

The Influence of Credit Risk Management and Market Risk on Financial Performance in Banking Companies

Roudatul Adawiah^{a*}, Heffi Christya Rahayu^b, Makmur^c

^{a*} Universitas Pasir Pengaraian, Indonesia. roudatuladawiahsiregar28@gmail.com

^b Universitas Pasir Pengaraian, Indonesia. heffirahayu@upp.ac.id

^c Universitas Pasir Pengaraian, Indonesia. makmur@upp.ac.id

Article History	Submitted	Revised	Accepted
	2025-02-28	2025-04-22 & 2025-05-19	2025-05-22

Abstract

This study aims to analyze the influence of credit risk management and market risk on the financial performance of banking companies listed on the Indonesia Stock Exchange (IDX) during the 2020–2023 period. A quantitative research method was applied using a purposive sampling technique, resulting in a sample of 19 banking companies. Secondary data were collected from official financial statements and analyzed using multiple linear regression, supported by F-tests, t-tests, and the coefficient of determination (R^2). The findings reveal that credit risk has a negative and significant effect on financial performance, as indicated by a regression coefficient of -0.015 and a significance level below 0.05. Conversely, market risk shows a positive and significant effect, with a regression coefficient of 0.025 and a significance level below 0.05. These results suggest that higher credit risk reduces financial performance, while strategic responses to market fluctuations can enhance bank profitability. The study offers valuable insights for financial managers and regulators to improve risk management practices and ensure banking sector stability amid global economic uncertainties.

Keywords: Credit Risk, Market Risk, Financial Performance, Banking, ROA, Risk Management



INTRODUCTION

The banking sector plays a vital role in supporting the financial system and the broader economy of a country. The primary function of the financial system is to allocate funds from surplus units to deficit units, thereby enabling efficient resource distribution. Any instability in the financial system may disrupt this intermediary function and hinder national economic growth. Consequently, the performance and stability of the banking sector are key indicators for assessing a country's economic fundamentals (Ismanto, 2020). In this regard, the financial performance of banks must be optimally managed to mitigate the systemic risks that could spill over into other sectors.

In its operations, banks face various types of risks, including credit risk, which arises from the potential default of borrowers in repaying their obligations. This risk is commonly measured using the Non-Performing Loan (NPL) ratio, which reflects the proportion of problematic loans to the total loans disbursed. An increasing NPL ratio signals ineffective credit management, which could ultimately diminish bank profitability (Bayu Adi Bahtiar et al., 2023; Noviana et al., 2023). Additionally, market risks such as interest rate fluctuations, exchange rate volatility, and commodity price changes also pose significant threats to banks, as they affect the bank's ability to generate net interest income (Astuti & Mahardika, 2021; Zuliyana & Valendra, 2021).

Profitability indicators such as Return on Assets (ROA) are essential in assessing financial performance because they reflect how efficiently a bank utilizes its assets to generate profits. ROA is particularly relevant in the banking sector as it focuses on operational performance driven by customer deposits (Angeline et al., 2024). Thus, the effectiveness of credit risk and market risk management is crucial in achieving sustainable profitability and financial resilience.

An analysis of NPL data from banking firms between 2020 and 2023 reveals significant disparities in credit risk management effectiveness. For instance, PT Bank Ganesha Tbk (BGTG) recorded a remarkably low NPL of 0.20% in 2023, whereas Bank of India Indonesia Tbk (BSWD) reported a high NPL of 4.83% in 2020, nearing the upper risk threshold (Saiful & Ayu, 2019). A high NPL ratio indicates an elevated risk of default, which may erode investor confidence and threaten the firm's financial stability (Khamisah et al., 2020). Hence, a comprehensive understanding of the impact of credit and market risks on financial performance is imperative for formulating robust banking strategies.

The urgency of this study lies in the need to strengthen risk management practices amid global economic uncertainties, particularly in the post-pandemic era and amid geopolitical instabilities that affect financial market stability. Prior studies have generally examined risks in isolation, without addressing the combined influence of credit and market risks on bank performance. This study aims to fill that gap by offering both academic insight and practical recommendations to enhance risk governance in the Indonesian banking sector.

Based on the background discussed, this study aims to analyze and examine the influence of credit risk management and market risk on the financial performance of banking companies listed on the Indonesia Stock Exchange during the 2020–2023 period. The findings are expected

to provide valuable insights for financial managers, regulators, and stakeholders in formulating adaptive risk mitigation policies and enhancing banking sector profitability and stability.

LITERATURE REVIEW

Definition of Banking Institutions

Banks play a critical role as financial intermediaries in fostering national development. Their operations predominantly involve mobilizing funds from the public in the form of deposits and channeling them into loans or other financial products, all while adhering to strict banking regulations (Hadi & Rusdianto, 2024). Banks are institutions that accept deposits from customers and provide loans to individuals or businesses requiring capital. They pay interest on deposits and earn income through credit disbursement (Nisa et al., 2024). In addition to their financial intermediation role, banks contribute to economic stability by facilitating payment systems, implementing monetary policy, and managing risks inherent in financial transactions (Vuong et al., 2023).

Definition of Risk

Risk is an inherent part of human activity and organizational decision-making. According to Kasidi, risk is the probability of an event occurring that deviates from expectations and may result in losses. Imam Wahyudi interprets risk as a consequence of decisions made under uncertainty, potentially leading to unfavorable outcomes (Naura et al., 2024). Risk is commonly defined as the chance of experiencing outcomes different from what was expected, especially unfavorable ones (Aven, 2016). It can also be viewed as a potential loss resulting from unforeseen events, or as the uncertainty surrounding the occurrence of an event, often with negative consequences (Grima et al., 2021). From a financial perspective, risk is often measured by the volatility of returns or the probability of default, making its identification and management crucial in financial institutions (Otero González et al., 2020).

Credit Risk

Credit risk refers to the potential for loss due to a borrower's failure to meet contractual debt obligations. Effective credit management ensures that loans are repaid in a timely manner, including both principal and interest. When loan repayments become non-performing, they can adversely impact a bank's performance (Zuliyana & Valendra, 2021). Credit risk is defined as the risk of loss arising when a borrower fails or refuses to fulfill repayment obligations (Siddique et al., 2022). Kasmir highlights that credit risk arises from uncollected loans due to the borrower's inability to meet repayment deadlines. High levels of credit risk signal the possibility of default, threatening the financial stability and operational continuity of the bank (Windasari & Purwanto, 2020). The Non-Performing Loan (NPL) ratio is a common metric for measuring credit risk, indicating how well a bank manages problem loans. It reflects the likelihood that borrowers will fail to meet their obligations (Hapsari, 2022). Key indicators of credit risk include the NPL ratio, Loan-to-Deposit Ratio (LDR), and provisions for bad debts, which together offer insight into a bank's credit portfolio quality (Lusmeida & Gunawan, 2025).

Market Risk

Market risk is defined as the potential for financial loss due to movements in market variables that affect both on-balance-sheet and off-balance-sheet positions. These variables include interest rates, foreign exchange rates, equity prices, and commodity prices (Korompis et al., 2020). Market risk arises from market fluctuations that can impact the value of financial instruments and derivative transactions (Jahrotunnupus & Manda, 2021). Sukma et al., (2019) describe market risk as the risk of loss in both recorded and contingent positions due to changes in market prices. One measure relevant to assessing market risk is the Net Interest Margin (NIM), which indicates a bank's ability to earn income from productive assets. A high NIM suggests better performance, while a low NIM reflects poor utilization of interest-earning assets (Hapsari, 2022).

METHOD

This study employs a quantitative research approach, focusing on banking companies listed on the Indonesia Stock Exchange (IDX) during the 2020–2023 period. The population comprises all banking companies listed on the IDX within the specified timeframe. A total of 19 companies were selected as the research sample using a purposive sampling technique, which involves selecting samples based on specific criteria relevant to the research objectives, such as completeness of financial statements and consistent data availability throughout the observation period.

The study utilizes secondary data obtained from official financial reports published by the IDX and company websites, as well as from trusted databases such as www.idx.co.id and other publicly accessible financial information platforms. Data collection was conducted using a documentation method, in which the researchers collected and reviewed relevant company records and reports.

To analyze the relationship between credit risk management, market risk, and financial performance, the study employs multiple linear regression analysis. Supporting statistical tests include the F-test (simultaneous test), t-test (partial test), and the coefficient of determination (R^2). These tests aim to determine the significance and explanatory power of the independent variables on the dependent variable. All data were processed using statistical software to ensure accuracy and reliability of the results.

ANALYSIS AND DISCUSSION

Table 1. Multiple Linear Regression Analysis

		Coefficients ^a
	Model	Unstandardized Coefficients B
1	(Constant)	1.455
	Credit Risk	-1.424
	Market Risk	2.219

Sources: SPSS Data Processing, 2025

Based on the results presented in Table 1, the multiple linear regression equation obtained is:

$$Y = 1.455 - 1.424(X1) + 2.219(X2)$$

This equation illustrates the relationship between the independent variables—credit risk (X1) and market risk (X2)—and the dependent variable, namely the financial performance of banking companies. The constant value of 1.455 implies that if both credit risk and market risk are assumed to be zero, the company's financial performance would be at a baseline level of 1.455.

Furthermore, the regression coefficient for credit risk is -1.424, indicating a negative relationship. This means that for every 1% increase in credit risk, the financial performance of the company is expected to decrease by 1.424 units, assuming all other factors remain constant. In contrast, the regression coefficient for market risk is 2.219, signifying a positive relationship. Thus, a 1% increase in market risk is predicted to enhance financial performance by 2.219 units, under the condition that other variables are held constant.

These results highlight the contrasting effects of credit and market risk on financial performance, with credit risk exerting a detrimental influence, while market risk contributes positively to financial outcomes.

Table 2. F-Test (Simultaneous Significance Test)

ANOVA ^a			
Model		F	Sig.
Regression		3.524	<,005 ^b

Sources: SPSS Data Processing, 2025

Based on Table 2, the F-value of 3.524 exceeds the F-table value of 3.12, and the significance level of 0.005 is less than 0.05. This implies that the independent variables, namely credit risk and market risk, simultaneously have a statistically significant effect on the dependent variable, which is financial performance.

Table 3. t-Test (Partial Significance Test)

Coefficients ^a			
Model		t	Sig.
(Constant)		2.512	<,035
Credit Risk		-2.991	<,015
Market Risk		2.362	<,025

Sources: SPSS Data Processing, 2025

As shown in Table 3, the regression coefficient for the credit risk variable is -1.424 with a p-value of 0.015, which is below the 0.05 threshold. Additionally, the t-statistic of -2.991 exceeds the t-table value of 1.73961. This confirms that credit risk has a negative and statistically significant impact on the financial performance of banking firms, thereby supporting the first hypothesis.

Similarly, the regression coefficient for market risk is 2.219, with a p-value of 0.025. The t-statistic of 2.362 also surpasses the critical value of 1.73961, indicating that market risk has a positive and

statistically significant impact on the financial performance of banking firms. Thus, the second hypothesis is also supported.

Table 4. Coefficient of Determination Test (R-Square)

Model	Model Summary		
	R	R Square	Adjusted R Square
1	,886 ^a	,750	,754

Sources: SPSS Data Processing, 2025

Based on Table 4, the coefficient of determination (R Square) is 0.754. This indicates that the independent variables, credit risk and market risk, account for approximately 75.4% of the variation in financial performance. The remaining 24.6% is influenced by other factors not included in the model. This suggests that while credit risk and market risk are key indicators of financial performance, banks should also consider integrating additional variables such as operational risk, liquidity, and macroeconomic indicators to enhance predictive accuracy.

Discussion

The Influence of Credit Risk on the Financial Performance of Banking Companies Listed on the Indonesia Stock Exchange

The findings reveal that credit risk has a negative and statistically significant effect on financial performance, with a coefficient of -1.424, a t-statistic of -2.991, and a significance level of 0.015 (< 0.05). Hence, the first hypothesis is accepted.

Non-Performing Loan (NPL) is a key indicator for evaluating a bank's credit risk. Banks with NPL ratios below 5% are considered effective in managing credit risk. In contrast, an NPL ratio above 5% signals weak credit risk management practices. These findings align with previous studies by Jahrotunnupus & Manda (2021), Sukma et al., (2019), Hapsari (2022), and Dayana & Untu (2019), all of which report a significant negative relationship between credit risk management and banking financial performance.

Moreover, elevated credit risk can lead to higher loan loss provisions, reduced capital adequacy, and declining investor confidence, which ultimately deteriorate the bank's profitability and long-term stability. This underscores the need for robust credit evaluation frameworks and proactive risk mitigation strategies.

The Influence of Market Risk on the Financial Performance of Banking Companies Listed on the Indonesia Stock Exchange

The analysis demonstrates that market risk has a positive and significant influence on financial performance, with a regression coefficient of 2.219, a t-statistic of 2.362, and a significance level of 0.025 (< 0.05), thereby supporting the second hypothesis.

Market risk, which refers to the potential for financial loss due to fluctuations in market variables (such as interest rates and exchange rates), is a critical component of banking risk. While it cannot

be fully eliminated through portfolio diversification, banks can minimize its effects by adopting sound hedging strategies and dynamic asset-liability management techniques (Rahma & Nurfauziah, 2022).

A higher Net Interest Margin (NIM) indicates stronger earnings from productive assets, which translates into enhanced financial performance. The results are consistent with prior research by Natalia (2017), Rahma & Nurfauziah (2022), Dayana & Untu (2019), Hapsari (2022), and Sukma et al., (2019), all of whom affirm a significant positive association between market risk indicators and banking profitability.

It is important to note that a well-managed market risk environment not only improves profitability but also supports better capital planning and liquidity management, contributing to the bank's resilience in a volatile economic landscape.

CONCLUSION

Based on the results of this study, it can be concluded that credit risk management and market risk significantly influence the financial performance of banking companies. Credit risk was found to have a negative and significant effect on financial performance, as indicated by a regression coefficient of -0.015, a significance level below 0.05, and a t-statistic of -2.991, which exceeds the critical t-value of -1.676 (in absolute terms). This implies that an increase in credit risk tends to reduce a bank's financial performance, emphasizing the importance of effective credit risk management in maintaining financial stability and profitability within the banking sector.

Conversely, market risk has a positive and significant impact on financial performance, with a regression coefficient of 0.025, a significance level below 0.05, and a t-statistic of 2.362, which surpasses the critical t-value of 1.676. These findings suggest that banks capable of responding strategically to market fluctuations can enhance their financial outcomes. Future research is recommended to expand the scope of variables by including factors such as operational risk, liquidity risk, and corporate governance (GCG) to provide a more comprehensive understanding of the determinants affecting bank financial performance amid the evolving dynamics of financial markets.

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