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ANALYSIS OF FINANCIAL RATIO (CAR, NPL, NIM, LDR) AND INDEPENDENT COMMISSIONERS ON PROFITABILITY IN BANKING ON THE INDONESIAN STOCK EXCHANGE

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ABSTRACT

This study aims to analyze the effect of Capital Adequate Ratio (CAR), Non Performing Loan (NPL), Net Interest Margin (NIM), Loan to Deposit Ratio (LDR) and Independent Commissioner on Return on Assets (ROA) in banks listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period.The research method used is a quantitative approach with testing using the Partial Least Squares Structural Equation Modeling (PLS-SEM) method. The data source comes from annual reports that have been audited and submitted to the Financial Services Authority. The type of data used is secondary data based on bank financial statements.The results show that CAR and LDR have no significant effect on ROA, while NPL has a negative and significant effect on ROA, but NIM and Independent Commissioner have a positive and significant effect on ROA. This study suggests that adopting a better strategy in managing credit risk management through capital optimization, strengthening governance and can add other ratios as part of the tool to measure bank profitability performance.

Keywords: ***Capital Adequate Ratio, Non Performing Loan, Net Interest Margin, Loan to Deposit Ratio and Independent Commissioner***

INTRODUCTION

The financial crisis in many countries in recent years shows that bank failures are caused by capital that is not sufficiently resistant to risk. The increase in banking credit risk is caused by poor economic stability such as inflation and a decline in the exchange rate. In Indonesia, the impact of the economic crisis triggered by the COVID-19 pandemic began to be felt in the first quarter after the cases appeared.

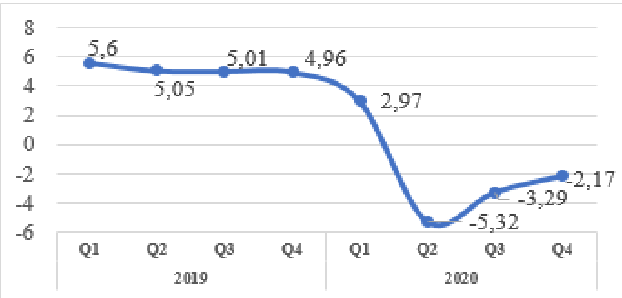

Table1 Eonomic Growth in Indonesia During the Pandemic

According to data from the Central Statistics Agency (BPS), Indonesia's economic growth in 2020 experienced a significant slowdown with negative growth of 2.07%, compared to growth of 5.02% in the previous year. In fact, economic conditions worsened in the second quarter of 2020, recording negative growth of 5.32%. The decline in the frequency of transactions and public spending is the main cause of the decline in Indonesia's economic conditions. Regarding inflation, data from BPS shows that Indonesia's inflation rate in March 2020 was 2.96% and began to decline with inflation rates ranging from 1.3% to 2% during August 2020 – February 2022. However, in March there was a significant increase which was accompanied by the Russia – Ukraine war and rising commodity prices on the global market. Data on economic growth and inflation can be observed that Indonesia's economic conditions have been hit quite badly by the COVID-19 pandemic with negative economic growth and varying inflation rates as a result of global events and domestic policies.

The COVID-19 pandemic also slowed the growth of commercial bank credit/financing, especially in the fourth quarter of 2020 and the

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first quarter of 2021 which recorded negative growth, reflecting a decrease in credit demand from parties directly affected by the pandemic, such as business actors who experienced a decrease in income or liquidity difficulties. However, along with improvements in economic conditions marked by a decline in the number of COVID-19 cases since the first quarter of 2021, there has also been a gradual improvement in the performance of the banking sector. Assets, Third Party Funds (DPK) and commercial bank credit began to show growth in the second quarter of 2022, indicating a recovery in economic activity and a return to confidence in the economy. Economic conditions affected by the COVID-19 pandemic have had a significant impact on the performance and growth of the banking sector in Indonesia with a significant increase in assets and deposits indicating the response of the public and business actors to changing economic conditions (Sadiq, A., & Nisar, M. , 2021).

Banking has a central role as the main link between parties who have excess funds and parties who need funds. Banks have a central role in channeling funds to economic sectors that need financing to invest and develop. Through providing credit and other financial services, banks facilitate investment in infrastructure, industry and other businesses which in turn can generate sustainable economic growth (Ahmed, S., 2020). Apart from that, banking also plays an important role in supporting business growth. Banks provide various financial services to companies including capital loans, working capital credits, and investment banking services helping companies to expand their operations, increase production capacity, and explore new opportunities, which can ultimately increase their productivity and competitiveness in the market (Almazari, A., 2019).

In economic conditions that are still affected by the COVID-19 pandemic, the banking sector may experience pressure on their ROA. Declining economic activity and increasing credit risk can affect banks' ability to generate profits from their assets (Khan, MI, & Ali, S., 2020). ROA as an indicator of bank profitability is not only influenced by internal company factors, but also by external conditions, such as overall economic conditions. In this context, economic conditions that experience stable recovery or positive economic growth tend to support an increase in bank ROA. Increased economic activity can increase demand for credit, which in turn can increase interest income and bank profitability.

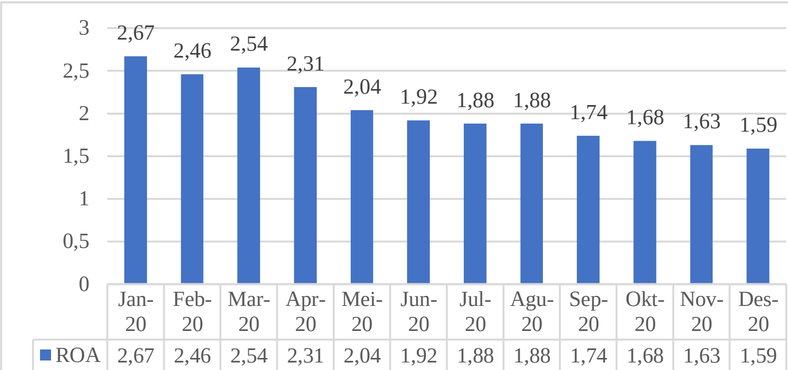

Figure 2. Growth in Return on Assets during the Pandemic Period

But on the contrary,bBased on the data above, it shows the gap phenomenon in economic conditionsWhen depressed or sluggish, as happened during the COVID-19 pandemic, bank ROA experiences a decline. A decline in economic activity can result in increased credit risk and have a negative impact on bank financial performance. In addition, loose monetary policies adopted by central banks to stimulate economic growth can also put pressure on bank interest margins which can reduce earnings and ROA. From the data provided in the table above, it can be seen that ROA has decreased over time from the beginning of 2020 to the end of the same year. At the beginning of the year (January-March 2020), ROA was at a relatively high level ranging from 2.46% to 2.67%. However, since April 2020 ROA has begun to decline consistently every month. In December 2020, ROA reached the lowest level in that period, namely 1.59%.

In the banking industry, there are two factors that influence profitability, namely internal and external factors. Internal factors refer to elements that exist within the company and can be managed directly, including bank operational activities, risk management and other components. Meanwhile, external factors include aspects that come from outside the company, such as macroeconomic

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variables which include inflation rates, interest rates, gross domestic product and the rupiah exchange rate (Setyaningsih et al., 2018).The COVID-19 pandemic has created major challenges for the banking sector which affects financial performance such as ROA, NIM, CAR and LSDR. In facing this situation the presence of an independent Commissioner is more important than before. Independent Commissioners can help ensure that banks take appropriate steps in managing risks arising from the pandemic, such as increased credit risk and market volatility which in turn can affect banking performance.

This research is to fillresearch gap or research gapin the literature related to the influence of Net Interest Margin (NIM), Capital Adequacy Ratio (CAR), Non-Performing Loans (NPL) and Loan to Deposit Ratio (LDR) on Return on Assets (ROA) of banks listed on the Stock Exchange in Indonesia, especially in the context of the COVID-19 pandemic situation and the post-pandemic economic recovery period.

The novelty of this research is by referring to existing literature, bseveral studies conducted previouslyDuring the COVID-19 pandemic, KI's role as a supervisor and strategic advisor has become increasingly important, considering the complexity of the challenges faced by the banking sector. However, to date, there has not been much research that specifically evaluates the impact of the presence of independent IP on strategic decision making related to risk management, compliance and bank capital management during times of crisis and recovery. Therefore, research that can be explored is how the presence of independent IP affects bank financial performance, especially in facing the challenges and uncertainty caused by the COVID-19 pandemic. Further research can explore the role of KI in facilitating adaptive and responsive decision making to rapidly changing business environments, as well as its impact on banks' ROA, NIM and CAR during times of crisis and recovery. By filling this research gap, we can provide a better understanding of the importance of IP independence in supporting the stability and growth of the banking sector in facing the challenges faced during the crisis and post-pandemic recovery period.

FORMULATION OF THE PROBLEM

This research aims to fill the gap in the literature regarding the influence of Net Interest Margin (NIM), Capital Adequacy Ratio (CAR), Non-Performing Loans (NPL), and Loan to Deposit Ratio (LDR) on Return on Assets (ROA) of banks listed in Indonesia Stock Exchange, especially during the COVID-19 pandemic and the economic recovery period. Although several studies have examined bank financial performance factors, less have considered the intervening role of Independent Commissioners in this relationship amidst economic uncertainty. Additionally, there has been little focus on the changing influence of these variables during economic recovery and the significance of the role of Independent Commissioners. Thus, it is hoped that this research can provide a new understanding of the dynamics of bank financial performance and the importance of Independent Commissioners in facing challenges in the Indonesian banking sector.

LITERATURE REVIEW

The Influence of Capital Adequate Ratio (CAR) on Return on Assets (ROA)

Capital resilience in principle does not affect ROA in banking companies. This matterThis occurs because of OJK regulations regarding CAR which state that the CAR for banks is a minimum of 8%. This condition means that the Bank always ensures that the regulations regarding the Capital Adequacy Ratio (CAR) can always be fulfilled.

However, banks tend to keep their CARs at no more than 8% because this means idle funds or even waste, because in fact the main capital of banks is trust, while the 8% CAR is only intended by Bank Indonesia to adapt conditions to international banking according to the BIS.

The results of previous research by Setyarini (2020) on Regional Development banks in Indonesia show that the Capital Adequacy Ratio (CAR) has a positive and significant effect on ROA. Furthermore, research conducted by Hediati and Hasanuh (2021) shows that CAR has a positive effect on ROA.

These results are in line with the results of research conducted by previous researchers which stated that CAR had a significant positive effect on ROA (Nurfitriani, 2021; Pratama et al., 2021).So the formulation of this hypothesis is as follows:

H1: Capital Adequancy Ratio (CAR) has a positive effect on Return On Assets (ROA) in Banking

The Effect of Non Performing Loans (NPL) on Return on Assets (ROA)

Non-Performing Loans (NPL) is a ratio that measures the level of non-performing loans or bad credit against the total loans and advances provided by the bank. This ratio is the main indicator in measuring credit risk and bank credit quality, where the higher the NPL indicates the greater the proportion of loans and advances that fail to be paid or are more than 90 days late (Baasi, 2018).

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Credit risk has a significant impact on banking profitability because increasing this risk can cause an increase in collectibility which leads to irregularities in credit payments according to the predetermined time period. This resulted in a lack of profits obtained from credit repayments, resulting in a decline in overall banking profitability.The results of previous research by Setyarini (2020) show that Non-Performing Loans (NPL) have a significant negative effect on ROA.So the formulation of this hypothesis is as follows:

H2: Non-Performing Loans (NPL) Have a Negative Influence on Return on Assets (ROA) in Banking

The Effect of Net Interest Margin (NIM) on Return on Assets (ROA)

NIM or Net Interest Margin is a ratio used to measure net interest income generated from the use of productive assets (Setyarini, 2020). A higher NIM ratio indicates that the bank is more effective in placing its productive assets in the form of credit (Setyarini, 2020). An increase in NIM shows that interest income on productive assets managed by the bank has also increased, thereby reducing the possibility of the bank experiencing financial problems (Setyarini, 2020).

Setyarini's (2020) research found that NIM has a positive and significant effect on ROA. Similar findings were also shown by Pramana and Rahyuda's (2021) study which stated that NIM had a significant positive effect on ROA. Consistent results were obtained by Rosandy and Sha (2022) who found that NIM had a significant positive influence on ROA. So the formulation of this research hypothesis is as follows:

H3: Net Interest Margin (NIM) has a positive effect on Return On Assets (ROA) in Banking

The Effect of Loan to Deposit Ratio (LDR) on Return on Assets (ROA)

A high LDR ratio indicates that the bank has low liquidity or is having difficulty fulfilling its obligations. On the other hand, a low LDR ratio indicates that the bank is in liquid condition and able to fulfill its obligations well. Illiquid banks will face challenges in restoring public trust and carrying out their main operational activities optimally (Maulana, Dwita, and Nayang (2021).

The results of the latest research confirm this, where Maulana, Dwita, and Nayang (2021) found that LDR had a positive and significant effect on the ROA of commercial banks in Indonesia during the 2017-2019 period. Oktaviani et al. (2019) also concluded similar results with a positive and significant influence of LDR on ROA of commercial banks.

Furthermore, Khoiriyah (2022) shows that LDR partially influences ROA.So the formulation of this research hypothesis is as follows:

H4: Loan Deposit Ratio (LDR) has a positive influence on Return On Assets (ROA) in banking

The Influence of Independent Commissioners on Return on Assets (ROA)

Independent Commissioners are individuals who have no interest relationship with controlling shareholders, directors or majority shareholders, so they are expected to provide objective and independent supervision in carrying out the company's management functions. Dewi Widyaningsih's research (2018) shows that independent commissioners have a positive but not significant effect on company value.

The research results show that independent commissioners have a positive influence on company value, although not yet significant. Research by Muhammad Nuryono et al. (2019) and Fitri Amaliyah & Eliada Herwiyanti (2019) confirm this finding. In contrast, Alfiana Suri et al. (2020) found that an independent board of commissioners can have a significant influence if it is effective. The synergy between independent commissioners and the audit committee also contributes to better supervision, thereby increasing company value. So the formulation of this research hypothesis is as follows:

H5: Independent Commissioners have a positive influence on Return On Assets (ROA) in Banking

Framework

The research aims to investigate the effect of several financial ratios on Return on Assets (ROA) in banks listed on the Indonesia Stock Exchange (BEI) during the following economic crisis period.

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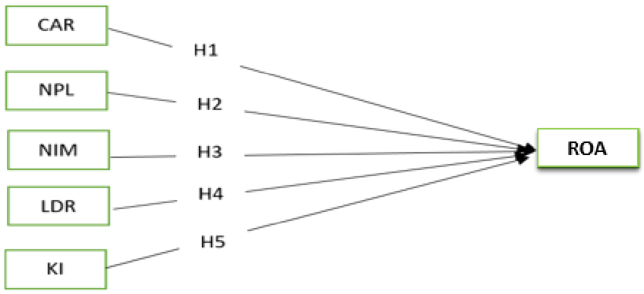

Figure 3 Framework of Thought

RESEARCH METHODS

Research Design

The design of this research is quantitative and aims to analyze the influence of Net Interest Margin (NIM), Capital Adequacy Ratio (CAR), Non-Performing Loans (NPL) and Loan to Deposit Ratio (LDR) on Return on Assets (ROA) of banks listed on Stock Exchange in Indonesia.

Types and Sources of Research Data

The type of data source used in research is a secondary data source consisting ofCAR, NIM, LDR, NPL, Independent Commissioner (KI) and ROA. The main data source comes from Indonesian Banking Statistics which is available atwww.ojk.go.idas well as from the annual reports of the sample banks, which can be accessed via the official website of each bank. Furthermore, the types of data and sources of secondary data mentioned above are shown in the table below:

Table 1 Types and Sources of Data

Variable Name	Sourcer	Data Year
Capital Adequate Ratio (CAR)	Banking & OJK Annual LK	2019-2023
Net Interest Margin (NIM)	Banking & OJK Annual LK	2019-2023
Loan to Deposit Ratio (LDR)	Banking & OJK Annual LK	2019-2023
Non Performing Loans (NPL)	Banking & OJK Annual LK	2019-2023
Independent Commissioner (KI)	Banking & OJK Annual LK	2019-2023

Population and Sample

The population in this study are banks operating in Indonesia. Determining the sample using a purposive sampling technique was based on considerations of its suitability for quantitative research and research that does not carry out generalizations. The sample criteria used in this research are as follows:

1. Conventional and sharia commercial banks in Indonesia have been operating since at least 2015 and have gone public
2. Has a positive equity value
3. Bank financial reports are presented in Rupiah denominations
4. Banks with ownership status as banks owned by the Indonesian Government and national private banks.

The samples taken in this research were 37 banks in Indonesia that have gone public to measure CAR, NPL, NIM, LDR, Independent Commissioner (KI) and ROA. Thus, the population data obtained is panel data with open banking companies as a cross section and data years 2019 to 2023 as a time series.

Method of collecting data

This research uses secondary data taken from OJK data in the form of annual financial reports of banks in Indonesia with a data period from 2019 to 2023. The data collection technique was carried out by observing the financial reports of general insurance companies in Indonesia which had been audited and submitted to the OJK.

RESEARCH RESULTS

Variable Descriptive Statistics

The following are descriptive statistics for Capital Adequate Ratio (CAR), Non-Performing Loans (NPL), Net Interest Margin (NIM), Loan to Deposit Ratio (LDR), proportion of Independent Commissioners (KI), and Return on Assets (ROA).

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Table 2 Descriptive Statistics of Research Variables

	CAR	NPLs	NIM	LDR	IK	ROA
MEANS	27.63	3.47	4.47	87.25	0.55	0.55
MAX	201.57	22.27	18.39	355.00	1.00	4.22
MED	22.80	2.94	4.56	85.72	0.50	1.06
MIN	3.21	0.00	-3.52	2.86	0.00	-15.89
STD.DEV	21.27	2.54	2.13	29.44	0.14	2.84

In general, banks listed on the IDX show impressive capital resilience with an average CAR of 27.63%, but wide disparities (lowest CAR of 3.21% to highest of 201.57% indicate a significant gap in financial strength between banks. Asset quality is an area that needs serious attention with an average NPL of 3.47% which is close to the alert threshold and several banks are facing heavy pressure with NPLs reaching 22.27%. The bank's ability to generate net interest income is quite solid, reflected in the average NIM. an average of 4.47% even though there are extreme cases with negative NIM which indicates challenges in asset-liability management.

The banking intermediation function is running quite well with an average LDR of 87.25%, but extreme variations (2.86% to 355%) indicate sharp differences in liquidity strategies between banks. The governance aspect is reflected in the average independent commissioner ratio of 0.55, indicating that overall banks listed on the IDX have a good proportion of independent commissioners. Industry profitability appears moderate with an average ROA of 0.55% but with wide variations (-15.89% to 4.22%) reflecting significant performance disparities.

Overall the Indonesian banking landscape shows resilience but also faces challenges with some banks showing superior performance while others struggle with asset quality and profitability issues. This condition creates opportunities for industry consolidation, improved risk management, and increased operational efficiency in order to strengthen the competitiveness of the national banking sector amidst ever-changing economic dynamics.

Measurement Model Testing (Outer Model)

Validity Test

The validity and reliability testing in this research is described as follows:

Table 3 Fornell-Larcker Validity Test

	CAR	IK	LDR	NIM	NPLs	ROA
CAR	1,000					
IK	-0.107	1,000				
LDR	0.097	-0.106	1,000			
NIM	0.156	0.038	0.211	1,000		
NPLs	-0.110	-0.086	0.045	-0.319	1,000	
ROA	0.038	-0.080	0.034	0.472	-0.493	1,000

The Fornell-Larcker Criterion test in the research complies with the required rule of thumb, which shows that it meets validity. The next validity test is to look at the Heterotrait-Monotrait Ratio (HTMT) value. The required HTMT ratio must be smaller than 1 so that it can be said to meet the validity assessment (Hair et al. 2019).

Reliability Test

The following are the results of the Composite Reliability and Cronbach's Alpha tests shown in the table below:

Table 4. Reliability Test

	Cronbach's Alpha	Composite Reliability
CAR	1,000	1,000
IK	1,000	1,000
LDR	1,000	1,000
NIM	1,000	1,000
NPLs	1,000	1,000
ROA	1,000	1,000

The table above shows that the composite reliability (CR) value has a range of 0.8 to 0.9 which exceeds the minimum threshold value requirement of 0.70. Based on the results of the reliability test in this study, it shows that the measuring instrument in this study meets the reliability value.

Inner Model Testing

After analyzing the measurement model, the next stage is evaluating the structural model (inner model).

Coefficient of Determination

Evaluation of the structural model in Partial Least Square can be seen from the value of the coefficient of determination orR2 for the dependent construct while the path coefficient values or t-values indicate the level of significance in hypothesis testing. Based on the research results, it shows the following values:

Table 5. Coefficient of Determination Test Results

	R Square	R Square Adjusted
ROA	0.376	0.364

The regression model for ROA (Return on Assets) shows better performance with R Square 0.376 and R Square Adjusted 0.364. These results indicate that 37.6% (or 36.4% after adjustment) of the variability in Return on Assets can be explained by the independent variables in the model. Even though this value shows a higher predictive ability than the KI model, there is still around 62.4% variation in ROA that cannot be explained by the model.

Hypothesis Testing

Analysis was carried out using the t-statistical test to determine the significance of the influence of each variable on ROA.

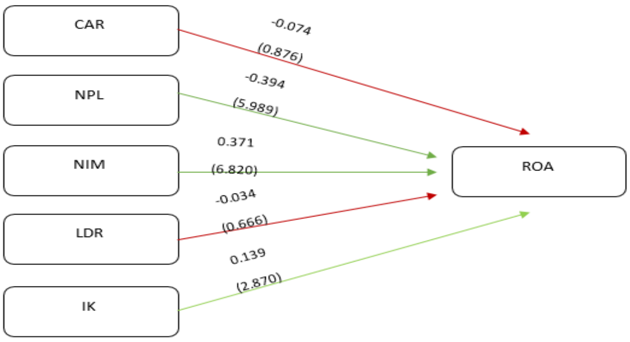

Figure 4. Direct Testing of Variables

Bootstrapping test results are as follows:

Table 6. Hypothesis Testing

	Original Sample (O)	Standard Deviation	T-stat	P-Values	Hypothesis
CAR -> ROA	-0.074	0.085	0.876	**0.382**	**Rejected**
IK -> ROA	0.139	0.048	2,870	**0.004**	**Accepted**
LDR -> ROA	-0.034	0.051	0.666	**0.506**	**Rejected**
NIM -> ROA	0.371	0.054	6,820	**0,000**	**Accepted**
NPL -> ROA	-0.394	0.066	5,989	**0,000**	**Accepted**

1. The influence of Capital Adequate Ratio (CAR) on ROA
Capital Adequate Ratio (CAR) has a negative influence on ROA with a t-statistic value of -0.876 and a p-value of 0.382. Because the p-value is greater than 0.05, the hypothesis that CAR has a significant effect on ROA is rejected. This means that CAR does not have a significant influence on company profitability as measured by ROA.

2. The influence of Loan to Deposit Ratio (LDR) on ROA
Loan to Deposit Ratio (LDR) has a negative influence on ROA with a t-statistic value of -0.666 and a p-value of 0.506. Because the p-value is greater than 0.05, the hypothesis that

LDR has a significant effect on ROA is rejected. Thus, the LDR variable does not show a significant influence on banking company profitability

3. The influence of Net Interest Margin (NIM) on ROA
Net Interest Margin (NIM) has a positive and significant influence on ROA with a t-statistic value of 6.820 and a p-value of 0.000. Because the p-value is smaller than 0.05, the hypothesis that NIM has a significant effect on ROA is accepted, indicating that a higher net interest margin contributes to increasing the profitability of banking companies.
4. The Effect of Non-Performing Loans (NPL) on ROA
Non-Performing Loans (NPL) show a negative and significant influence on ROA with a t-statistic value of -5.989 and a p-value of 0.000. Because the p-value is smaller than 0.05, the hypothesis that NPLs have a significant effect on ROA is accepted, meaning that an increase in NPLs tends to reduce the profitability of banking companies, considering that non-performing loans have a negative impact on bank financial performance.
5. The influence of Independent Commissioners (KI) on ROA
The Independent Commission (IK) shows a positive and significant influence on ROA with a t-statistic value of 2.870 and a p-value of 0.004. Because the p-value is smaller than 0.05, the hypothesis that Independent Commissioners have a significant effect on ROA is accepted, indicating that increasing the proportion of independent commissioners can increase the profitability of banking companies.

DISCUSSION

The Influence of Capital Adequate Ratio (CAR) on Return on Assets (ROA)

The test results show that the influence of the Capital Adequacy Ratio (CAR) on Return on Assets (ROA) is not significant during the pandemic and economic recovery (t-statistic = 0.876, p-value = 0.382). This is in contrast to previous research which found that CAR had a positive and significant effect on ROA. The rejection of this hypothesis can be seen in the context of OJK regulations which require a minimum CAR of 8%, which forces banks to maintain CAR above the threshold as a precautionary measure.

Banks with high CARs remained efficient during this period due to their ability to manage risk and utilize income diversification. The relationship between banking risk and profitability has become more complex; Although a high CAR provides a safety cushion, it can also reduce profitability due to reduced lending activity.

Signaling theory is less relevant during a crisis, where confidence is more influenced by government and central bank policies to maintain financial system stability. In addition, Indonesia's strong deposit insurance system reduces the importance of CAR as a signal for customers or investors. These findings are in line with contingency theory, where the effectiveness of strategies depends on the specific context; during the pandemic, factors such as credit risk management, liquidity and adaptability had a greater impact on profitability than CAR.

The Effect of Non Performing Loans (NPL) on Return on Assets (ROA)

The results of the analysis show that Non-Performing Loans (NPL) have a negative and significant influence on ROA (t-statistic = 5.989, p-value = 0.000), which means that an increase in NPL tends to reduce banking profitability as measured by ROA. The results of this research are in line with previous research conducted by Setyarini (2020) which also shows that NPLs have a significant negative effect on ROA and research by Fauziah (2021) that increasing credit risk can reduce banking profitability.

The results of the analysis show that Non-Performing Loans (NPL) have a negative and significant effect on Return on Assets (ROA) in banking (t-statistic = 5.989, p-value = 0.000). Hypothesis H2 is accepted, in line with credit risk theory and previous research. The acceptance of this hypothesis can be explained through several perspectives, taking into account the unique context of the 2019-2023 research period which includes the COVID-19 pandemic.

Based on credit risk theory, it confirms that high NPL reflects an increase in credit risk which has a negative impact on bank profitability. During the pandemic, NPL variations between bank groups increased, indicating the impact during the crisis had significant implications for profitability, especially regarding prudent credit risk management. The bank's financial intermediation function was also disrupted during the pandemic, high NPLs due to the economic slowdown reduced intermediation efficiency, reducing profitability. This indicates more effective risk management during the crisis which is consistent with the theory of economies of scale in risk management.

The results of this test also confirm that high NPLs influence banking profitability levels, with the pandemic context possibly strengthening the negative relationship between NPLs and ROA compared to normal periods. This consistency shows that credit risk management is a critical factor in determining bank profitability during the crisis.

The Effect of Net Interest Margin (NIM) on Return on Assets (ROA)

Net Interest Margin (NIM) has a positive and significant influence on Return on Assets (ROA) (t-statistic = 6.820, p-value = 0.000), indicating that a higher net interest margin increases banking profitability. The theory of financial intermediation efficiency states that a higher NIM reflects the bank's ability to manage the spread between interest income and interest costs.

During the pandemic, variations in NIM between bank groups increased, with the highest average being 5.71% and the lowest being 3.37%. This variability reflects differences in pricing strategies and asset-liability management. Large banks maintained the highest NIM and lowest standard deviation (0.98), demonstrating consistency in maintaining margins through revenue diversification.

However, banks face challenges in managing interest income due to low interest rates. Several small banks experienced losses with NIMs reaching -3.52%, while others achieved NIMs of up to 18.39%. This difference shows that large banks are better able to adapt their strategies to Bank Indonesia policies during the crisis. Operational efficiency is key; Medium and large banks are more successful in maintaining the difference between interest received and paid. They were able to adapt to the challenges, including quickly switching to digital banking services, which helped expand their services during social distancing.

The Effect of Loan to Deposit Ratio (LDR) on Return on Assets (ROA)

Based on the results of hypothesis testing, it shows that the Loan to Deposit Ratio (LDR) does not show a significant influence on ROA (t-statistic = 0.666, p-value = 0.506). Therefore, hypothesis H4 is rejected indicating that LDR does not have a significant positive influence on ROA in banking. The results of this research are not in line with research conducted by Maulana Dwita and Nayang (2021), Oktaviani et al. (2019) and Khoiriyah (2022) that LDR has a positive and significant effect on ROA.

The COVID-19 pandemic has drastically changed the banking landscape and customer behavior. Many customers tend to hold their funds in banks as a precautionary measure, while banks have become more selective in disbursing credit. As a result, several banks experienced an increase in deposits without a proportional increase in lending, causing LDR to decrease without always having a negative impact on ROA. Apart from that, the government and Bank Indonesia's stimulus policy which reduced the benchmark interest rate and relaxed credit restructuring rules broke the direct relationship between LDR and ROA. Furthermore, the relationship between LDR and ROA may be non-linear with different optimal points for each bank which causes shifts during the pandemic. Significant changes in bank asset quality due to the pandemic can also affect the relationship between LDR and ROA. In addition, banking regulations that emphasize liquidity risk during the pandemic can reduce pressure on banks to achieve certain LDR targets, thereby reducing the correlation with ROA.

The Influence of Independent Commissioners (KI) on Return on Assets (ROA)

The results of the analysis show that Independent Commissioners have a positive and significant influence on Return on Assets (ROA) in banking in Indonesia during the 2019-2023 period during the COVID-19 pandemic, which is in line with research by Almaqtari et al. (2023) show that boards with a higher proportion of independent members increase accountability and provide an objective assessment of internal transactions which contributes to increased ROA

The research results show that independent commissioners can reduce conflicts of interest between management and shareholders, as well as increase supervision, especially during the pandemic. They bring external perspectives and resources that help banks manage risk and seek new opportunities. Banks with a high proportion of independent commissioners adapt better to market changes. Apart from that, a high proportion is also a positive signal for investors regarding the quality of governance, increasing confidence amidst uncertainty. In the context of a crisis, independent commissioners play an important role in considering the interests of various stakeholders, reflecting awareness of the importance of an independent perspective in strategic decision making.

RESEARCH LIMITATIONS

This research only looks at the influence of variables on financial ratios in the form of CAR, NPL, NIM, LDR and Independent Commissioners on ROA, but cannot be used for financial performance projections. This research has not included other variables that could possibly influence banking profitability factors, including: Operating Expenses, Operating Income (BOPO)

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ratio, financial performance acceleration strategy.and other macroeconomic variables. This research does not take into account changes in economic and regulatory policies during the research period which could influence banking performance in unexpected ways.

PRACTICAL IMPLICATIONS

The following is a description of the managerial implications that can be drawn from the research results.

1. For Regulators:
   Regulators need to tighten supervision of credit risk in banks because NPLs have a significant effect on ROA. The minimum capital policy (CAR) should be revised according to economic conditions, with temporary relaxation during the crisis. Corporate governance regulations need to be strengthened, including requirements for independent commissioners. In addition, economic stimulus and monetary policy must be considered to support banking stability.
2. For Banking:
   Banks should adopt better credit risk management practices to reduce NPLs, strengthen credit analysis and improve officer training. Optimizing the use of capital must be pursued by maintaining CAR and exploiting investment opportunities. Revenue diversification and operational efficiency need to be improved through new products and technology. The role of independent commissioners must also be strengthened for effective supervision.
3. For Consumers:
   Consumers need transparent information about banks' financial conditions to make better decisions. Access to financial services must be ensured, especially through the development of digital banking services. Improved services and education about financial products are also important to help consumers manage their finances.

UPCOMING RESEARCH AGENDA

Based on the limitations of this research, the following are things that can be considered as a future research agenda:

1. Developing new research models:Researchers can develop new research models that consider other variables that might influence bank profitability during crisis periods including macroeconomic, regulatory and technological variables.
2. Cross-Sector Studies: Researchers can conduct cross-sector studies to understand how risk management and governance practices in other sectors can be adapted by the banking industry. This can provide new insights to improve banking performance.
3. Longitudinal Research: Researchers can conduct longitudinal research to examine the long-term influence of financial factors on banking performance. This will provide a deeper understanding of the dynamics of the banking industry over time.
4. International Comparative Analysis: Researchers can conduct international comparative analysis to understand how banking policies and practices in other countries can be adopted or adapted for the Indonesian context. This can help identify best practices that can be implemented in Indonesia.

CONCLUSION

Based on the research results, the conclusions are as follows:

1. Capital Adequacy Ratio (CAR): CAR does not significantly influence ROA during a crisis. While strong capital is vital for stability, a higher CAR does not necessarily lead to increased bank profitability in unstable conditions, as banks prioritize safety over profit.
2. Non-Performing Loans (NPL): NPL has a negative and significant impact on ROA. Rising NPLs decrease profitability due to higher credit loss provisions and reduced interest income. Effective credit risk management is crucial for maintaining financial performance, especially in economic crises.
3. Net Interest Margin (NIM): NIM positively and significantly influences ROA. Banks that sustain high net interest margins improve profitability, highlighting the importance of efficient asset-liability management and stable interest income generation.
4. Loan to Deposit Ratio (LDR): LDR does not significantly affect ROA during crises. Cautious credit distribution and increased liquidity do not always lead to greater credit distribution, indicating a need for more adaptive liquidity management strategies.
5. Independent Commissioner: Independent Commissioners positively and significantly influence ROA. A robust independent board enhances accountability and supervision, contributing to improved bank profitability and underscoring the importance of good corporate governance.

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