



The Impact of Financial Risk on Insurance Company Performance with Hedge Accounting as a Moderating Variable

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ABSTRACT

The public's confidence in insurance companies has been damaged by state-owned insurance companies' inability to pay claims. The purpose of this research is to investigate how financial risk affects business performance and how hedge accounting mitigates that influence. This study uses a quantitative approach. The analysis makes use of secondary data from 2019 to 2022 from insurance firms' annual reports. Both moderated regression analysis (MRA) and multiple linear regression analysis are used in this investigation. The findings show that return on assets (ROA) is significantly and negatively impacted by credit risk. Return on assets is unaffected by market, insurance, liquidity, and operational risks. The MRA analysis demonstrates how hedge accounting can increase the impact of risk associated with credit and insurance returns on assets. Hedge accounting, however, has no effect on how much market, operational, and liquidity risk affect return on assets.

INTRODUCTION

Article 1, paragraph 1 of Law No. 40 of 2014 on Insurance specifies that an agreement between the policyholder and the insurance company serves as the foundation for the insurance company's receipt of premiums. Insurance businesses play a more significant part in the growth of a country when they can assist the general population in managing the risks they encounter on a daily basis and when they initiate and carry out business operations. Due to the high number of default instances, insurance companies in Indonesia have been having difficulties lately. Public confidence in insurance businesses has decreased as a result of the problem of claim defaults, especially in state-owned insurance companies like Jiwasraya (Persero), which was followed by other insurance companies facing harsh penalties. OJK, the Financial Services Authority, has implemented a number of oversight actions, such as revoking the business licenses of troublesome insurance businesses.

In order to avoid claim defaults, insurance firms must continue to preserve the stability of their financial performance. To maintain their financial stability and reduce the risks they encounter, insurance businesses have to operate financially in accordance with the guidelines established by the Financial Services Authority (OJK). If an insurance company's financial performance fulfills the benchmarks established by the regulator – in this example, the OJK – in Regulation No. 71/POJK.05/2016 concerning the Financial Health of Insurance and Reinsurance Companies, the company's financial performance can be deemed healthy.

To evaluate and analyze a company's financial performance, financial analysis methods are employed (Ossat, 2019). Erkudo (2021) defines financial performance, on the other hand, as an evaluation of the degree to which a company has successfully applied financial standards to gauge its performance. Here are some statistics regarding return on assets (ROA), which is a stand-in for insurance companies' financial performance in this study:

Figure 1. Financial Performance of Insurance Companies from 2019 to 2022

The graph above, which displays statistics on the financial performance of insurance businesses, indicates that the return on assets (ROA) varies from 2019 to 2022. With a value of -0.01 in 2022, PT Malacca Trust Wuwungan Insurance Tbk – MTWI had the lowest return on assets (ROA). With a figure of 0.08, PT Victoria Insurance Tbk – VINS had the greatest return on assets (ROA) in 2019. Financial risk is one of the many variables that affects insurance firms' financial success. OJK Regulation Number 44/POJK.05/2020, Article 1, Paragraph 2, defines risk as the possibility of loss that is either uncontrollable or controllable because of certain events. OJK Regulation No. 30/POJK.04/2017 defines financial risk as the possibility of suffering financial loss as a result of fluctuations in interest rates, currency rates, the price of financial instruments, and other risk factors.

Five different categories of risk are included in this study as proxies for financial risk: credit, liquidity, market, insurance, and operational risk. First, credit risk serves as a stand-in for financial risk. As per Circular Letter Number 24/SEOJK.05/2017 from the Financial Services Authority, credit risk is the possibility that third parties won't fulfill their responsibilities towards the organization. According to research by Hapsari, R. N. (2022) and Maharani, N.K. (2024), credit risk significantly and negatively affects the financial success of insurance firms.

Second, liquidity risk serves as a stand-in for financial risk. One kind of risk that results from a business's incapacity to pay short-term obligations is liquidity risk (Tapang, 2022). According to research by Muchtar, S. (2024) and Lestari, M. (2023), liquidity risk significantly improves a company's financial performance.

Insurance risk comes in third. The process of selecting risks and the incapacity of insurance and reinsurance businesses to satisfy their obligations to policyholders are the root causes of insurance risk (SEOJK Number 24/SEOJK.05/2017). According to Ossat (2019) and Rudianto (2021), insurance risk affects how profitable insurance businesses are.

Fourth, market risk serves as a stand-in for financial risk. Market risk is the possibility of suffering losses as a result of shifts in the asset prices of the organization (SEOJK 28/SEOJK05/2017). Ossat (2019) and Karamoy (2021) conducted research that highlights the impact of market risk on a company's financial performance.

Operational risk is the sixth category of risk. Operational risk is characterized by system failures or internal process breakdowns that might affect operational expenses (Leverty, J. T., 2012). According to research by Ossat (2019) and Olalekan et al. (2018), operational risk significantly improves financial performance.

Hedge accounting is another element that may have an impact on the financial performance of insurance firms. The goal of the discipline of hedge accounting is to generate trustworthy and accountable financial reports. By identifying modest assets and income and significant liabilities and expenses, it entails adopting preventative measures to overcome uncertainties (Zhou, 2023). The aforementioned claim is consistent with study by Jawad (2014), which shows that hedge accounting significantly and favorably affects a company's financial performance. This is in line with study by Zhuro (2023), which claims that hedge accounting has a major and positive impact on businesses' financial performance. Hedge accounting, according to Erkurdo et al. (2021) who found different results, has no bearing on the financial performance of insurance businesses in Nigeria. In light of the above-mentioned concerns, the researcher is eager to delve deeper into "The Impact of Financial Risk on the Performance of Insurance Companies and Hedge Accounting as a Moderating Variable."

LITERATURE REVIEW

Agency Theory

Agency theory, according to Harmono (2009), can be defined as the interaction between a principle and an agent. The management of the business is the agent, while the shareholder is the principle. Managers must make the right choices in order to optimize the resources or wealth of the company and its shareholders. The conflicts of interest that exist between agents and principals are what gave rise to agency theory. There is a close relationship between agency theory and insurance companies' financial risk. The relationship between principals, or shareholders, and agents, or management, can result in conflicts of interest that could affect how financial risk decisions are made, as explained by agency theory.

Financial Performance

Financial performance, according to Mernurrurt Kasmir (2017) in Marsoerm (2021), is a representation of a firm's financial state over a specific period of time, indicating whether or not the company has accomplished its set targets. Derwangga (2021) asserts that a company's financial performance is a reflection of its success, as evidenced by the outcomes attained via a range of operations. In this study, return on assets (ROA) is the statistic used to measure the financial performance of the organization. As a financial performance statistic, return on assets (ROA) is used to assess management's capacity to produce overall profit.

Financial Risk

The possibility of financial loss as a result of changes in interest rates, exchange rates, the price of financial instruments, and other risk variables is defined as financial risk in POJK No. 30/POJK.04/2017. Financial service institutions must identify, measure, control, monitor, and report financial risks in accordance with this law, which regulates financial risk management. The following rules from the Financial Services Authority Circular Letter Number 24/SEOJK.05/2017 can be used to quantify financial risk in this research:

1. Credit Risk

The risk associated with a third party's inability to meet its obligations to the business is known as credit risk. This comprises credit risk resulting from investment concentration risk, counterparty credit risk resulting from counterparty failure, settlement risk resulting from settlement failure, and credit risk resulting from nation risk. The company's assets may decline as a result of credit risk brought on by counterparties' and reinsurers' defaults on their commitments. If one of the parties breaches the terms of the agreement, money will be lost.

This is supported by research conducted by Derwangga (2021), Karamoy (2021), Hapsari (2022), and Maharani (2024), which found that credit risk has a negative and significant impact on the profitability of insurance companies.

2. Liquidity Risk

The risk of an imbalance arising from mismatches in the size and maturity of assets and liabilities between the predicted cash flows of those items is known as liquidity risk. The ability of a business to turn investments into cash (liquid assets) is greatly impacted by liquidity risk. High reinvestment expenses are a risk associated with liquid assets that might hinder the operation of the business. Research by Derwangga (2021), Ruslim (2021), Lestari (2023), and Muchtar (2024) demonstrates that liquidity risk significantly improves a company's financial performance, lending support to this.

3. Market Risk

The likelihood of losing money as a result of shifts in the market value of an organization's assets, variations in foreign exchange rates, and shifts in interest rates as a result of market volatility and liquidity is known as market risk. This is consistent with studies by M. Ossat (2019) and Karamoy (2021), which show that market risk significantly improves a company's financial success.

4. Insurance risk

The likelihood that an organization won't be able to live up to its obligations to policyholders or other insured parties as a result of poor risk selection (underwriting), premium pricing, and/or claims handling is known as insurance risk. This is consistent with studies by Ossat (2019) and Rurdianto (2021) showing that insurance risk significantly improves insurance businesses' financial performance.

5. Operational risk

Operational risk is the possibility of risk brought on by deficiencies and/or failures of internal procedures, errors made by human resources, malfunctions of systems, and/or outside problems that have an impact on the business's operations. Operational risk will rise in tandem with a company's structural complexity. This is consistent with studies by Olalerkan et al. (2018) and Ossat (2019) showing that operational risk increases profitability significantly.

Hedge accounting

In order to recognize gains and losses (or income and expenses) related to hedging instruments and related hedged items in profit and loss (or Other Comprehensive Income, OCI) in the same accounting period, hedge accounting modifies the standard basis of accounting (PWC, 2017). One strategy used by businesses to control the risk of losses and lower the frequency of losses is hedge accounting (Tapang et al., 2022). The annual report of this study includes a section on changes in accounting standards where the use of hedge accounting is

evident. The company will receive a score of 1 if it implements PSAK 109; if it does not, it will be given a score of 0

Based on the description above, the hypotheses for this study are as follows:

H1: Credit risk is presumed to affect *return on assets* (ROA).

H2: Liquidity risk is presumed to affect *return on assets* (ROA).

H3: Market risk is presumed to affect *return on assets* (ROA).

H4: Insurance risk is presumed to affect *return on assets* (ROA).

H5: Operational risk is presumed to affect *return on assets* (ROA).

H₆: It is expected that accounting conservatism may moderate the effect of credit risk on *return on assets* (ROA).

H₇: It is expected that accounting conservatism may moderate the effect of liquidity risk on *return on assets* (ROA).

H₈: It is expected that accounting conservatism may moderate the effect of market risk on *return on assets* (ROA).

H₉: It is expected that accounting conservatism may moderate the effect of insurance risk on *return on assets* (ROA).

H₁₀: It is expected that accounting conservatism may moderate the effect of operational risk on *return on assets* (ROA).

Based on the description above and the formulation of hypotheses, the conceptual framework for this study is as follows:

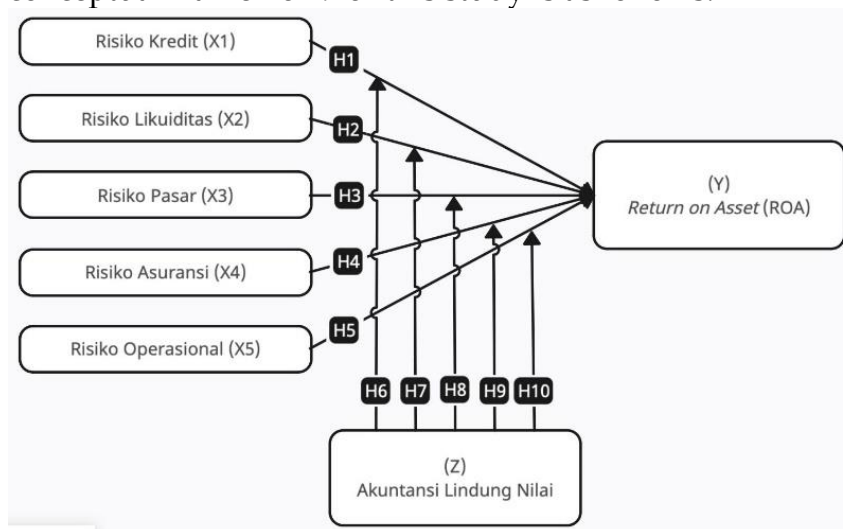


Figure 2. Conceptual Framework

METHODOLOGY

This research uses a quantitative approach. The insurance businesses listed on the Indonesia Stock Exchange (IDX) for the years 2019–2022 comprise the study's population. Purposive sampling is the sample strategy employed in this investigation. Eighteen insurance businesses listed on the IDX for the years 2019–2022 make up the sample. The annual financial reports of insurance firms for the years 2019–2022 as well as academic publications, scholarly articles, and

pertinent references make up secondary data, which is one of the data gathering methodologies. The research use both Moderated Regression Analysis (MRA) and Multiple Linear Regression Analysis (MLRA) as analytical techniques.

RESEARCH RESULTS

1. Normality Test Analysis

The normality test is conducted to assess whether the regression model in question has a normal distribution of data. The following are the results of the normality test for this study:

Table 1. Results of the Normality Test

One-Sample Kolmogorov-Smirnov Test

	Unstandardized Residual
N	38
Asymp. Sig. (2-tailed) ^c	,200 ^d

Source: Data processed using SPSS 27 (2024).

From the results of the *Kolmogorov-Smirnov* test above, it can be observed that the Asymp. Sig. (2-tailed) value is 0.200. This result indicates that the residuals in this regression model are normally distributed, as the *Asymp. Sig. (2-tailed)* value is greater than 0.05

2. Hypothesis Testing Analysis

The t-test is used to evaluate the significance of the effect of each independent variable individually in explaining the dependent variables. The following are the results of the t-test for this study:

Table 2. Results of the t-Test

Coefficients^a

Model	B	t	Sig.
(Constant)	0,050	2,754	0,010
Credit Risk	-0,002	-2,782	0,009
Liquidity Risk	0,000	-0,390	0,699
Market Risk	0,002	0,257	0,799
Insurance Risk	0,001	1,490	0,146
Operational Risk	0,001	0,506	0,616

a. *Dependent Variable: Return On Asset*

Source: Data processed using SPSS 27 (2024).

From the table above, the results of the hypothesis testing are as follows:

1. From the results of the statistical t-test, the credit risk variable has a computed t-value of -2.782, while the critical t-value for n = 38 is 2.024. Thus, the computed t-value > the critical t-value, where -2.782 < 2.024, and the significance level is 0.009. Since 0.009 < 0.05, the null hypothesis (H0) is rejected, and the alternative hypothesis (H1) is accepted. This indicates that credit risk has a significant negative effect on *return on assets* (ROA).

2. From the results of the statistical t-test, the liquidity risk variable has a computed t-value of -0.390, while the critical t-value for $n = 38$ is 2.024. Thus, the computed t-value < the critical t-value, where $-0.390 < 2.024$, and the significance level is 0.699. Since $0.699 > 0.05$, the null hypothesis (H_0) is not rejected, and the alternative hypothesis (H_2) is rejected. This indicates that liquidity risk does not have a significant effect on *return on assets* (ROA).
3. Based on the t-test results, the market risk variable has a calculated t-value of 0.257, whereas the critical t-value for $n = 38$ is 2.024. Since the calculated t-value (0.257) is less than the critical t-value (2.024), and the significance value is 0.799, which is greater than 0.05, H_3 is rejected. This indicates that market risk does not have a significant impact on *return on assets* (ROA).
4. The t-test results for the insurance risk variable show a calculated t-value of 1.490, while the critical t-value for $n = 38$ is 2.024. Since the calculated t-value (1.490) is less than the critical t-value (2.024), and the significance value is 0.146, which is greater than 0.05, H_4 is rejected. This indicates that insurance risk does not have a significant impact on *return on assets* (ROA).
5. The t-test results for the operational risk variable reveal a calculated t-value of 0.506, whereas the critical t-value for $n = 38$ is 2.024. Since the calculated t-value (0.506) is less than the critical t-value (2.024), and the significance value is 0.616, which is greater than 0.05, H_5 is rejected. This indicates that operational risk does not have a significant impact on *return on assets* (ROA).

3. F-Hypothesis Analysis

The F-test determines whether all the independent variables or predictor variables specified in the study have a joint effect on the dependent variables. The following are the results of the F-test in this research:

Table 3. Results of the Test

ANOVA ^a		
Model	F	Sig.
Regression	3,315	0,016 ^b
<i>a. Dependent Variable: Return On Asset</i>		
<i>b. Predictors: (Constant), Operational Risk, Market Risk, Liquidity Risk, Credit Risk, Insurance Risk</i>		

Source: Data processed using SPSS 27 (2024).

From the table above, it can be concluded that the results of the ANOVA test, or F-test, indicate that the significance value (sig.) obtained is 0.016, which is smaller than 0.05. Therefore, there is a simultaneous effect of credit risk, liquidity risk, market risk, insurance risk, and operational risk on *return on assets* (ROA).

4. Analysis of the Coefficient of Determination (R^2)

The coefficient of determination (R^2) is used to assess the extent of variability in the dependent variable explained by the independent variables in the model. The following presents the results of the coefficient of determination (R^2) test in this study:

Table 4. Hasil Uji Koefisien determinasi (R^2)

Model Summary^b	
Model	R²
1	0,341
a. Predictors: (Constant), Operational Risk, Market Risk, Liquidity Risk, Credit Risk, Insurance Risk	
b. <i>Dependent Variable: Return On Asset</i>	

Source: Data Processed using SPSS 27 (2024).

Based on the table above, the coefficient of determination is 0.341 or 34.1%. This indicates that the variable *return on assets* (ROA) is influenced by the variables credit risk, liquidity risk, market risk, insurance risk, and operational risk by 34.1%. The remaining 65.9% is influenced by other factors such as company size, *underwriting risk*, and *good corporate governance*, which are not examined or controlled in this study and are not explained in the research.

5. Moderated Regression Analysis

Interaction tests are often conducted using *Moderated Regression Analysis* (MRA). Interaction testing is a specific method within multiple linear regression analysis that involves the inclusion of interaction terms between independent variables and moderation variables. The following are the results of the moderation regression tests in this study:

Table 5. Results of Moderation Regression Testing

Coefficients^a				
Model	B	t	Sig.	
(Constant)	0,020	4,056	0,000	
Hedging Accounting	-0,169	-1,965	0,058	
Hedging Accounting Moderates Credit Risk	-0,001	-2,327	0,026	
Hedging Accounting Moderates Liquidity Risk	0,001	0,844	0,405	
Hedging Accounting Moderates Market Risk	0,006	0,537	0,595	
Hedging Accounting Moderates Insurance Risk	0,001	2,648	0,012	
Hedging Accounting Moderates Operational Risk	0,001	1,077	0,290	
a. <i>Dependent Variable: Return On Asset</i>				

Source: Data Processed with SPSS 27 (2024).

Based on the table above, the results of the hypothesis testing are as follows:

1. Moderation of Hedging Accounting with Credit Risk on *return on assets* (ROA). Based on the moderation variable test, it is known that the significance of the interaction between Credit Risk and Hedging Accounting is 0.026, which indicates a significant effect. Therefore, it can be concluded that the Hedging Accounting variable represents a type of

substantive moderation or is appropriate to be used as a moderating variable. Hedging Accounting is capable of moderating the effect of Credit Risk on *return on assets* (ROA).

2. Moderation of Hedging Accounting with Liquidity Risk on *return on assets* (ROA). Based on the moderation variable test, it is known that the significance of the interaction between Liquidity Risk and Hedging Accounting is 0.405, which indicates no significant effect. Therefore, it can be concluded that the Hedging Accounting variable represents a type of Homologizer Moderator or is not suitable to be used as a moderating variable. Hedging Accounting is not capable of moderating the effect of Liquidity Risk on *return on assets* (ROA).
3. Moderation of Hedging Accounting with Market Risk on *return on assets* (ROA). Based on the moderation variable test, it is known that the significance of the interaction between Market Risk and Hedging Accounting is 0.595, which indicates no significant effect. Therefore, it can be concluded that the Hedging Accounting variable represents a type of Homologizer Moderator or is not suitable to be used as a moderating variable. Hedging Accounting is not capable of moderating the effect of Market Risk on *return on assets* (ROA).
4. Moderation of Hedging Accounting with Insurance Risk on *return on assets* (ROA). Based on the moderation variable test, it is known that the significance of the interaction between Insurance Risk and Hedging Accounting is 0.012, which means it is significant. Thus, it can be concluded that the Hedging Accounting variable represents a type of Absolute Moderation or is suitable to be used as a moderating variable. Hedging Accounting is capable of moderating the effect of Insurance Risk on *return on assets* (ROA).
5. Moderation of Hedging Accounting with Operational Risk on *return on assets* (ROA). Based on the moderation variable test, it is known that the significance of the interaction between Operational Risk and Hedging Accounting is 0.290, which means it is not significant. Thus, it can be concluded that the Hedging Accounting variable represents a type of Homologizer Moderator or is not suitable to be used as a moderating variable. Hedging Accounting is not capable of moderating the effect of Operational Risk on *return on assets* (ROA).

DISCUSSION

1. The Impact of Credit Risk on Financial Performance

The variable of credit risk indicates that credit risk has a negative impact on return on assets (ROA), according to the findings of t-statistic tests. The following example demonstrates how credit risk adversely affects ROA: The company bears a substantial credit risk when counterparties, whether investment counterparties or reinsurers, default on their commitments to it. The company's

cash flow may be disrupted as a result, which could result in losses or call for the creation of capital reserves to offset the losses

This result is in line with studies by Derwangga (2021), Karamoy, H. (2021), Hapsari, R. N. (2022), and Maharani, N.K. (2024), which show that credit risk has a detrimental effect on return on assets (a measure of financial performance). This result, however, conflicts with the findings of a study by Murchtar, S. (2024), which claims that return on assets (ROA) is unaffected by credit risk.

2. The Impact of Liquidity Risk on Financial Performance

The liquidity risk variable indicates that liquidity risk has no bearing on return on assets (ROA), based on the findings of the t-statistic analysis. The following is an example that shows how liquidity risk has no effect on return on assets (ROA): Businesses that use good cash management techniques may be able to control their liquidity risk and lessen the effect it has on return on assets (ROA). These results align with the conclusions of study by Hapsari, R. N. (2022), Sertyadi, B. (2022), Stervani, S. (2022), and Maharani, N.K. (2024) that suggests liquidity risk has no impact on a company's financial performance. These results run counter to the study by Murchtar, S. (2024), which asserts that return on assets (ROA) is positively impacted by liquidity risk.

3. The Impact of Market Risk on Financial Performance

The t-statistic analysis's findings imply that market risk has no bearing on return on assets (ROA). The following is an example showing that return on assets (ROA) is unaffected by market risk: Insurance firms are required to make investments in organizations that have received excellent ratings from credit rating agencies approved by the Financial Services Authority (OJK). They also have to abide by the investment caps that POJK No. 5 of 2023 specifies for every investment counterparty. Firms can lessen the influence of market risk on their return on assets (ROA) by implementing efficient risk management. These results are in line with studies by Gherrbal, N. (2022), Hapsari, R. N. (2022), Lestari, M. (2023), and Murchtar, S. (2024), which conclude that market risk has little bearing on the insurance industry's ability to make money. These results, however, go counter to those of Karamoy, H. (2021)'s research, which revealed that market risk increases return on assets (ROA).

4. The Impact of Insurance Risk on Financial Performance

The t-statistic analysis's findings imply that insurance risk has no bearing on return on assets (ROA). This suggests that return on assets (ROA) is unaffected by insurance risk. Insurance companies, for instance, oversee a broad insurance portfolio that is spread over several industries and geographical areas. Because of its diversification, the corporation is better able to manage the risks it faces and lower the possibility of suffering large losses from isolated accidents. By doing this, the business guarantees that it has enough money to pay for future claims without jeopardizing its stability financially.

These results are in line with studies by Derwangga (2021) and Rurslim (2021), which conclude that insurance risk has little bearing on an insurance company's ability to make money. These results, however, conflict with those of Rurdianto's (2021) study, which discovered that insurance risk positively affects return on assets (ROA).

5. The Impact of Operational Risk on Financial Performance

Based on the results of the t-statistic analysis, it is suggested that operational risk does not impact *return on assets* (ROA). This indicates that operational risk does not have an effect on *return on assets* (ROA): Insurance companies typically have robust internal control systems to ensure that operational activities are conducted in accordance with established procedures and standards. With an effective control system, companies can prevent detrimental operational risks.

These findings are consistent with research conducted by Derwangga (2021), Karamoy (2021), and Hapsari (2022), which states that operational risk does not affect *return on assets* (ROA). However, these findings are contrary to the research by Ossat (2019), which found that operational risk has a positive impact on *return on assets* (ROA).

6. The Effect of Hedge Accounting in Moderating the Relationship Between Credit Risk and *return on assets*

Based on the results of the MRA analysis, it is suggested that hedge accounting effectively moderates the impact of credit risk on *return on assets* (ROA). An example illustrating how hedge accounting can moderate the effect of credit risk on *return on assets* (ROA) is as follows: In the context of insurance companies, credit risk arises when third parties, such as policyholders, investment counterparties, or reinsurance companies, fail to meet their obligations. Hedge accounting aims to protect the company from losses caused by this risk, thereby maintaining financial stability and improving *return on assets* (ROA).

7. The Effect of Hedge Accounting in Moderating the Relationship Between Liquidity Risk and *return on assets*

Based on the results of the MRA analysis, it is suggested that hedge accounting does not effectively moderate the impact of liquidity risk on *return on assets* (ROA). An example illustrating how hedge accounting fails to moderate the effect of liquidity risk on *return on assets* (ROA) is as follows: Liquidity risk for insurance companies is primarily related to the availability of funds to meet insurance claims or other obligations. Hedge accounting, however, cannot address liquidity issues that arise suddenly due to large claims or market instability.

8. The Effect of Hedge Accounting in Moderating the Relationship Between Market Risk and *return on assets*

Based on the results of the MRA analysis, it is suggested that hedge accounting does not effectively moderate the impact of market risk on *return on assets* (ROA). An example illustrating how hedge accounting fails to moderate the effect of

market risk on *return on assets* (ROA) is as follows: Market risk is systemic and complex, involving various external factors that are difficult to predict and fully control. Although hedge accounting can provide protection against changes in the value of specific assets or liabilities, it cannot consistently shield the company from all types of potential market risks.

9. The Effect of Hedge Accounting in Moderating the Relationship Between Insurance Risk and *return on assets*

Based on the results of the MRA analysis, it is suggested that hedge accounting can moderate the impact of insurance risk on *return on assets* (ROA). An example illustrating how hedge accounting can moderate the effect of insurance risk on *return on assets* (ROA) is as follows: Hedge accounting can enhance the transparency of information regarding a company's risks, including insurance risk and its impact on performance. With more accurate and transparent information, managers can make better decisions in managing risks, identifying needs, and optimizing company performance.

10. The Effect of Hedge Accounting in Moderating the Relationship Between Operational Risk and *return on assets*

Based on the results of the MRA analysis, it is suggested that hedge accounting does not effectively moderate the impact of operational risk on *return on assets* (ROA). An example illustrating the ineffectiveness of hedge accounting in moderating the impact of operational risk on *return on assets* (ROA) is as follows: Operational risk is often difficult to identify, measure, and manage effectively using conventional hedge accounting strategies. Operational risk involves complex factors that are not always related to market value fluctuations, so traditional hedge accounting may not be well-suited to address operational risks that can impact *return on assets* (ROA).

CONCLUSION

The following can be used to summarize the research findings based on the previously mentioned results:

1. According to the analysis's findings, credit risk significantly and negatively affects return on assets (ROA) for insurance businesses listed between 2019 and 2022 on the Indonesia Stock Exchange.
2. The analysis's findings show that, for insurance businesses listed on the Indonesia Stock Exchange between 2019 and 2022, liquidity risk has no effect on return on assets (ROA).
3. The analysis's findings show that, for insurance businesses listed on the Indonesia Stock Exchange between 2019 and 2022, market risk had no impact on return on assets (ROA).

4. The analysis's findings show that, for insurance businesses listed on the Indonesia Stock Exchange between 2019 and 2022, insurance risk had no effect on return on assets (ROA).
5. The analysis's findings show that, for insurance businesses listed on the Indonesia Stock Exchange between 2019 and 2022, operational risk had no effect on return on assets (ROA).
6. According to the MRA analysis's findings, hedge accounting is a useful tool for reducing the influence of credit risk on return on assets (ROA) for insurance companies listed between 2019 and 2022 on the Indonesia Stock Exchange.
7. For insurance businesses listed on the Indonesia Stock Exchange, the results of the MRA analysis indicate that hedge accounting is ineffective in reducing the impact of liquidity risk on return on assets (ROA).
8. Based on the MRA study, it appears that hedge accounting is ineffective in reducing the effect of market risk on return on assets (ROA) for insurance companies that are listed between 2019 and 2022 on the Indonesia Stock Exchange.
9. The results of the MRA analysis indicate that, for insurance businesses listed on the Indonesia Stock Exchange between 2019 and 2022, hedge accounting does an effective job of mitigating the impact of insurance risk on return on assets (ROA).
10. According to the MRA analysis's findings, hedge accounting is ineffective in reducing the effect of operational risk on return on assets (ROA) for insurance companies that are listed between 2019 and 2022 on the Indonesia Stock Exchange.

FUTURE RESEARCH

Subsequent research should investigate other factors that may affect *return on assets* (ROA), such as company size, underwriting risk, and corporate governance, which are not included or controlled in this study. Additionally, it could consider performance metrics for insurance companies that have been established by regulators (OJK) but were not utilized in this research.

REFERENCES

- Apri, A. O., & Sertyadi, B. (2022). The impact of liquidity, capital structure, and activity on the profitability of manufacturing companies in the livestock feed sector listed on the Indonesia Stock Exchange. *Journal of Social Sciences, Management, Accounting, and Business*, 3(1), 25-39. <https://doi.org/10.47747/jismab.v3i1.583>
- Fitriani, N. H., & Maharani, N. K. (2024). The impact of credit risk, liquidity risk, bank capital, and bank profitability. *Scientific Journal of Management, Economics, & Accounting (MERA)*. <https://doi.org/10.31955/mera.v8i2.3938>
- Gracer, M. F., & Lerverty, J. T. (2012). The effect of enterprise risk management on the firm's information environment: Evidence from property-liability insurers. *Journal of Risk and Insurance*, 79(2), 377-416.
- Hapsari, R. N. (2022). The impact of minimum capital adequacy requirements, credit risk, market risk, operational risk, and liquidity risk on bank performance. *Parsimonia: Journal of Accounting, Management, and Business*, 9(1), 28-43. <https://doi.org/10.33479/parsimonia.v9i1.584>
- Harmono. (2009). *Bank Management*. PT Burmi Aksara. Jakarta.
- Ironkwer, D. R., & Osaat, A. S. (2019). Risk management and financial performance of insurance companies in Nigeria. *International Journal of Advanced Academic Research | Accounting Practice (Vol. 5, Issue 4)*.
- Jawad, F. A., Xia, X., Alshamam, M. A., & Alnuraimi, Q. A. (2014). Hedging accounting as a strategic tool in financial risk management: A review. *Research Journal of Finance and Accounting*, 5, 52-59.
- Joer Wilson Erturkurdo, E. E. (2021). Hedging accounting and financial performance of listed commercial banks in Nigeria. *Phoenix Journal of Contemporary Studies*, 4(2), 37-55.

Kasmir. (2017). *The Analysis of Financial Report* (8th ed.). Jakarta: Rajawali Pers.
Novia, J., & Murchtar, S. (2024). The impact of internal risk and market risk on the performance of insurance companies listed on the Indonesia Stock Exchange. *Syntax Literate: Indonesian Scientific Journal*.
<https://doi.org/10.36418/syntax-literate.v9i3.15412>

Olalerkan, O., & Irom, I. (2018). Financial risk management and profitability: Empirical evidence from commercial banks in Nigeria. *Saherl Analyst: Journal of Management Sciences*, 16(2), 117-137.

POJK No. 71/POJK.05/2016 concerning the health of insurance companies and reinsurance companies. Financial Services Authority (OJK). Jakarta.

POJK No. 5 of 2023 concerning amendments to the regulation of the Financial Services Authority No. 71/POJK.05/2016 concerning the health of insurance companies and reinsurance companies. Financial Services Authority (OJK). Jakarta.

POJK No. 44/POJK.05/2020 concerning risk management for non-bank financial services institutions. Financial Services Authority (OJK). Jakarta.

POJK No. 30/POJK.04/2017 concerning the repurchase of shares issued by public companies. Financial Services Authority (OJK). Jakarta.

Rurdianto, D., & Derwangga, A. H. (2021). The impact of insurance risk on the profitability of insurance companies listed on the Indonesia Stock Exchange. *Journal of System Information, Insurance, Auditing, and Taxation (SIKAP)*, 6(1), 64-85. <https://doi.org/10.32897/jsikap.v6i1.1031>

Rursiati, R., & Lestari, M. (2023). Analysis of the impact of market risk, credit risk, liquidity risk, and operational risk on the performance of regional development banks. *Proceedings of the National Seminar Forum Management Indonesia* e-ISSN 3026-4499.
<https://doi.org/10.47747/snfmi.v1i.1507>

Rodyah Wi., & Bambang, S. M. (2021). Determinants of banking profitability listed on the Indonesia Stock Exchange before and during COVID-19. *Journal Syntax Admiration*, 2(12), 2394-2411. <https://journalsyntaxadmiration.com/index.php/journal/article/view/355>

SER OJK No. 28/SER OJK.05/2017 concerning guidelines for technical reserves for insurance companies and reinsurance companies based on Sharia principles. Financial Services Authority (OJK). Jakarta.

SER OJK No. 24/SER OJK.05/2017 concerning guidelines for calculating minimum capital based on risk for insurance companies and reinsurance companies. Financial Services Authority (OJK). Jakarta.

Shibani, A., Hasan, D., Saaifan, J., Sabbourberh, H., Eltaib, M., Saidani, M., & Gherrbal, N. (2022). Financial risk management in construction projects. *Journal of King Saud University Engineering Sciences*. <https://doi.org/10.1016/j.jksuers.2022.05.001>

Sondakh, J. J., Turlung, J. E., & Karamoy, H. (2021). The effect of third-party funds, credit risk, market risk, and operational risk on profitability in banking. *Journal of Governance & Regulation*, 10(2), 179-185. <https://doi.org/10.22495/jgrv10i2art15>

Stephanie, F. G., & Rurslim, H. (2021). The impact of insurance ratios on the performance of insurance companies. *Contemporary Journal of Accounting*, 1(2), 68. <https://doi.org/10.24912/jka.v1i2.15090>

Stervani, S. (2022). The impact of risk-based capital, net premium, and liquidity on the profitability of life insurance companies. *Journal of Accounting and Business Studies*. <https://doi.org/10.61769/jabs.v7i2.599>

Takon, A. T., Urklala, S. M., Obo, A. P., Erfiung, E. B., Iherndinihur, E. J., Anyingang, J. U., & Nkamarer, R. A. (2022). Financial risk management and performance of insurance companies: The moderating role of hedging

accounting. *Journal of Management Information and Decision Sciences* (Vol. 25, Issue 3).

Undang-Undang No. 40 of 2014 concerning Insurance. Financial Services Authority (OJK). Jakarta.

Zhour, H. (2023). Hedging performance and fair-value financial reporting: Evidence from bank holding companies. *Journal of Risk and Financial Management*, 16(2), 65. <https://doi.org/10.3390/jrfm16020065>