

CHAPTER I

INTRODUCTION

1.1. Background

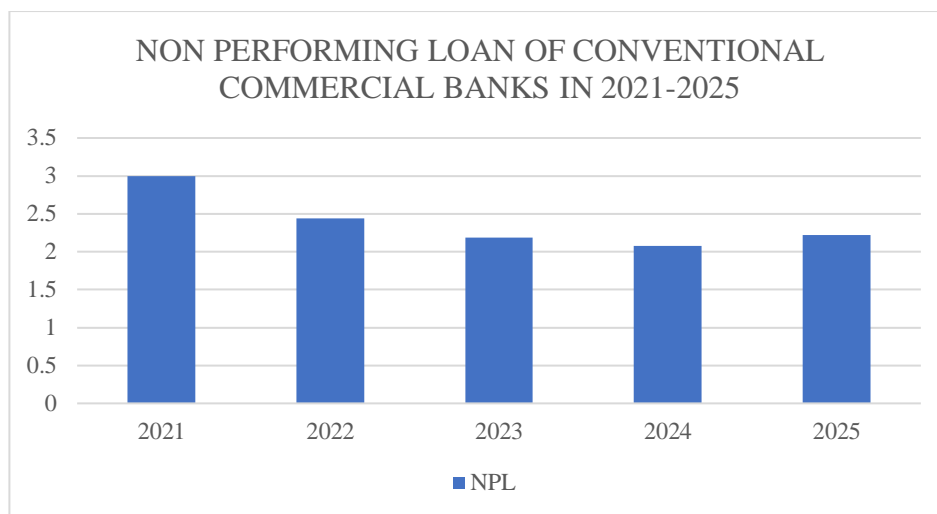
The strategic role in the financial system has been carried out by the banking sector as an intermediary institution, where funds from the community are first collected, and then redistributed to various sectors of the economy. The distribution process is realized through various financing mechanisms, with credit facilities generally positioned as the main instrument in supporting the sustainability and dynamics of economic activities. The distribution of this financing is a means to meet the needs of the community, support the smooth running of trade activities, strengthen the production process, provide services, and even help financing consumption. In addition, banks also provide various services that make it easier for people to carry out financial activities. These services include transaction facilities such as transfers, deposits, withdrawals, and payments as well as payment traffic services that allow the transfer of funds between parties through the banking system

In the end, all of these activities can increase economic growth and the welfare of the community at large . However, credit disbursement activities that are used as the main function in banking operations are inseparable from the potential risks, especially credit risks that under certain conditions can lead to the emergence of Non Performing Loan (NPL) (Herfina and Muchda, 2025).

The term Non-Performing Loan (NPL) itself is understood as a representation of credit risk, namely the possibility of losses experienced by banks when the debtor's credit repayment obligations cannot be fulfilled as they should Jaeng, 2024 The NPL level is known to be influenced by various factors, including credit quality that tends to be less than optimal, inefficiencies in managing operational costs, and industrial scale which contributes significantly (Annisa, Ernitawati and Wulandari, 2022). If the NPL level increases, it implicitly reflects a decline in the quality of credit disbursement, which is characterized by an increasing proportion of Non Performing Loan. In a broader context, such an increase not only increases the risk exposure that banks have to bear, but also has the potential to have more complex implications for the performance and overall health of the banking.

Over the past five years, the condition of conventional commercial banks in Indonesia has shown fluctuations in the aspect of credit risk. Based on OJK data for the 2021-2024 period, credit risk indicators tend to decrease. However, in 2025 there will be another increase, which indicates a new pressure on the quality of banking credit.

Figure 1.1 Percentage of Non Performing Loan in Conventional Commercial Banks in Indonesia During 2021–2025



Source : OJK, 2025

Looking at the development of NPL in the 2021–2025 period, there is a fairly consistent improvement in credit quality. In 2021, NPL was at the highest position of 3%, then fell to 2.44% in 2022 and continued to decline to 2.19% in 2023. This downward trend continues until it reaches a low of 2.08% in 2024, reflecting the increased effectiveness of credit risk management by banks. However, in 2025 there will be a slight increase to 2.22%, which indicates that although credit quality is generally improving, credit risks still need to be watched out for and managed sustainably (OJK, 2025).

The level of Non-Performing Loan (NPL) in banking is basically also influenced by the monetary policy set by Bank Indonesia, especially through the determination of the Bank Indonesia Certificate (SBI) interest rate and the regulation of the money supply using the Reserve Requirement Ratio (GWM) instrument. This policy, indirectly, forms conditions that affect the performance

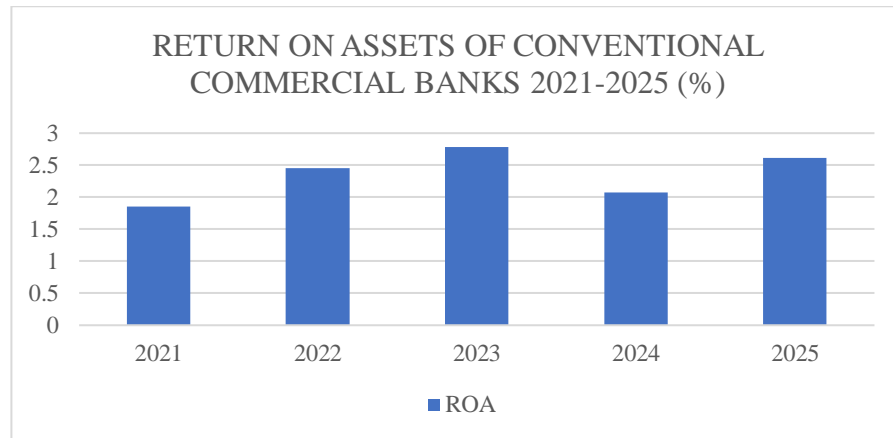
of banks in distributing credit more efficiently while keeping the level of non-performing loans within controlled limits. In addition to these external factors, the dynamics of NPL cannot be separated from the internal conditions of the bank itself, which are represented through the Capital Adequacy Ratio (CAR), Return on Assets (ROA), and Operating Expenses to Operating Income (BOPO) indicators, among others. These three indicators reflect the level of capital adequacy, profit-making ability, and operational efficiency of banks, which as a whole play a role in determining the bank's ability to manage and control credit risk.

In the context of banking, ROA is an important indicator in assessing the bank's ability to generate profits from its operational activities, including from credit distribution activities. Return on Assets (ROA) is understood as a profitability ratio used to represent the amount of profit that can be generated from each asset owned by the company. Through this ratio, the level of efficiency of asset management can be identified, especially in terms of the extent to which all resources owned can be utilized and optimized so that they can be effectively converted into profits for the company.

Thus, the financial performance of banks, especially the ability to generate profits, is one of the factors that can determine the ability of banks to improve their capital positions or experience additional pressure (Pradigdo, Albart and Huda, 2025). Therefore, the development of the level of profitability during this period needs to be examined more deeply, as an effort to assess the ability of

banks to manage and reduce the level of non-performing loans through the income that is successfully generated.

Figure 1.2 Percentage of Return on Assets in Conventional Commercial Banks in Indonesia During 2021–2025



Source : OJK, 2025

When viewed from the profitability level of conventional commercial banks as shown in Figure 1.2, which is measured through the Return on Assets (ROA) indicator as a reflection of the asset's ability to generate profits during the 2021–2025 period, it can be seen that the banking stability condition can be seen. The development of ROA shows a tendency to increase from 1.85% in 2021 to 2.78% in 2023, but in 2024 it will decrease to 2.07%, before then increasing again to 2.61% in 2025.

These fluctuations show that the bank's ability to generate profits is not completely stable from year to year. This instability is important because the profits generated by banks play a role as one of the sources to generate capital. In addition to the Return on Assets (ROA) indicator, there are also other factors that also affect the level of credit risk, one of which is the Reserve Requirement

Ratio (GWM). This instrument, indirectly, plays a role in influencing the performance of banks in managing and distributing credit more optimally, so that the level of Non Performing Loan is expected to be suppressed and remain within controlled limits. The Reserve Requirement Ratio (GWM) itself is understood as a number of funds sourced from deposits collected by Private Commercial Banks (BUS) and Conventional Commercial Banks (BUK), which are then required to be deposited with Bank Indonesia in a certain amount in accordance with the provisions that have been set

Figure 1.3 Percentage of Reserve Requirement Ratio in Indonesia During 2021–2025



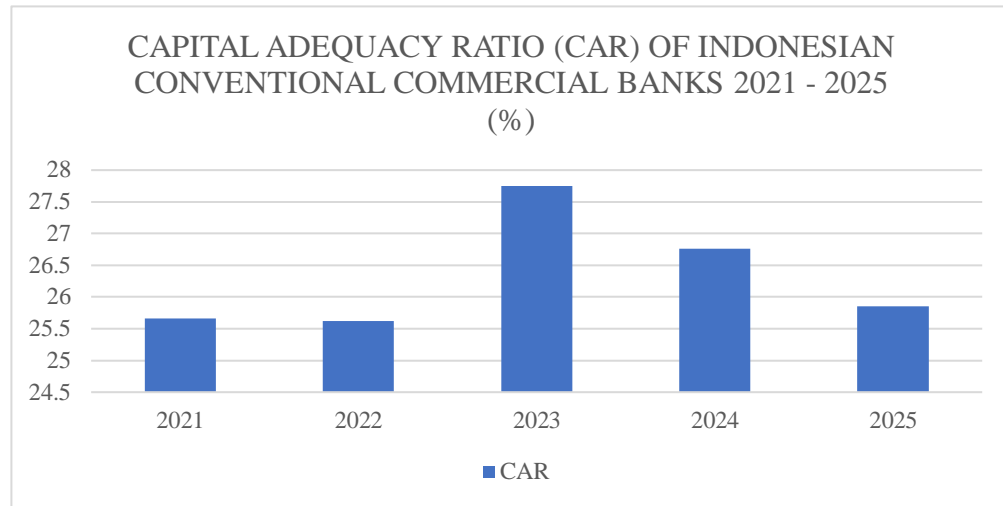
Source : Bank Indonesia, 2025

Based on data on Bank Indonesia's reserve requirement ratio for 2021-2025, there are fluctuations in the Reserve Requirement Ratio (GWM) policy that affect banking liquidity. In 2021, the reserve requirement was recorded at 3%, then increased sharply to 9% in 2022. In 2023, the reserve requirement ratio will decrease to 7%, before rising again to 9% in 2024. In 2025, the reserve requirement ratio will fall again to 7%. This pattern of movement shows that

the reserve requirement policy varies every year, with peaks in 2022 and 2024, and decreases in 2023 and 2025, which need to be paid attention to by regulators and the banking industry in managing liquidity. In addition to Return on Assets (ROA) and Reserve Requirement Ratio (GWM), Capital Adequacy Ratio (CAR) is also seen as one of the factors that has an important role in influencing the level of Non-Performing Loan (NPL). In the context of non-performing credit risk, banks are required to allocate a certain amount of funds that are not only intended for business development, but also to anticipate potential operational financial risks, which in this case are measured through the CAR ratio (Munthe *et al.*, 2025). Conceptually, the Capital Adequacy Ratio (CAR) represents a ratio used to show the extent of the bank's total assets, including credits, participations, securities, and bills to other banks that can be supported by the bank's own capital, outside of funding sources from external parties

Indonesia's banking stability in 2021-2025 shows a weakening trend. After the CAR reached its highest point in 2023, it then declined in 2024 and 2025, which indicates that banks' ability to absorb risk began to decrease even though it remained within relatively stable limits. The decline in banking stability could not be separated from the macroeconomic conditions that developed at that time. Inflationary pressures that have increased after the pandemic have pushed up the prices of basic necessities and business costs, so that people's purchasing power and business actors are also depressed. At the same time, the benchmark interest rate is increasing to control inflation, which makes borrowing costs increase and slow credit growth.

Figure 1.4 Percentage of Capital Adequacy Ratio in Conventional Commercial Banks in Indonesia During 2021–2025



Source : OJK, 2025

Banking stability can be seen from one of the indicators that shows the bank's capital in facing risks, one of which is the Capital Adequacy Ratio (CAR). Based on Figure 1.1, the development of CAR over the past five years shows that Indonesia's banking stability has a gradual tendency to weaken. After reaching the highest increase in 2023 of 27.75%, CAR decreased in the next two years to 26.76% in 2024 and fell again to 25.85% in 2025

Although the decline in 2024 and 2025 is not drastic, it indicates that the bank's capital capacity to absorb risks is starting to weaken when compared to 2023 which had experienced an increase. The fluctuations in Non-Performing Loans (NPL) in each conventional commercial bank in Indonesia during the 2021–2025 period are basically also influenced by the bank's ability to generate profits, which in this case is represented through the Return on Assets (ROA) indicator. This relationship is strengthened by the findings which show that

ROA has a significant and negative influence on NPL, so an increase in ROA tends to be followed by a decrease in NPL levels. This condition implicitly indicates that the bank's ability to manage assets and the effectiveness of its managerial capacity are at a fairly optimal level in reducing the risk of non-performing loans. Thus, the higher the ROA value achieved, the more optimal the use of bank assets in generating profits, which ultimately contributes to reducing the level of bad loans.

In addition to internal factors such as ROA, credit risk or NPL are also affected by macroeconomic conditions and monetary policy. In accordance with research (Hariyanti, 2024) it reinforces that macroeconomic factors such as the previous year's non-performing loans, the Deposit Credit (KKB) ratio, SBI interest rates, and inflation are proven to be strongly and meaningfully related so that they are able to have a real and significant impact on the level of non-performing loans in Indonesia.

One of the instruments in monetary policy that has a significant role is the Reserve Requirement Ratio (GWM), which is used to determine the percentage of third-party funds that must be placed by banks in Bank Indonesia. Based on the findings (Fajriati, Chaidir and Yudha, 2022), it is shown that the reserve requirement has a positive influence on Non-Performing Loans (NPL), which indicates that the increase in reserve requirements has the potential to limit banks' ability to distribute credit optimally, so that the risk of non-performing loans tends to increase. Nonetheless, the partial effect of reserve requirements does not always show consistent significance on every bank.

However, when combined with the Bank Indonesia Certificate (rSBI) interest rate, simultaneously these two variables are able to explain the variation in NPL of up to 83% in commercial banks in Indonesia. This indirectly confirms that monetary policy has a fairly dominant role in maintaining the stability and health of the banking sector.

Another internal factor that affects credit risk is the bank's capital and portfolio structure. The decline in the Capital Adequacy Ratio (CAR) in 2024–2025 from 27.75% to 25.85% shows that banks' ability to absorb credit risk has begun to decline. In addition, a history of previous bad credit and a high Credit-to-Deposits ratio indicate that banks are distributing credit aggressively, so the likelihood of default is greater. Banks with riskier loan portfolios have higher NPL potential, especially when macroeconomic conditions and monetary policy fluctuate. In line with this, research conducted by (Fachrurrozie *et al.*, 2025), indicating that the internal characteristics of banks, particularly those related to capital, have a role that cannot be ignored in influencing the level of Non-Performing Loans (NPL). Theoretically, an adequate CAR can strengthen bank stability and reduce exposure to credit risk; however, studies have shown an inconsistent relationship between CAR and NPL, with some studies finding negative, positive, or insignificant associations. This suggests that the decline in CAR does not necessarily directly increase NPL, but may reflect a weakening of banks' ability to bear credit losses in the future, so that in unstable economic conditions, the risk of increasing NPL remains greater.

The problem of increasing Non-Performing Loans (NPL) in the 2025 period is an indication of the emergence of new pressure on the quality of banking credit after previously showing a post-pandemic improvement trend. This increase occurred in the midst of relatively high interest rates due to tight monetary policy to maintain inflation and exchange rate stability, thereby increasing the interest burden on debtors, especially in the household and micro, small, and medium business sectors. In addition, economic growth, which tends to slow down compared to the initial post-pandemic recovery period, causes some debtors to be able to pay. This situation increases the risk of late credit payments and has the potential to increase the ratio of non-performing loans.

On the internal side, the decline in the Capital Adequacy Ratio (CAR) from 2024 to 2025 indicates a decline in banks' capacity to absorb potential losses due to credit risk. At the same time, the ongoing growth in credit disbursement, especially in the consumptive segment and MSMEs which are relatively more sensitive to changes in interest rates and economic conditions, causes exposure to the risk of default to increase. This condition shows that credit expansion is not fully offset by adequate capital strength, which has the potential to encourage an increase in non-performing loans if the quality of debtors declines. Liquidity is also facing pressure due to the relatively strict Reserve Requirement Ratio (GWM) policy, making it more limited for banks to restructure or expand their credit. This condition is exacerbated by global uncertainty, weakening people's purchasing power, and rising cost of living

which affects debtors' cash flow. Therefore, the increase in NPL in 2025 reflects a combination of macroeconomic pressures and internal bank factors, so further studies are needed to analyze the influence of profitability, capital, and liquidity policies on the level of credit risk in conventional commercial banks in Indonesia.

The results of previous research show that internal factors of banks, such as profitability, liquidity, and capital, have a fairly important role in determining the level of non-performing loans and banking stability. However, the resulting findings still show variation and have not shown strong consistency. High profitability is generally able to strengthen banks' resilience to credit risk, while liquidity policies through monetary instruments can limit or encourage credit expansion, ultimately affecting the quality of financing. In addition, capital adequacy represented through the Capital Adequacy Ratio (CAR) serves as a buffer in dealing with potential losses arising from non-performing loans. However, the relationship between Return on Assets (ROA), Reserve Requirement Ratio (GWM), CAR, and Non-Performing Loans (NPL) did not always show a consistent pattern in each observation period, as they were influenced by economic conditions, monetary policy, and banking characteristics in each country and the time of the study.

In the context of conventional commercial banks in Indonesia for the 2021–2025 period, fluctuations in ROA, changes in reserve reserve policy, and the tendency to decrease in CAR occur simultaneously with the dynamics of NPL which had decreased but increased again in 2025. This condition shows the

complex relationship between banks' ability to generate profits, liquidity policies, capital adequacy, and credit risk. A decline in profitability has the potential to weaken banks' ability to strengthen capital, while reserve policies affect liquidity space and credit disbursement, which further impacts the quality of financing. On the other hand, CAR allegedly acts as an intermediary variable that determines the extent to which the influence of profitability and liquidity can be passed on to changes in the level of non-performing loans. Therefore, this study was conducted with a further study entitled "Analysis of the Influence of Return on Assets (ROA) and Reserve Requirement Ratio (GWM) on Non-Performing Loan through Capital Adequacy Ratio (CAR) as an Intervening Variable in Conventional Commercial Banks in Indonesia" to empirically analyze the direct and indirect relationship between these variables, so as to obtain a more comprehensive understanding of the factors that affect banking credit risk.

1.2. Problem Formulation

1. Does Return on Assets (ROA) in Conventional Commercial Banks directly affect Non-Performing Loan (NPL) in Indonesia?
2. Does the Reserve Requirement Ratio (GWM) in Conventional Commercial Banks directly affect Non-Performing Loan (NPL) in Indonesia?
3. Does Return on Assets (ROA) in Conventional Commercial Banks affect the Capital Adequacy Ratio (CAR), and through the Capital Adequacy Ratio (CAR) affect Non-Performing Loan (NPL) in Indonesia?

4. Does the Reserve Requirement Ratio (GWM) in Conventional Commercial Banks affect the Capital Adequacy Ratio (CAR), and through the Capital Adequacy Ratio (CAR) affect Non-Performing Loan (NPL) in Indonesia?
5. To what extent do Return on Assets (ROA) and the Reserve Requirement Ratio (GWM) contribute to Non-Performing Loan (NPL), both directly and indirectly through the Capital Adequacy Ratio (CAR), in Conventional Commercial Banks in Indonesia?

1.3. Research Objectives

1. To determine and analyze the direct effect of Return on Assets (ROA) in Conventional Commercial Banks on Non-Performing Loan (NPL) in Indonesia.
2. To determine and analyze the direct effect of the Reserve Requirement Ratio (GWM) in Conventional Commercial Banks on Non-Performing Loan (NPL) in Indonesia.
3. To determine and analyze the effect of Return on Assets (ROA) on the Capital Adequacy Ratio (CAR) and its effect on Non-Performing Loan (NPL) through the Capital Adequacy Ratio (CAR) in Conventional Commercial Banks in Indonesia.
4. To determine and analyze the effect of the Reserve Requirement Ratio (GWM) on the Capital Adequacy Ratio (CAR) and its effect on Non-Performing Loan (NPL) through the Capital Adequacy Ratio (CAR) in Conventional Commercial Banks in Indonesia.

5. To determine and analyze the extent of the contribution of Return on Assets (ROA) and the Reserve Requirement Ratio (GWM) to Non Performing Loan (NPL), both directly and indirectly through the Capital Adequacy Ratio (CAR), in Conventional Commercial Banks in Indonesia.

1.4. Research Benefits

1. Theoretical Benefits

- a. For the author, this study is expected to provide a deeper understanding as well as scientific experience in analyzing the influence of Return on Assets (ROA) and Reserve Requirement Ratio (GWM) on Non-Performing Loan (NPL), with Capital Adequacy Ratio (CAR) as an intervening variable, through the application of empirical approaches and quantitative analysis.
- b. For universities, this research is expected to be used as an additional academic reference as well as enriching scientific treasures in the field of economics, especially in the scope of finance and banking related to the relationship between profitability, liquidity policies, capital, and credit risk in conventional commercial banks in Indonesia.

2. Practical Benefits

- a. For banking institutions, the results of this study will be useful as evaluation materials and strategic considerations in increasing profitability, managing liquidity policies, and strengthening capital to reduce the level of non-performing loans and maintain the health of banks in a sustainable manner.
- b. For regulators and policymakers, this study can provide an empirical picture of the influence of the Reserve Requirement Ratio and profitability

conditions on credit risk through capital adequacy, so that it can be an input in policy formulation that supports the stability of the banking system.

- c. For readers and the wider public, this study will be a hope as a comprehensive source of information on the factors that affect non-performing loans in conventional commercial banks in Indonesia, which is able to improve understanding of the conditions and dynamics of the banking sector.

1.5. Scope

This research is classified as a quantitative research that utilizes secondary data, collected from various official sources, including financial services authority (OJK) publication reports, annual financial statements of conventional commercial banks operating in Indonesia, and data related to the Reserve Requirement Ratio (GWM) policy obtained through Bank Indonesia's publication during the observation period from 2015 to 2025. In its implementation, the main focus of this study is directed at testing the causal relationship between the level of profitability represented by Return on Assets (ROA) and liquidity policy as measured through Reserve Requirement Ratio (GWM) for Non-Performing Loan (NPL), by including Capital Adequacy Ratio (CAR) as an intervening variable that plays a role in bridging the relationship between these variables.

More specifically, the scope of this study is limited to Conventional Commercial Banks that are under the supervision of the Financial Services Authority and have the availability of complete, consistent, and continuously accessible financial statements during the study period. The variables analyzed include Return on Assets

(ROA) as an indicator of profitability, Reserve Requirement Ratio (GWM) as an indicator of liquidity policy, Non-Performing Loans (NPL) as an indicator of non-performing loans, and Capital Adequacy Ratio (CAR) as an indicator of capital adequacy as well as a mediation variable. Thus, this study does not include Islamic banks, people's credit banks, or other banking entities that do not meet the criteria for completeness and consistency of data in the period from 2015 to 2025.