

## The Effect Of CAR, NPL, NIM, And LDR On Financial Performance On Banking Companies Listed In IDX

Mutiara Putri

Departement of Accounting, Universitas Muhammadiyah Sukabumi

[mutiaraputri228@gmail.com](mailto:mutiaraputri228@gmail.com)

Article Info	Abstract
Received June 9, 2022 Revised June 9, 2022 Published June 18, 2022	<i>This study aims to determine the effect of CAR, NPL, NIM, and LDR on financial performance with ROA as a measuring tool. This research was conducted on banking companies listed on the Indonesia Stock Exchange for the period 2018-2020. The research method used is quantitative research with an associative approach. The sample in this study were 21 banking companies. The data analysis used is multiple linear analysis. Based on the results of data analysis, it shows that the CAR and LDR has no significant effect on ROA. NPL has a significant and negative effect on ROA. NIM has a significant effect on ROA.</i>
<b>Keywords :</b> CAR, NPL, NIM, LDR, ROA	

### INTRODUCTION

The rapid development of the COVID-19 outbreak has resulted in a health and welfare crisis in various parts of the world. The increasing number of COVID-19 cases in Indonesia has prompted the government to issue policies to suppress the spread of this virus. The policies made by the government do not only focus on public health, but the government also makes policies related to people's welfare during the pandemic. Regarding the welfare of the people, the government has issued many policies which regulate the national economy and financial system stability in dealing with the threat of a pandemic (Dirkareshza et al., 2021).

Looking at the policies carried out by the government, it can be concluded that the impact of the COVID-19 pandemic does not only occur in the health sector. But many sectors that participate are affected, for example, the economic, political, social, and other sectors. One of those affected by COVID-19 in the economic sector is the banking industry. Banking has a very important meaning for a country. In simple terms, a bank is defined as a financial institution whose main activity is to collect funds from the public and channel these funds back to the community and

provide other banking services (Kasmir, 2020, p. 12) . Meanwhile, financial institutions are companies engaged in finance whose activities are to collect funds, or to channel funds or both to collect and channel funds (Kasmir, 2020, p. 12) . According to OJK, banking has the main function of collecting and distributing public funds aimed at national development in order to increase economic growth and national stability. By carrying out this task well, Indonesia's economic growth will also grow well. As one of the industries that has been affected by the COVID-19 pandemic, banks must currently be able to maintain their financial performance so that paralysis does not occur during the pandemic. Risk analysis and appropriate strategies need to be carried out to deal with the unknown when the pandemic will end (Indira, 2021) .

Financial performance is an analysis carried out to see the extent to which a company has carried out financial implementation properly and correctly, according to Irhan Fahmi (in Faisal et al., 2018) . Based on this definition, it can be concluded that the success of a bank can be seen from its financial performance. A drastic decline in financial performance can lead to financial difficulties. Financial distress or commonly called Financial Distress is a situation where a company is unable to fulfill its obligations (Kristanti, 2019, p. 3) . This is an early sign before finally going bankrupt. This financial distress can be caused by several factors, the most basic of which is the decline in financial performance which is getting worse. The same is the case with banks, bank financial performance can describe the results of all bank operational activities, if the bank carries out operational activities and bank management well, then the financial performance will also look good, and vice versa. One of the indicators for assessing the financial performance of a bank is an assessment of the soundness level. Bank health is very important for all related parties, both bank managers and the public as customers or investors (Wahyudi, 2016) . A healthy bank is a bank that can maintain public trust, carry out its functions well, and can be utilized by the government in implementing monetary policy (Putri et al., 2021).

Seeing the many phenomena that occur, bank health is one of the most important factors that need to be considered in assessing the bank's financial performance. This is useful for certain parties, both the bank management and the public as customers or investors. As for the aspects to assess the health of the bank is the Camel method. The Camel method is an analysis that assesses the financial

condition of a bank using five important aspects, namely Capital, Assets, Management, Earnings, and Liquidity, each aspect being measured by its own indicators, then banking conditions are divided into several categories ranging from very healthy to not. healthy (Arum et al., 2022, p. 186) . The camel method is a method for assessing the financial condition and management of a bank. This has been determined by Bank Indonesia (BI) as the central bank, in Bank Indonesia Circular Letter No. 6/23/DPNP concerning the soundness assessment system for commercial banks. According to Kasmir (in Pelupessy, 2022, p. 29) (Pelupessy, 2022, p. 29), several aspects of the CAMEL method are: (1) Capital (2) Asset Quality (3) Management (4) Earnings (5) Liquidity . The indicators from the camel method assessment are considered to be able to identify problems in banking financial performance by looking at the soundness of the bank (Keffala, 2021).

The level of soundness of the bank can be done by analyzing financial ratios. Where the financial ratio is an index that connects two accounting numbers and is obtained by dividing one number by another, according to James C Van Horne (in Kasmir, 2021, p. 104) . Financial ratios to measure the soundness of a bank usually use the Camel method. This Camel method has many types of financial ratios to assess the health condition of the bank. In this study, in the aspect of capital the ratio measurement used is the Capital Adequacy Ratio (CAR). Then for the aspect of asset quality the ratio used is Non-Performing Loan (NPL), while for the aspect of management using the ratio of Net Interest Margin (NIM) , and in the aspect of liquidity using the ratio Loan Deposit Ratio (LDR). For the aspect of profitability, this research was not carried out because of profitability as well as the profitability aspect which will be a measure of the bank's financial performance.

In this study, the bank's financial performance is a measure of the health of the bank. The most appropriate indicator to assess financial performance is profitability according to Syofyan (in Saputra, 2014) . The profitability indicator commonly used in the banking industry is Return on Assets (ROA ) . ROA focuses on the bank's ability to earn a profit based on the total assets owned. Banks in Indonesia prioritize ROA measurement rather than ROE for bank profitability (Saputra, 2014).

In this study, the measurement of bank financial performance uses the Return on Assets (ROA) ratio . This ratio is used to assess the efficiency and effectiveness

of the bank in using its assets to generate profits. The higher the ROA, the better the performance, this happens because of the high rate of return on assets. In this case, the bank must know the financial performance of the bank, in the sense that the bank can carry out its operational activities normally and is able to fulfill all its obligations properly in accordance with applicable banking regulations. The average ROA value from 2018 to 2020 tends to decrease, which is presented in the following table.

**Table 1. ROA Ratio at Banks Listed on the IDX 2018-2020**

No.	Bank Code	Company Name	ROA		
			2018	2019	2020
1	AGRO	Bank Rakyat Indonesia Agroniaga Tbk	1.54%	0.31%	0.24%
2	BABP	International MNC Bank Tbk	0.74%	0.27%	0.15%
3	READ	Bank Capital Indonesia Tbk	0.90%	0.13%	0.44%
4	BBCA	Central Bank Table 1. Asia Tbk	4.01%	4.02%	3.32%
5	BBMD	Bank Mestika Dharma Tbk	2.96%	2.72%	3.17%
6	BDMN	Bank Danamon Indonesia Tbk	2.99%	2.95%	0.87%
7	BGTG	Ganesha's Bank Tbk	0.16%	0.32%	0.10%
8	BMAS	Bank Maspion Indonesia Tbk	1.54%	1.13%	1.09%
9	BNBA	Earth Bank Arta Tbk	1.77%	0.96%	0.96%
10	BANGA	CIMB Niaga Bank Tbk	1.85%	1.99%	1.06%
11	BNII	Bank Maybank Indonesia Tbk	1.48%	1.09%	0.82%
12	BNLI	Gem Bank Tbk	0.78%	1.30%	0.97%
13	BRIS	Indonesian Islamic Bank	0.43%	0.31%	0.81%
14	BSIM	Bank Sinar Mas Tbk	0.25%	0.23%	0.30%
15	BSWD	Bank of India Indonesia Tbk	0.24%	0.60%	0.49%
16	INPC	Artha Bank Graha International Tbk	0.27%	-0.30%	0.11%
17	MAYA	Mayapada Bank International Tbk	0.73%	0.78%	0.12%
18	MEGA	Bank Mega Tbk	2.47%	2.90%	3.64%
19	NISP	Bank OCBC NISP Tbk	2.10%	2.22%	1.47%
20	PNBN	Bank Pan Indonesia Tbk	2.16%	2.08%	1.91%
21	SDRA	Bank Woori Saudara Indonesia 1906 Tbk	2.59%	1.88%	1.84%
<b>Total</b>			<b>31.96%</b>	<b>27.89%</b>	<b>23.88%</b>
<b>Average</b>			<b>1.52%</b>	<b>1.33%</b>	<b>1.14%</b>

Source: Secondary data, Annual Report (2018-2020)

Seeing the phenomena that occur, it is necessary to know the effect of these ratios on financial performance. Therefore, the authors are interested in conducting research on the effect of financial ratios on bank financial performance. In this case the author places more emphasis on the ratio of CAR, NPL, NIM, and LDR. This study aims to determine and explain the effect of the camel ratio, using the CAR,

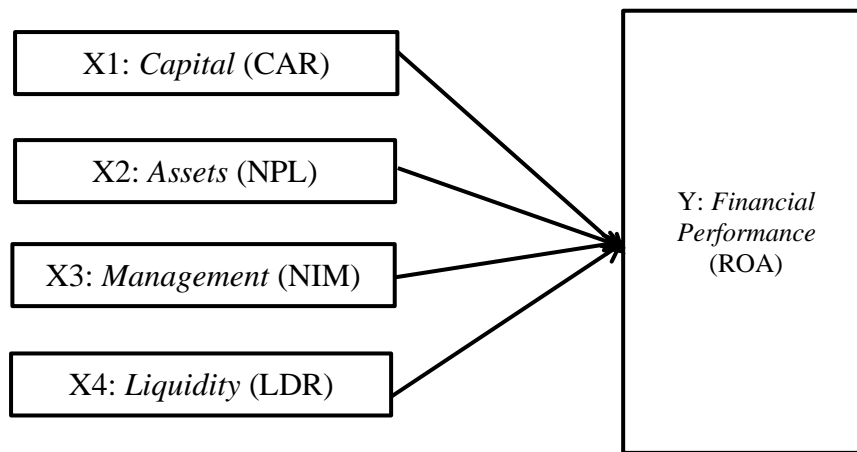
NPL, NIM, and LDR ratios as measurement indicators, on bank financial performance using ROA as a benchmark.

Based on the explanation above, the formulation of the problem in this study is (1) How is the influence of the Capital Adequacy Ratio (CAR) on the financial performance of the bank? (2) How is the influence of Non-Performing Loan (NPL) on the bank's financial performance? (3) How influence of Net Interest Margin (NIM) on bank financial performance? (4) How does Loan Deposit Ratio (LDR) affect bank's financial performance? (5) How does CAR, NPL, NIM, and LDR influence bank's financial performance?

## **RESEARCH METHODS**

The research method used is quantitative with an associative approach. This associative approach is used to determine the relationship of several or more variables (Jaya, 2020, p. 51). This research was conducted on banking companies listed on the Indonesia Stock Exchange (IDX), by accessing the official website, namely [www.idx.co.id](http://www.idx.co.id). The research population is 47 banking companies listed on the Indonesia Stock Exchange (IDX), with a total sample of 21 companies. The sampling technique used was purposive sampling, where the sample was selected based on certain considerations (Juliandi et al., 2014, p. 58).

In this study the variables were divided into two, namely the independent variable and the dependent variable. The independent variables in this study were compiled based on five aspects of bank soundness assessment of camel financial ratios consisting of: Capital proxied by CAR, Asset Quality proxied by NPL, Management proxied by NIM, and Liquidity proxied by LDR. While the dependent variable in this study is the financial performance of the bank. The assessment of bank financial performance in this study uses the Return of Assets (ROA) ratio as an indicator of its measurement. The variables in this study can be described as follows.



**Figure 1.** Research design

The data collection technique used is documentation and literature study, namely by collecting and studying data in the form of financial reports from a bank (Juliandi et al., 2014, p. 68). The type of research data used based on the nature is quantitative data because the data are in the form of financial statements presented in the form of numbers (Jaya, 2020, p. 84). While the type of data based on the source is secondary data, where the financial report data is obtained from the official website of the Indonesia Stock Exchange. The data analysis technique used is Multiple Linear Regression Analysis. By first testing the classical assumptions, which consist of: (1) Normality Test (2) Multicollinearity Test (3) Heteroscedasticity Test (4) Autocorrelation Test . The regression model used in this study is as follows:

$$ROA = \alpha + CAR X1 + NPL X2 + NIM X3 + LDR X4 + \varepsilon$$

**Description :**  $\alpha$  : Constant

ROA : Return on Assets

X1 : Capital Adequacy Ratio

X2 : Non Performing Loan

X3 : Net Interest Margin

X4 : Loan to Deposit Ratio

$\varepsilon$  : error ( error )

## RESULTS AND DISCUSSION

### Classic assumption test

#### Normality test

This normality test is used to determine whether the residual value of the data is normally distributed or not. The normality test used is the Kolmogorov Smirnov One Sample statistical test .

**Table 2. Normality test results**

One-Sample Kolmogorov-Smirnov Test			Unstandardized Residual
N			63
Normal Parameters <sup>a,b</sup>	mean		0,0000000
	Std. Deviation		0,78644423
Most Extreme Differences	Absolute		0,107
	Positive		0,107
	negative		-0,060
Test Statistics			0,107
asympt . Sig. (2-tailed) <sup>c</sup>			0,070
Monte Carlo Sig. (2-tailed) <sup>d</sup>	Sig.		0,072
	99% Confidence Interval	Lower Bound	0,065
		Upper Bound	0,079
a. Test distribution is Normal.			
b. Calculated from data.			
c . Lilliefors Significance Correction.			
d. Lilliefors ' method based on 10000 Monte Carlo samples with starting seed 299883525.			

Source: Data processed by the author, SPSS 28 (2022)

The results of the One Sample Kolmogorov Smirnov test show that the residual value in the data used is normally distributed with the Asymp value. Sig. (2- tailed ) shows a value of 0.70 where the significance value is more than 0.05.

#### Multicollinearity Test

Multicollinearity test aims to test whether the regression model found a correlation between the independent variables (independent).

**Table 3. Multicollinearity test results**

Model		Unstandardized Coefficients		Coefficients <sup>a</sup>			Collinearity Statistics	
		B	Std. Error	Standardized Coefficients Beta	t	Sig.	Tolerance	VIF
1	(Constant)	0,108	0,704		0,153	0,879		
	CAR	0,007	0,014	0,045	0,468	0,641	0,946	1.057
	NPL	-0,516	0,091	-0,542	-5,641	0,001	0,954	1.048
	NIM	0,310	0,082	0,360	3,775	0,001	0,968	1.033
	LDR	0,007	0,005	0,131	1,376	0,174	0,968	1.033
a. Dependent Variable: ROA								

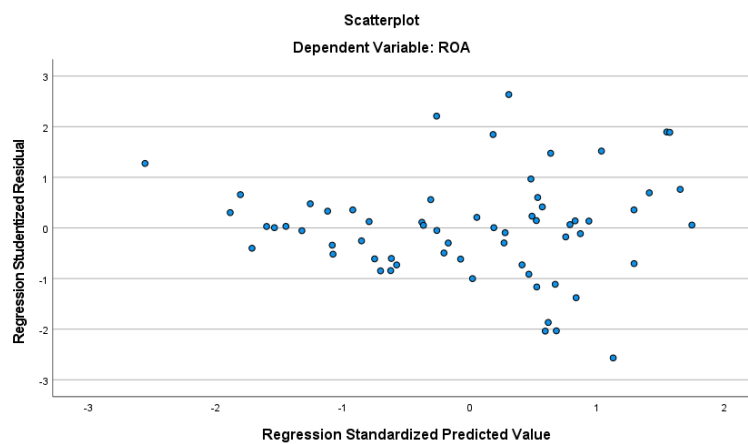
Source: Data processed by the author, SPSS 28 (2022)

The results of the multicollinearity test in the table above show that the

tolerance value for the CAR variable is 0.946, NPL is 0.954, NIM is 0.968, and LDR is 0.968 while the value of Variance Influence Factor (VIF) independent CAR is 1.057, NPL is 1.048, NIM is 1.033, and the LDR of 1.033. From these results, it is concluded that the tolerance value is greater than 0.10 and the VIF value is less than 10. In accordance with the decision-making provisions that have been determined, the regression model in this study does not have multicollinearity.

**Heteroscedasticity Test**

Heteroscedasticity test is used to determine whether there is an inequality of variance from the residual value for all observations in the regression model. Testing is done by using a Scatterplot graph .



**Figure 2:** Heteroscedasticity test results

heteroscedasticity test using the scatterplot graph in the picture above, show that the scatterplot forms dots that spread randomly and do not form a certain pattern and are above and below the number 0 and the Y axis, then the regression model does not have heteroscedasticity.

**Autocorrelation Test**

The autocorrelation test aims to test whether there is a correlation between the error terms from the time series data of the regression model. A good regression model is a regression model that does not have autocorrelation. The autocorrelation test of the regression equation was carried out using the Durbin-Watson test .

**Table 4. Autocorrelation test results**

Model Summary <sup>b</sup>					
Model	R	R Square	Adjusted Square	R Std. Error of the Estimate	Durbin-Watson
1	0,700 <sup>a</sup>	0,490	0,455	0,81311	1,979

a. Predictors: (Constant), LDR, CAR, NIM, NPL  
 b. Dependent Variable: ROA

Source: Data processed by the author, SPSS 28 (2022)



The results of the autocorrelation test using Durbin Watson , showed a DW value of 1.979. Then for the dL value of 1.461 and dU of 1.729. As for the 4-dL value of 2.539 and 4-dU of 2.270. The values for dU and dL are obtained from the Durbin Watson statistical table . It can be concluded that the DW value in the test is in the range of dU (1.729) < DW (1.979) < 4-dL (2.539), according to the decision-making provisions, it can be concluded that there is no autocorrelation.

### Hypothesis testing

#### Partial Regression Test ( t-test )

Partial regression test or t-test is used to determine whether or not there is a significant effect of the independent variables separately on the dependent variable. The test is carried out using a significance level of 0.05 ( $\alpha = 5\%$ ).

**Table 5. The results of the partial regression test**

		Coefficients <sup>a</sup>				
Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	0,108	0,704		0,153	0,879
	CAR	0,007	0,014	0,045	0,468	0,641
	NPL	-0,516	0,091	-0,542	-5,641	0,001
	NIM	0,310	0,082	0,360	3,775	0,001
	LDR	0,007	0,005	0,131	1,376	0,174

a. Dependent Variable: ROA

Source: Data processed by the author, SPSS 28 (2022)

Based on table 5 above, it shows a significant value of CAR on ROA of 0.641 > 0.05 with a t value of 0.468 < t table of 2.002, it means that the Capital Adequacy Ratio has no significant effect on Return On Assets . The ineffectiveness of CAR on ROA may be caused by banks that are very careful about their capital, because the minimum standard of CAR according to Bank Indonesia Regulations is 8% which makes banks strive to always keep the CAR above the minimum value. The second possibility is that banks maintain their capital due to the covid pandemic, especially during one of the periods in this study, where in 2020, the economy in Indonesia is less stable. Another possibility that can happen is because banks are less able to use their capital for things that generate profits.

The NPL variable on ROA shows a significant value of 0.001 < 0.05 with a t value of -5.641 > t table 2.002, which means that the Non Performing Loan variable has a significant and negative effect on Return on Assets. A negative relationship indicates that when NPL increases, ROA will decrease. This is likely due to the poor quality of existing credit which causes a large number of bad loans, making

banks hesitant to increase lending. Non-performing loans make the bank suffer losses, it will affect the decline in profits which can cause the ROA value to fall.

The NIM variable on ROA shows a significant value of  $0.001 < 0.05$  with a t-count value of  $3.775 > t\text{-table } 2.002$ , which means that Net Interest Margin has a significant and positive effect on Return on Assets. The results showed that NIM has a positive relationship and has a significant effect on ROA. In the sense that bank management is able to generate net interest, which will certainly affect the bank's income itself. High net interest income will affect profit before tax, and ROA will also increase. In addition, if net interest income increases, the bank's income will also increase so that financial performance will also increase.

The LDR variable on ROA shows a significant value of  $0.174 > 0.05$  with a t-count value of  $1.376 < t\text{-table } 2.002$ , it means that the Loan Deposit Ratio has no significant effect on Return on Assets. The lack of effect of LDR on ROA may occur because of the amount of asset ownership or funds from banks used for financing to third parties. Another possibility occurs due to the lack of application of the precautionary principle to banks in providing financing to third parties which makes the bank in an illiquid condition.

#### Simultaneous Regression Test ( F-test )

Simultaneous regression test or F-test is used to determine whether or not there is a significant effect of the independent variables simultaneously on the dependent variable. The significance level ( $\alpha$ ) is 5% or 0.05.

**Table 7. Simultaneous Regression Test Results**

		ANOVA <sup>a</sup>				
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	36,838	4	9,210	13,930	0,001 <sup>b</sup>
	Residual	38,347	58	0,661		
	Total	75,185	62			

a. Dependent Variable: ROA  
b. Predictors: (Constant), LDR, CAR, NIM, NPL

Source: Data processed by the author, SPSS 28 (2022)

The results of the F test showed a significant value of  $0.001 < 0.05$ . Meanwhile, the F table test uses a significance of 0.05 with df 4 and the denominator 58 so that it is known that the F table value is 2.53. Then it is known that F count  $13.930 > F\text{ table } 2.53$ , so it can be said to be significant, which means that the variables CAR, NPL, NIM, and LDR simultaneously or simultaneously affect financial performance with ROA as a measuring tool.

## Linear Regression Analysis

Multiple linear regression analysis was used to explain how much influence the independent variables, namely CAR, NPL, NIM, and LDR had on the dependent variable, namely ROA. Based on the results of the study, it can be seen that the multiple linear regression equation formed in this study is as follows:

$$ROA = 0.108 + 0.007X_1 - 0.516X_2 + 0.310X_3 + 0.007X_4$$

Based on the equation model, it is known that a constant of 0.108 indicates a positive relationship between the independent variables, namely CAR, NPL, NIM, and LDR on the dependent variable, namely ROA. The regression coefficient for the CAR variable ( $X_1$ ) is 0.007, which means that if the other independent variables have a fixed value and the CAR has increased by 1%, there will be an increase in ROA of 0.007. The regression coefficient for the NPL variable ( $X_2$ ) is -0.516, which means that if the other independent variables have a fixed value and the NPL has increased by 1%, there will be a decrease in ROA of 0.516. The regression coefficient for the NIM variable ( $X_3$ ) is 0.310, which means that if the other independent variables have a fixed value and the NIM increases by 1%, there will be an increase in ROA of 0.310. The regression coefficient for the LDR variable ( $X_4$ ) is 0.007, which means that if the other independent variables have a fixed value and the LDR has increased by 1%, there will be an increase in ROA of as much as

## Coefficient of Determination Test

The coefficient of determination test is used to measure how far the ability of the independent variable in explaining the dependent variable is, the value of the coefficient of determination ( $R^2$ ) lies at 0 and 1.

**Table 8.** The results of the coefficient of determination

Model Summary <sup>b</sup>				
Model	R	R Square	Adjusted Square	Std. Error of the Estimate
1	0,700 <sup>a</sup>	0,490	0,455	0,81311
a. Predictors: (Constant), LDR, CAR, NIM, NPL				
b. Dependent Variable: ROA				

Source: Data processed by the author, SPSS 28 (2022)

The coefficient of determination test above shows that the value of the coefficient of determination ( $K_d$ ) is 0.700 or 49%. This value is the result of the formula  $K_d = R^2 \times 100\% = (0.7002 \times 100\%) = 49\%$ . Based on these calculations,

it is concluded that the effect of the independent variable on the dependent variable is 49%, namely the effect of CAR, NPL, NIM, and LDR on ROA.

## **Discussion**

### **Effect of Capital Adequacy Ratio on Return on Assets**

Based on the results of the study, the effect of the Capital Adequacy Ratio variable shows a significant value of  $0.641 > 0.05$  with a t count value of  $0.468 < t$  table 2.002, which means that the Capital Adequacy Ratio has no significant effect on Return On Assets in banking companies listed on the stock exchange. Indonesian securities for the period 2018-2020. Based on the research, it can be concluded that CAR does not have a significant effect on ROA. This is probably caused by banks that are very careful about their capital, because the minimum standard of CAR according to Bank Indonesia Regulations is 8% which makes banks strive to always keep the CAR above the minimum value. The possibility of the two banks maintaining their capital due to the covid pandemic, especially during one of the periods in this study, where in 2020, the economy in Indonesia is less stable. Another possibility that can happen is because banks are less able to use their capital for things that generate profits.

The results of this study are in line with research conducted (Yulianah & Aji, 2021) , with the title "The Effect of NPL, LDR, BOPO, and CAR Ratios on Profitability of State-Owned Banks in Indonesia". The study stated that the CAR variable had no significant effect on ROA. The same thing is also found in a study conducted by (Anindiansyah et al., 2020) with the research title "The Effect of CAR, NPL, BOPO, and NPL on ROA with NIM as an Intervening Variable (Study on Banks That Go Public on the Indonesia Stock Exchange for the Period of 2015-2018)". The study showed results which stated that the CAR variable had no significant effect on ROA, but in this study it showed a negative relationship between CAR and ROA.

### **The Effect of Non-Performing Loans on Return on Assets**

Based on the results of the study, the effect of the Non Performing Loan variable on Return on Assets shows a significant value of  $0.001 < 0.05$  with a t value of  $-5.641 > t$  table 2.002, which means that the Non Performing Loan variable has a significant and negative effect on Return on Assets in banking companies listed on the Indonesian stock exchange for the period 2018-2020. Based on the

research, it can be seen that there is a negative relationship and significant effect between NPL on ROA. Where when the NPL increases, the ROA will decrease. This is likely due to the poor quality of existing credit which causes a large number of bad loans, making banks hesitant to increase lending. Non-performing loans make the bank suffer losses, it will affect the decline in profits which can cause the ROA value to fall.

The results of this study are in line with research conducted by (Sudarmawanti & Pramono, 2017) with the research title "The Effect of CAR, NPL, BOPO, NIM, and LDr on ROA". Likewise in research (Dewi, 2018) with the title "The Influence of CAR, BOPO, NPL, NIM, and LDR on ROA in Companies in the Banking Sector Listed on the IDX for the Period 2012-2016". Both studies show that NPL has a negative relationship and has a significant effect on ROA.

#### **Effect of Net Interest Margin on Return on Assets**

Based on the results of the study, the influence of the Net Interest Margin variable on Return on Assets shows a significant value of  $0.001 < 0.05$  with a t value of  $3.775 > t \text{ table } 2.002$ , which means that Net Interest Margin has a significant and positive effect on Return on Assets in the company. banks listed on the Indonesian stock exchange for the 2018-2020 period. The results of this study are in line with the results of research by (Yulianah & Aji, 2021) , with the title "The Effect of NPL, LDR, BOPO, and CAR Ratios on Profitability of State-Owned Banks in Indonesia". This study shows that NIM has a significant effect on ROA. However, this is different from the research conducted by (Dewi, 2018) , (Sudarmawanti & Pramono, 2017) and (Rembet & Baramuli, 2020) in the three studies which state that the NIM variable does not have a significant effect on ROA. Based on the research, it is known that NIM has a positive relationship and has a significant effect on ROA. In the sense that bank management is able to generate net interest, which will certainly affect the bank's income itself. High net interest income will affect profit before tax, and ROA will also increase. In addition, if net interest income increases, the bank's income will also increase so that financial performance will also increase.

#### **Effect of Loan Deposit Ratio on Return on Assets**

Based on the results of the study, the influence of the Loan Deposit Ratio variable on Return on Assets shows a significant value of  $0.174 > 0.05$  with a t

value of  $1.376 < t \text{ table } 2.002$ , which means that the Loan Deposit Ratio has no significant effect on Return on Assets in banking companies that listed on the Indonesia Stock Exchange for the period 2018-2020. Based on the results of the study showed that LDR had no significant effect on ROA. Here the LDR shows that the bank lends all or part of its funds to third parties, this can make the bank illiquid, the possibility of LDR has no significant effect on ROA because of the total ownership of assets or funds from the bank. another possibility occurs due to the lack of application of the precautionary principle to banks in providing financing to third parties which makes the bank in an illiquid condition. This study is in line with research conducted by (Yulianah & Aji, 2021) with the research title "The Effect of NPL, LDR, BOPO, and CAR Ratios on Profitability of State-Owned Banks in Indonesia."

#### **Effect of CAR, NPL, NIM, and LDR on Return On Assets**

Based on the results of the study, it showed a significant value of  $0.001 < 0.05$ , while the F table test used a significance of 0.05 with a df of 4 and a denominator of 58 so that it was known that the F table value was 2.53. Then it is known that F count  $13,930 > F \text{ table } 2,53$ , so it can be said to be significant. So the variables CAR, NPL, NIM, and LDR simultaneously or simultaneously affect the ROA of banking companies listed on the Indonesian stock exchange for the period 2018-2020. Then the magnitude of the influence of the independent variable on the dependent variable is 49%, namely the influence of CAR, NPL, NIM, and LDR on ROA as an indicator of financial performance in banking companies listed on the Indonesia Stock Exchange (IDX) for the 2018-2020 period.

#### **CONCLUSIONS AND SUGGESTIONS**

Based on the results and discussion, it shows that the Capital Adequacy Ratio (CAR) does not have a significant effect on Return on Assets (ROA), possibly because banks do not utilize existing capital. Then Non Performing Loans (NPL) have a significant and negative effect on Return on Assets (ROA) due to the high number of non-performing loans. In contrast to NPL, Net Interest Margin (NIM) has a significant effect on Return on Assets (ROA) because banks have succeeded in increasing net interest income. The Loan to Deposit Ratio (LDR) has no significant effect on Return on Assets (ROA) due to the lack of prudence in the

provision of financing. Meanwhile, the simultaneous effect for CAR, NPL, NIM, and LDR is stated to have a significant relationship to Return on Assets (ROA).

Based on these conclusions, the authors provide the following suggestions: (1) Banks should pay more attention to the use of capital which should be able to help increase profits and financial performance. (2) The provision of credit to customers that must be considered in order to avoid non-performing loans, requires the principle of prudence in lending. (3) Net interest income should be maintained and increased, because it affects the profit earned by the bank. (4) The principle of prudence is very necessary in the provision of financing, because it will affect the value of bank liquidity.

## REFERENCES

- Arum, R. A., Wahyuni, Y., Ristiyana, R., Nadhiroh, U., Wisandani, I., Rachmawati, D. W., Hilda, Sundari, R. I., Sufyati, Hartatik, Seto, A. A., & Bakri. (2022). *Analisis Laporan Keuangan Penilaian Kinerja Perusahaan Dengan Pendekatan Rasio Keuangan*. Media Sains Indonesia.
- Dirkareshza, R., Azura, D. M., & Pradana, R. (2021). Government Policy during the Covid-19 Pandemic: Between a Prosperous Country and a Healthy Country. *Jurnal Mercatoria*, 14(1), 79–98. <http://ojs.uma.ac.id/index.php/mercatoria/article/view/731/643>
- Faisal, A., Samben, R., & Pattisahusiwa, S. (2018). Analisis kinerja keuangan. *Kinerja*. <https://journal.feb.unmul.ac.id/index.php/KINERJA/article/view/2444>
- Indira, N. C. (2021). *Analisis Tingkat Kesehatan Bank Umum Syariah Di Masa Pandemi Covid-19 Menggunakan Metode CAMEL (Studi Kasus Bank Muamalat Indonesia Dan Bank ...* repository.uinsu.ac.id. <http://repository.uinsu.ac.id/id/eprint/12523>
- Jaya, I. M. L. M. (2020). *Metode Penelitian Kuantitatif Dan Kualitatif*. Anak Hebat Indonesia.
- Juliandi, A., Irfan, & Manurung, S. (2014). *Metodologi Penelitian Bisnis Konsep dan Aplikasi*. UMSU Press.
- Kasmir. (2020). *Manajemen Perbankan*. Rajawali Pers.

- Kasmir. (2021). *Analisis Laporan Keuangan*. Rajawali Pers.
- Keffala, M. R. (2021). How using derivative instruments and purposes affects performance of Islamic banks? Evidence from CAMELS approach. *Global Finance Journal*.  
<https://www.sciencedirect.com/science/article/pii/S1044028319301991>
- Kristanti, F. T. (2019). *Financial Distress*. Inteligencia Media.
- Pelupessy, F. W. (2022). *Penilaian Kesehatan Bank*. CV. Azka Pustaka.
- Putri, A. S., Ferawati, R., & Khairiyani, K. (2021). *ANALISIS TINGKAT KESEHATAN BANK DENGAN MENGGUNAKAN METODE CAMEL DAN RGENC PADA BANK BNI SYARIAH*. repository.uinjambi.ac.id.  
<http://repository.uinjambi.ac.id/10008/>
- Saputra, E. A. (2014). *Analisis Pengaruh Rasio Camel Terhadap Kinerja Keuangan Bank Umum Di Indonesia*. Universitas Sebelas Maret Surakarta.
- Wahyudi, H. (2016). ANALISIS TINGKAT KESEHATAN BANK DENGAN MENGGUNAKAN METODE CAMEL PADA PT. BANK RAKYAT INDONESIA TBK. *Jurnal Bisnis Administrasi*, 05(01), 43–49.