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Firm Size as a Moderator of Solvency Determinants in Islamic Life Insurance Companies

Ukuran Perusahaan sebagai Moderasi dari Determinan Solvabilitas Perusahaan Asuransi Jiwa Syariah

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ABSTRACT

Indonesia's Sharia life insurance industry faces challenges in maintaining the company's solvency level. Factors such as claim expense ratio, fund change ratio, and company size are crucial in determining the sustainability of company solvency. This study aims to analyze the effect of the claim expense ratio and fund change ratio on the solvency level of Sharia life insurance companies, with company size as a moderating variable. Using a quantitative deductive approach, secondary data was collected from annual financial statements of six full-fledged sharia life insurance companies registered with OJK from 2017 to 2023. The results showed that the claim expense ratio does not affect the solvency level, while the fund change ratio has a negative effect. Company size does not moderate the relationship between the claim expense ratio and solvency level but can moderate the relationship by weakening the negative effect of the fund change ratio on the solvency level.

Keywords: Early Warning System, Full Fledged Sharia, Islamic Life Insurance, Solvency.

ABSTRAK

Industri asuransi jiwa syariah di Indonesia menghadapi tantangan dalam menjaga tingkat solvabilitas perusahaan. Faktor-faktor seperti rasio beban klaim, rasio perubahan dana, dan ukuran perusahaan menjadi krusial dalam menentukan keberlangsungan solvabilitas perusahaan. Penelitian ini bertujuan untuk menganalisis pengaruh rasio beban klaim dan rasio perubahan dana terhadap tingkat solvabilitas perusahaan asuransi jiwa syariah, dengan ukuran perusahaan sebagai variabel moderasi. Dengan menerapkan pendekatan deduktif kuantitatif, data sekunder dikumpulkan dari laporan keuangan tahunan 6 perusahaan asuransi jiwa yang beroperasi secara syariah penuh dan terdaftar di OJK selama tahun 2017-2023. Hasil penelitian menunjukkan bahwa rasio beban klaim tidak berpengaruh terhadap tingkat solvabilitas, sedangkan rasio perubahan dana berpengaruh negatif. Ukuran perusahaan tidak memoderasi hubungan antara rasio beban klaim dan tingkat solvabilitas, tetapi mampu memoderasi hubungan dengan memperlemah pengaruh negatif rasio perubahan dana terhadap tingkat solvabilitas. Penelitian ini memberikan kontribusi baru dalam literatur mengenai faktor-faktor yang memengaruhi tingkat solvabilitas perusahaan asuransi jiwa syariah, dengan mempertimbangkan ukuran perusahaan sebagai variabel moderasi. ***Kata Kunci: Sistem Peringatan Dini, Syariah Penuh, Asuransi Jiwa Syariah, Solvabilitas.***

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I. INTRODUCTION

Indonesia is one of the countries that implement dual financial systems, namely the Conventional and Islamic financial systems. Both systems are present in Indonesia against the background of the community's needs for the products and services offered in each system. The conventional financial industry was established in Indonesia much earlier than the Islamic financial industry. The new Islamic financial industry was present in Indonesia in the 1990s, along with public awareness of the need for financial products and services under Sharia principles. In the insurance industry, sharia insurance was only present in Indonesia starting in 1994, while conventional insurance had been present decades earlier. Since its introduction in 1994, Sharia insurance has experienced good growth, as reflected in the increase in industry players, participants, premiums, and assets. However, the public's need for conventional insurance still exists. This condition is inseparable from several limitations in the Islamic insurance industry compared to conventional insurance, such as limited capacity to manage or bear risks, limited investment instruments, product variations, and low literacy levels.

As a country with the second largest Muslim population in the world, Indonesia is one of the countries with great potential in terms of Sharia financial penetration. Since its launch, Sharia Insurance has continued to experience significant growth. In terms of Sharia Life Insurance Assets, in 2022, it has a share of 5.6% compared to total Life Insurance assets. At the same time, Sharia General Insurance has a market share of 3.7%. It is supported by 15 fully-fledged Sharia insurance and reinsurance companies and 43 Sharia insurance and reinsurance companies in the form of Sharia business units.

Regarding contribution income, the role of Sharia Life Insurance in Indonesia is getting bigger, as indicated by the contribution portion of Sharia Life Insurance sales reaching 11.8% in 2022 soaring. In contrast, Sharia Life Insurance's contribution reached only 5.8% five years ago. In Sharia General Insurance, the contribution reached 3.8% in 2022. The huge potential of the Islamic insurance market and the limitations of the Islamic insurance industry show the importance of developing Islamic insurance. However, the limitations of the Islamic insurance industry should not be a barrier to public access to insurance products (OJK, 2022).

Based on data from the Financial Services Authority (OJK), the total gross contribution of Islamic life insurance companies in 2021 is IDR 20.65 trillion, an increase of 37.6% from 2020, which amounted to IDR 15.01 trillion. The 2021 gross contribution is 10.1% of the total gross contribution of life insurance companies in 2021. Meanwhile, gross claims of life insurance companies with Sharia principles increased by 59.5% from IDR 11.57 trillion in 2020 to IDR 18.46 trillion in 2021. The gross claim is 10.3% of the total gross claim of life insurance companies in 2021. Broadly speaking, Indonesia's Islamic life insurance industry is experiencing growth, but this also brings new challenges for Islamic life insurance companies, namely maintaining solvency. Solvency is one of the important financial health indicators for Islamic life insurance companies. Solvency shows the company's ability to fulfill its obligations to policyholders, including claim payments. Good solvency is important to maintain policyholder trust and maintain the stability of the Islamic life insurance industry.

Low solvency can be fatal for Islamic life insurance companies. It can result in the company's inability to pay claims, loss of policyholder confidence, and company failure. For example, in 2022, PT Asuransi Jiwa Adisarana Wanaartha had its license revoked by OJK through the Decree of the Board of Commissioners of the Financial Services Authority Number KEP-71/D.05/2022 dated December 5, 2022, because the company could not fulfill the provisions that caused the sanction of Business Activity Limitation (PKU). Sanctions were imposed on PT Asuransi Jiwa Adisarana Wanaartha because violations of the minimum solvency level, minimum investment adequacy ratio, and minimum equity were not under the provisions of laws and regulations in the insurance sector.

Based on the data and facts above, the author conducts this research to identify factors that affect the solvency level of Islamic life insurance companies and can provide recommendations to improve the company's solvency so that it can be used to prevent the re-occurrence of cases of violation of the minimum solvency level. The reasons for selecting independent variables include, among others, the Claims Expense Ratio used to assess the proportion of premium income used to pay claims. A low Claims Expense Ratio indicates that the company can manage its claims well. Then, the Funds Change Ratio is used to assess the growth of company funds over time. A high Funds Change Ratio indicates that the company is experiencing good fund growth.

Company size was chosen as a moderating variable because larger Islamic life insurance companies generally have a higher level of solvency than smaller Islamic life insurance companies.

However, this is interesting because in previous research, according to (Cut Riezka, 2023), partial capital structure has a significant effect on the level of solvency, while profitability and company size have no significant effect on the level of solvency.

Based on the background previously described, the formulation of this research problem is whether the claim expense ratio and the ratio of changes in funds affect the solvency level of Islamic life insurance companies and whether there is moderation in company size on the relationship between the claim expense ratio and the ratio of changes in funds to the solvency level of Islamic life insurance companies. This study aims to analyze the effect of claim expense ratio and fund change ratio on the solvency level of Islamic life insurance companies and test whether company size moderates the relationship between claim expense ratio and fund change ratio with the solvency level of Islamic life insurance companies.

II. LITERATURE REVIEW

Theoretical Basis

The Agency Theory proposed by Michael C. Jensen and William H. Meckling in 1976 explains the relationship between a company's principals (owners) and agents (managers). In the context of Islamic life insurance companies, policyholders act as principals who delegate authority to the management of Islamic life insurance companies as agents to manage their funds and obligations. The management of an Islamic life insurance company is an agent acting on behalf of policyholders. The financial ratios in this study can be seen as indicators of the performance of the management of Islamic life insurance companies in managing their funds and obligations. Thus, policyholders can assess the performance of the management of Islamic life insurance companies and increase management accountability. The management of Islamic life insurance companies must be transparent in conveying financial and operational information to policyholders, as well as the important role of the Sharia Supervisory Board in Islamic life insurance to ensure that the company's activities are under the principles of Islamic Sharia to increase policyholder confidence.

Sharia Insurance

According to the National Sharia Council of the Indonesian Ulema Council (DSN-MUI) in Fatwa Number 21/DSN-MUI/X/2001 concerning General Guidelines for Sharia Insurance, defines Sharia Insurance (Ta'min, Takaful, or Tadhamun) as an effort to protect and help each other among several people/parties through investments in the form of assets and tabarru' which provides a pattern of return to face certain risks through contracts (agreements) under sharia. Regulation of the Minister of Finance of the Republic of Indonesia Number 11/PMK.010/2011 states that every sharia insurance company is obliged to maintain financial health consisting of the economic health of the Tabarru' Fund and the financial health of the Company Fund. Tabarru' Fund itself is defined as a collection of funds derived from the contributions of the participants, whose mechanism of use is under the Tabarru' Agreement that has been agreed upon to help among the participants, which is not and not for commercial purposes. Company Funds are funds derived from shareholders and/or company assets used to conduct insurance business activities or reinsurance business with sharia principles. Specifically, Sharia life insurance companies must maintain one additional indicator, namely the financial health of the Participant Investment Fund, which is defined as investment funds derived from participant contributions for life insurance products that contain investment elements, which the company manages under the agreed investment contract. Sharia and reinsurance companies must always meet a solvency level of at least 100%, consisting of 30% for Tabarru' Funds and 70% for Company Funds.

Solvency Level

The ratio that measures the company's ability to meet its needs and obligations is the solvency ratio (Putri et al., 2013). Own capital and loan capital and the company's ability to meet its obligations can be known after calculating the solvency ratio. The health of takaful companies can be calculated using Risk-Based Capital (RBC) (Ulfan et al., 2018). The minimum amount of capital an insurance company must have based on the risk level it bears to protect its customers from adverse developments is called RBC. Risk-based capital models are factor-based models that incorporate selected types of risks insurance companies face. (Yusof et al., 2016).

Claims Expense Ratio

Insurance companies use ratios in the Early Warning System (EWS) to detect early the level of health and financial performance (Boitan, 2012). One of the fundamental factors of EWS is the claim expense ratio.

Claims that occur in insurance companies will be shown in the claim expense ratio (Wiguna & Susilawati, 2020). Based on this relationship, the hypotheses built in this study are:

H_1: The claim expense ratio affects the solvency level of Islamic life insurance companies.

Funds Change Ratio

The ratio used to indicate the level of stability of the company's operating activities is the ratio of changes in funds (Aryani et al., 2023). There is no normal limit on this ratio. If the ratio increases yearly, it indicates the growth of tabarru' funds, which means there is an increase in participant contributions or the results of the development of funds managed by Islamic life insurance companies, and vice versa. If the ratio is close to zero, it shows that the growth of tabarru' funds is stagnant or insignificant. Based on this relationship, the hypotheses built in this study are:

H_2: The ratio of changes in funds affects the level of solvency of Islamic life insurance companies.

Company Size

Company size or firm size is a variable that can affect company profitability. This variable aims to see the size of a company from the assessment of assets, sales, profits, tax burdens, and others (Rafi & Syaichu, 2019). A large company is undoubtedly different from a small company. Larger companies generally have a higher solvency level than smaller Islamic life insurance companies. Based on this relationship, the hypotheses built in this study are:

H_3: Company size moderates the relationship between the claim expense ratio and the solvency level of Islamic life insurance companies.

H_4: Company size moderates the relationship between the ratio of changes in funds and the solvency level of Islamic life insurance companies.

III. RESEARCH METHODS

This study uses a quantitative design with a deductive approach to analyze the effect of claim expense ratio, fund change ratio, and company size on the solvency level of Islamic life insurance companies. The research data in the form of secondary data was collected from the annual financial statements of 6 Islamic life insurance companies in Indonesia registered with OJK for 7 years, from 2017 to 2023. 2017 is the first year to implement OJK Regulation Number 72/POJK.05/2016 concerning the Financial Health of Insurance Companies and Reinsurance Companies with Sharia Principles. Insurance companies must at all times meet the solvency level of tabarru' funds, landud funds, and company funds of at least 60% (sixty percent) no later than December 31, 2017, and at least 80% (sixty percent) no later than December 31, 2018, and 100% (one hundred percent) no later than December 31, 2019. The following is a calculation of the sample size and a list of Islamic life insurance companies that will be sampled in this study.

Table 1. Sample Selection Criteria

Criteria for Sharia Life Insurance Companies	Total
Population (Sharia Life Insurance Companies Registered with OJK)	31
Sharia Life Insurance as a Sharia Business Unit	(23)
Full Sharia But Does Not Meet Reporting Year Requirements	(2)
Sharia Life Insurance Companies Meet the Conditions	6
Number of Years of Observation	7
Number of Observations	**42**

Based on Table 1, there are 31 Islamic life insurance companies in Indonesia registered with the OJK, of which 23 companies are Sharia Business Units, and 2 Full Fledge Sharia insurance companies that do not report or that do not publish financial reports regularly for the period 2017 to 2023 as many as 2 companies. So, in total 6 companies published financial reports from 2017 to 2023, with a research period of 7 years, 42 observers are obtained. The following are the names of the companies to be analyzed, including:

Table 2. List of Sharia Life Insurance Companies Analyzed

No.	Company Name
1.	PT Asuransi Takaful Keluarga
2.	PT Asuransi Jiwa Syariah Al-Amin
3.	PT Asuransi Jiwa Syariah Amanahjiwa Giri Artha
4.	PT Asuransi Jiwa Syariah Jasa Mitra Abadi
5.	PT Asuransi Jiwa Syariah Bumiputera
6.	PT Capital Life Syariah

The dependent variable used in this study is the level of solvency using the Risk-Based Capital (RBC) proxy obtained by dividing the value of the company's solvency level by the specified minimum solvency level limit. The health level of insurance companies can be seen from the RBC ratio (Utami dan Khoiruddin, 2016). RBC is a minimum solvency level set (Rustamunadi & Rohmah, 2021). The minimum RBC set by OJK is 120% (Kristanti et al., 2021).

$$Risk\ Based\ Capital\ (RBC)\ Ratio\ = \frac{Solvency\ Level}{Minimum\ Solvency\ Level\ Limit}$$

The independent variables used in this study include the claim expense ratio and fund change ratio. The claim expense ratio is measured based on the ratio between the value of net claim expenses and the company's net premium income. According to Kristanti et al. (2021), the claim expense ratio is an indicator that explains the comparison between claim costs and premium income. If the cost of claims is less than premium income, the costs borne by the company will be smaller and vice versa.

$$Claims\ Expense\ Ratio\ (CER) = \frac{Net\ claims\ expense}{Net\ premium\ income}$$

The ratio of changes in funds is measured based on the ratio between the difference between the total tabarru' funds of the current year and the total tabarru' funds of the previous year and the total tabarru' funds of the previous year (Charumathi, 2012).

$$Fund\ Change\ Ratio\ (FCR) = \frac{(Total\ funds\ n) - (Total\ funds\ n-1)}{Total\ funds\ n-1}$$

This study uses a moderating variable, namely company size. The proxy used to measure company size results from the natural logarithm of the company's total assets, as used by Widiasih et al. (2024).

$$Size = Ln\ (Total\ assets)$$

Multiple linear regression for panel data is used in this study to examine the relationship between the claim expense ratio and the ratio of changes in funds to the level of solvency with company size as a moderating variable. The model used to test the hypothesis is as follows:

$$RBC = \alpha + \beta_1 CER + \beta_2 FCR + \beta_3 SIZE + \beta_4 CER*SIZE + \beta_5 FCR*SIZE\ \ \varepsilon$$

Information:

RBC	=	Solvency level measured through Risk-Based Capital
α	=	Constant
ε	=	Standard error
β1-β3	=	Regression Coefficient
CER	=	Claims Expense Ratio
FCR	=	Fund Change Ratio
SIZE	=	Firm Size

IV. RESULTS AND DISCUSSION

Table 3. Descriptive Statistics

Variable	Obs.	Mean	Median	Min.	Max.	Std. Dev.
RBC	42	2,6067	2,2386	0,8000	6,7123	1,3525
CER	42	0,6574	0,5227	0,0263	1,8775	0,4527
FCR	42	-0,0687	0,0769	-13,9996	1,6840	2,2583
SIZE	42	27,2308	27,4510	25,1977	29,0769	1,1995

Descriptive statistical analysis is used to determine the description of data seen from the minimum, maximum, average, and standard deviation values. In this study, the variables used in the calculation of descriptive statistics are the level of solvency (RBC), claim expense ratio (CER), fund change ratio (FCR), and company size (SIZE). Based on descriptive statistical analysis, the sample description is as follows.

Based on Table 3, the average (Mean) RBC is 2.6067, CER is 0.6574, FCR is -0.0687, and SIZE is 27.2308. The average value of RBC shows that the average solvency level of Islamic life insurance companies in this sample is above the value of 1, which indicates that the average Islamic life insurance company in this sample has a good level of solvency. The average value of CER shows that the average claim expense ratio of Islamic life insurance companies in this sample is positive, which means that the average claim expense of Islamic life insurance companies in this sample has increased. The average value of FCR indicates that the average ratio of changes in Islamic life insurance company funds in this sample is negative, which means that the average Islamic life insurance company funds in this sample have decreased. The average value of SIZE indicates that the average size of Islamic life insurance companies in this sample is positive, which means that the average Islamic life insurance company in this sample has a large size.

The minimum value of RBC is 0.8000, CER is 0.0263, FCR is -13.9996, and SIZE is 25.1977. The minimum values of RBC, CER, and SIZE are positive, while the minimum value of FCR is negative. The maximum value of RBC is 6.7123, CER is 1.8775, FCR is 1.6840, and SIZE is 29.0769. The standard deviation of RBC is 1.35252, CER is 0.4527, FCR is 2.2583, and SIZE is 1.1995. The standard deviation values of RBC and SIZE indicate considerable variation in the level of solvency and size of Islamic life insurance companies in this sample. The standard deviation value of CER indicates moderate variation in the claim expense ratio of Islamic life insurance companies in this sample. The standard deviation value of FCR indicates a very large variation in the ratio of changes in funds of Islamic life insurance companies in the sample data.

In the regression model estimation method using panel data, it can be done through 3 approaches, including the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). The best regression model will be used in the analysis of the 3 regression models that can be used to estimate panel data.

1. Chow Test

This test is used to compare or choose which is the best, the FEM model or the CEM model. If the probability value is greater than 0.05, then the selected model is CEM, but if the probability value is smaller than 0.05, then the selected model is FEM.

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	0.841699	(5,33)	0.5300
Cross-section Chi-square	5.041238	5	0.4109

Figure 1. Chow Test Results

Based on figure 1, both the Cross Section F probability value of 0.5300 and Chi-square of 0.4109 are greater than the significance level of 0.05, so the best model to use is the CEM model and can proceed to the Lagrange Multiplier Test.

2. Lagrange Multiplier Test

This test is used to compare or choose the best between the CEM or REM models. If the probability value is greater than 0.05, then the selected model is CEM, but if the probability value is smaller than 0.05, then the selected model is REM.

Lagrange Multiplier Tests for Random Effects
Null hypotheses: No effects
Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided (all others) alternatives

	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	0.282384	0.010719	0.293103
	(0.5951)	(0.9175)	(0.5882)

Figure 2. Lagrange Multiplier Test Results

Based on figure 2, the cross-section probability value of 0.5951 is greater than the significance level of 0.05, so it can be concluded that the best model to use in this study is the CEM model.

The selected model is CEM. Therefore, classical assumption tests must be carried out, namely multicollinearity test and heteroscedasticity test.

1. Multicollinearity Test

Multicollinearity problems can be seen from the correlation coefficient between independent variables. If the coefficient value is> 0.85, there is a multicollinearity problem. Otherwise, if the coefficient value < 0.85, there is no multicollinearity problem.

	CER	FCR	SIZE
CER	1.000000	-0.030226	0.178728
FGR	-0.030226	1.000000	0.203342
SIZE	0.178728	0.203342	1.000000

Figure 3. Multicollinearity Test Results

Based on figure, it can be seen that the correlation coefficient between CER and FCR is -0.0302 or smaller than 0.85; the correlation coefficient between CER and SIZE is 0.1787 or smaller than 0.85; and the correlation coefficient between FCR and SIZE is 0.2033 or smaller than 0.85. Thus, it can be concluded that the variables are free from multicollinearity problems or pass the multicollinearity test.

2. Heteroscedasticity Test

White's test tests whether heteroscedasticity occurs if the Prob. If the chi-square value is smaller than 0.05, then the data occurs heteroscedasticity problem, but if the Prob value. If the chi-square value is greater than 0.05, then the data does not have heteroscedasticity problems, or the heteroscedasticity test assumptions have been met.

Heteroskedasticity Test: White
Null hypothesis: Homoskedasticity

F-statistic	1.145304	Prob. F(9,32)	0.3615
Obs*R-squared	10.23276	Prob. Chi-Square(9)	0.3320
Scaled explained SS	14.43499	Prob. Chi-Square(9)	0.1077

Figure 4. Heteroscedasticity Test Results

Based on figure 4, it can be seen that the Prob. A chi-square value of 0.3320 is greater than 0.05, meaning no heteroscedasticity problem or the heteroscedasticity test has passed.

The following are the results of multiple linear regression using the CEM model.

Table 4. Results of Multiple Linear Regression

Variable	Coefficient	t-Statistic	Probability	
C	3,6017	0,7440	0,2309	
CER	1,7266	0,2022	0,4205	
FCR	-4,9933	-1,8336	0,0375	*
SIZE	-0,1002	-0,2698	0,3944	
CER*SIZE	-0,1099	-0,1739	0,4315	
FCR*SIZE	0,3874	1,7454	0,0447	*
R-squared		0,2378		
Adjusted R-squared		0,1320		
F-statistic		2,2465		
Prob (F-statistic)		0,0353		

The results based on Table 4 show that the CER variable does not affect RBC, which means that H1 in this study is rejected. In other words, the claim expense ratio partially does not affect the level of solvency. This result is based on the findings obtained by Aryani et al. (2023), which state that the claim expense ratio does not affect the level of solvency. However, contrary to the research of Jamiah et al. (2024), where the results of their research state that the claim expense ratio has a negative and significant effect on the level of solvency, while Melisa Anggraini et al. (2022) research proves that the claim expense ratio has a positive effect on the health level of insurance companies.

The test results of the FCR variable show a significant negative effect on RBC, which means H2 in this study is accepted. The ratio of changes in funds has a negative effect on the level of solvency of Islamic life insurance companies, meaning that the greater the increase in funds, the lower the level of solvency of the company. Several factors, such as a less-than-optimal investment strategy, can cause this. If the company does not invest funds effectively, the investment returns will not be enough to cover the increasing claim obligations, which will reduce the company's solvency. Another factor that can cause a negative influence is inefficiency in fund management, which can be in the form of high operating costs, poor investment portfolio management, or inappropriate investment decisions. It contradicts the research of Melisa Anggraini et al. (2022), who states that the ratio of fund changes does not influence insurance companies' solvency level.

As a moderating variable, company size weakens the negative relationship between FCR and RBC and cannot moderate the relationship between CER and RBC. Thus, H3 in this study is rejected, and H4 is accepted. The size of the company does not affect the impact of the claim expense ratio on the solvency level of Islamic life insurance companies; however, it weakens the negative impact of the ratio of changes in funds on the solvency level of Islamic life insurance companies. Large companies are relatively better able to reduce the negative impact of increasing funds on the level of solvency than small companies. Large companies tend to have access to more capital and various financial instruments, which allows them to spread investment risk more effectively. In addition, large companies usually have more experienced management and robust infrastructure to implement more complex investment strategies and better portfolio diversification. These advantages allow large companies to reduce the negative impact of fund fluctuations on solvency.

V. CONCLUSION

This research examines the influence of the claim expense ratio and fund change ratio on the solvency level of Sharia life insurance companies in the 2017-2023 period. The research results show that the claim expense ratio does not significantly affect the solvency level of Sharia life insurance companies, and fluctuations in claims do not directly affect the company's ability to fulfill its obligations to policyholders. On the other hand, the fund change ratio negatively influences solvency, which means that an increase in funds reduces the company's solvency level, possibly due to less-than-optimal investment strategies or inefficiency in fund management. In addition, company size does not moderate the relationship between the claims expense ratio and solvency, which means that the company's size does not influence the impact of the claims expense ratio on solvency. However, company size can moderate the relationship between the ratio of changes in funds and solvency by weakening the negative influence, indicating that large companies are better able to reduce the negative impact of increasing funds on solvency than small companies.

Based on the findings of this research, it is recommended that further research expand the sample size and research period, as well as consider additional variables such as risk management, profitability, and investment diversification to provide a more comprehensive understanding of the factors that influence the solvency level of sharia life insurance companies. Also, it is recommended that the OJK continue to strengthen regulations and supervision of investment strategies and risk management of Sharia life insurance companies, as well as provide more detailed guidance on fund management and fulfilling solvency obligations to ensure the stability and sustainability of the Sharia insurance industry in Indonesia. Although this research provides valuable insight into the factors that influence the solvency level of Islamic life insurance companies, several limitations need to be noted. This research is limited in sample size because it only uses data from six Sharia life insurance companies with Full Sharia Fledge registered with the OJK from 2017-2023. This limitation may affect the generalization of the findings because they do not cover the entire population of Sharia life insurance companies in Indonesia, so the results may not fully represent the conditions of the industry as a whole.

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The authors declare no conflicts of interest.

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