

## RISK-BASED CAPITAL AND TAKAFUL INSURANCE PERFORMANCE: THE MODERATING ROLE OF FIRM SIZE

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### ABSTRACT

*This study examines the impact of Risk-based Capital (RBC) on Takaful's financial performance, focusing on company size as a moderation factor. The RBC value is an insurance company's benchmark in assessing the ability to meet insurance and reinsurance commitments. Overall, a good RBC level can reinforce a company's value advantage. Based on resource-based theory, which discusses the value possessed by a company, it is explained that the size of a company can provide a positive prospectus signal for investors in terms of the health and performance of the company. The research methodology used in this study is Moderated Regression Analysis (MRA) with a quantitative approach. This research is focused on Islamic insurance companies in Indonesia that have received permits from the Financial Services Authority (OJK) from 2019 to 2023. The results of this study show that the amount of RBC allocation has a significant effect on the financial performance of Islamic insurance companies (takaful) in Indonesia. However, the size of the company does not moderate the influence of RBC on the financial performance of takaful companies in Indonesia. Insurance companies, both large and small, must be able to effectively allocate RBCs so that companies can meet claims obligations and maintain the stability of the company's financial health. RBC can assist insurers in formulating more effective risk management strategies so that insurers can increase customer and stakeholder confidence and maximize their financial performance.*

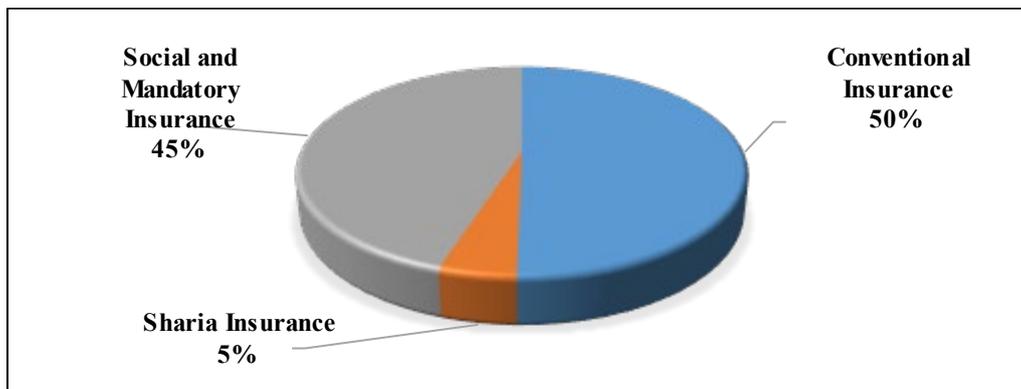
**Keywords:** Risk-based Capital, Takaful, Performance, Firm Size

### INTRODUCTION

Globally, the Islamic insurance or takaful industry makes a relatively small contribution compared to other Islamic finance sectors, only recording a contribution of 1% of the total assets of the Islamic financial sector (Serpina et al., 2022). In Indonesia itself, after almost three decades of Sharia insurance development in Indonesia, with the majority of the Muslim population exceeding 80% of the Indonesian population, the Sharia insurance industry shows significant growth every year. This is evidenced by the continued development of sharia insurance contributions of 16.1% during 2018-2023 (AASI, 2023). However, the Sharia insurance industry still needs more development, especially compared to the conventional insurance business. In Indonesia, the total number of Sharia life insurance companies stands at 29, accompanied by 25

Sharia general insurance companies, and four Sharia reinsurance companies, including Sharia business units. This figure notably contrasts with the greater number of conventional insurance companies operating within the country (Otoritas Jasa Keuangan, 2023a) This figure indicates that the potential for the progress of sharia insurance in Indonesia is still immense.

The growth opportunities of sharia insurance in Indonesia can be seen based on the significant contribution in market share in the following figure:



**Figure 1: Contribution of the Insurance Industry in Indonesia, (Source: ojk.go.id)**

In the figure above, based on OJK data as of December 2022, the contribution of conventional insurance reached a market share of 50.32%, the contribution of social and compulsory insurance of 45%, and the contribution of sharia insurance of 4.76% (Otoritas Jasa Keuangan, 2023a). The low contribution level indicates that the potential for sharia insurance growth opportunities in Indonesia is still enormous. Based on this, it is necessary to strengthen the contribution of Sharia insurance so that the developments of the Sharia insurance industry can increase significantly.

The development of the sharia insurance industry (takaful) is inseparable from the performance owned by the company (Falikhhatun & Shofia, 2021; Sukmaningrum et al., 2023; Widayati & Miranti, 2023). Performance is information that shows the level of realization in implementing a policy/activity to carry out the organization's goals, goals, vision, and mission (Rahmawati et al., 2023). According to Hansen et al. (2004), there are two types of performance: financial and non-financial. Financial performance is an essential metric that serves as an indicator of a company's operational health, encompassing its fiscal viability and profitability. In contrast, non-financial performance pertains to the correlation between strategic effectiveness and the operational efficiency of the company. Improvement of production processes, products, services, and market management is the primary goal of a company (Gutterman, 2023). Performance in insurance companies can be optimal when the company has added value that will impact public trust in the company (Bui & Krajcsák, 2024). This is because, along with the maturing of the insurance industry, the public is increasingly aware of how to identify reputable and competent insurance providers. One way to do this is by looking at insurance companies' financial performance.

Based on Doumpos et al. (2012), the insurance industry's financial performance is crucial for various stakeholders, including agents, policyholders, and policymakers.. Financial performance can provide input to management to decide on improvement measures for the company. (Gunawan & Trihadmini, 2022; A. Sharma et al., 2018; Zinyoro & Aziakpono, 2023). An assessment of insurance companies' financial performance is conducted to ascertain the competitive advantage held by the company. Financial performance is a widely utilized metric for evaluating profitability (Nurlatifah & Mardian, 2016). Financial performance can be evaluated using profitability ratios.(Armono, 2024; Ashok & Kushal, 2021; Nasution & Yusleny, 2023; Nur

et al., 2023; Sari & Daryanto, 2021). The profitability ratio of a company indicates its performance, which will be an added value for the company (Kasmir, 2018).

The assessment of insurance companies' financial performance plays a crucial role in the industry's overall growth, ultimately contributing to the economy's success (Pramusinta & Aryani, 2022; Stephanie & Ruslim, 2021). This is because insurance companies are involved in risk-related businesses. Globally, insurers deal with several risk categories that directly impact their performance (Liedtke, 2021).

The level of a company's health is also essential to anticipate or detect risks that may arise in a company's operations, so a measure is needed to assess how far the company's financial health level is (Taswin & Suhendra, 2022). In the insurance industry, an organization's financial soundness is evaluated through the Risk-based Capital (RBC) ratio (Lombardi, 2006). Risk-based capital (RBC) is a metric utilized to assess the capital required by insurance companies to sustain their operations and mitigate the risks they encounter. RBC ensures that insurance companies uphold adequate capital reserves to mitigate potential losses arising from underwriting, investment, and operational risks. With this approach, regulators can evaluate the financial strength of an insurance company in the face of unexpected disruptions while providing a more transparent and responsive framework to the insurance industry's needs, especially in the context of sharia, such as takaful insurance.

RBC is a ratio that measures financial health in insurance companies required by the Financial Services Authority (OJK). Sharia insurance companies are said to be healthy if they have met the solvency level of at least 30% in tabarru' funds and 70% in company funds (Regulation of the Minister of Finance No. 11/PMK.010/2011, 2011). The Regulatory Capital Requirement (RBC) value is a crucial measure that assesses an insurance company's capacity to effectively meet its insurance and reinsurance obligations. This evaluation involves a comprehensive understanding of the company's capital needs for managing its assets and liabilities efficiently. The ability to maintain the RBC level impacts insurance companies' ability to maintain their image, especially their financial health (Quak et al., 2023). Thus, the determination of this RBC is expected to protect customers' interests, ensure the adequacy of capital in insurance companies, and avoid risks that can harm each party in Sharia insurance to create added value for stakeholders in Sharia insurance companies.

In addition to paying attention to the RBC level as a strategy for developing the insurance industry in maintaining the level of health, performance, and added value for Islamic insurance companies, based on Resource-Based Theory, other important, influential factors can provide a competitive advantage, namely the size of the company (D'Oria et al., 2021). Company size is assessed from total assets, total sales, profit, tax burden, and number of employees (Hartono, 2017). Larger companies tend to have more adequate resources to implement effective risk management strategies, thereby improving financial performance. However, if the company's size is smaller, it can create complexity in management, potentially reducing the effectiveness of RBC implementation. Therefore, analysis of the interaction between company size and RBC is essential to understanding the dynamics of takaful insurance performance. Hence, the substantial size and growth of the company's assets will convey a positive signal to investors, indicating the company's robust health and performance.

Previous studies have analyzed the influence of RBC on takaful performance, including (Akbar et al., 2023; Alamsyah, 2021; Mentari & Baskoro, 2023; Nasution et al., 2019; Pratama et al., 2020) Which explains that RBC makes a significant contribution to increasing the company's added value. This concept is based on signal theory, which suggests that insurance companies with strong

financial security and high levels of health will have a positive reputation among investors and the public. This will make them more attractive for people to use their financial services. However, contrary to these results, other studies conducted (Akhyar & Indraswati, 2024; Septina, 2022; Vitalis, 2024; Wahyono et al., 2021) found that RBC had no significant impact on the performance of insurance companies. Further research by (Angelous et al., 2023; Felicia & Viriany, 2023; Maulana & Euis, 2023; Riyana et al., 2024), the empirical evidence indicates that the size of Sharia insurance companies exerts a positive and statistically significant impact on the financial performance of the company. This suggests that a larger company size is associated with greater support to maintain its position.

Based on this description, this study is important considering the limitations of the literature that comprehensively examines the relationship between Risk-Based Capital (RBC), corporate financial performance, and firm size in one analysis model, especially in the context of takaful sharia insurance companies. This research aims to provide a comprehensive understanding of the relationships between variables that are urgently needed to provide a more accurate picture of the financial stability and efficiency of takaful companies, as well as to provide a better decision-making basis for regulators, management, and investors. The study focuses on Sharia insurance companies in Indonesia, where the industry is experiencing growth but declining business numbers. This research is important to understand the performance of Islamic insurers and how RBC affects the company's financial performance. RBC is critical to ensuring that the company can meet its obligations to policyholders, even in challenging scenarios, and to maintain the stability of the insurance industry as a whole. Based on this, this research is expected to fill the gap in previous research and make a significant contribution to the development of literature in the field of Islamic financial management.

## LITERATURE REVIEW AND HYPOTHESIS

Following Regulation of the Minister of Finance No. 53/PMK.010/2012, an amendment to the Law of the Republic of Indonesia No. 40 of 2014 on Insurance, Risk-based Capital (RBC) is regarded as a critical gauge of financial soundness for insurance companies, particularly concerning their solvency and capacity to meet their commitments. The minimum solvency level set for Sharia insurance companies is not less than 100%. As mentioned by the OJK in the roadmap of the insurance industry in Indonesia for 2023-2027, it is explained that RBC is essential in helping customers assess whether the company has enough capital to meet their obligations in the event of an individual or group purchase policy from them (Otoritas Jasa Keuangan, 2023b). Based on this, when the minimum solvency level is less than 100% of the funds needed to overcome the risk of losses incurred, it is under the regulation of the Minister of Finance in PMK no. 424/KMK.06/2003, the insurance company is obliged to submit a financial restructuring plan and is prohibited from distributing dividends or giving any form of compensation to shareholders. Moreover, the solvency rate of the Sharia insurance company is less than 40%. In that case, the company is subject to the first and last warning sanctions and is very at risk of being closed if its financial health is not improved.

Determining optimal strategies for fostering strong company performance involves addressing the challenge of balancing solvency and profitability factors, encapsulated by the Trade-Off Theory. This theory posits that decisions made to enhance solvency may sometimes conflict with those aimed at maximizing profitability. As a result, a delicate equilibrium must be sought to manage these competing objectives and drive sustainable business success effectively (Horobet et al., 2021). If an insurer decides to meet a large amount of achieved solvency levels, the RBC level will likely be maintained, but the company's profitability level will decrease. In line with the theory

of Van Horne in Dhruv Sharma (2009), it is stated that in allocating RBC, there are challenges associated with the optimization of multi-purpose trade-offs involving two competing objectives. These objectives entail maximizing shareholder wealth and preserving the company's health and long-term viability. Therefore, the allocation of RBC is essential to improve the performance of Sharia insurance companies, but some consequences will reduce profits (profitability) for its holders.

Based on Resource Theory, it is stated that the resources owned by the company are one of the factors that help the company excel in the competition and achieve good long-term performance (Madhani, 2010). Scarce resources also influence a company, which can last long and not be easily imitated, sent, or replaced by other companies. In this case, the firm size calculated based on the company's total assets is one of the competitive advantages owned by the company. Large companies have more ability to make profits and are relatively more stable in running a business than small companies, so financial performance increases.

Previous studies have analyzed the influence of RBC on takaful performance, including (Akbar et al., 2023; Alamsyah, 2021; Mentari & Baskoro, 2023; Nasution et al., 2019; Pratama et al., 2020) Which explains that RBC makes a significant contribution to increasing the company's added value. This concept is based on signal theory, which suggests that insurance companies with strong financial security and high levels of health will have a positive reputation among investors and the public. This will make them more attractive for people to use their financial services. However, contrary to these results, other studies conducted (Akhyar & Indraswati, 2024; Septina, 2022; Vitalis, 2024; Wahyono et al., 2021) found that RBC had no significant impact on the performance of insurance companies. Further research by (Angelous et al., 2023; Felicia & Viriany, 2023; Maulana & Euis, 2023; Riyana et al., 2024), the empirical evidence indicates that the size of Sharia insurance companies exerts a positive and statistically significant impact on the financial performance of the company. This suggests that a larger company size is associated with greater support to maintain its position.

Based on the comprehensive description provided, the study posits the following hypotheses:

H1: Risk-based Capital has a significant impact on Takaful Financial Performance

H2: Firm Size can moderate the influence between Risk-based Capital and Takaful Financial Performance

## RESEARCH METHOD

The study utilizes a quantitative approach, employing Moderated Regression Analysis (MRA) to analyze the influence of the Risk-based Capital (RBC) variable on Takaful financial performance, while considering the moderation effect of firm size. The research specifically focuses on Sharia insurance companies from 2019 to 2023, using purposive sampling, a non-probability sampling technique involving specific criteria for the entire population (Hardani, 2020). By giving specific criteria to the population to select a sample, namely:

1. Registered Sharia insurance companies with the OJK
2. Sharia insurance companies have completed their financial statements for 2019-2023.

This study utilizes the purposive sampling method and encompasses 20 Sharia insurance companies that were registered with the OJK between 2019 and 2023, making a total of 100 samples used in the study. The following is the list of Sharia insurance companies sampled for this study:

**Table 1: List of Sharia Insurance Company Research Samples**

No.	Company Name	No.	Company Name
1	PT Asuransi Takaful Keluarga	11	PT Asuransi Jiwa Sinar Mas MSIG
2	PT Asuransi Jiwa Syariah Al-Amin	12	PT Avrist Assurance
3	PT Asuransi Jiwa Syariah Amanahjiwa Giri Artha	13	PT Axa Mandiri Financial Services
4	PT Asuransi Syariah Keluarga Indonesia	14	PT BNI Life Insurance
5	PT Asuransi Jiwa Syariah Bumiputera	15	PT Great Eastern Life Indonesia
6	PT Capital Life Syariah	16	PT Sun Life Financial Indonesia
7	PT AIA Financial	17	PT Asuransi Jiwa Reliance Indonesia
8	PT Asuransi Allianz Life Indonesia	18	PT Asuransi Jiwa Generali Indonesia
9	PT Asuransi Jiwa Central Asia Raya	19	PT Astra Aviva Life
10	PT Asuransi Jiwa Manulife Indonesia	20	PT Prudential Sharia Life Assurance

The study utilizes secondary data from the company's financial statements, which can be accessed on the ojk.go.id website. It examines Risk-based Capital as an independent variable, profitability as a dependent variable, and firm size as a moderation variable. The following presents the operational definition of each variable and its measurement.

**Table 2: Research Variables**

Variable	Indicator	Scale
Risk-based Capital (RBC)	Risk-Based Solvency Level / Minimum Capital	Ratio
Takaful Financial Performance	ROA = (Net Profit After Tax / Total Equity) x 100%	Ratio
Firm Size	Firm size = Ln (Total Aset)	Ratio

The data analysis in this study employs the Moderated Regression Analysis (MRA) test to examine whether the moderation variables can enhance or diminish the influence between independent and dependent variables. The calculation model for assessing the influence of independent variables on dependent variables with moderation variables is as follows:

$$(I) \text{ TFP} = \alpha + \beta_1\text{RBC} + \epsilon$$

$$(II) \text{ TFP} = \alpha + \beta_1\text{RBC} + \beta_2\text{FSz} + \beta_3\text{RBC*FSz} + \epsilon$$

Information:

TFP : Takaful Financial Performance (Y)

A : Constant

B1- B3 : Regression coefficient direction

RBC : Risk-based Capital (X)

FS : Firm Size (M)

RBC\*FSz : The interaction between Risk-based Capital and Firm Size.

$\epsilon$  : Error

## RESULT AND DISCUSSION

### 1. Descriptive statistics

The study uses descriptive statistics to provide an overview of the data. The table below displays the results of the descriptive statistics generated using Eviews 12.

**Table 3: Descriptive statistics**

	<b>TFP</b>	<b>RBC</b>	<b>FS</b>
Mean	1.308410	360.2879	26511.29
Maximum	2.966000	4236.268	391852.0
Minimum	0.073000	88.42700	1372.495
Std. Dev.	0.545165	483.3091	60032.13
Observations	100	100	100

The descriptive statistics in Table 3 reveal that the average value of the Takaful Financial Performance variable, as measured by ROA, is lower than the standard deviation, indicating a relatively high variability in the data. Conversely, the average values for the Risk-based Capital and Firm Size variables exceed the standard deviation, suggesting a more consistent distribution for these variables. The minor standard deviation relative to the mean suggests minimal deviation in the research variables.

### 2. Analysis Moderated Regression Analysis (MRA)

In conducting MRA analysis tests, three approaches can be carried out, namely by Random Effect Model (REM), Fixed Effect Model (FEM) and Common Effect Model (CEM). To determine the best model, an analysis was conducted including likelihood ratio (chow test), Hausman test, and Lagrange multiplier test. The following are the results of the model selection test for the three estimation models in this study.

**Table 4: Model Test Results**

	<b>Model Estimation</b>	<b>Prob</b>	<b>Model Selection</b>
<b>Research model 1</b>			
Likelihood ratio	CEM/FEM	0.0000	FEM
Hausman test	REM/FEM	0.0097	FEM
<b>Research model 2</b>			
Likelihood ratio	CEM/FEM	0.0000	FEM
Hausman test	REM/FEM	0.0620	REM
Langrange Multiplier	CEM/REM	0.0000	REM

According to the findings from the model test presented in Table 4, it can be inferred that research model 1 employs a fixed effect model (FEM) approach. This can be seen based on the results of the Hausman test, which shows a probability value of  $0.0097 < 0.05$ , so the selected model is FEM and does not need to do a Lagrange Multiplier Test. In contrast, in research model 2, the research model used is the random effect model; this is due to the test score Lagrange Multiplier Test  $0.0000 < 0.05$ , which means that the selected model is a random effect model. The classical assumption test does not need to be performed using the REM model in the panel data regression test. REM is included in the Generalized Least Square (GLS) estimation method (Gujarati & Porter, 2009). However, classical assumption tests can be performed on any model (CEM, FEM and REM). To find out if the selected model meets the requirements of the Best Linear Unbias Estimator (BLUE).

### 3. Classic Assumption Test

The classical assumption test aims to see the results of the variable data used to be free from data normality, multicollinearity, heteroscedasticity and autocorrelation problems. The following are the results of the classical assumption test for the three research models used in this study.

**Table 5: Classical Assumption Test**

Classical Assumption Test	Model Estimation	Result	Results
Normality Test (Probability Jarque-Bera > 0.05)	Model 1	0.088240	Normally distributed
	Model 2	0.053201	Normally distributed
Multicollinearity Test (1<VIF<10.00)	Model 1	X = 1.000000	No Multicollinearity Occurs
	Model 2	X = 1.007148 Z = 1.007148	No Multicollinearity Occurs
Heteroscedasticity Test (Prob. Breusch-Pagan-Godfrey >0.05)	Model 1	0.6367	No Heteroscedasticity Occurs
	Model 2	0.3170	No Heteroscedasticity Occurs
Autocorrelation Test (LM Test > 0.05)	Model 1	0.7020	No Autocorrelation Occurs
	Model 2	0.7665	No Autocorrelation Occurs

Based on Table 5, the data in these two research models are free from the classical assumption problem. This means that the data used in this study has met the criteria of BLUE (Best Linear Unbiased Estimator), namely, the model estimation is unbiased, consistent, normally distributed, and efficient, so that it can be used as a valid test tool.

### 4. Hypothesis Testing

Based on the model selection test in Table 4, hypothesis testing for research model 1 is a fixed-effect model, and research model 2 uses a random-effect model. The decision-making for hypothesis testing in the model is when the variable probability level is less than 0.05, then the hypothesis in this study is accepted. The following are the results of hypothesis tests on each research model.

**Table 6: Hypothesis Test Results**

Variable	T-Statistics	Prob.	Results
RBC → TFP	-4.295407	0.0000	H1 Accepted
RBC*FSZ → TFP	-1.186296	0.2384	H2 Rejected

Based on the findings of the hypothesis test presented in Table 6, it is apparent that the probability level associated with the Risk-based Capital variable is significantly less than 0.05, specifically 0.0000. This implies that the Risk-based Capital variable significantly influences Takaful Financial Performance as measured by the ROA variable. Therefore, it can be concluded that H1 is supported. Additionally, the results of hypothesis testing for moderation variables reveal that the probability level of the RBC\*FSz interaction variable was greater than 0.05, specifically 0.2384. This indicates that the Firm Size variable does not moderate the relationship between Risk-based Capital and Takaful Financial Performance as proxied by the ROA variable. Hence, H2 was not supported.

## 5. Determination Coefficient Test (R<sup>2</sup>)

The determination test determines the proportion of independent variables that can explain the dependent variables in the equation model studied. The results of the determination coefficient test for the two model equations above were obtained as follows:

**Table 7: Determination Coefficient Test Results (R<sup>2</sup>)**

Model Estimation	Coefficient of Determination Test	
	R Square	Adjusted R Square
<b>Model 1</b>	0.681448	0.600801
<b>Model 2</b>	0.394607	0.375688

In Table 7, the R Square value for the Equation 1 model is 0.681448, indicating that the risk-based capital variable can influence Takaful Financial Performance by 68.14%, while other variables outside the study account for 31.86%. For the Equation 2 model, the R Square value is 0.394607, signifying that Risk-based Capital, Firm Size, and the interaction between Risk-based Capital and Firm Size collectively affect Takaful Financial Performance by 39.46%, with other variables outside the study contributing 60.54%.

## 6. The Effect of Risk-Based Capital on Takaful Financial Performance

The findings from the hypothesis testing in Table 6 confirm that the first hypothesis of this study is supported, demonstrating a significant link between the Risk-based capital (RBC) variable and the financial performance of takaful companies in Indonesia. The RBC level in Sharia takaful/insurance companies serves as an indicator of the company's expected performance. This is consistent with the trade-off theory, which suggests that allocating capital reserves to maintain solvency can impact investment activities and subsequently influence financial performance.

This study are compatible with the previous research endeavors Ono Tarsono, Preztika Ayu Ardheta & Rininda Amriyani (2020), Nana Diana & Tati Apriani (2020), Noor Shafitri, Nazir Ahmad & at the gate; Sholatiya Dalimunthe (2022), Iga Permata Putri Mentari & Rahmat Ayo Baskoro (2023) The research indicates that the Risk-Based Capital (RBC) has a negative and significant impact on the profitability of takaful companies. Specifically, as the solvency of the company increases, its funds become less productive and have limited profit potential. However, the results obtained from this particular study do not correspond with the discoveries made by Muhammad Zaelani Maulana Akbar, Lukman Effendy & Robith Hudaya (2023), Wahyono, Nurochim & Indarti Diah Palupi (2021), Nurul Mubarak & Dede Rahayu (2018), Alifia Riza Azhari & Puji Sucia Sukmaningrum (2021) that the Risk-Based Capital (RBC) does not employ a significant impact on the profitability of insurance companies.

RBC (Risk-Based Capital) is utilized in the insurance industry to assess the amount of capital an insurance company needs to withstand the risks in their insurance portfolio (Otoritas Jasa Keuangan, 2023b). An elevated RBC value signifies that the insurance company possesses adequate capital to underwrite the risks it assumes. Conversely, if the RBC value is low, then it can be considered that the insurance company has a high risk of bankruptcy. The calculation of RBC is based on the risk taken by the insurance company. These risks can come from the insurance portfolio, for example, the risk of the premium pool that the customer must pay, investment risk, and operational risk. In the insurance industry, RBCs are very important for regulators to monitor and pay attention to. Regulators will regularly monitor insurance firms' capital reserves to ascertain their ability to mitigate the risks associated with their insurance portfolios adequately. The minimum RBC value set by the regulator (Financial Services Authority (OJK)) is 100% for Sharia insurance companies and 120% for conventional insurance companies.

Based on the empirical data obtained from the sampled Sharia insurance companies in the study, it was found that most insurance companies with a minimum RBC value show a higher level of performance produced. See the following table:

**Table 8: Comparison of the Average Value of RBC and Financial Performance of Insurance Companies for the 2019-2023 period**

	ROA>Mean	ROA<Mean	Total
RBC>Mean	0	26	26
RBC<Mean	57	17	74
Total	57	43	100

Based on the comparison in Table 8, a high level of RBC cannot optimize good performance in a company. It can be seen that the majority of companies in this study sample have a lower-than-average RBC level, indicating a stable profitability value. This shows that insurance companies allocate their capital to achieve a large solvency level, so automatically, the capital used to fulfil their obligations is higher, which leads to low profitability or company performance. This indicates that a high RBC value suggests an escalating risk for the company, potentially leading to a decrease in profitability and a downturn in the financial performance of takaful companies.

### 7. The Effect of Risk-based Capital on Takaful Financial Performance with Firm Size as a Moderating Variable

The findings from the hypothesis testing in Table 6 indicate that the study's second hypothesis has been rejected. The data indicates that firm size does not moderate the relationship between risk-based capital and Takaful financial performance. The analysis demonstrates that firm size does not significantly augment the influence of risk-based capital on the financial performance of Takaful companies in Indonesia.

The size of a company, as indicated by total assets, sales numbers, average sales, and total assets, reflects its firm size (Hartono, 2017). Larger companies find it easier to secure funding. This study considers the company's size as a potential moderator in the interaction between company size and RBC on financial performance. The study found that the effect of company size on financial performance and its interaction with RBC was insignificant. This finding contradicts the Resource-based Theory, which suggests that company size can confer competitive advantages for long-term performance. The study's results propose that a large company may not necessarily have a value in the market.

The empirical data analysis indicates that the firm size of Islamic insurance companies remains stable annually. Conversely, the levels of RBC and company profitability exhibit significant fluctuations. This suggests that the company size within the research sample did not significantly moderate the influence of RBC on the financial performance of Sharia insurance companies. It can also be inferred that in Sharia insurance companies with both large and small firm sizes, RBC has an equivalent impact on financial performance. Therefore, effective RBC management is paramount for insurance companies. These findings align with the research of Leny Anggara, Nagian Toni, Enda Noviyanti Simorangkir, and Wilsa Road Betterment Sitepu (2021), the findings indicate that the influence between solvency and value is not influenced by the size of the company.

## CONCLUSION

The research on the impact of Risk-Based Accounting (RBC) on the financial performance of takaful (Islamic insurance) companies in Indonesia from 2019 to 2023 concludes that RBC significantly affects the financial performance of these companies during the period. The findings suggest that these companies exhibit a high level of solvency, indicating an increasing allocation of capital to meet obligations, affecting their profitability. Companies implementing RBC need strong managerial capabilities to execute risk management strategies in compliance with regulations effectively. Therefore, the allocation of RBC is crucial and can significantly impact the performance of Islamic insurance companies.

Another research finding is that firm size cannot moderate the influence of RBC on takaful financial performance in takaful companies in Indonesia from 2019 to 2023. Firm size plays a role as a homogenizing moderator because it does not have a significant influence as a moderator or on the dependent variable. It can be concluded that companies with both large and small firm sizes have the same obligation to allocate company capital effectively and efficiently to maximize profits through investment management and minimize company risk through diversification. This is important to ensure financial stability and the ability to meet customer obligations, create financially healthy and highly competitive insurance companies, and increase customer and stakeholder confidence.

There are several limitations in this study, namely, the research period studied is only five years, namely 2019-2023, and the variable used to analyze the level of financial performance of Sharia insurance companies is only one variable, namely the RBC level of Sharia insurance companies. Based on this, there are several suggestions for researchers in the future, namely by increasing the number of research periods and being able to add other variables related to the financial performance of Sharia insurance companies, such as using the company's financial health analysis based on the Early Warning System (EWS) method which is seen from the aspect of financial ratios, namely solvency ratio, profitability, claim expense, return on investment, liquidity, premium growth and reserves technical. Furthermore, researchers can utilize various analysis methods to assess the financial performance of Sharia insurance companies. This can involve employing qualitative analysis to gain a more extensive understanding of the factors impacting the financial performance of these insurance companies. Insurance companies, must be able to effectively allocate RBCs so that companies can meet claims obligations and maintain the stability of the company's financial health. RBC can assist insurers in formulating more effective risk management strategies so that insurers can increase customer and stakeholder confidence and maximize their financial performance.

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