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The Effect Of NPL, LDR, And CAR On ROA With NIM As A Mediation Variable In Conventional Bank Listed On The Indonesian Stock Exchange (BEI)

Aura Salsabila[1], Eko Sujadi[2], Elex Sarmigi[3]
[1,2,3]State Islamic Institute of Kerinci, Sungai Penuh, Indonesia

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ABSTRACT
This study aims to examine the influence of NPL, LDR, and CAR on ROA with NIM as a mediating variable. The population used in this research is all conventional banks in Indonesia listed on the IDX in 2022, totaling 140 banks. This study employs secondary data with a sample of 86 banks using purposive sampling method for sample selection. The analytical method used in this research is partial least square method, which is used to analyze the relationship between two or more variables. The results show that NPL does not influence NIM, while LDR significantly influences NIM, and CAR does not influence NIM. Furthermore, NPL significantly influences ROA, but LDR and CAR do not influence ROA, and NIM also does not influence ROA. This study also proves that NIM mediates the influence of NPL on ROA, and LDR does not influence ROA through NIM mediation, and NIM also cannot mediate the influence of CAR on ROA.

Corresponding Author:
Aura Salsabila
State Islamic Institute of Kerinci
Sungai Penuh, Indonesia
aurasalsabila2911@gmail.com

INTRODUCTION

Since the early 21st century, the banking sector has become an integral component of a country's global economy (Ghosh 2017). In Indonesia, the banking sector, including conventional banks, has experienced rapid development over the past few decades (Riyanto et al. 2018). Conventional banks, as financial institutions operating on traditional business models, serve as primary providers of financial services to the public and businesses. They gather funds from customers and allocate them back in the form of loans, creating liquidity and supporting investments and consumption (Putra et al. 2023). Besides their role in mobilizing and channeling funds, banks also play a significant role in supporting economic growth by providing loans to individuals, companies, and other entities (Ueda 2006)

In supporting economic growth and stability, the banking sector must maintain optimal financial health, especially conventional banks. Efficient and profitable banks can support economic growth, whereas banks experiencing financial problems can disrupt financial system stability, which directly affects economic growth (Mashamba, Magweva, and Gani 2023). Based on regulations by the Financial Services Authority (OJK) of Indonesia, the banking sector is required to maintain financial health, mitigate credit risks, and ensure

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liquidity and capital adequacy (Hisan and Septiarini 2020). In order to optimize financial performance, this research will delve deeper into how NPL, LDR, and CAR can shape the dynamics of ROA and NIM as mediating variables in conventional banks in Indonesia.

Return on Assets (ROA) is a crucial indicator for measuring the efficiency and profitability of a financial institution. ROA reflects a bank's ability to generate net profit relative to its total assets. A positive and optimal ROA indicates that the bank can efficiently manage its assets and provide value to stakeholders (Sudiyatno 2013).

High Return on Assets (ROA) in the banking sector has significant positive impacts. ROA reflects the efficiency of asset management and the potential for profit generation. A high ROA level indicates good credit risk management, reducing Non-Performing Loans (NPL). Additionally, a high ROA can increase the Loan-to-Deposit Ratio (LDR) by providing the bank with the ability to offer loans. This can also positively contribute to the Capital Adequacy Ratio (CAR) by increasing the bank's capital. A good ROA can also create favorable Net Interest Margin (NIM), reflecting the bank's ability to generate positive net interest income. Overall, a high ROA not only reflects solid financial performance but also plays a role in supporting the stability and health of the banking sector.

In addition to Return On Assets (ROA), the Net Interest Margin (NIM) ratio is also commonly used as a profitability metric to measure the level of profit earned by a bank over a specific period. Net Interest Margin (NIM) is a critical indicator in analyzing a bank's profitability level. NIM reflects the difference between interest income from productive assets and interest expenses from liabilities. Referring to research findings (Purwanti 2020) showing that NIM positively influences stock prices, this explains that a higher NIM ratio indicates the bank's efficiency in generating net profit from its productive assets. Banks with high NIM tend to have better ROA as they can generate greater net interest income from their operations. The operational efficiency reflected in NIM has a positive impact on the profitability of the bank, allowing them to optimize the use of assets and liabilities.

Several previous studies have shown that NPL, LDR, and CAR influence ROA (Silvia Chandrawati Susoni Basri 2022), as well as NIM (Silvia and Salma 2021). From the research results (Susilawati and Nurulrahmatiah 2021) examining the "Influence of Non-Performing Loan (NPL) and Loan to Deposit Ratio (LDR) on Return on Asset (ROA) with Net Interest Margin (NIM) as a Mediating Variable in State-Owned Banks Listed on the IDX", it is indicated that NPL does not significantly affect NIM. However, NPL can significantly directly influence ROA and does not significantly affect ROA through NIM mediation. Furthermore, LDR significantly influences NIM, but LDR does not significantly affect ROA. Additionally, LDR can significantly influence ROA through NIM mediation. On the other hand, NIM significantly influences ROA.

The credit ratio or asset quality ratio is one of the key ratios in bank management used to assess the credit risk faced by financial institutions. The credit ratio is a measure used to evaluate the health of the credit portfolio of a financial institution, such as a bank. The Non-Performing Loan (NPL) ratio can be used to gauge the credit ratio of a financial institution. The NPL ratio provides an overview of the credit portfolio quality of a bank and can serve as an indicator of the credit risk faced by the financial institution. The higher the NPL ratio, the

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greater the credit risk that the bank may face, which can impact its financial health and profitability (Nguyen Thi Hong 2017). High NPL can also have a widespread negative effect on ROA. Unpaid interest burdens or decreases in the value of productive assets can impair the bank's ability to generate optimal net interest income. Additional operational costs associated with managing and recovering troubled assets can be an additional burden that erodes net income, exerting negative pressure on ROA.

In the banking sector, liquidity ratios are also used to measure a bank's ability to meet its short-term financial obligations (Geeta and Nagasivanand 2021). Loan to Deposit Ratio (LDR) is one of the common ratios used to measure and assess liquidity ratios. LDR reflects the relationship between the amount of loans extended by the bank and the amount of funds received from customers. A high LDR may indicate potential liquidity risk due to reliance on loans. Conversely, a low LDR may indicate suboptimal asset management and a lack of profitable lending activity. LDR, reflecting the extent to which a bank relies on external funds to support lending activities, has complex implications for ROA. As an indicator of dependence on external funding, a high LDR can increase capital costs and interest expenses, affecting the balance between income and expenditure.

The next ratio used to measure the financial performance of banks is the Capital Adequacy Ratio (CAR). The Capital Adequacy Ratio (CAR) is a key measure in the banking sector that indicates the extent to which a bank has sufficient capital to cover risks that may arise from its operational activities. The impact of CAR on Return on Assets (ROA) is crucial in determining the sustainability and financial health of a bank. Banks with high CAR tend to indicate that they have the ability to cover potential losses, especially those related to credit risk. In the context of ROA, a high CAR can have a positive impact. Adequate risk protection can help avoid significant decreases in a bank's net income, enhance operational stability, and create conditions conducive to sustainable ROA.

In addition to directly influencing ROA, NIM also plays a role as a mediating variable between the relationships of NPL, LDR, and CAR or between credit ratios, liquidity ratios, and capital adequacy ratios. This can be seen from the research findings (Astuti and Badjuri 2023) which found that NPL negatively affects NIM, meaning that high levels of problematic loans can impact banks in obtaining interest margins. Meanwhile, LDR does not affect NIM. Additionally, LDR also has no influence on ROA. Furthermore, this research also indicates that NIM does not have the ability to mediate NPL or LDR towards ROA. These research findings contradict the study conducted by (Andiansyah 2020) which found that BOPO and LDR influence NIM, while CAR and NPL do not affect NIM. Additionally, NIM has a positive and significant impact on ROA. Similarly, previous studies conducted by (Dewi and Triaryati 2017), (Farhanditya and Mawardi 2021), and (Rembet and Baramuli 2020) have also found similar results.

From the explanations above, this research is directed towards investigating the variables that influence changes in ROA, where ROA is a profitability ratio indicating how efficiently a bank generates net profit from total assets. Based on previous research findings, the researcher is motivated to choose the same title, namely "The Influence of NPL, LDR, and CAR on ROA with NIM as a mediating variable." In this study, the researcher focuses on

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conventional banks listed on the Indonesia Stock Exchange (IDX). The objectives of this research are to provide a deeper understanding of how NPL, LDR, and CAR ratios affect ROA in the banking sector. Additionally, this study aims to investigate whether NIM acts as a mediating variable to explain the more complex relationships between these aspects. Although there have been many studies on the impact of NPL, LDR, and CAR on ROA with NIM as a mediating variable in the banking sector, the researcher aims to provide the latest research findings on financial performance in 2022. The research results are expected to make a significant contribution to improving banking risk management, optimizing financial performance, and developing strategic policies.

METHODS

This research is a type of quantitative research with an associative approach. Quantitative research with an associative approach is a scientific research method that collects and analyzes numerical data aimed at determining the influence of two or more variables. The variables used in this study consist of independent variables, namely NPL, LDR, and CAR, while the dependent variable is ROA, and the mediating variable is NIM.

The population in this study is conventional banks listed on the Indonesia Stock Exchange in 2022. Conventional banks listed on the IDX consist of 140 banks. Using purposive sampling method, the researcher only took 86 banks as research samples. By using purposive sampling method, the researcher established several criteria in taking samples, namely:

1. Conventional banks listed on the Indonesia Stock Exchange in 2022
2. Conventional banks that published complete financial reports in 2022.

The instrument used in this study is the financial report data of conventional banks consisting of balance sheets, income statements, and cash flow statements in 2022. To collect data, the researcher used documentation method, which is collecting and recording data directly from the annual financial reports of conventional banks published on the Indonesia Stock Exchange (www.bei.idx), as well as financial ratio publication reports from the Financial Services Authority (www.ojk.go.id). In addition, the researcher also obtained data through literature review such as books, previous research reports, and published scientific articles.

This research uses the *Partial Least Square* (PLS) statistical method. *Partial Least Square* method is a statistical method used to analyze the relationship between two or more variables (Nusrang, Fahmuddin, and Hafid 2023). The software used to test and analyze all hypotheses in this study is Smart PLS version 3.0.

RESULTS AND DISCUSSION

Inner Model Analysis

Inner Model Analysis is a part of Structural Equation Modeling (SEM) analysis aimed at testing the causal relationships among hypothesized latent variables. R-Square is used to measure the Inner Model, which aims to determine how much the independent (exogenous) variables influence the dependent (endogenous) variables.

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Table 1. R-Square Calculation Results

Variable	*Adjusted R-Square*
NIM	0.054
ROA	0.192

Source: Secondary Data Processed (2023)

Based on Table 1, the model measurement in this study is based on the results of the Inner Model analysis.

a. The influence of Non-Performing Loan (NPL) or X1, Loan to Deposit Ratio (LDR) or X2, and Capital Adequacy Ratio (CAR) or X3 on Net Interest Margin (NIM) or Z is 0.054 or 5.4%.
b. The influence of Non-Performing Loan (NPL) or X1, Loan to Deposit Ratio (LDR) or X2, and Capital Adequacy Ratio (CAR) or X3 on Return On Assets (ROA) or Y is 0.192 or 19.2%.

Hypothesis Testing

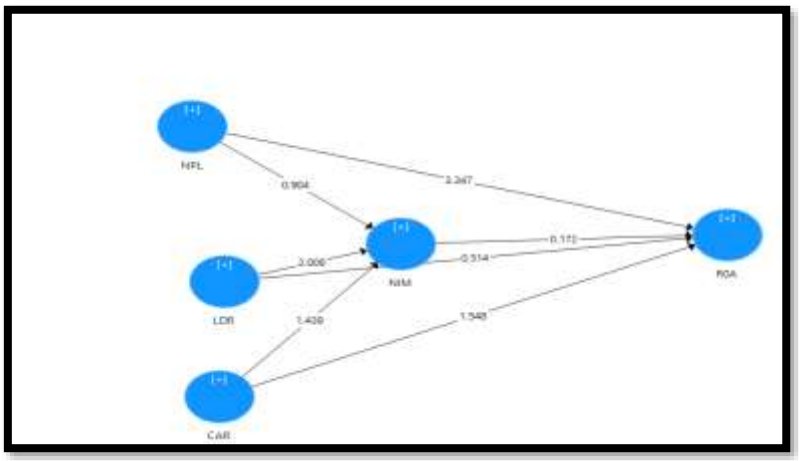

Image 2. Structural Model Diagram
Source: Output Results (2023)

Image 2 depicts the structural model diagram regarding the relationships between variables in this study, conducted after bootstrapping. Bootstrapping in PLS method analysis is performed to provide more comprehensive information about various aspects of the model or observed variables, thus the results are used to test hypotheses.

Table 2. Hypothesis Testing of Direct Effects

Hypotheses	Original Sample (O)	t-statistisc	p-value	Description
$X1 \rightarrow Z$	-0.105	0.904	0.366	H1 Rejected
$X2 \rightarrow Z$	0.358	2.008	0.045	H2 Accepted
$X3 \rightarrow Z$	-0.200	1.439	0.151	H3 Rejected
$X1 \rightarrow Y$	-0.428	3.347	0.001	H4 Accepted
$X2 \rightarrow Y$	0.092	0.514	0.607	H5 Rejected
$X3 \rightarrow Y$	-0.243	1.548	0.122	H6 Rejected
$Z \rightarrow Y$	-0.031	0.172	0.863	H7 Rejected

Source: Processed Secondary Data (2023)

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In hypothesis testing in this study, two criteria are used. First, with a p-value less than 5% or 0.05, the variable has a significant influence. Second, using the t-test value (t-statistic), if the t-test value is greater than the t-table value of 1.96, then the variable has a significant influence.

The results of the test of the influence of NPL (X1) on NIM (Z)

Based on Table 2, the p-value of the NPL (X1) variable is 0.366, which is greater than 0.05. This result indicates that NPL (X1) does not have a significant influence on NIM (Z). Looking at the t-test result of 0.904, which is smaller than 1.96 (the t-table value), indicating that there is no significant influence of NPL on NIM. Therefore, based on these results, H1 is rejected.

The results of the test of the influence of LDR (X2) on NIM (Z)

Based on Table 2, the p-value of the LDR (X2) variable is 0.045, which is smaller than 0.05. This result indicates that LDR (X2) has an influence on NIM (Z). Looking at the t-test result of 2.008, which is greater than 1.96 (the t-table value), indicating that there is a significant influence of LDR on NIM. It can also be observed that the original sample value is 0.358, suggesting that LDR positively influences NIM. Therefore, based on these results, H2 is accepted.

The results of the test of the influence of CAR (X3) on NIM (Z)

Based on Table 2, the p-value for the CAR (X3) variable is 0.151, which is greater than 0.05. This result indicates that CAR (X3) does not have an influence on NIM (Z). Looking at the t-test result of 1.439, which is smaller than 1.96 (the t-table value), further reinforcing the indication that CAR does not have a significant influence on NIM. Both results indicate that H3 is rejected.

The results of the test of the influence of NPL (X1) on ROA (Y)

Based on Table 2, the p-value for the NPL (X1) variable is 0.001, which is smaller than 0.05. This result indicates that NPL (X1) has an influence on ROA (Y). Furthermore, the t-test value of 3.347 is greater than 1.96 (the t-table value). This t-test also indicates that NPL (X1) significantly influences ROA (Y). Additionally, there is an original sample value of -0.428, explaining that NPL (X1) negatively affects ROA (Y). Therefore, H4 is accepted.

The results of the test of the influence of LDR (X2) on ROA (Y)

Based on Table 2, the p-value for the LDR (X2) variable is 0.607, which is greater than 0.05. This result indicates that LDR (X2) does not have an influence on ROA (Y). Furthermore, the t-test result of 0.514 is smaller than 1.96 (the t-table value), further reinforcing the indication that LDR (X2) does not have a significant influence on ROA (Y). Therefore, H5 is rejected.

The results of the test of the influence of CAR (X3) on ROA (Y)

Based on Table 2, the p-value for the CAR (X3) variable is 0.122, which is greater than 0.05. This result indicates that CAR (X3) does not have an influence on ROA (Y). Furthermore, the t-test value of 1.548 is smaller than 1.96 (the t-table value), further reinforcing the indication that there is no significant influence of CAR (X3) on ROA (Y), thus H6 is rejected.

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The results of the test of the influence of NIM (Z) on ROA (Y)

Based on Table 2, the p-value for the NIM (Z) variable is greater than 0.05, specifically 0.863. This result indicates that NIM (Z) does not have an influence on ROA (Y). Furthermore, the t-test result of 0.172 is smaller than 1.96 (the t-table value), indicating that NIM (Z) does not have a significant influence on ROA (Y). Therefore, based on both results, H7 is rejected.

Table 3. Hypothesis Testing of Indirect Effects

Variable	Original Sample (O)	t-statistics	p-values	*Description*
$X1 \rightarrow Z \rightarrow Y$	0.003	0.113	0.910	H8 Rejected
$X2 \rightarrow Z \rightarrow Y$	-0.011	0.142	0.887	H9 Rejected
$X3 \rightarrow Z \rightarrow Y$	0.006	0.135	0.893	H10 Rejected

Source: Processed Secondary Data (2023)

The results of testing the influence of NPL (X1) on ROA (Y) through NIM (Z)

Based on Table 3, the p-value for the NPL (X1) variable is greater than 0.05, specifically 0.910. This result indicates that NPL (X1) does not have an influence on ROA (Y) mediated by NIM (Z). Furthermore, the t-test result of 0.113 is smaller than 1.96 (the t-table value), indicating that NPL (X1) does not have a significant influence on ROA (Y) through NIM (Z). Alternatively, it can be said that NIM (Z) cannot mediate the influence of NPL (X1) on ROA (Y). Therefore, H8 is rejected.

The results of testing the influence of LDR (X2) on ROA (Y) through NIM (Z)

Based on Table 3, the p-value for the LDR (X2) variable is greater than 0.05, specifically 0.887, which can be interpreted as LDR (X2) does not have an influence on ROA (Y) through the mediation of NIM (Z). Similarly, the t-test result of 0.142 is smaller than 1.96 (the t-table value), indicating that LDR (X2) does not significantly affect ROA (Y) through the mediation of NIM (Z). Both results indicate that H9 is rejected.

The results of testing the influence of CAR (X3) on ROA (Y) through NIM (Z)

Based on Table 3, the p-value for the CAR (X3) variable is greater than 0.05, specifically 0.893, which can be interpreted as CAR (X3) does not have an influence on ROA (Y) through the mediation of NIM (Z). Similarly, the t-test result of 0.135 is smaller than 1.96 (the t-table value), indicating that CAR (X3) does not significantly affect ROA (Y) through the mediation of NIM (Z). Both results indicate that H10 is rejected.

Discussion

Based on the research findings, it is indicated that NPL does not have an influence on NIM. This result suggests that poor asset quality does not substantially affect a bank's net interest income. In other words, banks may be able to maintain the stability of their net interest income even in the face of non-performing loans. Additionally, the lack of influence of NPL on NIM may reflect the effectiveness of the bank's credit risk management mechanisms. Banks may have implemented policies and practices that successfully minimize the negative impact of NPL on net interest income. Referring to Bank Indonesia Regulation No. 6/10/PBI/2004 dated April 12, 2004, concerning the Assessment System of Commercial Bank Health Levels, if the NPL value exceeds 5%, it means that the bank's performance is unhealthy (Bank Indonesia 2004). Several previous studies support these findings. For example, a study

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conducted by Farhanditya and Mawardi concluded that NPL does not have a significant influence on NIM (Farhanditya and Mawardi 2021). Furthermore, Susilawati and Nurul also conducted a study on the influence of NPL on NIM, which illustrates that NPL does not have an influence on NIM (Susilawati and Nurulrahmatiah 2021).

Furthermore, the researcher also found that LDR has a significant positive influence on NIM. In general, an increase in LDR can enhance NIM, especially if interest rates, credit portfolio structure, and operational efficiency also experience improvement. The higher the LDR, the higher the interest income earned by the bank. This is due to the increase in the number of loans granted by the bank. Thus, an increase in LDR can boost NIM, especially if the interest rate also increases. The importance of the influence of LDR on NIM also creates implications for the net interest income of the bank. A high LDR can create pressure on the net interest margin, which can affect the overall profitability of the bank. This research finding is supported by studies conducted by Susilawati and Nurul, which concluded that LDR has a significant influence on NIM (Susilawati and Nurulrahmatiah 2021). Additionally, the study conducted by Wahyudi further supports this research result, indicating that LDR has a positive and significant influence on NIM (Wahyudi 2016), Moreover, the research conducted by Margaret and Nurmayanti also yielded similar results to previous researchers, showing that LDR has a significant influence on NIM (Margaret and Nurmayanti 2014).

This study also resulted in finding that CAR does not have an influence or correlation with NIM. The limited relationship between capital adequacy and net interest income indicates that the health of a bank's capital does not directly affect efficiency in generating interest income. With CAR having no impact on NIM, banks view risk management and capital management as two separate aspects. Capital health, measured by CAR, is considered a regulatory compliance component, while factors such as funding structure and loan portfolio are more dominant in influencing NIM. These findings support Marpaung & Lizabeth's findings, which showed that CAR does not have a correlation with NIM (Marpaung and Lizabeth 2018), as well as research conducted by Fauziah and Diana regarding the influence of CAR on NIM, resulting in CAR also not having an influence or correlation with NIM (Fauziah and Diana 2022).

The results of this study also demonstrate that NPL has a significant negative influence on ROA. This means that the higher the NPL, the lower the ROA. NPL reflects non-recoverable loans, reducing interest income and triggering credit reserve allocations, which decrease net profit. High credit risk and weak risk management can diminish stakeholder confidence. Additional operational costs for intensive collection and non-performing asset management can also harm net profit, negatively impacting ROA. These findings are consistent with the research conducted by Susilawati and Nurul, which showed that NPL significantly affects ROA (Susilawati and Nurulrahmatiah 2021). Similarly, a study by Astuti and Badjuri proved that NPL has a negative effect on ROA (Astuti and Badjuri 2023). Furthermore, research by Yuliani also demonstrated that NPL has a negative influence on ROA (Yuliani et al. 2023).

Furthermore, the researchers also indicate that LDR does not have an influence on ROA. A high LDR reflects high bank liquidity risk, while a decrease in LDR indicates a lack of

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effectiveness in credit allocation by the bank. Although this effectiveness affects bank efficiency since most of the income comes from loan interest, the financial performance of the bank does not solely depend on loan allocation. An increase in LDR is not always followed by an increase in ROA. Essentially, when LDR does not significantly affect ROA, it reflects a balance between wise fund allocation, interest rate stability, and effective risk management in maintaining the profitability of financial institution assets. These results support the findings of Astuti and Badjuri, which show no influence of LDR on ROA (Astuti and Badjuri 2023). This conclusion is also reinforced by the study conducted by Susilawati and Nurul, which demonstrates that LDR does not significantly affect ROA (Susilawati and Nurulrahmatiah 2021).

This research also yielded that CAR does not have an influence on ROA. CAR measures a bank's ability to bear risk and meet minimum capital requirements. If a bank has adequate CAR, it may indicate that despite sufficient capital levels, its impact on bank profitability, as measured by ROA, may be limited. Furthermore, a high CAR does not always result in proportional benefits in ROA. Banks with higher CAR may tend to prioritize safety and stability through safer investments, which in turn can limit the potential profits that can be generated from more profitable but riskier assets. These research findings align with studies conducted by Putri et al., which prove that CAR does not affect ROA (Putri, Hendra Sanjaya Kusno, and Juspa Parasi 2022).

Furthermore, the researchers also conducted testing on the influence of NIM on ROA, indicating that NIM does not affect ROA. NIM does not significantly influence ROA, which may be due to careful risk management policies, a focus on safer assets, and a lack of exposure to high-risk assets. Additionally, cost structure and market interest rate conditions may play a role, with high funding costs or interest rate stability limiting the impact of NIM on increasing ROA. Overall, the limitations of NIM in directly reflecting bank financial performance explain its lack of significance on ROA. The same study was conducted by Nufus and Munandar regarding the effect of NIM on ROA, which resulted in NIM not significantly influencing ROA (Nufus and Munandar 2021), This research is also supported by the findings of Usman Harun's study, which showed that NIM does not affect ROA (Harun 2016).

This research also indicates that the influence of NPL on ROA cannot be mediated by NIM. High NPL has the potential to harm bank profits as it can lead to a decrease in ROA. However, its impact significantly depends on the bank's administrative ability to manage and handle disbursed credits. Negative consequences of high NPL levels include unrecoverable credit risks, which can ultimately result in a decline in ROA. Unrecoverable or delinquent credits can lead to additional financial burdens, affecting the overall asset profitability of the bank. These research findings support the results of studies conducted by Astuti and Badjuri, which showed that the influence of NPL on ROA cannot be mediated by NIM (Astuti and Badjuri 2023), Additionally, similar studies were conducted by Anindiansyah et al., which resulted in NIM not being able to mediate the influence of NPL on ROA (Anindiansyah et al. 2020).

From this study, it also shows that the influence of LDR on ROA cannot be mediated by NIM. Increasing the Loan-to-Deposit Ratio (LDR) in banks can enhance profits through

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healthy fund allocation to the public. However, risks still exist, especially related to the potential sudden withdrawal of funds by the public, which can affect the financial performance of banks. Therefore, even though a high LDR can provide benefits, banks need to maintain balance and implement effective risk management strategies to address these potential risks. These findings align with previous research by Astuti and Badjuri, which demonstrated that the influence of LDR on ROA cannot be mediated by NIM(Astuti and Badjuri 2023).

This study also yields that the influence of CAR on ROA cannot be mediated by NIM. Net Interest Margin (NIM) does not act as an intermediary in the relationship between Capital Adequacy Ratio (CAR) and Return on Assets (ROA) in the banking sector. This means that the influence of CAR on ROA is not dependent on the impact of NIM. The direct relationship between CAR and ROA is likely more influenced by other factors such as risk management and operational policies, without NIM involvement as an intermediary. NIM only has an impact on ROA when the CAR level is low. In this context, a high NIM can increase bank revenue, potentially boosting profits and ROA. Conversely, if the CAR level is high, a high NIM will not have a significant impact on ROA. These findings are consistent with previous research by Anindiansyah et al., which indicated that NIM cannot mediate the influence of CAR on ROA (Anindiansyah et al. 2020).

CONCLUSION

Based on the findings and discussions of the research, it can be concluded that NPL does not have a significant effect on NIM. However, NPL has a significant negative effect on ROA, and the NIM variable is unable to mediate the effect of NPL on ROA. Furthermore, LDR has a significant positive effect on NIM, but LDR does not affect ROA, and it does not affect ROA through NIM mediation. Additionally, CAR does not have an effect on NIM or ROA, and NIM also does not mediate the effect of CAR on ROA.From these research findings, banks, especially the conventional ones analyzed, are advised to pay attention to their performance to maximize profits. This includes maximizing the use of productive assets, ensuring adequate capital adequacy, and maintaining the quality of loans to improve the net interest income ratio. Therefore, banking companies are recommended to focus on variables such as NPL and CAR, as the test results have shown negative effects on NIM and ROA, thus affecting the financial performance of banks.However, this study has several limitations and weaknesses, such as dependence on secondary data, which limits the influencing variables, limited sample selection only to conventional banks, and a research period focused only on the year 2022. Therefore, future research is recommended to use other variables such as BOPO, KAP, SBI interest rates, bank size, DPK, and others that can affect the ROA variable outside of secondary data, to obtain more accurate and diverse results. Future researchers are also advised to extend the research period and expand the research objects to obtain better and more accurate results. Furthermore, future research can use other analysis methods or techniques to deepen the analysis and also compare the methods used in this study.

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