THE INFLUENCE OF CAPITAL ADEQUACY RATIO (CAR), LOAN TO DEPOSIT RATIO (LDR) AND NON-PERFORMING LOAN (NPL) ON PROFITABILITY

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Abstract

This research aims to analyze the influence of Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), and Non-Performing Loans (NPL) on the Profitability of Banks listed on the Indonesia Stock Exchange in the period 2019 - 2021. The data used in this research was obtained from Banking Financial reports published by the Indonesian Stock Exchange. After carrying out the purpose sampling techniques, a suitable sample of 41 banks was used. The data analysis technique in this research uses multiple regression analysis. The type of data used is secondary data which is obtained by collecting all the necessary data in the form of financial reports for each sample company in each research period, so to determine the accuracy of the model it is necessary to test several classic assumptions underlying the regression model. Classical assumption tests used in this research include the normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. Based on the research results, it shows that the Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), and Non-Performing Loans (NPL) have a simultaneous and significant effect on the profitability of banks listed on the Indonesian Stock Exchange.

Keywords: Capital Adequacy Ratio (CAR); Loan to Deposit Ratio (LDR); Non-Performing Loan (NPL); Return on Asset (ROA)

Introduction

The financial sector is the spearhead of a country's economy. Banks as one of the financial sector institutions, namely their main activities include collecting and distributing funds from the community and providing other banking services (Mesrawati, 2019). The development of banking in Indonesia has been quite significant over time. The function of banks is no longer limited to savings and loan institutions. Banks also play an important role in the country's economy, the contribution of which can be seen in the business world. A good financial system will have a positive impact on bank performance and profitability levels. Good bank performance will certainly result in good profitability for the bank. One way to measure the level of banking profitability is to look at the Return on Assets ratio owned by the bank. Conducting a profitability analysis aims to see the profit of a bank during a certain period. Return On Assets is the company's ability to make a profit in running its business (Karamoy & Tulung, 2020).

Banking in the last three years has fluctuated. It can be seen that in 2019 to 2020 there was a very significant decline, while in 2020 to 2021 there was an increase but still far from the initial increase. This is known to be due to the economic conditions being shaken by the corona virus pandemic. The decline in ROA in 2020 was due to the economic conditions which were also getting worse. However, when the economy began to recover, in 2021 the percentage of banking ROA began to increase, although not significantly enough. Changes in fluctuating figures in banking certainly have an impact on the health of the bank itself. ROA is important for banking because ROA is used to measure the effectiveness of banking in utilizing assets to generate profits.

According to Mesrawati (2019), probability can be measured by one of the internal factors, namely the calculation of the bank's financial ratios which include capital adequacy, operational efficiency, liquidity and asset size. Internal factors describe the condition and performance of the bank during its operational activities.

Literature Review

Banking

According to Law Number 10 of 1998 concerning banking, a bank is a business entity that collects funds from the public in the form of savings and distributes them to the public in the form of credit and/or other forms in order to improve the standard of living of many people. A bank is a financial institution whose main function is to collect funds from the public, distribute funds to the public and provide services in the form of other banking services (Ismail, 2018).

Return On Asset (ROA)

Probability is the company's ability to generate profits from its business activities. ien. So that it is able to generate high profits. Likewise, if a bank has a low level of profit, it means that the bank is unable to manage its resources well, so it is unable to generate high profits. The resources processed in generating profitability are sales activities, asset use and capital use. The probability ratio is used to measure the company's ability to generate profits from its normal business activities. The profitability ratio is often known as the rentability ratio, it can

also be useful for measuring the level of management effectiveness in running its operations (Herry, 2016)

Capital Adequacy Ratio (CAR)

CAR is a ratio that shows how far all risky bank assets (credit, investments, securities, receivables from other banks) are financed from the bank's own capital funds in addition to obtaining funds from sources outside the bank, such as community funds, loans (debt), and others. According to Apriani & Mansoni (2019) CAR is an indicator to see the health of bank capital, to measure the adequacy of capital owned by the bank to support assets that contain or generate risk, for example the financing provided. Meanwhile, according to Bernardin (2016) CAR is a ratio that shows how much of the total risky bank assets (credit, investments, securities, receivables from other banks) are financed from the bank's own capital in addition to obtaining funds from sources outside the bank, such as community funds, loans, and so on.

Non-Performing Loan (NPL)

Non-Performing Loan (NPL) is a condition where a customer is unable to pay his obligations either in part or in full. Non-Performing Loan (NPL) is also commonly referred to as bad debt. Thus, Non-Performing Loan (NPL) shows the ability of a bank to manage its problematic credit (Fibriyanti & Nurcholidah, 2020). The higher the NPL, the worse the quality of the bank's credit.

Loan to Deposit Ratio (LDR)

Loan to Deposit Ratio (LDR) is the ratio of the total amount of credit owned by the bank to the amount of funds received by the bank. Loan to Deposit Ratio is the credit risk faced by the bank in providing liquid components to be able to meet obligations and the ability to meet credit requests submitted without delay. The issuance of Bank Indonesia Regulation Number 17/11/PBI/2015 concerning amendments to Bank Indonesia Regulation 15/15/PBI/2013 all references to Loan to Deposit Ratio or LDR in bank regulations are read as Loan to Funding Ratio or LFR since August 3, 2015. The amount and parameters used in calculating LDR/LFR are set out in Bank Indonesia Regulation Number 17/11/PBI/2015, the lower limit of the LDR/LFR target is 78% (seventy eight percent) and the upper limit of the LDR/LFR is 94% (ninety four percent) (A M Kossoh et al., 2017).

Material and Method

The companies that are the objects of the study are banking companies listed on the Indonesia Stock Exchange in the 2019-2021 period. This study was conducted to analyze the effect of profitability proxied by ROA on banking through the Capital Adequacy Ratio (CAR), Loan To Deposit Ratio (LDR) and Non Performing Loan (NPL). Information about banking was obtained through the website www.idx.co.id. The data used for research purposes is data in the form of annual financial reports.

This research is a quantitative research with secondary data from annual financial reports listed on the Indonesia Stock Exchange. Quantitative method is a research method that will describe the relationship between variables, estimate phenomena, and test theories and hypotheses to produce empirical components using statistics (Mustaqim, 2016). The tool for

data processing used in this study is SPSS. This study uses multiple linear regression analysis method. The test in this study is the effect of Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR) and Non-Performing Loan (NPL) on Profitability with Return on Assets (ROA) indicators in Banking Companies listed on the Indonesia Stock Exchange in 2019-2021.

This study uses quantitative analysis that will provide a description of the symptoms that will be analyzed using measuring instruments and data processing. According to Hartati (2016) the results of quantitative data processing will be presented in the form of numbers with statistics. The analysis technique in this study aims to analyze the influence of independent variables, namely Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR) and Non-Performing Loan (NPL) on the dependent variable, namely Profitability with the Return on Assets (ROA) indicator. The analysis method used in this study uses tools in the statistical application program, namely Statistical Product and Service Solution (SPSS).

The purpose of data analysis is to simplify the data into a form that is easier to read and interpret. Data analysis in this study uses multiple linear regression, which consists of descriptive statistical testing, and other hypothesis testing results. Classical assumption testing consists of normality testing, multicollinearity testing, heteroscedasticity testing, and autocorrelation testing. Hypothesis testing consists of F-test, t-test, and coefficient of determination (R^2) testing.

Design Study

The affordable population in this study was obtained based on the criteria below.

1. Banking Companies listed on the Indonesia Stock Exchange for the 2019-2021 period
2. Companies that report financial reports consecutively in the 2019-2021 period
3. Data is available in full in the Banking Financial Report for the 2019-2021 period

Based on purposive sampling, the number of samples used was 41 banks listed on the Indonesia Stock Exchange consecutively during the 2019-2021 period.

Data Analysis

This study was conducted in principle to test how much influence the Capital Adequacy Ratio (CAR), Non-Performing Loan (NPL), Loan to Deposit Ratio (LDR) has on Return On Asset (ROA) in banking companies listed on the Indonesia Stock Exchange (IDX) for the period 2019 - 2021. This study was conducted by using secondary data with data sources originating from annual reports and financial reports on the official websites of each bank and those on the Indonesia Stock Exchange (IDX) in 2019 - 2021 as many as 43 banking companies which were then selected using the purposive sampling method, namely a sample determination technique with certain criteria so that a research sample of 41 banking companies was obtained with a total sample of 123.

Result

Descriptive Statistics

This research was conducted in principle to test how much influence the Capital Adequacy Ratio (CAR), Non-Performing Loan (NPL), Loan to Deposit Ratio (LDR) have on Return On Asset (ROA) in banking companies listed on the Indonesia Stock Exchange (IDX) for the period 2019 - 2021.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Capital Adequacy Ratio (CAR)	123	9,01	169,92	30,4412	22,22424
Loan to Deposit Ratio (LDR)	123	4,08	517,04	92,6062	72,18767
Non Performing Loan (NPL)	123	,08	41,75	4,5053	4,96876
Return On Asset (ROA)	123	-8,99	12,21	,5274	2,79574
Valid N (listwise)	123				

Figure 1. Descriptive Statistics

Based on the results of descriptive statistics, there are 126 banking samples listed on the Indonesia Stock Exchange (IDX) for the 3-year period 2019 - 2021. With the minimum value, maximum value, average value (mean), and standard deviation of each variable are as follows:

1. The Capital Adequacy Ratio (CAR) variable for banks listed on the IDX for the 2019-2021 period shows a minimum value of 9.01 achieved by PT Bank Pembangunan Daerah Banten Tbk in 2019, while the maximum value of 169.92 was achieved by PT Bank Jago Tbk in 2021. With an average (mean) CAR variable of 30.4412 and a standard deviation of 22.22424, which means the standard deviation is smaller than the average (mean), it can be indicated that the Capital Adequacy Ratio (CAR) has data that does not vary.
2. The Loan to Deposit Ratio (LDR) variable for banks listed on the IDX for the 2019-2021 period shows a minimum value of 4.08 achieved by Bank Permata Tbk in 2019, while the maximum value of 517.04 was achieved by PT Bank BTPN Syariah Tbk. in 2020. With an average (mean) LDR variable of 92.6062 and a standard deviation of 72.18767, which means the standard deviation is smaller than the average (mean), it can be indicated that the Loan to Deposit Ratio (LDR) has data that does not vary.
3. The Non-Performing Loan (NPL) variable for banks listed on the IDX for the 2019-2021 period shows a minimum value of 0.08 achieved by PT Bank QNB Indonesia Tbk in 2021, while the maximum value of 41.75 was achieved by PT Bank Bumi Arta Tbk in 2021. With an average (mean) LDR variable of 4.5053 and a standard deviation of 4.9678, which means the standard deviation is greater than the average (mean), it can be indicated that the Non-Performing Loan (NPL) has data that varies.
4. The Return on Asset (ROA) variable for banks listed on the IDX for the 2019-2021 period shows a minimum value of 0.08 achieved by PT Bank Jago Tbk. in 2019, while the maximum value of 12.21 was achieved by PT Bank BTPN Syariah Tbk. in 2019. With an average (mean) of the LDR variable of 0.5274 and a standard deviation of 2.79574, which means that the standard deviation is greater than the average (mean), it can be indicated that Return on Asset (ROA) has varying data.

Classical Assumption Test

The normality test aims to test whether in the regression model, the confounding variables or residuals have a normal distribution. A good regression model is data that is

distributed normally or close to normal. In this study using Kolmogorov-Smirnov statistical analysis, multivariate data testing is carried out on the residual values. If the test results are probability value > 0.05 then the data is normally distributed and if the probability value <0.05 then the data is not normally distributed. The following are the results of data analysis using the normality test.

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		123
Normal Parameters[a,b]	Mean	0,0000000
	Std. Deviation	2,32136065
Most Extreme Differences	Absolute	0,171
	Positive	0,065
	Negative	-0,171
Test Statistic		0,171
Asymp. Sig. (2-tailed)		,200[cd]

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance

Figure 2. Classical Assumption Test

Based on the results of the normality test above, a significant value of the Unstandardized Residual of 0.200 can be obtained, which means it is greater than 0.05. Thus, it can be concluded that the Residual is normally distributed and the regression model can be used as the next test.

Multicollinearity Test

The multicollinearity test aims to test whether the regression model finds a correlation between independent variables. The results of the multicollinearity test can be seen from the tolerance value and Variance Infaltion Factor (VIF). Tolerance measures the variability of the selected independent variables that are not explained by other independent variables, so a low tolerance value is the same as a high VIF value because VIF = 1 / Tolerance. Multicollinearity occurs when the VIF value is more than 10 with a tolerance value of less than 0.10. So it is said that there is no multicollinearity if the VIF value is less than 10 and the Tolerance value is more than 0.10. The following are the results of the multicollinearity test.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	0,199	0,486		0,409	0,683		
	Capital Adequacy Ratio (CAR)	-0,035	0,010	-0,281	-3,608	0,053	0,956	1,045
	Loan to Deposit Ratio (LDR)	0,019	0,003	0,495	6,267	0,073	0,928	1,078
	Non Performing Loan (NPL)	-0,083	0,043	-0,147	-1,898	0,060	0,969	1,032

a. Dependent Variable: Return On Asset (ROA)

Figure 3. Multicollinearity Test

Based on the results of the multicollinearity test in table 4.5, it shows that the independent variables do not experience multicollinearity, because the results of all VIF calculation analyses have values below 10 and tolerance values above 0.10. The largest VIF value is 1.078 and the smallest is 1.032, which means that the value is still less than 10. While the largest tolerance value is 0.969 and the smallest value is 0.928, which means that the value is greater than 0.10. From the results of these calculations, it can be concluded that there is no multicollinearity, so the equation is feasible to use.

Heteroscedasticity Test

A good regression model is a model that does not show symptoms of heteroscedasticity. To determine whether or not there are symptoms of heteroscedasticity, this study conducted a scatter plot test and a glejser test. The scatterplot test data can be said to have no symptoms of heteroscedasticity if there is no clear pattern, such as dots spreading above and below the number 0 on the Y axis. However, if the dots form a certain regular pattern (wavy, widening then narrowing), then there are symptoms of heteroscedasticity. The following are the results of the scatterplot test.

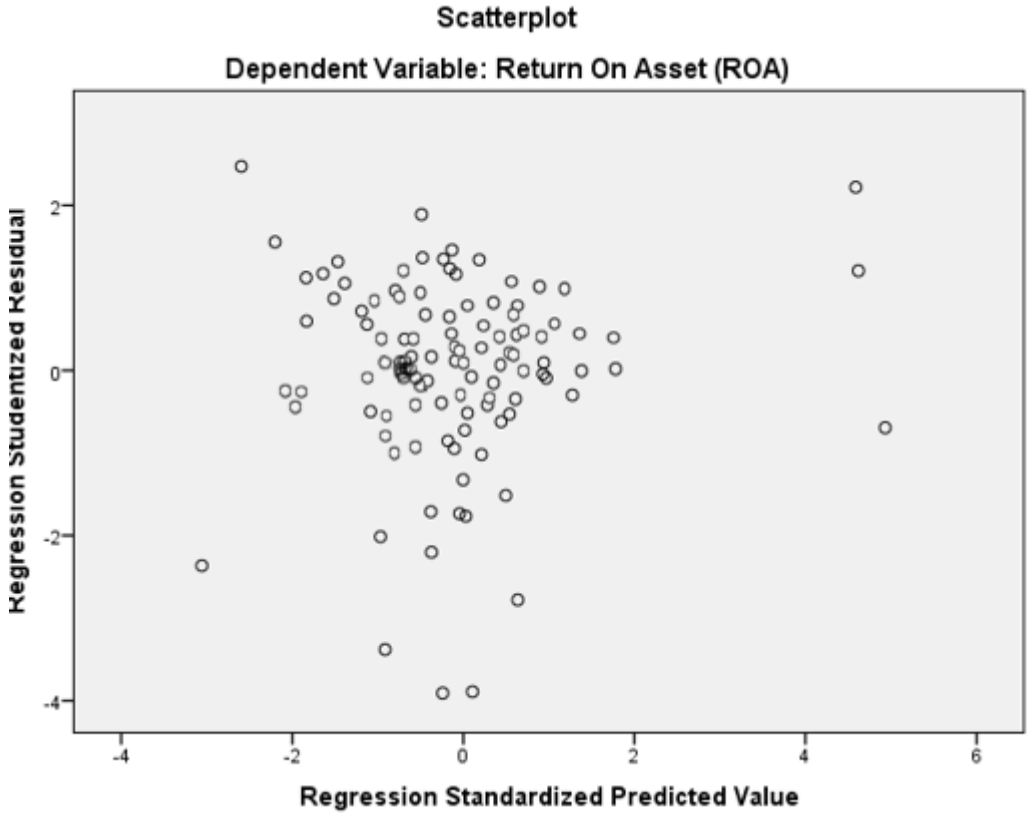

Figure 3. Heteroscedasticity Test

Based on the scatterplot test conducted, the results show that:

1. The data points are spread above and below the number 0
2. The data points do not gather and do not form certain patterns

Autocorrelation Test

The autocorrelation test aims to test whether in the linear regression model there is a correlation between the disturbance error in period t and the error in period t-1 (previously). If there is a correlation, then it is called an autocorrelation problem. Autocorrelation arises because sequential observations over time are related to each other.

A good regression model is one that is free from autocorrelation. Autocorrelation testing in this study uses the Durbin-Watson Test. According to Sunyoto (2011:91), one of the measures in determining whether or not there is an autocorrelation problem is the Durbin-Watson (DW) Test with the following provisions:

1. Positive autocorrelation occurs if the DW value is below -2
2. No autocorrelation occurs if the DW value is between -2 and 2.
3. Negative autocorrelation occurs if the DW value is above 2.

The following is a table of the results of the analysis of the autocorrelation test:

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,557[a]	,311	,293	2,35044	1,298

a. Predictors: (Constant), Non Performing Loan (NPL), Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR)

b. Dependent Variable: Return On Asset (ROA)

The calculated value of the Durbin-Watson Test results is 1.298, which means that there are no symptoms of autocorrelation because the DW value is between -2 and 2.

Multiple Linear Regression Analysis

This multiple linear regression analysis aims to test the effect of Capital Adequacy Ratio (CAR), Non-Performing Loan (NPL), Loan to Deposit Ratio (LDR) on Return On Asset (ROA). The following is a table of the output results of multiple linear regression analysis processed using SPSS.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	0,199	0,486		0,409	0,683		
	Capital Adequacy Ratio (CAR)	-0,035	0,010	-0,281	-3,608	0,053	0,956	1,045
	Loan to Deposit Ratio (LDR)	0,019	0,003	0,495	6,267	0,073	0,928	1,078
	Non Performing Loan (NPL)	-0,083	0,043	-0,147	-1,898	0,060	0,969	1,032

a. Dependent Variable: Return On Asset (ROA)

Figure 3. Multiple Linear Regression Analysis

Based on the table above, the following regression equation can be obtained:

1. Constant value is 0.198775
2. X1 value is -0.035
3. X2 value is 0.19
4. 2. X1 value is -0.083

So the regression equation is:

$$\boldsymbol{Y = 0.198775 - 0.035X_1 + 0.19X_2 - 0.083X_3}$$

The regression equation above can be interpreted into the following explanation:

1. The constant of 0.198775 indicates that the independent variables consisting of the Capital Adequacy Ratio (CAR), Non Performing Loan (NPL), and Loan to Deposit Ratio (LDR) are considered constant or do not change and have a value of 0.198775
2. The regression coefficient of Capital Adequacy Ratio (CAR) = -0.035. This shows that with the assumption that the Non Performing Loan (NPL) and Loan to Deposit Ratio (LDR) variables are considered constant, then every increase in the Capital Adequacy Ratio (CAR) variable by 1 (one) unit will result in the Return On Asset (ROA) variable decreasing by -0.035.
3. Regression coefficient of Loan to Deposit Ratio (LDR) = 0.19. This shows that assuming the Capital Adequacy Ratio (CAR) and Non-Performing Loan (NPL) variables are considered constant, then every increase in the Loan to Deposit Ratio (LDR) variable by 1 (one) unit will result in the Return On Asset (ROA) variable increasing by 0.19.
4. Regression coefficient of Non Performing Loan (NPL) = -0.083. This shows that assuming the Capital Adequacy Ratio (CAR) and Loan to Deposit Ratio (LDR) variables are considered constant, then every increase in the Non Performing Loan (NPL) variable by 1 (one) unit will result in the Return On Asset (ROA) variable decreasing by 0.083.

Statistical t Test (Significance Test of Partial Effect)

In this study, the t-test was used to test the effect of Capital Adequacy Ratio (CAR), Non Performing Loan (NPL), Loan to Deposit Ratio (LDR) on Return On Asset (ROA) partially.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0,199	0,486		0,409	0,683
	Capital Adequacy Ratio (CAR)	-0,035	0,010	-0,281	-3,608	0,053
	Loan to Deposit Ratio (LDR)	0,019	0,003	0,495	6,267	0,073
	Non Performing Loan (NPL)	-0,083	0,043	-0,147	-1,898	0,006

a. Dependent Variable: Return On Asset (ROA)

From the results of the table test, it can be concluded that:

1. Results of the first hypothesis test (H1)

The results of the first hypothesis test (H1) state that the Capital Adequacy Ratio (CAR) variable has an effect on Return On Asset (ROA). From the hypothesis test that has been carried out, it shows that the results of the Capital Adequacy Ratio (CAR) variable from the t-test produce multiple regression calculations with a t value = -3.608 and a significant value of 0.053 greater than 0.05, meaning that there is no effect between the Capital Adequacy Ratio (CAR) variable and Return On Asset (ROA). This means that H1 is rejected.

2. Results of the second hypothesis test (H2)
   The results of the second hypothesis test (H2) state that the Loan to Deposit Ratio (LDR) variable has an effect on Return On Asset (ROA). From the hypothesis testing that has been done, it shows that the results of the Loan to Deposit Ratio (LDR) variable from the t-test produce multiple regression calculations with a t value = 6.267 and a significant value of 0.073 greater than 0.05, meaning that there is no effect between the Loan to Deposit Ratio (LDR) variable and Return On Asset (ROA). This means that H2 is rejected.
3. Results of the third hypothesis test (H3)
   The results of the third hypothesis test (H3) state that the Non-Performing Loan (NPL) variable has an effect on Return On Asset (ROA). From the hypothesis testing that has been done, it shows that the results of the Non-Performing Loan (NPL) variable from the t-test produce multiple regression calculations with a t value = -1.898 and a significant value of 0.006 less than 0.05, meaning that there is an effect between the Non Performing Loan (NPL) variable and Return On Asset (ROA). This means that H3 is accepted.

Simultaneous Test (F Test)

The F statistical test basically shows whether all independent variables or free variables entered into the model have a joint influence on the dependent variable or bound variable. The results of the simultaneous F test calculation can be seen in the following table.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	296,151	3	98,717	17,869	,200[b]
	Residual	657,423	119	5,525		
	Total	953,574	122			

a. Dependent Variable: Return On Asset (ROA)

b. Predictors: (Constant), Non Performing Loan (NPL), Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR)

Based on table 4.10 above, it can be seen with a significance level of 5 percent (0.05) and degrees of freedom in column df 1 = 3 and df 2 = 119, then the F value can be seen = 17.869. In column Sig. = 0.200 > 0.05 shows that simultaneously there is no influence of Capital Adequacy Ratio (CAR), Non Performing Loan (NPL), and Loan to Deposit Ratio (LDR) on Return On Asset (ROA) and it is said that the model is not feasible.

Test of Determination Coefficient (R^2)

The value of the coefficient of determination is between zero and one. A value close to one means that the independent variables provide almost all the information needed to predict the dependent variable. While a small R2 value means that the ability of the independent variables or free variables to explain the dependent variable or bound variable is very limited. The following are the results of the determination coefficient test (R^2).

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,557[a]	,311	,293	2,35044	1,298

a. Predictors: (Constant), Non Performing Loan (NPL), Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR)

b. Dependent Variable: Return On Asset (ROA)

Based on the results of the determination coefficient test (R2), it can be seen that the Adjusted R Square value in the model is 0.293 or 29.3 percent. So it can be interpreted that the Capital Adequacy Ratio (CAR), Non Performing Loan (NPL), and Loan to Deposit Ratio (LDR) variables affect Return On Asset (ROA) by 29.3 percent and the rest is influenced by variables outside the model used in this study.

Discussion

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

The results of the analysis of the Capital Adequacy Ratio (CAR) variable on Return On Asset (ROA) are based on the results of the partial test, the Capital Adequacy Ratio (CAR) has no effect on Return On Asset (ROA). This is evidenced by the results of the t-test in table 4.9 where the significance value is 0.053. The significance value shows a value greater than 0.05. So it can be concluded that the CAR variable has no effect on ROA.

This means that banks that have large capital but the bank cannot use the capital effectively, the capital will not affect the bank's profitability. So that public trust is still low and the public will be careful to invest their funds (Dini and Manda, 2020).

The results of this study are consistent with the results of research conducted by Novia Dini, Gusganda Suria Manda (2020) which states that the Capital Adequacy Ratio (CAR) has no effect on Return On Asset (ROA). However, the results of this study are not consistent with the results of research conducted by Daniel Nugroho, Maryam Mangantar, Joy E. Tulung (2019), Watung E.C Rembet, Dedy N. Baramuli (2020), A.A. Putu Nikkita Devi, Agus Wahyudi Salasa Gama, Ni Putu Yeni Astiti (2020), Helmalia Fauziah (2021), and Aminah Fitrieska Pratami (2021) which stated that the Capital Adequacy Ratio (CAR) has an effect on Return On Assets (ROA).

The Influence of Loan to Deposit Ratio (LDR) on Return on Asset (ROA)

The results of the analysis of the Loan to Deposit Ratio (LDR) variable on Return On Asset (ROA) are based on the results of the partial test, the Loan to Deposit Ratio (LDR) has no effect on Return On Asset (ROA). This is evidenced by the results of the t-test in table 4.9

where the significance value is 0.073. The significance value shows a value greater than 0.05. So it can be concluded that the LDR variable has no effect on ROA.

This means that banking conditions in the 2019-2021 period are quite conservative and are cautious in dealing with liquidity risks. With a high level of capital adequacy (CAR), banks have not optimally utilized their capital. The bank's intermediation function has not been maximized, indicated by suboptimal credit distribution (LDR).

A low LDR ratio indicates that the use of funds has not been maximized, as well as very careful credit distribution. In addition, the use of funds for other operational activities has also not been optimal. In fact, income is not obtained solely from credit distribution, so LDR is not significant to ROA.

The results of this study are consistent with the results of research conducted by Watung E.C Rembet, Dedy N. Baramuli (2020) which stated that the Loan to Deposit Ratio (LDR) variable has no effect on Return On Asset (ROA). However, the results of this study are not consistent with the results of research conducted by Novia Dini, Gusganda Suria Manda (2020), A.A. Putu Nikkita Devi, Agus Wahyudi Salasa Gama, Ni Putu Yeni Astiti (2020), and Aminah Fitrieska Pratami (2021) which stated that the Loan to Deposit Ratio (LDR) variable has no effect on Return On Asset (ROA).

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

The results of the analysis of the Non Performing Loan (NPL) variable on Return On Asset (ROA) are based on the results of the partial test of Non Performing Loan (NPL) affecting Return On Asset (ROA). This is evidenced by the results of the t-test in table 4.9 where the significance value is 0.006. The significance value shows a value that is smaller than 0.05. So it can be concluded that the NPL variable affects ROA.

This means that an increase in NPL will affect bank profitability, because the higher the NPL, the worse the quality of bank credit which causes the number of non-performing loans to increase, and therefore the bank must bear losses in its operational activities so that it affects the decline in profit (ROA) obtained by the bank.

The results of this study are consistent with the results of research conducted by Novia Dini, Gusganda Suria Manda (2020), A.A. Putu Nikkita Devi, Agus Wahyudi Salasa Gama, Ni Putu Yeni Astiti (2020), and Helmalia Fauziah (2021) stated that the Non Performing Loan (NPL) variable has an effect on Return On Asset (ROA). However, the results of this study are inconsistent with the results of research conducted by Daniel Nugroho, Maryam Mangantar, Joy E. Tulung (2019), and Watung E.C Rembet, Dedy N. Baramuli (2020) which stated that the Non Performing Loan (NPL) variable has no effect on Return On Asset (ROA).

Conclusion, Implication, and Recommendation

Based on the data analysis that has been carried out, the following conclusions can be drawn:

1. Testing the variable influence of Capital Adequacy Ratio (CAR) on Return n Asset (ROA) shows that Capital Adequacy Ratio (CAR) has no effect on Return On Asset (ROA).
2. Testing the variable influence of Loan to Deposit Ratio (LDR) on Return On Asset (ROA) shows that Loan to Deposit Ratio (LDR) has no effect on Return On Asset

(ROA). Testing the variable influence of Loan to Deposit Ratio (LDR) on Return On Asset (ROA) shows that Loan to Deposit Ratio (LDR) has no effect on Return On Asset (ROA).

3. Testing the variable influence of Non-Performing Loan (NPL) on Return On Asset (ROA) shows that Non Performing Loan (NPL) has an effect on Return On Asset (ROA).

Based on the conclusions above, it can be concluded that there are several suggestions from the researcher as follows:

1. For Investors
   For investors, before making an investment, investors should consider the Non Performing Loan factor because it has a dominant negative influence on the bank's financial performance as measured by Return On Asset because if the negative influence can be minimized, the bank is likely to experience good performance.
2. For the Bank
   For the bank management, it is expected to always maintain its capital level, so that it will increase the bank's profitability. Policy making needs to ensure that the number of Non Performing Loans does not swell, or a maximum of 5% in accordance with Bank Indonesia regulations. In order for the NPL value from year to year to be reduced, the bank must have a prudent principle to be applied to problematic loans.
3. For the Monetary Authority
   Bank Indonesia as the monetary authority in Indonesia is expected to continue to supervise the performance of banks, especially in terms of the non-performing loan ratio which has been proven to have a significant influence on the banking ability to earn profits.

The limitations in this study can be used as a consideration for further researchers in order to obtain more optimal research results. The limitations in this study include:

1. The value of Adjusted R Square in the regression model of this study is low, which is 0.239 or only 23.9 percent. This means that the Return On Asset (ROA) test variable can only be explained by the Capital Adequacy Ratio (CAR), Non Performing Loan (NPL), and Loan to Deposit Ratio (LDR) of 23.9 percent. While the remaining value of 76.1 percent is influenced by other factors outside the three independent variables in the study.
2. This study only focuses on banking in 2019-2021, so it cannot be used as a basis for Return On Asset (ROA) in general for banking companies listed on the Indonesia Stock Exchange (IDX).

With the limitations of the study, further research needs to be improved in order to obtain good results. For this reason, further research is recommended:

1. Adding other variables that are not included in the regression model in this study to increase the low Adjusted R Square value. Such as the BI Rate variable, inflation, and exchange rate.

2. In carrying out the future research agenda, it is expected to be able to examine all banking companies listed on the Indonesia Stock Exchange (IDX).

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