Financial performance of sharia life insurance companies in Indonesia

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ABSTRACT

Purpose-The objective of this study is to analyze the financial standing of Indonesian Sharia life insurance firms, which will be assessed in terms of profit and influenced by premium income, investment return, and risk-based capital. Sharia insurance aims to help each other by setting aside funds in accounts for the purpose of helping each other in case of an accident. Indonesia has a majority Muslim population, making Sharia insurance easy to develop. The development of Sharia insurance is expected to be in line with its financial performance.

Design/Methodology/Approach-This research used a quantitative approach and secondary data. The sample used was Sharia life insurance companies registered with the Association of Sharia Insurance Indonesia during the period 2016-2021, with a total of 8 companies collected through purposive sampling. Hypothesis testing in this study used panel data regression analysis.

Findings-The findings of this study demonstrated that premium income and risk-based capital had little bearing on the profitability of Indonesian Sharia life insurance firms. In the meanwhile, Indonesian Sharia life insurance companies' profits are impacted by investment return. The results of this study contribute to customers and companies to pay attention to financial performance and risk management.

Research Limitations/Implications-This study has limitations due to a small sample size. It may prevent the findings from being extrapolated.

Originality/Value-The investment capability of Sharia life insurance companies in Indonesia has shown good performance, which can generate profits. However, the signaling information from the premium decision-making capability and risk-based capital still does not meet the standard and needs to be improved.

1. The Introduction

The Sharia phenomenon has become one of the contributors to economic activities in Indonesia. Not only banks that use Islamic guidelines but also financial institutions follow suit by using Islamic guidelines. Islam is the majority religion of the Indonesian people. This has pushed the increasing demand for support in their lives that use Islamic values. Thus, this becomes the basis for the easy development of Sharia-based economic activities. The community currently needs Sharia insurance, one of the Sharia financial institutions.

On August 25, 1994, Sharia insurance was first introduced in Indonesia, namely Takaful Life Insurance (Financial Services Authority, 2019). Since then, other insurance companies have emerged. The existence of Sharia insurance in Indonesia has received good feedback from the community. This is evidenced by the many insurances that are spread throughout Indonesia today. The focus of this research object is Sharia life insurance. Life insurance is a protection program for families if there is a risk, such as a policyholder's death. Sharia insurance aims to help each other by setting aside funds in the account for mutual aid in case of a disaster (Mulder, 2020). Thus, Sharia insurance shares risks between customers and the company (risk sharing).

Sharia insurance obtains its profits through the profit-sharing system. This system is based on a joint decision between the consumer and the insurance company. Like other companies, insurance also has profits used to measure its financial management performance. The profit of insurance companies can be evaluated with various elements, namely premium income, risk-based capital, and investment. The participant's contribution (premium income) in insurance is by paying their money to the company, and afterwards, the participant or customer can receive compensation for the contribution given. The participant or customer will continue to own any premium income that the company collects. The company's premium income represents both a portion of its current income and a potential liability for the future. The company must set aside a portion of the premium income as a reserve to pay if a loss occurs (Liu et al., 2020).

According to Kumari (2013), the company will also get a large profit by collecting a large premium income. This supports the research by Hidayat et al. (2021), which explains that premium income affects profits positively, meaning that the company's profit increases with increasing premium income. Besides receiving funds from customers, the company also must return the funds to customers (Huber, 2022). Therefore, the company will process the funds received by making investments in Sharia financial institutions. The research conducted by Alif (2022) states that investment income affects profits positively.

The government regulates the standard solvency level (risk-based capital) that insurance companies must maintain to maximize profits. According to the rules issued by the regulator, the limit used in the appropriate solvency level is at least 120% (Hidayat et al., 2021). According to Malik (2011) and Moreno et al. (2020), in their research, risk-based capital has a significant positive effect on profitability. With risk-based capital, insurance companies have ensured that they have funds to pay claims submitted. An empirically realistic scenario results in a much reduced solvency capital requirement for the typical German life insurance business, in contrast to the findings of prior studies (Biagini et al., 2020). In the United Kingdom, insurance is ranked as the largest across the European Union and the third largest globally. However, life insurers are in the lagging position and always enjoy the benefit of economies of scale (Mamatzakis et al., 2023). In comparison, the insurance market in Indonesia tends to be small because many people have not used life insurance.

From the explanation above, this study intends to investigate how premium revenue, investment return, and risk-based capital affect the financial performance of Sharia life insurance firms. This research has an urgency, such as insurance companies as a transfer of risk in the economy, providing a mechanism to promote saving and investment activities. Then the research question in this study is as follows: 1) Does premium income affect the financial performance of life insurance in Indonesia? 2) Does investment return affect the financial performance of life insurance in Indonesia? 3) Does risk-based income affect the financial performance of life insurance in Indonesia?

2. Literature Review

Based on signalling theory, a company's financial performance can provide signals of its condition. For investors or potential investors, information that reflects a company's condition is crucial in choosing the right investment and minimizing potential risks. Good financial conditions can be seen through the profits generated by the company. A company that consistently generates profits can minimize the risk for investors in choosing investments. A Sharia life insurance company with good performance will be more trusted by stakeholders, especially considering Indonesia's low number of life insurance participants, coupled with the case of default by PT. Asuransi Jiwasraya. Thus, Indonesian society needs a basis of trust from Sharia life insurance companies, one of which can be seen from their financial performance. The purpose of Sharia life insurance is to provide payments based on the demise or survival of participants, or other payments to participants or other parties entitled at a specified time as specified in the agreement, the amount of which has been determined and based on the results of fund management as referred to in Law Number 40 of 2014 concerning Insurance (Financial Services Authority, 2019). Sharia life insurance is a risk management business based on Sharia principles. Insurance in Arabic is called Takaful, Tadhamun, and Atamin, which means mutual support or guarantee. Insurance companies are called Muamin, and the insured party is Muang Manraf or Mustamin. At-Ta'min refers to allowing someone to make a payment or instalment so that they or their heirs can receive an agreed-upon amount or compensation for lost property. They pay or make instalments so that they or their heirs can receive the agreed-upon amount or compensation for lost property. The profit earned by the company can measure the financial performance of Sharia life insurance companies. Premium income, investment returns, and risk-based income are a few things that have an impact on how financially successful Sharia life insurance firms are.

According to Law Number 40 of 2014 Concerning Insurance, premium is the sum of money that the insurance company or reinsurance company determines and the policyholder agrees to pay based on an insurance or reinsurance agreement or the sum of money that is determined based on the provisions of the laws and regulations underlying the mandatory insurance program in order to obtain benefits (Financial Services Authority, 2019). According Alif (2022), premium revenue has a statistically significant impact on financial performance. In an insurance company, one of the important elements is the premium because the premium is an obligation that the insured party must carry out to the insurer. Premium paid by Sharia insurance participants will be divided into contributions to the tabarru fund, paid to company funds. If there is a unit link, a contribution is deposited into the participant's investment fund. Expenses related to claims and reinsurance will be charged to the Cabarrus fund, while company funds will finance the company's operations. The Sharia life insurance companies have a unit link where there is a participant's investment fund in which part of the participant's contribution will be invested. Revenue comes from specific contributions to investments and returns from investments. In contrast, the expenses are mainly if there is a withdrawal of investment or payment of benefits.

Investment income is income from the investment portfolio of insurance company assets. Investment returns are the results of insurance company activities to collect large amounts of money and distribute it to policyholders (Bodla et al., 2017). The rate of return on investment is the directly related investment cost minus the return on investment. By investing assets properly, the rate of return on investment will be high, so the company can increase the amount of assets to be invested again, and it is more profitable than the rate of return on investment. Investment return positively affects financial performance in the Romanian insurance market (Burca & Batrinca, 2014). The solvency ratio positively affects financial performance (Malik, 2011; Burca & Batrinca, 2014; Moreno et al., 2020). The ratio of equity capital to risk is known as risk-based capital. It plays a significant role in determining an insurance company's integrity, particularly with regard to its capacity to pay or fulfill all of its obligations (Tarsono et al., 2020). Risk-based capital means that a company is required to have a certain amount of capital required based on the insurance company's investment and operational risk. This ratio calculates the financial capacity of Islamic insurance companies to meet the risk coverage fund obligations to be executed (Hidayat et al., 2021).

Premiums are one of the sources of income. The larger the premiums the Sharia life insurance company receives, the more funds can be invested. The more funds invested, the greater the opportunity for the company to gain profits. The level of premiums paid by customers corresponds to the risk covered. If the amount of premiums received by the company increases and covers the expenses incurred, it will affect the profit earned by the company. This explanation is supported by the research results of Alif (2022), claiming that premium revenue has a favorable impact on the company's profit or financial performance. **H$_1$: Premium Income Affects the Financial Performance of Sharia Life Insurance Companies In Indonesia**

Sharia life insurance companies will obtain premiums from policyholders, which will then be managed, one of which is used as a source of investment funds. If the company can manage and make good investment decisions, it will increase its profits. Investment results have a positive effect on the financial performance of the life insurance company, seen from its profit (Huber, 2022). **H$_2$: Investment Return Affects the Financial Performance of Sharia Life Insurance Companies in Indonesia**

Risk-based capital gauges a company's solvency or capacity to meet all of its obligations. A 120% loss insurance firm must meet certain financial requirements, which are determined by the risk-based capital health ratio. Companies that achieve a 120% risk-based capital should show good financial conditions. This good financial condition can be seen from the increase in their profits. As stated in the research results of Burca & Batrinca (2014) and Moreno et al. (2020) risk-based capital or solvency has a positive effect on the financial performance of insurance companies. **H$_3$: Risk Based Capital Affects the Financial Performance of Sharia Life Insurance Companies in Indonesia**

This study will investigate the impact of premium revenue, investment outcomes, and risk-based capital on the financial performance of Sharia life insurance firms in Indonesia based on the prior explanation. The conceptual framework of this study is shown in Figure 1.
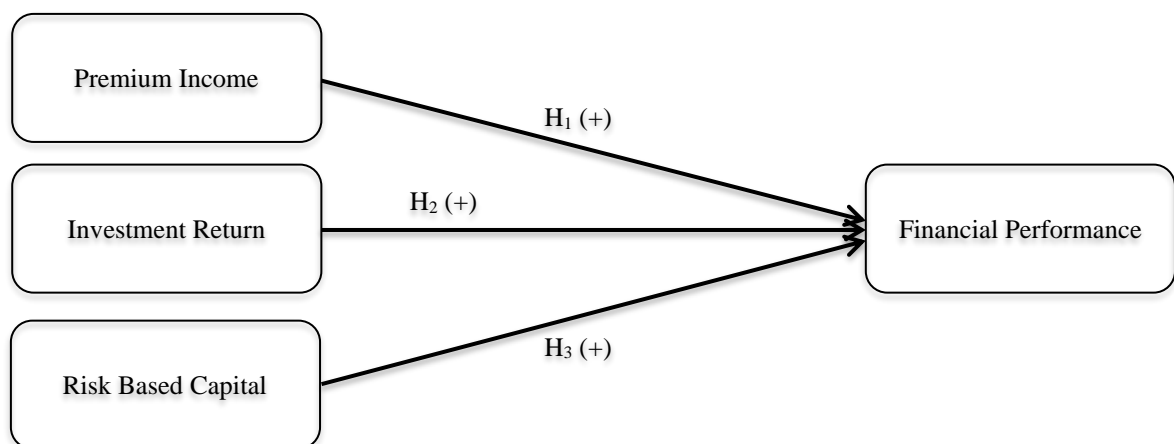

Figure 1. **Research Framework**

3. Research Methodology

This research design employs a quantitative explanatory approach. Panel data is used, where data is collected from eight financial reports of Sharia life insurance companies in the period from 2016 to 2021. This study uses non-probability sampling to obtain all the complete data needed in the research.

This study uses premium income, investment return, and risk-based capital as independent variables to investigate the factors influencing the financial performance of Sharia life insurance businesses in Indonesia. In measuring premium income, it is the difference between total premium income and reinsurance and fees. Investment return is the profit from investment activities carried

out or managed from premium income. Sharia insurance companies must have the necessary capital, which depends on investment risk and insurance activities, known as risk-based capital (Bodla, Tandon, & Bodla, 2017). The risk-based capital adequacy scale is used to determine an insurance company's ability to pay its obligations resulting from applied risk coverage. The percentage of risk-based capital used can be found by looking at the solvency ratio achievement report. Risk-based capital is the division of the solvency ratio and the minimum solvency ratio multiplied by one hundred per cent. Meanwhile, financial performance is measured by the net profit of Sharia life insurance companies.

By investigating the partial impact of premium revenue, investment return, and risk-based capital variables on the financial performance of Sharia life insurance businesses, data analysis in this study makes use of panel data analysis. This study's first step in data analysis is definitive assumption tests and then determining the best panel data model for the research. The next step is to test the influence between independent and dependent variables are conducted, as well as determine the coefficient of determination.

4. Result and Discussion

Financial performance indicates the company's performance viewed from its financial statements. Performance is most easily seen from the company's profit or loss achievement. Various factors can affect a company's performance. The determining elements in this study include premium income, investment return, and capital at risk. From the sampling technique, panel data was obtained with 48 observations. Table 1 shows the descriptive statistical results.

Table 1. Descriptive Statistics

Variable	N	SD	Mean	Max	Min
Premium Income	48	0.981	5.025	7.250	3.307
Investment Return	48	0.865	4.281	6.025	2.903
Risk Based Capital	48	34.149	21.765	128.699	0.870
Financial Performance	48	0.634	4.861	5.913	3.925

This study tests the anticipated normal distribution of data before looking at the effects of premium income, investment return, and risk-based capital components. As can be seen from Figure 2 and supported by the Jarque-Bera probability value of 0.357, it can be concluded that the data is normally distributed. The condition for parametric testing is that the data is normally distributed, and therefore further testing can be conducted.
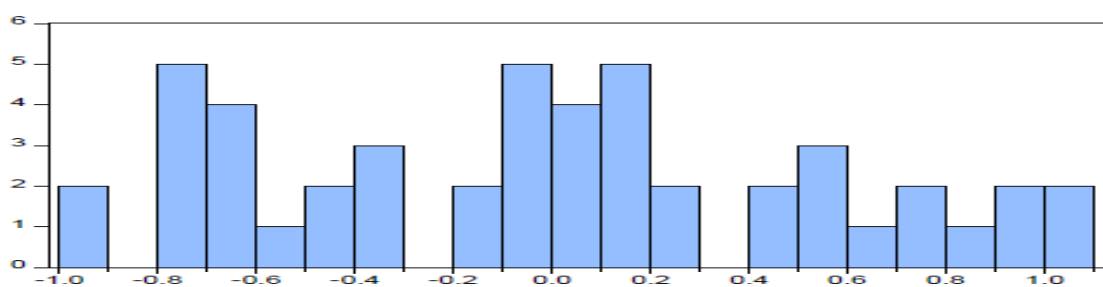

Figure 2. Normality Test Result

After normality test, this study conducted multicollinearity test, heteroscedasticity test and autocorrelation test. The results of testing the classical assumptions can be seen in Table 2 and Table 3. From the results of Table 2 it can be concluded that there is no multicollinearity between independent variables. In Table 3, it can be interpreted that the data used does not occur heteroscedasticity but autocorrelation occurs. To cure the autocorrelation problem, the Newey-West method is used. Furthermore, Table 4 contains the correlation matrix between variables in the study.

Table 2. **Multicollinearity Test Result**

Variable	Centered VIF
Premium Income	4.095
Investment Return	3.827
Risk Based Capital	1.139

Table 3. **Heteroscedasticity and Autocorrelation Test Result**

Test	Probability Chi-Square
Heteroscedasticity	0.697
Autocorrelation	0.000

Table 4. **Matrix Correlation**

Variable	Premium Income	Investment return	Risk based capital	Financial Performance
Premium Income	1	0.790	-0.049	0.477
Investment Return		1	4.281	0.513
Risk Based Capital			1	-0.022
Financial Performance				1

The next test is panel data testing. Panel data is conducted to determine the appropriate model in this study, either a common effect, fixed effect, or random effect model. Panel data testing is performed using Chow and Hausman tests. From the results of panel data testing in Table 5, a random effect model is decided as the best model in this study.

Table 5. **Chow and Hausman Test Result**

Test	Probability	Decision
Chow Test	0.000	Fixed Effect Model
Hausman Test	0.098	Random Effect Model

The hypothesis test results shows in Table 6 below that premium income does not have a significant statistical impact on the financial performance of sharia life insurance companies in Indonesia. This finding is consistent with previous studies by Putra (2016) and Tarsono et al. (2020), which have also found no significant relationship between premium income and the profitability of insurance companies in Indonesia. However, this research can provide valuable insights to insurance companies to increase their premium collecting activities and raise awareness about the benefits of life insurance to potential beneficiaries as suggested by Ishtiaq & Siddiqui (2019).

Table 6. **Hypothesis Test Result**

Variable	Coefficient	Probability	R^2
Premium Income	2.511	0.715	
Investment Return	0.069	0.020*	0.100
Risk Based Capital	0.000	0.877	

Note: t statistics in parentheses. *$p < 0.05$.

Sharia life insurance companies use premium income to be managed as a source of investment funds. The company is expected by its customers to invest accurately and well to provide profits and have a high level of solvency (Heide). This study supports Ishtiaq & Siddiqui (2019) and Alif (2022) research that premium income has a positive and statistically significant influence on the financial performance of life insurance companies. Investment is one of the activities to seek profit, so when there is an addition to investment return, the company's profits will also increase. This means that Sharia life insurance companies in Indonesia have managed investments well, and these good investment returns are reflected in good financial performance.

The more leveraged insurance businesses outperformed their less leveraged competitors. (Morara & Sibindi, 2021). Sharia life insurance companies in Indonesia are still new and smaller

than conventional life insurance companies. This claim confirms the findings of this study that risk-based capital has no statistically significant impact on a company's financial success. The findings of this study are in line with the investigation made by Bawa & Chattha (2013) and Mwangi & Murigu (2015). This study identifies dependencies of the event on company and country characteristics, which need to be considered by regulating agencies (Biagini et al., 2020). Some Sharia life insurance companies in Indonesia have risk-based capital below 120%. The contribution of this research for companies is: first, determine the level of premium income that can benefit the company and stakeholders. Second, maintain optimal investment management. Third, follow the minimum risk-based capital standards which regulators lately set.

5. Conclusion

Based on the study, the following conclusions can be drawn: first, there is no positive effect of premium income on the financial performance of sharia life insurance companies in Indonesia. Second, there is a positive effect of investment return on financial performance. Third, there is no positive effect of risk-based capital on financial performance of sharia life insurance companies in Indonesia. This study has limitations due to a small sample size. It may prevent the findings from being extrapolated. Further research is needed to explore the theme of life insurance companies in more depth. Qualitative approaches, such as interviewing customers, may provide insights into what customers expect from the company. This information can be useful for the company to improve its services and meet customer needs.

REFERENCES

Alif, R. A. (2022). Analysis of premium income and claim expenses on risk based capital and profit of life insurance companies in Indonesia for the 2016-2020 period. *Dinasti International Journal of Management Science*, *4*(2), 209–220. https://doi.org/10.31933/dijms.v4i2

Bawa, S. K., & Chattha, S. (2013). Financial performance of life insurers in Indian insurance industry. *Pacific Business Review International*, *6*(5).

Biagini, F., Huber, T., Jaspersen, J. G., & Mazzon, A. (2020). Estimating extreme cancellation rates in life insurance. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3387043

Bodla, S., Tandon, D., & Bodla, B. S. (2017). Profitability performance of life insurance companies: A study in Indian context. *International Journal of Computing and Business Research*, *7*(3), 1–15.

Burca, A. M., & Batrinca, G. (2014). The determinants of financial performance in the Romanian insurance market. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, *4*(1), 299–308. https://doi.org/10.6007/IJARAFMS/v4-i1/637

Hidayat, N. I. A., Susanti, S., & Zulaihati, S. (2021). Pengaruh premi, hasil investasi dan risk based capital terhadap laba perusahaan asuransi syariah Indonesia 2019 (The effect of premium, investment returns and risk based capital on profits of Indonesia sharia insurance company in 2019). *Jurnal Akuntansi, Keuangan, dan Manajemen*, *2*(4), 327–344. https://doi.org/10.35912/jakman.v2i4.552

Huber, T. (2022). Comparative risk aversion in two periods: An application to self-insurance and self-protection. *Journal of Risk and Insurance*, *89*(1). https://doi.org/10.1111/jori.12353

Ishtiaq, N., & Siddiqui, D. A. (2019). Factors affecting financial performance of life insurance sector in Pakistan. *International Journal of Social and Administrative Sciences*, *4*(2). https://doi.org/10.18488/journal.136.2019.42.178.199

Kumari, T. H. (2013). Performance evaluation of Indian life insurance industry in post liberalization. *International Journal of Social Sciences Arts and Humanities,* 1(1).

Liu, Y., Chen, K., & Hill, R. V. (2020). Delayed premium payment, insurance adoption, and household investment in rural China. *American Journal of Agricultural Economics*, *102*(4). https://doi.org/10.1002/ajae.12038

Malik, H. (2011). Determinants of insurance companies profitability: An analysis of insurance sector of Pakistan. *Academic Research International*, *1*(3).

Mamatzakis, E., Staikouras, C., Triantopoulos, C., & Wang, Z. C. (2023). Measuring the efficiency and productivity of UK insurance market. *International Journal of Finance and Economics*. https://doi.org/10.1002/ijfe.2723

Morara, K., & Sibindi, A. B. (2021). Determinants of financial performance of insurance companies: Empirical evidence using Kenyan data. *Journal of Risk and Financial Management*, *14*(12). https://doi.org/10.3390/jrfm14120566

Moreno, I., Parrado-Martínez, P., & Trujillo-Ponce, A. (2020). Economic crisis and determinants of solvency in the insurance sector: New evidence from Spain. *Accounting and Finance*, *60*(3). https://doi.org/10.1111/acfi.12422

Mulder, N. (2020). Bad deaths, good funerals: The values of life insurance in New Orleans. *Economic Anthropology*, *7*(2). https://doi.org/10.1002/sea2.12172

Mwangi, M., & Murigu, jane wanjugu. (2015). The determinants of financial performance in general insurance companies in Kenya. *European Scientific Journal*, *11*(1).

Putra, I. N. D. D. (2016). The influence growth of income, assets, ratio of claim and risk based capital on the profitability of life insurance companies in Indonesia. *International Journal of Business and Commerce*, *6*(09).

Tarsono, O., Ardheta, P. A., & Amriyani, R. (2020). The influence of net premium growth, claim ratio and risk-based capital on the financial performance of life insurance companies. In *Annual International Conference on Accounting Research* (AICAR 2019) (pp. 65-68). Atlantis Press. https://doi.org/10.2991/aebmr.k.200309.015