parties who need funds within a certain time period and the refund is added with a number of rewards or profit sharing.

Some research studied the development of sharia insurance (*takaful*) in the world and in Indonesia. The research was mostly in the form of qualitative studies. The growth of sharia insurance was seen from various perspectives, both in terms of global growth and growth in Indonesia. It is also in terms of marketing, products announced, consumer behavior and legal rules. Some

literature discusses the development of sharia insurance (*takaful*) in the world and in Indonesia.

The examples such as Hassan [9] concluded that the presence of competition made Takaful (sharia) insurance a more desirable business and spread widely throughout the world from the beginning for the past three decades. Takaful mechanism works under the supervision and guidance of Shariah scholars and is promulgated based on sharia law applied in certain areas that have the credibility and trust of its members. Takaful insurance has great potential in Muslim countries. However, the takaful insurance market finds many challenges such as innovation, awareness, risk management issues and financial modeling that need to be addressed for the progress of takaful insurance itself.

Other studies discussing the growth of sharia insurance include the article "Sharia Insurance Growth in the World and in Indonesia" [1] which provides an illustration of how insurance growth in the world and in Indonesia with constraints on understanding of sharia contracts at that time without enough understanding.

Discussion on sharia insurance growth can also be shown from the journal "Factor Analysis on Purchasing Decision of Islamic Insurance" [3] where they research Sharia life insurance on Prudential insurance which is one of the big players. They find that the phenomenon of low Islamic insurance purchases can be seen from the low number of assets and market share of Islamic insurance services. They analyzed the reasons for deciding to purchase sharia life insurance on sharia Prudential insurance as a big player in the sharia life insurance business. The data analysis technique used was the CFA (Confirmatory Factor Analysis) method using Amos.

Other research conducted by Nugraheni and Muhammad [2] where they stated that innovation strategies are needed to develop the sharia insurance market. Innovations made are market innovation, product innovation and process innovation, in which the innovation needs to be adjusted to the demographics and geographical conditions of its customers. Ramadhani [10] also discussed the prospect and challenges of the development of sharia insurance in Indonesia, which in her journal emphasized the problem of lack of insurance products which could reach the middle class and lower class, also about limitations on capacity of the national sharia insurance industry, especially for large scale projects.

Effendi [4] states that there is a strong relationship between Islamic financial institutions, especially Islamic banks and insurance. Islamic banks should be able to direct their creditors to use Sharia insurance in financing that meets Islamic principles. This makes Islamic banking financing the biggest potential market for Sharia insurance. In his research, using the Analytic Network Process (ANP) approach, he found 4 problems in developing the potential of the Sharia insurance market, such as internal insurance issues, customer problems, competition problems, and regulatory issues, where the strategy offered is to improve service quality, improve relationships and synergies between Islamic financial regulators and institutions as well as positive policies that support the development of sharia insurance by government authorities.

A journal article submitted by Sari, Anshori [6] concerning the effect of *murabaha, istisna, mudaraba* and *musharaka* financing on profitability. This research was conducted to ensure the profitability of Islamic banks is influenced by *murabaha, istisna, mudharabah* and *musharaka* financing. By using multiple linear regression analysis, it can be concluded that the murabaha contract has a negative effect, while *mudharabah* has a positive effect. Moreover, *musharaka* and *istisna* do not have a significant effect on ROE.

In addition, Tarigan [11] in his research also found that insurance is needed when the insurer binds himself to the party who will insure (called the insured) to compensate the loss suffered by the insured when an event occurs suddenly and incidentally, where the insured promised to pay a premium.

Continuing the above research, this research would like to find more about the influence of sharia financing which based on some literature should be a factor in the growth of sharia insurance. Referring to Sari and Anshori's research [6], this research is conducted using multiple linear regression because it uses several independent variables of sharia financing consisting of *mudharabah* financing, *murabaha* financing, *musharaka* financing, *istisna* financing and *ijarah* financing, as well as sharia insurance premiums as the dependent variable. By using a time series data of almost 6 years, it is expected that the data is sufficient to analyze the behavior of financing and sharia insurance premiums. This research uses time series data which can be used as the current time and the lag of independent variables. Due to this, the right model is to use Autoregressive Distributed Lag (ARDL).

It is expected that the results of this study provide a positive picture of the impact of the magnitude of bank financing with the growth of Islamic insurance. It is also hoped that the research results can provide analysis and formulation of strategies needed to advance the sharia insurance market. By understanding market conditions, the authorities and sharia insurance industry players can carry out strategies in developing sharia insurance and increasing sharia premiums through the financing sector.

3. METHODOLOGY

This research uses a quantitative Autoregressive Distributed Lag (ARDL) to analyze and collect relevant information about sharia financing through banks as well as sharia premium insurance by industry statistics. Researchers use secondary data of data statistics obtained from sharia financing data and premium data released by the OJK.

By using Autoregressive Distributed Lag (ARDL) model, it is expected to obtain a picture of the relationship between the growth of sharia insurance with the growth of bank financing, so that a conclusion will be obtained about the effect of the growth of bank financing on the growth of Sharia insurance. Sharia financing banking data used in this study are from January 2014 to November 2019. Sharia financing data is financing using *mudharabah*, *musharaka*, *murabaha*, *istisna* and *ijarah* contracts. There are several other funding sources that have no influence, such as *qardh* and *salam*. *Qardh* financing according to Karim [12] is a contract to lend money, while *qardhul hasan* is essentially alms, because this contract does not require repayment of the loan; therefore, this financing does not require collateral that is usually needed in insurance. *Salam* financing is financing using a contract of sale of goods with an order in accordance with certain conditions and payment of the price of goods in advance in full. This financing was not included in the study because *salam* financing activities in the Islamic banking industry are minimal.

The ARDL model will be run with the OLS technique given that it is usually well received and used to build a strong dynamic model. Other tools and techniques require a more comprehensive and extensive series of data, which is difficult to be provided and not available in the Islamic banking finance industry. This is due to the fact that the sharia banking industry is not as the conventional banking finance industry, as the sharia banking industry in Indonesia is still in the growth phase with limited data and information [13].

Initial stages of this research which use Autoregressive Distributed Lag (ARDL) approach are conduct individual tests by doing the variable stationarity test using the ADF and PP methods, correlation test and causality test using the granger causality test. Then, we test model selection by Gauss Markoff theorem to find out whether it passes the Best, Linear, Unbiased, Estimator (BLUE) tests through residual diagnostic tests namely LM Correlation test, Heteroskedasticity test, Multicollinearity test and Normality test. Further, Simultaneous test, Partial test and Rsquared checking were conducted.

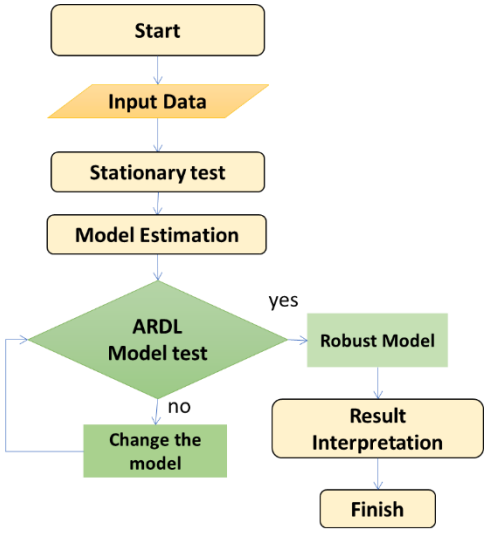

Figure 1 Testing Stages

4. RESULTS AND DISCUSSION

This research aims to identify the effect of sharia financing variables on premium performance of sharia insurance companies. Therefore, sharia insurance premium variable is placed as the dependent variable, which is influenced by the independent variables namely *murabaha*, *mudharabah*, *musharaka*, *istisna* and *ijarah* financing.

4.1. Research Result

The sharia premium model, explained by the number of sharia financing, will provide information related to the individual influence of sharia financing and the overall effect of sharia financing on sharia insurance premiums. The variables used are *Murabaha* Financing (MRP), *Mudharabah* Financing (MDP), *Musharaka* Financing (MSP), *Istisna* Financing (ISP), and *Ijarah* Financing (IJP). Islamic financing variable is an independent variable that will be tested with the sharia insurance premium variable (PRT) as the dependent variable that describes the value paid to bear the risk sharing.

The test results using the correlation coefficient shows that all independent variables MDP, MSP, MRP, ISP and IJP have a linear relationship with the PRT variable. Meanwhile, a granger causality test on the independent variable *Istisna* financing showed no influence with the dependent variable sharia insurance premium. The granger test results indicate that the ISP variable is not included in the model.

Stationary tests show that sharia insurance premiums (PRT) are found not stationary at 1st difference when using the ADF test, even though by using the PP test, the PRT variable passes the stationary test at the level stage. Meanwhile, stationary tests on the independent variables MSP, MRP, MDP, ISP and IJP except MSP

Table 1. Coefficient Correlation of Sharia Insurance Premium and Financing Variable

Variable Name	Value of Coefficient of Correlation				
	MDP	MSP	MRP	ISP	IJP
PRT	0.3365**	0.3155**	0.3703**	0.2863*	-0.2599*

** Significant on α=5%, * Significant on α=10%

Table 2. Granger Causality test on Sharia Insurance Premium and Financing Variable

Null Hypothesis:	F-Statistic	Prob. Value	Lag	Conclusion
DMDP does not Granger Cause DPRT	1.90798	0.0772*	9	declined
DMSP does not Granger Cause DPRT	19.7055	0.0000***	1	declined
DMRP does not Granger Cause DPRT	10.3084	0.0000***	4	declined
DISP does not Granger Cause DPRT	0.81024	0.5238	4	accepted
DIJP does not Granger Cause DPRT	2.2799	0.0718*	4	declined

were found to be stationary at 1st difference using the ADF test. By using the PP test, MSP passes the stationary test at the 1st difference level. For this reason, all variables (PRT, MSP, MRP, MDP, ISP and IJP) are stationary at 1st difference both with ADF and PP tests. So, the model will use 1st difference variables. The DISP variable was excluded from the model since it is not stationary by granger test.

The best model results are with equation as seen in Equation (1).

$$DPRT_t = 34221.48 + 0.319DMDP_t + 0.096DMSP_t - 0.081DMSP_{t-1} - 0.163DPRT_{t-3} - 0.054DMRP_{t-3} \quad (1)$$

And the result calculation by eviews program as table 3.

The above model has passed the modeling test such as autocorrelation test, heteroskedasticity test, multicollinearity test, F test and t test. The R squared checking explains that the overall effect of the independent variables included in the model can be explained by changes in sharia financing for 51.85%. It means that there are some other influences besides sharia financing which affect the growth of sharia insurance premiums.

4.2. Discussion

The test results above show several things; the first is that the financing of *ijarah* and *istisna* was proven to have no effect on the growth of sharia insurance premium. The *Istisna* financing variable did not pass the stationary test, and the ijarah financing variable did not pass the modeling test, which means ijarah financing does not influence the growth of sharia insurance premiums. This can be because this transaction is not often found in financing. Literature is needed on Islamic finance and more specifically is about sharia financing, so that business owners (including home industry or small business enterprises) and the public can increasingly understand the various forms of financing.

The increase of sharia premiums is influenced by the increase in *mudharabah* and *musharaka* financing, thus proving that *mudharabah* and *musharaka* financing have an influence on the growth of sharia insurance premiums. The month before of *musharaka* financing and three months before of *murabaha* financing and sharia insurance premium turned out to have slightly decreased the contribution of Islamic insurance premiums. It can be caused by several things, such as:

- Claims happening can have a declining effect on insurance growth because financing is complete and insurance also does not continue.
- Limited capacity of Islamic insurance so that there is still conventional insurance.

Murabaha financing, although the biggest transaction in banking financing, does not give an effect

Table 3. Variable Result Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	34221.48	63514.05	0.538802	0.5920
DPRT(-3)	-0.163066	0.061046	-2.671197	0.0097
DMSP	0.096586	0.022279	4.335336	0.0001
DMSP(-1)	-0.081394	0.026504	-3.071043	0.0032
DMRP(-3)	-0.054113	0.012881	-4.201073	0.0001
DMDP	0.319205	0.085618	3.728239	0.0004
R-squared	0.518489	Mean dependent var		18171.36

on the growth of sharia insurance premiums, even the financing in the previous period had a slight decrease in the growth of sharia insurance premiums.

5. CONCLUSION AND SUGGESTIONS

5.1. Conclusion

From the results of the research presented in the discussion above, it can be concluded that *murabaha* financing as the biggest transaction in banking financing, does not have an effect on the growth of sharia insurance premiums, even the financing in the previous period had a slight decrease in the growth of sharia insurance premiums. For this reason, financing that has a positive influence, like *musharaka* and *mudharabah* financing, needs to be increased by providing incentives to banks that can increase *musharaka* and *mudharabah* financing over murabaha financing.

This emphasises the need for literacy to the public and businesses regarding *musharaka* and *mudaraba* financing, which give a positive effect on premium growth, so that it can increase the financing transactions which can also increase the growth of sharia insurance. Literacy is also needed to increase *istisna* and *ijarah* financing which are currently still in a small portion. Therefore, it can be expected that *istisna* and *ijarah* financing will grow and influence the growth of sharia insurance premiums.

Financing that is repaid or discontinued, which makes insurance premiums also stop and discontinue financing due to claims, are something that gives a slight negative effect on the growth of Islamic insurance. This is a consequence of the financing and insurance business, but it could be minimized by providing incentives for customers to continue financing on time without claims

The limited capacity of sharia insurance is one of the challenges of sharia insurance in protecting sharia financing. Based on this, it is imperative to improve regulations that are applicable and can mutually support growth in the whole Islamic financial industry.

5.2. Suggestions

To develop the growth potential of the sharia insurance industry, several things can be considered, such as:

- Carry out sustainable sharia financial literacy to the public and business owners, including home industries or small business enterprises, to increase understanding of sharia finance, particularly the *mudharabah*, *ijarah* and *istisna* financing transactions, whose portion is still quite small
- Providing incentives to banks who could increase financing, using transactions other than *murabaha* and *musharaka*, as the biggest financing portfolio, so it could spread its financing portfolio.
- Providing incentives to companies which engage in corporations and infrastructure which have long-term financing through sharia, particularly through *mudharabah* and *musharaka* financing so it can increase the growth of sharia insurance premium.
- Encourage more regulatory policies to Islamic financial industry, such as between sharia banking, sharia insurance, other Islamic non-bank financial institutions, so all can support each other and can continue to grow.First, confirm that you have the correct template for your paper size. This template has been tailored for output on the A4 paper size.

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