# The Influence of Financial Risk on Financial Performance with Good Corporate Governance As A Moderating Variable in Banking Sector Companies Listed on The Indonesia Stock Exchange

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ABSTRACT: The purpose of this study is to address the research problems that have been formulated by examining the following objectives to analyze the effect of credit risk on financial performance; to examine the effect of liquidity risk on financial performance; to assess the effect of market risk on financial performance in financial institutions within the banking subsector listed on the Indonesia Stock Exchange; to investigate whether good corporate governance moderates the relationship between credit risk and financial performance; to determine whether good corporate governance moderates the relationship between liquidity risk and financial performance; to analyze whether good corporate governance moderates the relationship between market risk and financial performance; and to examine the simultaneous effect of credit risk, liquidity risk, and market risk on financial performance. The population of this study consists of companies in the financial sector, specifically the banking subsector, listed on the Indonesia Stock Exchange (IDX). A total of 29 companies were selected as the sample for observation. The study employed panel data regression analysis with the Moderated Regression Analysis (MRA) approach, utilizing STATA version 17 for data processing and analysis. The empirical findings of this study are as follows: credit risk has a negative but not statistically significant effect on financial performance; liquidity risk has a positive but not statistically significant effect on financial performance; market risk has a negative and statistically significant effect on financial performance; good corporate governance exerts a positive but not statistically significant moderating effect on the relationship between credit risk and financial performance; good corporate governance exhibits a negative but not statistically significant moderating effect on the relationship between liquidity risk and financial performance; good corporate governance has a positive and statistically significant moderating effect on the relationship between market risk and financial performance; and finally, credit risk, liquidity risk, and market risk collectively (simultaneously) have a statistically significant impact on financial performance.

Keywords: Credit Risk; Liquidity Risk; Market Risk; Good Corporate Government; and Return on Assets.

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### I. INTRODUCTION

Finance is one of the fundamental aspects in the life of individuals, organizations, and the state. The ability to manage finances effectively is the main determinant of success in achieving goals, both short-term and long-term. For individuals, good financial management allows for financial stability and preparation for the future. On the other hand, for organizations or companies, optimal financial management is crucial to ensure operational continuity and support sustainable business growth. In the context of companies, especially the banking sector, financial management includes various important activities, ranging from budget planning, cash flow management, debt and capital management, to investment planning. One of the main objectives of these activities is to increase profitability and operational efficiency. Companies that are able to manage finances wisely will be more resilient to external risks and have high competitiveness in the market.

The financial sector provides a wide range of investment options that suit each investor's risk profile and investment goals. For example, for more conservative investors, instruments such as deposits or bonds can be an option because they offer a lower level of risk. The importance of the financial sector for investors also lies in easier access to market information and various financial analyses. The existence of financial institutions, especially banks, securities companies, and investment managers, helps investors in conducting proper analysis before deciding to invest. The development of investment in Indonesia for the period 2019 to 2023 shows a fluctuating trend, it can be seen that total investment has consistently increased, although there was a slight decline in 2023. Total investment increased from IDR 7,943 trillion in 2019 to IDR 9,731 trillion in 2022, before falling slightly to IDR 9,488 trillion in 2023. The value of non-financial investment has experienced an increasing trend while the value of financial investment has continued to decline since 2020. The most significant increase in investment occurred in 2020 driven by financial investment which experienced a sharp increase. In that year, non-financial investment actually decreased. The investment movement occurred due to the initial reaction of the pandemic. As the pandemic conditions subside and the economy recovers, nonfinancial investment has increased. It is different with financial investment which has decreased due to global financial conditions which still tend to be unstable. Financial investments made in 2023 amounted to IDR 3,092.36 trillion, down 17.98 percent when compared to financial investments in 2022. The decline that occurred in 2023 was due to global economic uncertainty and the weakening of the rupiah exchange rate. For this, it is clear how investment, especially investment in the financial sector, experiences financial risks.

The financial sector, especially the banking subsector, has a very vital role in a country's economy. Banks are not only financial intermediaries that connect surplus funds with those who need funds but also play an important role in maintaining financial system stability. Banks listed on the Indonesia Stock Exchange (IDX) not only reflect the overall performance of the financial sector but also become an important indicator for investors to assess the health of the national economy. As public companies, banks listed on the IDX are obliged to maintain their transparency and financial performance to attract investor interest and maintain public trust. However, a major challenge faced by the banking sector is financial risk management. These risks include credit risk, liquidity risk, and market risk, which can affect financial performance directly or indirectly.

Credit risk refers to the risk of loss arising from the inability of the debtor or a third party to meet their obligations in accordance with the agreement. In the context of banking, this risk is particularly significant given that most of the bank's assets come from credit portfolios. When the default rate increases, the bank's net profit can be affected as it has to provide a larger reserve of credit losses. Poorly managed credit risk can result in a decline in asset quality, ultimately affecting investor confidence in the bank. Then, liquidity risk arises when a bank does not have enough liquid assets to meet its short-term obligations, such as withdrawals by customers or other operational needs. In the banking sector, maintained liquidity is essential to ensure smooth operations. Inability to manage liquidity can lead to operational disruptions, increased borrowing costs, or even the risk of bankruptcy. Therefore, effective liquidity risk management is a priority for banks, especially for IDX-listed banks, as they operate under strict regulatory supervision and high expectations from investors. Meanwhile, market risk refers to potential losses due to fluctuations in market prices, such as interest rates, foreign exchange rates, and commodity prices. Banks face market risk when engaging in trading activities, investing in financial instruments, or having exposure to changes in interest rates and exchange rate can affect the portfolio of assets in foreign currencies. High market risk can reduce the bank's profitability and make investors hesitant to invest.

Banking companies listed on the Indonesia Stock Exchange are under pressure to show solid performance, both in terms of profitability and financial stability. Credit risk is often a key indicator of a bank's financial health, as a troubled credit portfolio can lead to large losses and lower profitability. Then, liquidity risks, if not managed properly, can trigger a crisis of confidence that has the potential to shake the bank's operational stability and reputation. And, market risk, with global dynamics full of uncertainty, is increasingly important to monitor, given that market price fluctuations can affect a bank's earnings and asset value. Banks listed on the IDX not only face challenges in managing financial risks but are also required to provide satisfactory results for shareholders. Any decline in financial performance due to financial risks can be directly reflected in the bank's share price movements, which in turn affects investors' perception of the banking sector as a whole. Financial risk management, especially credit risk, liquidity risk, and market risk, is a crucial aspect in maintaining the financial performance of banks listed on the IDX. By mitigating these risks, banks can not only increase profitability but also maintain financial stability and public trust, which ultimately has a positive impact on the capital market and the national economy.

In accordance with research conducted by Abdellahi, (2017) prove that credit risk has a significant effect on financial performance. Then, research from Hikmawati & Sutrisno, (2021) prove that credit risk has a negative and significant effect on financial performance. However, the research differs from Olivia et al., (2022) which also proves that credit risk has a negative and insignificant effect on financial performance. Furthermore, research from Azura et al., (2024) prove that the risk significantly affects financial performance. Research from Hikmawati & Sutrisno, (2021) prove that liquidity risk has a positive and insignificant effect on financial performance. Findings differ from Abdulsalam et al., (2023) proving that liquidity risk has a significant effect on financial performance. Then, research from Stuart & Stuart (2022) Disclosure of liquidity risk has a negative and insignificant effect on financial performance. Subsequently, research from Azura et al., (2024) Strengthening the evidence that there is a significant influence between liquidity risk and financial performance. Then, the research also from Wau et al., (2023) proving that market risk has a positive and insignificant effect on financial performance. However, research differs from Olivia et al., (2022) found that market risk has a positive and significant effect on financial performance. Meanwhile, other research from Eklemet et al., (2024) Reinforcing evidence that market risk has a negative and significant effect on financial performance. From some of these empirical studies, there are several findings that are pro and con or inconsistent so that it is necessary to follow up that it is true that financial risk is true with the proxy of credit risk; liquidity risk; and market risks really affect the performance of the banking subsector listed on the Indonesia Stock Exchange.

Financial performance is one of the fundamental aspects used to assess the success of a company in managing financial resources to achieve organizational goals. In the context of banking companies listed on the Indonesia Stock Exchange (IDX), financial performance has a broader dimension because it has a direct impact on stock prices and investor confidence. Information about financial performance that is published periodically is the basis for investment decision-making. Therefore, companies are required to maintain transparency and consistency in financial reporting so that they can reflect their actual financial conditions. Financial performance is a reflection of an entity's ability to manage resources, generate revenue, and manage expenses to achieve specified financial goals. Finances need to be managed properly so that financial risks do not occur or minimize the occurrence of financial risks. Poorly managed financial risks can lead to adverse fluctuations in revenue, reduce profitability, and disrupt cash flow. On the other hand, good risk management can mitigate potential losses and improve financial stability and resilience. Therefore, financial risk plays a big role in influencing the financial performance of an entity and can also be a determining factor for financial success or failure.

The impact of financial risks on financial performance is the focus of attention of various parties such as entities or investors, especially on companies operating in the financial sector. However, the impact of financial risk is not always linear and can be influenced by other factors, one of which is good corporate governance (GCG). Good Corporate Governance (GCG) is a framework that regulates relationships between shareholders, management, and other stakeholders to ensure that the company is managed in a transparent, accountable, and integrity manner. GCG plays an important role in moderating or strengthening and weakening the relationship between financial risk and financial performance by implementing GCG. Companies can strengthen internal control systems, ensure more prudent or prudent credit decision-making, and improve the quality of credit risk management. This can help minimize the impact of credit risk on financial performance. A good GCG can improve oversight of liquidity management, such as maintaining a balance between liquid assets and short-term liabilities. Transparency and accountability in liquidity management can help companies maintain their operational stability. Then, GCG can also provide a framework for companies to manage market risks more effectively, for example by conducting comprehensive risk evaluations and adopting appropriate hedging policies.

For this reason, good corporate governance (GCG) was chosen because of its crucial role in ensuring transparency, accountability, and efficiency of corporate management, especially in the banking sector which is very vulnerable to financial risks. GCG implementation can increase investor confidence, maintain financial stability, and mitigate risks that can affect the company's financial performance. In the context of banking, GCG is a key element in managing credit risk, liquidity risk, and market risk, which is a major challenge for banks listed on the Indonesia Stock Exchange (IDX). Banks that apply good governance principles tend to have stronger internal control mechanisms, which can reduce the likelihood of unsound management practices and increase the effectiveness of strategic decision-making.

In addition, previous research has shown mixed results regarding the relationship between GCG and financial performance. Some studies have found that the implementation of strong GCG can increase a company's profitability and value, while other studies show an insignificant influence under certain conditions. Therefore, this study aims to examine more deeply how GCG plays a role in moderating the influence of financial risk on banking financial performance in Indonesia. In accordance with research conducted by Hikmawati & Sutrisno, (2021) Proving that good corporate governance is able to moderate the relationship between credit risk to financial performance and other findings. However, a different study was revealed by Mardiana et al., (2018) Explaining that good corporate governance has a negative and insignificant effect. Then, research from Eklemet et al., (2024) Found that corporate governance has a positive and significant effect and moderates the influence of liquidity risk and market risk on financial performance.

From some of these findings, good corporate governance (GCG) is suitable for use as a moderation variable because it has a strategic role in managing various risks faced by companies, especially credit risk, liquidity risk, and market risk. GCG can strengthen or weaken the relationship between these risks to financial

performance. GCG is used as a moderation variable because it can affect how much impact credit, liquidity, and market risk on a company's financial performance. With the implementation of good governance, companies can reduce the negative impact of credit risk by increasing supervision and stricter lending policies, managing liquidity risks with better cash management strategies and liquid asset optimization, and controlling market risk with more adaptive investment and risk management strategies. In general, the role of GCG remains important in ensuring that companies have better risk management policies. Therefore, in this study, GCG is considered a factor that can strengthen or weaken the relationship between financial risks and the company's financial performance.

Based on the background that has been explained above, the formulation of the problem can be described as follows: (1) does credit risk have a negative and significant effect on financial performance?; (2) does liquidity risk have a negative and significant effect on financial performance?; (3) does market risk have a negative and significant effect on financial performance?; (4) does good corporate government positively and significantly moderate the influence of credit risk on financial performance?; (5) does good corporate government positively and significantly moderate the influence of liquidity risk on financial performance?; (6) Does Good Corporate Government positively and significantly moderate the influence of market risk on financial performance?; and (7) do credit risks, liquidity risks, and market risks simultaneously have a negative and significant effect on financial performance?.

### **II. LITERATURE REVIEW**

#### **Signaling Theory**

According to Fahmi, (2018:103), signaling theory emphasizes the meaning of information issued by the industry to the investment provisions of parties outside the company. Information is a meaningful factor for investors and business actors because information essentially presents explanations, notes or good reflections for the conditions of the future era for the continuity of a company's life and how the market is affected. Complete, relevant, meticulous and timely information is needed by investors in the capital market as analytical equipment to make investment decisions.

The relevance of signal theory with this study is that when companies manage financial risks well through the implementation of good corporate government (GCG), this gives a positive signal to the market. Positive signals increase investor confidence, attract more investments, and ultimately improve financial performance. However, when a negative signal is that the company fails to implement good corporate governance (GCG) and financial risks are poorly managed, negative signals will appear. This can reduce market confidence; increase capital costs; and lower financial performance.

#### **Agency Theory**

The theory of agency was put forward by Michael C. Jensen and William H. Meckling in their research entitled Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure (1976). According to Horne & Wachowicz, (2019:147), agency theory was built as an effort to understand and solve problems when there is incompleteness of information when making a contract (engagement). The contract referred to here is a contract between the principal (employer), for example the shareholder or leader of the company and the agent (order recipient), for example management or subordinates. Agency theory predicts that if the agent has an information advantage over the principal and the interests of the agent and principal are different, there will be a principal-agent problem, where the agent will take actions that benefit him but harm the principal. The burden that arises due to management actions becomes agency costs. Then, according to Fahmi, (2018:266), agency theory is a theory that discusses the conflict between the management and the commissioner where the management is called the agent or executor and the commissioner as the principal. Where they have to build an employment contract that involves rules that must be agreed upon by both parties, especially rules that affirm that agents must work to maximize profits to the principal.

#### **Financial Performance**

According to Fahmi, (2018:2), financial performance is an overview of the company's success achievements can be interpreted as the results that have been achieved from various activities that have been carried out. This means that financial performance is an analysis that is carried out to see the extent to which a company has implemented using the rules of financial implementation properly and correctly. Meanwhile, according to Hutabarat (2020:2), financial performance is an analysis that is carried out to see the extent to which a company has implemented in accordance with the rules of financial implementation properly and correctly.

#### **Financial Risk**

According to Ross et al., (2017:101), financial risk as the possibility of an undesirable outcome resulting from changes in prices, exchange rates, or financial policies. As globalization advances, financial risk becomes more complex, especially due to greater reliance on international financial markets. Then, according to Hull, (2018:45), financial risk includes the uncertainty of financial results faced by an organization due to changes in asset values, interest rates, exchange rates, and others. In this case, financial risk is a major element that must be considered in business decision making, especially in healthy and sustainable financial management.

#### **Good Corporate Government**

According to Rustam, (2017:294), Good Corporate Governance is a series of relationships between the Board of Commissioners, the Board of Directors, interested parties, and the company's shareholders. Corporate governance creates a structure that assists companies in setting goals, carrying out daily business activities, paying attention to the needs of stakeholders, ensuring that the company operates safely and healthily, complies with other laws and regulations, and protects the interests of customers. Then, Mardiasmo, (2018:23) Revealing that Good Corporate Governance is the implementation of management in a solid and responsible development that is in line with the principles of democracy and efficient markets. Avoidance of wrongs in allocation and investment, as well as the prevention of political and administrative corruption. Implementing budget discipline to create a legal and political framework for the growth of activities in the business world, definitively good corporate governance is defined as a system that regulates and controls the company so that the company creates added value for all its stakeholders.

# The Influence of Variables and Research Hypothesis Formulation

The Influence of Credit Risk on Financial Performance

According to Indonesian Bankers Association, (2015:8), credit risk is the result of the failure of the debtor or other parties to fulfill credit repayment obligations at the bank. The higher the credit risk faced by a bank, the higher the bank will experience a financial crisis, and vice versa. In accordance with research conducted by Abdellahi, (2017) prove that credit risk has a significant effect on financial performance. Then, research from Hikmawati & Sutrisno, (2021) prove that credit risk has a negative and significant effect on financial performance. However, the research differs from Olivia et al., (2022) which also proves that credit risk has a negative and insignificant effect on financial performance. Furthermore, research from Azura et al., (2024) prove that the risk significantly affects financial performance. Credit risk is related to the possibility of default by the debtor. If credit risk increases, companies could experience an increase in the burden of loss reserves, which can reduce profitability and financial performance. Therefore, despite differences in significance, the direction of the relationship between credit risk and financial performance is generally negative. Based on the theoretical and empirical studies formulated, the first hypothesis proposed is.

H1: credit risk has a negative and significant effect on financial performance.

#### The Influence of Liquidity Risk on Financial Performance

Based on POJK Number 18/POJK.03/2016, liquidity risk is a risk due to the Bank's inability to fulfill maturity obligations sourced from cash flow funding or from liquid assets that are guaranteed with high quality without interfering with the Bank's financial activities and conditions. According to Horne & Wachowicz, (2019:56), liquidity is an important factor in determining the financial health of a company. Lack of liquidity can lead to lost financial opportunities and difficulties, which affect overall financial performance. Furthermore, according to Brigham & Houston, (2019:641), liquidity risk affects a company's ability to meet short-term liabilities, which affects its operational efficiency and profitability, which are critical components of financial performance. In accordance with research conducted by Hikmawati & Sutrisno, (2021) prove that liquidity risk has a positive and insignificant effect on financial performance. Findings differ from Abdulsalam et al., (2023) proving that liquidity risk has a significant effect on financial performance. Then, research from Naibaho & Mayayogini, (2022) state that liquidity risk has a negative and insignificant effect on financial performance. Subsequently, research from Azura et al., (2024), there is a significant influence between liquidity risk and financial performance. Liquidity risks are associated with the company's ability to fulfill its short-term obligations without experiencing significant financial difficulties. If liquidity risk increases, companies may face obstacles in meeting their operational needs, potentially reducing profitability and financial stability So that it has a negative and significant impact on the company. Overall, liquidity risk tends to have a negative impact on financial performance, whether significant or not, depending on how the bank manages its financial resources. Increasingly The greater the liquidity risk faced by banks, the higher the likelihood of financial disruption that has an impact on the bank's profitability and stability. Based on the theoretical and empirical studies formulated, the second hypothesis proposed is.

H2: liquidity risk has a negative and significant effect on financial performance.

#### The Influence of Market Risk on Financial Performance

According to Wau et al., (2023:182), market risk describes how much interest income can be generated from assets owned by banks. Market risk describes management's ability to manage a company's productive assets to earn net interest income. The larger the net interest income figure, the higher the bank's financial performance. In accordance with research conducted by Wau et al., (2023) proving that market risk has a positive and insignificant effect on financial performance. However, research differs from Olivia et al., (2022) found that market risk has a positive and significant effect on financial performance. Meanwhile, other research from Eklemet et al., (2024) Reinforcing evidence that market risk has a negative and significant effect on financial performance. Market risks associated with changes in the value of financial assets due to fluctuations in market conditions. Market risk reflects uncertainties that can affect a company's profitability, especially in the financial and banking sectors that rely heavily on market stability. Risk The market can have a positive effect on financial performance if the company is able to take advantage of market opportunities with the right investment strategy. However, market risk can also have a negative effect, especially when market volatility is high and companies do not have effective risk mitigation strategies. Based on the theoretical and empirical studies formulate then the third hypothesis proposed, is.

H3: market risk has a negative and significant effect on financial performance.

#### The Influence of Good Corporate Governance on Credit Risk on Financial Performance

According to Siamat, (2017), credit risk is characterized as a risk associated with the possibility that the client will not meet his obligations or the risk that the debtor will not be able to repay his loans. Credit problems in the current climate caused by debtors unable to repay loans pose a risk to banks that can be negative. Because of the potential for non-performing loans to reduce bank capital, risky loans have the potential to hinder bank performance. After granting credit, banks are obliged to monitor the use of credit and the debtor's ability and compliance in fulfilling its responsibilities. In accordance with research conducted by Hikmawati & Sutrisno, (2021) prove that Good Corporate Governance can moderate the relationship between credit risk and financial performance. However, a different study was revealed by Mardiana et al., (2018) Explaining that good corporate government has a negative and insignificant effect. Then, research from Eklemet et al., (2024) Strengthening the evidence that Good Cooperate Government has a positive and significant effect which means that it is able to moderate the relationship or influence of credit risk on financial performance. Furthermore, research from Azura et al., (2024) There is a significant influence between credit risk on banking financial performance. Based on the theoretical and empirical studies formulated, the fourth hypothesis proposed is.

H4: Good corporate government moderates positively and significantly the influence of credit risk on financial performance.

#### The Influence of Good Corporate Governance in Moderating Liquidity Risk on Financial Performance

According to Fahmi, (2018), liquidity risk indicates the company's capacity to complete tasks in a timely manner and in a manner that fulfills its obligations. This means that the company states that the state will be liquid if the company's assets are easier to manage than its debts. Good corporate governance (GCG) is applied by the company as a guideline in maximizing internal control based on GCG principles and aims to manage risks so that business objectives are met, one of which is to form a healthy company from all aspects so that it can provide a positive signal to increase financial performance and affect the investment value of stakeholders. In accordance with research conducted by Hikmawati & Sutrisno, (2021) Finding evidence that good corporate governance is unable to moderate the influence of liquidity risk on financial performance. Other research from Halimahtussakdiah et al., (2023) explain that Good Corporate Governance cannot moderate liquidity risks to financial performance. Then, research from Eklemet et al., (2024) Found that corporate governance has a positive and significant effect and moderates the influence of liquidity risk on financial performance. Based on the theoretical and empirical studies formulated, the fifth hypothesis proposed is.

H5: Good corporate government moderates positively and significantly the influence of liquidity risk on financial performance.

#### The Influence of Good Corporate Governance on Market Risk on Financial Performance

According to Tricker, (2019:125), Companies with good corporate governance (GCG) practices tend to be better able to handle market uncertainty and risks that have the potential to affect their performance. Then, according to Brigham & Houston, (2019:231), Companies that have good GCG tend to be more stable and able to manage market risk more effectively, so that their financial performance is not easily affected by market fluctuations. In accordance with research conducted by Eklemet et al., (2024) state that Good Cooperate Government has a positive and significant effect, which means that it is able to moderate the relationship or influence of market risk on financial performance. However, research differs from Mardiana et al., (2018) state that good corporate governance has a negative and insignificant effect and does not moderate the influence of

management risks on financial performance. Then, research from Kusnodiharjo & Augustine, (2019), it was also revealed that good corporate government has a positive but insignificant effect in moderating the relationship between financial risk and financial performance. With good GCG, companies can manage liquidity more efficiently, optimize cash flow, and reduce the likelihood of short-term liability defaults. Based on the theoretical and empirical studies formulated, the sixth hypothesis proposed is.

H6: Good corporate government moderates positively and significantly the influence of market risk on financial performance.

#### The Influence of Credit Risk, Liquidity Risk, and Market Risk on Financial Performance

The financial performance of banks is greatly influenced by various risk factors, especially credit risk, liquidity risk, and market risk. These three risks are part of financial risks that play an important role in maintaining the stability of financial companies in the banking subsector. Credit risk is a possible loss due to the debtor's failure to meet payment obligations. The higher the credit risk, the greater the potential losses that must be borne by the bank, so that it can reduce financial performance. Liquidity risk Is the bank's inability to meet its short-term obligations due to insufficient liquid assets. When banks experience liquidity difficulties, banks must look for more expensive sources of funding. Then Market risk is related to changes in interest rates, exchange rates, and securities prices that can affect a bank's revenue. Fluctuations in interest rates and unstable exchange rates can cause uncertainty in banking revenues, potentially lowering financial performance. Therefore, risk Credit, liquidity risk, and market risk not only affect the financial performance of banks individually but also simultaneously. These three risks interact with each other in determining banking stability. If the bank's management fails to control these three risks simultaneously, then financial performance can deteriorate further. Brigham & Houston, (2019).

In accordance with research conducted by Mardiana et al., (2018), proving that management risks simultaneously have a positive and significant effect on financial performance. Then, the research conducted by Korompis et al., (2020) state that simultaneously market risk, Credit Risk, and liquidity risk has a significant effect on the bank's financial performance (ROA). Meanwhile, in the study Rahmandita et al., (2023) also proves liquidity risk, credit risk and market risk simultaneously affect financial performance in banking. Based on the theoretical and empirical studies formulated, the seventh hypothesis proposed is.

H7: credit risk, liquidity risk, and market risk simultaneously have a negative and significant effect on financial performance.



#### **Research Conceptual Framework**

#### III. RESEARCH METHOD

#### **Operational Definition**

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1. Financial Risks

This risk refers to the potential losses experienced by banking companies due to the uncertainty inherent in financial activities. In this study, financial risk is measured through three main aspects, namely credit risk, liquidity risk, and market risk, as these aspects have a significant influence on the bank's profitability and stability.

#### Credit Risk (X1) a.

Credit risk be possible losses arising from the debtor's failure to meet interest and/or loan principal payment obligations to the bank. To measure credit risk, this study uses a Non-Performing Loan (NPL). This ratio was chosen because describe quality of the bank's credit portfolio directly. Increasingly The higher the NPL, the greater the amount of uncollected credit, so the higher the credit risk faced by banks. By Eklemet et al., (2024:372), finding that NPLs have a significant relationship with the bank's profitability, and the formula used for Calculating credit risk using Nonperforming Loan / NPL is.

 $\frac{\text{Total non performing loan}}{100\%} \times 100\%$ NPL = Total credit

b. Liquidity Risk (X2)

Liquidity risk reflects a bank's ability to meet its short-term obligations using its liquid assets. To measure liquidity risk, this study uses a Loan to Deposit Ratio (LDR). LDR was chosen as a liquidity risk proxy because it describes the extent to which third-party funds are used for credit disbursement. This ratio is very important because banks with high LDRs tend to be more vulnerable to liquidity risk. By Eklemet et al., (2024:372), indicating that the LDR has a significant relationship with the bank's financial stability which in calculating liquidity risk using loan to deposit ratio / LDR, The formula, that is.

Loan to Deposit Ratio =  $\frac{Total Third Party Funds}{Total Third Party Funds} \times 100\%$ Total credit

Market Risk (X3) c.

Market risk is the potential loss due to changes in the market value of financial instruments owned by banks. To measure market risk, this study uses Net Interest Margin (NIM) because it reflects the bank's efficiency in managing its productive assets to generate net interest income as well as this proxy shows the bank's ability to obtain profit margins from financing activities. Based on research Jaelani, (2024:268), stating that NIM is a valid measure to evaluate a bank's ability to manage profit margins and the formula used to calculate this proxies is.

Net Interest Margin =  $\frac{Net Interest Income}{Average Total Earning Assets} \times 100\%$ 

#### 2. Good Corporate Government (Z)

Good corporate governance (GCG) is a series of governance principles and mechanisms that are applied to ensure transparency, accountability, responsibility, independence, and fairness in the management of banking companies. GCG is used as a moderation variable which in this study is measured using a proxy, namely.

a. Independence of the Board of Commissioners

Independence of the Board of Commissioners refers to the ability of the Board of Commissioners to carry out supervisory duties and provide advice to the Board of Directors objectively, without being influenced by the interests of internal or external parties of the Company. The selection of these proxies is based on Independence Board of Commissioners that Playing a role in increasing the effectiveness of supervision and objective decision-making and the council an independent commissioner can reduce the risk of conflicts of interest and increase transparency in the management of financial risks. By Moeslem et al., (2024:1332), the independence of the board of commissioners contributes to increasing the effectiveness of GCG implementation in the banking industry and In calculating the independence of the Board of Commissioners using formulas, that is.

Number of Independent Commissioners Total Number of Board of Commissioners × 100% IDK =

3. Financial Performance (Y)

Financial performance refers to a bank's ability to generate profits and manage its financial resources efficiently. In this study, financial performance was measured using a proxy, namely.

Return on Assets (ROA) a.

ROA shows how efficient a bank is in making a profit from the total assets it owns. The selection of ROA as a proxy is based on ROA measuring the bank's efficiency in generating profits from the total assets owned. This ratio is often used in financial research because it reflects the bank's level of profitability. According to Kasmir, (2017:106), ROA is the main indicator in assessing the financial performance of banks with its formula, namely.

Return on Assets = 
$$\frac{\text{Earnninng after tax}}{\text{Total Activa}} \times 100\%$$

#### **Population & Sample**

The population used in this study is Banking Sector Companies listed on the Indonesia Stock Exchange in 20, 19 to 2023 which amounted to 47 companies with purposive sampling techniques and a sample of 29 companies as seen in Table 1 below.

No.	Code	Company Name
1	AGRO	Bank Raya Indonesia Tbk.
2	AGRS	Bank IBK Indonesia Tbk.
3	BABP	Bank MNC Internasional Tbk
4	BBCA	Bank Central Asia Tbk.
5	BBHI	Allo Bank Indonesia Tbk.
6	BBKP	Bank KB Bukopin Tbk.
7	BBNI	Bank Negara Indonesia (Persero) Tbk.
8	BBRI	Bank Rakyat Indonesia (Persero) Tbk.
9	BBTN	Bank Tabungan Negara (Persero) Tbk.
10	BDMN	Bank Danamon Indonesia Tbk.
11	BEKS	Banten Fund Development Bank Tbk.
12	BJBR	West Java Regional Development Bank and Banten Tbk.
13	BJTM	East Java Regional Development Bank Tbk.
14	BKSW	Bank QNB Indonesia Tbk.
15	BNBA	Bank Bumi Arta Tbk.
16	BNGA	Bank CIMB Niaga Tbk.
17	BNII	Bank Maybank Indonesia Tbk
18	BNLI	Bank Permata Tbk.
19	BSIM	Bank Sinarmas Tbk.
20	BSWD	Bank Of India Indonesia Tbk.
21	BTPN	Bank BTPN Tbk.
22	BVIC	Bank Victoria International Tbk.
23	DNAR	Bank Oke Indonesia Tbk.
24	INPC	Bank Artha Graha International Tbk.
25	МАҮА	Bank Mayapada Internasional Tbk.
26	CLOUD	Bank Mega Tbk.
27	NISP	Bank OCBC NISP Tbk.
28	NOBU	Bank Nationalnobu Tbk.
29	PNBN	Bank Pan Indonesia Tbk.

Table 1. Sample List of Financial Companies in the Banking S	Subsector
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#### IV. Analysis Method

Data analysis in this study uses panel data regression with the presence of variable moderation using moderated regression analysis (MRA). According to Basuki & Prawoto, (2016:275), the data panel is a combination of time series data and cross-section data. Cross section data is data collected at one time against many individuals. Meanwhile, time series data is data collected from time to time on an individual. The selection of panel data is because in this study it uses time series data and cross section data. The use of time series data in this study is in a 5-year time period, from 2019-2023. Because the study uses the moderation variable, the regression equation of the panel data for the moderation variable is to use the equation Moderated Regression Analysis (MRA). According to Ghozali, (2018:229), Moderated Regression Analysis (MRA) is an analytical approach that maintains the integrity of the sample and provides a basis for controlling the influence of moderator variables. The following is a regression equation model that will be tested using a moderator effect in the form of a moderation variable, namely.

$$Y_{it} = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} * Z + \beta_5 X_{5it} * Z + \beta_6 X_{6it} * Z + \varepsilon_{it}$$

Where

Y<sub>it</sub> : Financial Performance

α : Constant

 $\beta_1$ - $\beta_3$  : The regression coefficient of each independent variable

X<sub>1</sub> : Credit Risk

- X<sub>2</sub> : Liquidity Risk
- X<sub>3</sub> : Market Risk
- $X_4*Z \quad : The \ interaction \ between \ the \ variables \ of \ Credit \ Risk \ and \ Good \ Corporate \ Government$
- X<sub>5</sub>\*Z : Interaction between Liquidity Risk variables and Good Corporate Government
- $X_6*Z$  : The interaction between the Market Risk variable and Good Corporate Government
- Z : Good Corporate Government (Moderation variable)

### V. ANALYSIS AND DISCUSSION

**Descriptive Statistics** The results of this analysis include the minimum, maximum, mean, and standard deviation values of each variable. The descriptive table shows how the data distribution tendencies, whether there are large deviations (outliers), and the extent of variation between data. This analysis is important to assess the feasibility of the data before proceeding to the inferential testing stage. The following are the results of descriptive statistical testing as shown in Table 2 below.

Table 2: Descriptive Statistical Test									
Variable	Obs	Min	Max	Mean	Std. Dev				
Net performing loan (X1)	145	0.000	0.793	0.045	0.075				
Loan to deposit ratio (X2)	145	0.171	1.759	0.880	0.225				
Net interest margin (X3)	145	-0.176	0.133	0.042	0.032				
Independence of the Board of Commissioners (Z)	145	0.20	1.00	0.58	0.14				
Return on Assets (Y)	145	- 0.803	0.035	- 0.003	0.076				

Table 2. Descriptive Statistical Test

Source: Processed by STATA 17, Year 2025.

As per the table 2 Above show variable Net Performing Loan (X1) has 145 observations with a minimum value of 0.000 and a maximum value of 0.793. The mean of this variable is 0.045 with a standard deviation of 0.075. The relatively small average value indicates that in general, the banks in the sample have low levels of non-performing loans or fairly good condition. This shows efficiency in credit risk management; Furthermore, the Loan to Deposit Ratio (X2) variable also has 145 observations with a minimum value of 0.171 and a maximum of 1.759. The average LDR value is 0.880 with a standard deviation of 0.225. This means that the average third-party funds that are successfully channelled into the form of credit are 88%. However, with a considerable standard deviation, there is significant variation between observations, reflecting differences in credit disbursement policies between banks or time periods; For the Net Interest Margin (X3) variable, a minimum value of -0.176 and a maximum of 0.133 were obtained, with an average value of 0.042 and a standard deviation of 0.032. A positive net interest margin on average indicates that the bank is profiting from the difference between the loan interest and the deposit interest. Nevertheless, a negative minimum value indicates that in some periods or units of analysis, banks are experiencing pressure on interest margins; The Independence variable of the Board of Commissioners (Z) has a minimum value of 0.20 and a maximum of 1.00, with an average of 0.58 and a standard deviation of 0.14. This shows that the proportion of independent commissioners on the board of commissioners is in the range of 58%, which reflects that most of the board of commissioners in the sample has fulfilled the principles of good corporate governance. This level of independence is expected to provide objective supervision of the bank's management; Finally, the Return on Assets (ROA) variable (Y) shows a minimum value of -0.803 and a maximum of 0.035. The mean ROA is -0.003 with a standard deviation of 0.076. A negative average ROA value indicates that overall, the banks in the sample experience low levels of profitability and even losses in some cases. A very low minimum value indicates the presence of a unit or period with very poor financial performance.

#### **Inferential Statistics**

Data processing in this study uses the STATA 17 application. The data of this study is included in the panel data category, which is a combination of cross section data, which is the research object consisting of 29 banking companies and the time series, which is the research period during the period 2019-2023. The following is an analysis of the panel data test after processing with STATA 17, which is as follows:

1. Estimation Model Selection

There are three methods that can be used for panel data in the study, namely Common Effect (CE), Fixed Effect (FE) and Random Effect (RE) regression models. To determine the best estimation model in this study, the following tests were carried out.

a. Chow Test

The following are the results of the chow test in determining the most appropriate fixed effect or common effect model to use as shown in Table 3 below.

I able	3. Chow Test Results
F test that all $u_i=0$ : F(28, 113) = 3.12	Prob > F = 0.0000
Source: Processed by STATA 17, Year 2025.	

According to Table 3 above, it shows that the probability value of F, which is 0.0000 where the value is <0.05 which means that H0 is subtracted. So, the method chosen is FEM.

b. Hausman Test

The following are the results of the thirst test in choosing whether the fixed effect or random effect model is most appropriate to use as shown in Table 4 below.

Table 4. Hausman Test R	Results
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$chi2(3) = (b-B)'[(V_b-V_B)^{-}(-1)](b-B)$	
= 90.37	
Prob > chi2 = 0.0000	

#### Source: Processed by STATA 17, Year 2025.

According to Table 4 above, the value of  $chi^2(3) = 90.37$  with the Prob >  $chi^2 = 0.0000$ . These results indicate that there is a significant difference between the Fixed Effects model and the Random Effects model. In particular, a very small p-value (less than 0.05) suggests that it rejects the zero (H<sub>0</sub>) hypothesis that the difference between the two models is insignificant which means that the fixed effect (FE) model is more appropriately used.

2. Classic Assumption Test

This is the result of a classical assumption test without the moderation variables used in the fixed effect estimation model, which are as follows.

a. Multicollinearity Test

The following is presented a table of multicollinearity test results based on VIF (Variance Inflation Factor) as follows:

Variable	VIVID	1/VIF
X1	1,39	0.717668
X2	3,15	0,317937
X3	2,58	0,388160
BRIGHT RED	2,37	

Table 5. Multicollinearity Test Results of Panel Data Regression

#### Source: Processed by STATA 17, Year 2025.

Based on the Table 5, it shows that all independent variables (X1, X2, and X3) have a Variance Inflation Factor (VIF) value that is below 10.00, which is 1.04; 1.03; and 1.01, respectively. Thus, it can be concluded that the independent variables used in this study are not highly correlated with each other.

b. Heteroscedasticity Test

The heteroscedasticity test was carried out to test whether there were symptoms of heteroscedasticity in this research model. If there is a symptom of heteroscedasticity, it indicates that there is inconsistency in the model variation and causes the error to be inconsistent. The following are the results of the robust heteroscedasticity test as shown in Figure 2 below.

Figure 2. Heteroscedasticity Test of Panel Data Regression with Fixed Effect and Robust Standard Error

	(within) regr	ression		Number o		=	145
Group variable: code_num				Number o	of groups	=	29
R-squared:				Obs per	group:		
Within	= 0.1468					n =	5
Between	= 0.7473				av	g =	5.0
Overall	= 0.0600				ma	× =	5
				- ( )			
				F(3, 28)	_	=	2.67
corr(u_i, Xb)	= -0.7464			Prob > F	•	=	0.0665
		(Std. er	r. adjust	ted for 29	) cluster	s in	code_num)
		(Std. er Robust	r. adjust	ted for 29	) cluster:	s in	code_num)
Y	Coefficient		r. adjust t	ted for 29 P> t			<pre>code_num) interval]</pre>
Y X1	Coefficient 0064548	Robust				onf.	
		Robust std. err.	t	P> t	[95% co	onf. 97	interval]
×1	0064548	Robust std. err.	t -0.11	P> t  0.913	[95% co	onf. 97 71	interval]
X1 X2	0064548 .018513	Robust std. err. .058233 .0229301	t -0.11 0.81	P> t  0.913 0.426	[95% co 12573 02845	onf. 97 71 99	interval] .1128302 .0654832
X1 X2 X3	0064548 .018513 -1.148589	Robust std. err. .058233 .0229301 .4822333	t -0.11 0.81 -2.38	P> t  0.913 0.426 0.024	[95% co 12573 02845 -2.1363	onf. 97 71 99	interval] .1128302 .0654832 1607789
X1 X2 X3 _cons	0064548 .018513 -1.148589 .0288184	Robust std. err. .058233 .0229301 .4822333	t -0.11 0.81 -2.38	P> t  0.913 0.426 0.024	[95% co 12573 02845 -2.1363	onf. 97 71 99	interval] .1128302 .0654832 1607789

Source: Processed by STATA 17, Year 2025.

As per Figure 2 shows that The Fixed Effect regression model, which has been adjusted to robust standard error, can be explained that not all independent variables have a significant effect on the financial performance of banking companies. Variables X1 and X2, which in this context are assumed to be representations of financial risk indicators and interactions with Good Corporate Governance (GCG), show a significance value above 0.05, which means that they do not have a statistically significant influence on Return on Assets (ROA) as a proxy for financial performance. In contrast, the X3 variable showed a significant negative influence, with a coefficient value of -1.14859 and a significance value of 0.024. This indicates that certain increased risks (e.g., Non-Performing Loans/NPLs or High Leverage) have a detrimental impact on the company's financial performance. These findings support the theory that uncontrolled financial risks will lower the efficiency and profitability of banks.(Brigham & Houston, 2019). Adjustment to heteroscedasticity through robust standard error provides confidence that even though the error variance is not uniform (heteroscedastic), the test results remain valid and unbiased. The use of this approach is common in panel data regression to improve the accuracy of p-values and avoid erroneous conclusions due to violations of classical assumptions. Using robust standard errors, the coefficient calculation has been adjusted to address previously detected heteroscedasticity, ensuring that the estimation results remain valid and reliable.

3. Regression Data Panel

The panel data regression model is used because the data used is a combination of time series and cross section data. Initial testing was conducted to determine the best model between the Pooled Least Square (PLS), Fixed Effect Model (FEM), and Random Effect Model (REM). The following are the results of the panel data regression test using the fixed effect (FE) estimation model as shown in Figure 3 below.

Figure 3. Results of	of Panel Data Regressio	n Test with Fixed	Effect (FE)

Fixed-effects (within) regression Group variable: <b>code_num</b>							145 29
R-squared:	Obs per group:						
Within		min	=	5			
Between	= 0.7473				avg	=	5.0
Overall :	= 0.0600				max	=	5
				F(3,113)		=	6.48
corr(u_i, Xb)	= -0.7464			Prob > F	:	=	0.0004
Y	Coefficient	Std. err.	t	P> t	[95% cor	nf.	interval]
Y 	Coefficient	Std. err.	t -0.08	P> t  0.935	[95% cor		-
	0064548		_		-	,	.1493152
×ı	0064548 .018513	.0786248	-0.08	0.935	1622247	7 L	.1493152 .0943942
×1 ×2	0064548 .018513	.0786248 .038301	-0.08 0.48	0.935 0.630	1622247 0573681	7 L 1	.1493152 .0943942 6302544
×1 ×2 ×3	0064548 .018513 -1.148589	.0786248 .038301 .2616292	-0.08 0.48 -4.39	0.935 0.630 0.000	1622247 0573681 -1.666924	7 L 1	.1493152 .0943942 6302544
X1 X2 X3 _cons	0064548 .018513 -1.148589 .0288184	.0786248 .038301 .2616292	-0.08 0.48 -4.39	0.935 0.630 0.000	1622247 0573681 -1.666924	7 L 1	

#### Source: Processed by STATA 17, Year 2025.

As shown in Figure 3, hthe result of the Fixed Effect test (F test all  $u_i = 0$ ) produces a value of F(28, 113) of 3.12 with a Prob > F = 0.0000. This indicates that there is a significant fixed effect, so the Fixed Effect approach is more appropriate than the Pooled OLS in this model. Thus, it can be concluded that only the X3 variable was shown to have a significant influence on financial performance (Y) proxied with ROA, while the X1 and X2 variables showed no significant influence. In addition, the differences in the characteristics of each company significantly affect the model, so the justification for using the Fixed Effect model is appropriate.

The determination coefficient test  $(R^2)$  was carried out to find out how much the independent variable interprets and influences the independent variable.

Table 6. Determination Coe	fficient Test with Fixed Effect

R-squared	
Within $= 0.1468$	
Between $= 0.7473$	
Overall = 0.0600	

#### Source: Processed by STATA 17, Year 2025.

As per Table 6 it can be explained that R-squared (Within) of 0.1468 indicates that about 14.68% of the variation in Y can be explained by the variation in the variables X1, X2, and X3 in each company, then R-squared Within (0.1468), this is the main determination coefficient for the fixed effect model which shows how much variation of the dependent variable (Y) in each entity can be explained by an independent variable. It is suitable for primary interpretation in the FE model because FE only analyses variables that change in an entity over time.

5. Moderated Regression Analysis (MRA)

In studies with moderation variables, the Moderated Regression Analysis (MRA) approach was used to test whether the moderation variable (in this case Good Corporate Governance or GCG) which strengthened or weakened the influence of independent variables on the dependent variables. The following are the results of the Moderated Regression Analysis (MRA) test in the regression panel data as seen in Figure 4 below.

Figure 4. Moderated Regression Analysis (MRA) Test in Panel Data Regression with Fixed Effect

Fixed-effects	Number o	fobs =	145			
Group variable: code_num				Number of	f groups =	29
R-squared:				Obs per group:		
Within = 0.1842					min =	5
Between = 0.7577 Overall = 0.0454				avg =		5.0
					5	
				F(6,110)	=	4.14
corr(u_i, Xb)	= -0.7379	Prob > F	=	0.0009		
Y	Coefficient	Std. err.	t	P> t	[95% conf.	interval
X1_c	040008	.1001379	-0.40	0.690	2384577	.1584418
X2_c	.0212212	.0406931	0.52	0.603	0594229	.1018653
	871613	.2991072	-2.91	0.004	-1.464373	2788528
X3_c						
X3_c X1Z_c	.6877717	.9751386	0.71	0.482	-1.244724	2.62026
	.6877717 0102024	.9751386 .2823575	0.71 -0.04	0.482 0.971	-1.244724 5697687	
X1Z_c						.549364
X1Z_c X2Z_c	0102024	.2823575	-0.04	0.971	5697687	.549364 11.44582
X1Z_c X2Z_c X3Z_c	0102024 6.070547	.2823575 2.712364	-0.04 2.24	0.971 0.027	5697687 .6952775	.549364 11.44582
X1Z_c X2Z_c X3Z_c _cons	0102024 6.070547 0046919	.2823575 2.712364	-0.04 2.24	0.971 0.027	5697687 .6952775	2.620268 .549364 11.44582 .0054678

#### Source: Processed by STATA 17, Year 2025.

According to Figure 4 above, the results of regression equations with the moderation variable are obtained, namely.

 $\begin{aligned} Y_{it} &= \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} * Z + \beta_5 X_{5it} * Z + \beta_6 X_{6it} * Z + \varepsilon_{it}. \\ &= -0,0046919 + 0,0212212 X_{1it} - 0,871613 X_{2it} + 0,6877717 X_{3it} + 0,6877717 X_{4it} * Z \\ &- 0,0102024 X_{5it} * Z + 6,070547 X_{6it} * Z \end{aligned}$ 

According to this equation, there are 2 variables that have a significant effect on return on assets (Y) which without using the moderation variable, namely market risk, in this case using a net interest margin (X3) proxy with a coefficient of -0.871613 has a significant effect even if the effect is negative or inconsistent with financial performance, in this case using a return on assets proxy (Y). This means that the higher the market risk indicated by the increase in Net Interest Margin, the more likely it is to have a decline in the company's financial performance. This decline may be caused by an imbalance between interest income and interest expenses that are not optimally managed, thus putting pressure on the company's assets. In other words, inefficient market risk management can be a factor that lowers the value of Return on Assets, although in general Net Interest Margin is usually considered a positive indicator in the financial sector. Then, the existence of a moderation variable, namely Good Corporate Government (Z), showed that the interaction between X3 and Z (X3Z c) had a positive and significant coefficient of 6.0705 (p = 0.027), which means that Good Corporate Governance (Z) was able to strengthen the influence of X3 on Y. The higher the implementation of GCG, the greater the positive influence of X3 on the dependent variable; the interaction between X2 and Z (X2Z c) resulted in a negative coefficient of -0.0102, but it was not significant (p = 0.971), so GCG was not able to significantly moderate the influence of X2 on Y; And, the interaction between X1 and Z (X1Z c) had a positive coefficient of 0.6878, but it was also insignificant (p = 0.482), so there was no strong enough moderation effect of GCG on the relationship between X1 and Y. It can be concluded that in this model, only X3 was significantly moderated by the Good Corporate Governance variable, while the other two interactions were insignificant. This shows that the role of GCG as a moderation variable is not uniform to all independent variables and only effective on the X3 variable in increasing its influence on the dependent variable n (Return on Assets). Likewise, the type of classification of moderation variables in this study is pure moderator or interaction moderator, because the Good Corporate Governance variable does not have a direct effect on Return on Assets but has a significant influence when interacting with the X3 variable (market risk). This is in accordance with the classification of Baron & Kenny (1986) which states that a variable is said to be a pure moderator when it only shows the effect of interaction and has no direct influence on the dependent variable. In addition, because the interaction model usually causes high impacts or symptoms of multicollinearity, it needs to be tested again after the moderation variable, as seen in Table 7 below.

Variable	VIVID	1/VIF
X1Z_c	1,55	0,645291
X2Z c	1,09	0,915168
X3Z c	1,37	0,610525
X1Z_c	2,44	0.409984
X2Z c	1,78	0,562964
X3Z c	1,64	0,610525
BRIGHT RED	1,64	

 Table 7. Multicollinearity Test Results After the Moderation Variable

#### Source: Processed by STATA 17, Year 2025.

As per Table 7 shows that all independent variables have a Variance Inflation Factor (VIF) value which is below 10.00. It can be concluded that there are no symptoms of multicollinearity after the interaction of the moderation variable.

6. Hypothesis Testing (Simultaneous or F-Test)

For the results of the test simultaneously or jointly using the F Test with moderation of the reaction with independent variables as seen in **Figure 4** above, it produced a value of F (6.110) = 4.14 with a Prob >  $\mathbf{F} = 0.0009$ , meaning that simultaneously the independent variables in the model had a significant effect on the dependent variables at a significance level of 1%.

From the results of the evaluation, the evaluation of the data analysis and the hypothesis can be interpreted as follows.

1. First Hypothesis Testing; The Effect of Credit Risk on Financial Performance

Credit risk (X1) with a non-performing loan proxy with a coefficient of -0.04008 does not affect financial performance (Y) which is reflected in the return on assets of financial companies in the banking subsector listed on the Indonesia Stock Exchange with a probability level (p-values) of 0.690 > 0.05. This result has a negative or indirect relationship direction and is also insignificant which means **"H1 is rejected"**.

2. Second Hypothesis Testing; The Effect of Liquidity Risk on Financial Performance

Liquidity risk (X2) with a proxy loan to deposit ratio with a coefficient of 0.0212212 does not affect financial performance (Y) which is reflected in the return on assets in financial companies in the banking subsector listed on the Indonesia Stock Exchange with a probability level (p-values) of 0.603 > 0.05. These results have a positive or one-way relationship direction but are not significant which means "H2 is rejected".

3. Third Hypothesis Testing; The Effect of Market Risk on Financial Performance

Market risk (X3) with a proxy net interest margin with a coefficient of -0.871613 affects financial performance (Y) which is reflected in the return on assets in financial companies in the banking subsector listed on the Indonesia Stock Exchange with a probability level (p-values) of 0.004 < 0.05. This result has a negative or non-directional but significant relationship direction which means **"H3 is accepted"**.

4. Testing the Fourth hypothesis; The Effect of Credit Risk on Financial Performance Moderated by Good Corporate Government

Credit risk (X1) with non-performing loan proxies with a coefficient of 0.6877717 does not affect financial performance (Y) which is reflected in the return on assets moderated by good corporate government (Z) which is proxied by the independence of the board of commissioners in financial companies in the banking subsector listed on the Indonesia Stock Exchange with a level of probability (p-values) of 0.482 < 0.05. These results have a positive or one-way relationship direction but are not significant which means **"H4 is rejected"**.

5. Fifth hypothesis testing; The Effect of Liquidity Risk on Financial Performance Moderated by Good Corporate Government

Liquidity risk (X2) with a proxy loan to deposit ratio with a coefficient of -0.0102024 does not affect financial performance (Y) which is reflected in the return on assets moderated by good corporate government (Z) which is proxied by the independence of the board of commissioners in financial companies in the banking subsector listed on the Indonesia Stock Exchange with a probability level (p-values) of 0.971 < 0.05. This result has a negative or a directional but insignificant relationship direction which means "H5 is rejected".

6. Sixth hypothesis testing; The Influence of Market Risk on Financial Performance Moderated by Good Corporate Government

Market risk (X3) with a proxy net interest margin with a coefficient of 6.070547 affects financial performance (Y) which is reflected in the return on assets moderated by good corporate government (Z) which is proxied by the independence of the board of commissioners in financial companies in the banking subsector listed on the Indonesia Stock Exchange with a level of probability (p-values) of 0.027 > 0.05. These results have a negative but not significant which means "H6 is accepted".

7. Hypothesis testing Seventh; The Simultaneous Influence of Credit Risk, Liquidity Risk, and Market Risk on Financial Performance

Credit risk (X1); liquidity risk (X2); and market risk (X3) have a simultaneous or joint effect on financial performance (Y) which is reflected in the return on assets with a prob value of > F of 0.0009 < 0.05 which means significant and affecting.

# VI. Conclusion and Recommendation

# Conclusion

- 1. Credit risk has a negative and insignificant effect on the financial performance of banking subsector companies listed on the Indonesia Stock Exchange. This indicates that increased credit risk tends to lower financial performance, but the effect is not statistically strong enough to be statistically significant. This means that although credit risk is one of the main risks in banking activities, in the context of this study, its fluctuations do not directly affect a company's profitability as measured through return on assets (ROA). This may be due to the bank's ability to implement effective credit risk management or due to other factors that are more dominant in determining financial performance.
- 2. Liquidity risk has a positive and insignificant effect on the financial performance of financial companies in the banking subsector listed on the Indonesia Stock Exchange. This indicates that increased credit risk tends to lower financial performance, but the effect is not statistically strong enough to be statistically significant. This means that although credit risk is one of the main risks in banking activities, in the context of this study, its fluctuations do not directly affect a company's profitability as measured through return on assets (ROA). This may be due to the bank's ability to implement effective credit risk management or due to other factors that are more dominant in determining financial performance
- 3. Market risk has a negative and significant effect on the financial performance of banking subsector companies listed on the Indonesia Stock Exchange. This indicates that increased market risk directly adversely affects the financial performance of banking companies, which is reflected in the decline in the value of return on assets (ROA).
- 4. Good corporate government has a positive and insignificant effect on the financial performance of financial companies in the banking subsector listed on the Indonesia Stock Exchange. This indicates that Good Corporate Governance (GCG) plays a role in moderating credit risk, but the impact is positive but not significant on the financial performance of financial companies in the banking subsector listed on the Indonesia Stock Exchange. This means that although the application of GCG principles has the potential to reduce or manage credit risk, its effect on a company's financial performance is not strong enough to show a significant difference.
- 5. Good corporate government has a negative and insignificant effect on the liquidity risk on financial performance in financial companies in the banking subsector listed on the Indonesia Stock Exchange. This means that although GCG has the potential to manage or reduce liquidity risks, its impact on the company's financial performance actually shows a negative direction, but not significant enough to show a clear or significant change.
- 6. Good corporate government has a positive and significant effect in moderating market risk on financial performance in financial companies in the banking subsector listed on the Indonesia Stock Exchange. This shows that the application of GCG principles can effectively assist companies in managing market risk, which in turn improves their financial performance.
- 7. Credit risk; liquidity risk; and market risk has a simultaneous or joint effect on the financial performance of financial companies in the banking subsector listed on the Indonesia Stock Exchange. This shows that the three types of risks not only impact individually but also interact with each other in influencing the company's financial performance.

# Recommendation

- 1. For the Management of Banking Companies
  - a. The results of the study show that credit risk has a negative and insignificant effect on financial performance in banking subsector companies listed on the Indonesia Stock Exchange. Therefore, if you want to improve the financial performance of banking companies through credit risk, focus your attention on net interest margin.
  - b. The results of the study show that liquidity risk has a positive and insignificant effect on the financial performance of financial companies in the banking subsector listed on the Indonesia Stock Exchange. Therefore, if you want to improve the financial performance of banking companies through liquidity risk, the focus of attention is on the loan to deposit ratio.
  - c. The results of the study show that market risk has a negative and significant effect on the financial performance of financial companies in the banking subsector listed on the Indonesia Stock Exchange. Therefore, if you want to improve the financial performance of banking companies through market risk,

the focus of attention is on net interest margin.

- d. The results of the study show that good corporate government has a positive and insignificant effect on moderating credit risk on financial performance in financial companies in the banking subsector listed on the Indonesia Stock Exchange. Therefore, if we want to ensure that GCG really plays an optimal role in moderating credit risk and has a real impact on improving financial performance, then management's focus should be directed to strengthening the functions of the board of commissioners and audit committees, where companies must ensure that the board of commissioners and audit committees carry out effective supervision functions over the credit granting process and credit risk management. Periodic evaluations of the credit portfolio and compliance with the prudential principle must be conducted objectively and transparently.
- e. The results of the study show that good corporate government has a negative and insignificant effect in moderating liquidity risks on financial performance in financial companies in the banking subsector listed on the Indonesia Stock Exchange. Therefore, if you want to ensure that GCG really plays an optimal role in moderating liquidity risk and has a real impact on improving financial performance, then management's focus should be directed to strengthening the role of good governance principles in liquidity management.
- f. The results of the study show that good corporate government has a positive and significant effect in moderating market risk on financial performance in financial companies in the banking subsector listed on the Indonesia Stock Exchange. Therefore, if we want to ensure that GCG really plays an optimal role in moderating market risk and has a real impact on improving financial performance, then the focus of management's attention is directed to strengthening the overall application of GCG principles in market risk management strategies.
- g. The results of the study show that credit risk, liquidity risk; and market risk have a simultaneous effect on the financial performance of financial companies in the banking subsector listed on the Indonesia Stock Exchange. Therefore, management should adopt an integrated and holistic risk management approach to minimize the cumulative impact of these three types of risks on the company's financial performance.
- 2. For further research
  - a. Given that the results show that credit risk has a negative and insignificant effect on financial performance, further research should use one more tool or instrument besides non-performing loans (NPLs) such as credit risk-weighted assets, which better reflect the level of exposure and handling of credit risk by banks.
  - b. Given that the results of the study show that liquidity risk has a positive and insignificant effect on financial performance, the next study should consider not only using the loan to deposit ratio (LDR), but also other indicators such as liquidity coverage ratio (LCR), net stable funding ratio (NSFR), and cash ratio in order to capture the liquidity dimension more comprehensively.
  - c. Given that the results of the study show that good corporate government has a positive and insignificant effect in moderating credit risk on financial performance, further research should consider using tools or instruments more specific, such as the GCG index from the OJK, the number of meetings of the board of commissioners, independent ownership, or assessment scores from governance rating agencies.
  - d. Given that the results of the study show that good corporate governance has a negative and insignificant effect on moderating liquidity risk on financial performance, further research should consider the role of GCG in managing liquidity risk that may be long-term and indirect. Therefore, the use of dynamic panel data or longitudinal models can help observe the effect of GCG on liquidity risk over a longer and more stable period of time.

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