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THE EFFECT OF NON PERFORMING LOAN (NPL) AND LOAN TO DEPOSIT RATIO (LDR) ON RETURN ON ASSETS (ROA) IN PT. BANK SULSELBAR

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Abstract

The purpose of this research is totest and analyze the effect of Non Performing Loans (NPL) and Loan to Deposit Ratio (LDR) on Return On Assets (ROA) at PT. Sulselbar Bank. The techniques for collecting secondary data are obtained from the Financial Data at PT. Sulselbar Bank. The population is the financial statements at PT. Bank Sulselbar from August 2017 to December 2021, and the samples taken are monthly data for 4 (four) years and 5 (five) months. So, the amount of data obtained is 53. The results of the research have been tested on classic assumptions such as the assumption of normality, the assumption of multicollinearity and the assumption of heteroscedasticity. By applying multiple linear regression techniques in the process of analyzing the data. The results showed that partially Non Performing Loans (NPL) had a negative and insignificant effect on Return on Assets (ROA) and Loan To Deposit Ratio (LDR) had a positive and insignificant effect on Return on Assets (ROA). Simultaneously Non Performing Loans (NPL) and Loan to Deposit Ratio (LDR) have a positive effect

Keywords:*Non Performing Loans*(NPL), Loan to Deposit Ratio (LDR), Return on Assets (ROA)

1. INTRODUCTION

When running the operations of a bank must have a goal in order to obtain maximum profit. Measurement of profitability can be measured by the ratio of Return on Equity (ROE) and Return On Assets (ROA). According to Dendawijaya (2018: 29) Bank Indonesia places more importance on the ROA ratio than the ROE ratio. This is because the ROA ratio prioritizes profitability resulting from assets, most of which are obtained from raising funds from the public. According to Bank Indonesia regulations No.13/1/PBI/2011, in terms of the best minimum measurement for Return on Assets (ROA) is 1.5%. The greater the ROA value obtained by the bank, the greater the level of profit obtained by the bank and the position of the bank will also be better in terms of asset use.

Non Performing Loans(NPL) in this study, namely the ratio used to measure the risk of credit disbursed by comparing bad loans with the amount of credit disbursed. According to Bank Indonesia Regulation No.23/2/PBI/2021 currently stipulates that the applicable Non

Performing Loan (NPL) value is 5%. A high NPL value indicates that a large amount of money is withheld by customers because these funds need to be used by the bank. The value of Non-Performing Loans (NPL) must be a concern for banking financial management, this is because the management of non-performing loans which continues to increase will affect the health of the bank.

According to Rohimah (2021: 134) Bank losses are generally caused by bad loans, which result in reduced bank profits, losses due to non-receipt of paid funds, and unacceptable interest income. which results in a decrease in total revenue. This of course will have an impact on the ROA ratio which will fluctuate, which investors are worried about will lose confidence and withdraw their funds simultaneously so that it will result in a rush. So we need a mechanism to maximize ROA in a bank

Loan to Deposit Ratio(LDR) is used as an indicator to determine the level of vulnerability of a bank. The size of the LDR is stipulated in Bank Indonesia regulation number 17/11/PBI/2015, the lower limit of the target LDR is 78% and the initial limit is 94%. According to Susilawati (2021: 74), if the value shows a figure below 78%, it is stated that the bank concerned is unable to properly repay all the funds it has collected. However, if the value shows a number above 94%, then the total credit disbursed is more than the funds collected which will later have an impact on the adequacy of the bank's own capital.

Several previous researchers have analyzed using the Loan to Deposit Ratio (LDR) as a proxy, it has the aim of expressing the ability of banks to pay back depositor withdrawals by relying on credit as a source of liquidity.

In connection with the background of the problem that has been explained by the author, PT. Sulselbar Bank. Empirical facts obtained from the financial reports of Bank Sulselbar illustrate that the company's Return on Assets (ROA) has decreased and increased during the 2016-2020 period, shown in the table below:

Table 1. NPL, LDR and ROA data at PT. Bank Sulselbar Makassar from the Report Financial Publications As of 31 December 2016-2020 period.

Year	Non Performing Loans (NPL) (In %)	Loan To Deposit Ratio (LDR) (In %)	Return On Assets (ROA) (In %)
2016	0.51	103.00	4.96
2017	0.52	119.38	3.56
2018	0.51	119.76	3.67
2019	1.25	117.85	3,36
2020	0.67	121.42	3,12

Source: Financial Report Data of PT. Bank Sulselbar Makassar (Data downloaded October 22

From the table it can be seen that the NPL value of Bank Sulselbar is at the 2019 figure, which has increased due to profit instability due to a lack of control over the assets owned by the company. However, this increase is still safe because it is at 5% in accordance with Bank Indonesia regulations. The LDR value for the last 5 years has continued to increase which illustrates the lack of bank control over the assets it owns. The value of the ROA ratio is at a very good value, that is, the average is above 3% from Bank Indonesia's provisions of 1.5%, Bank Sulselbar has an unstable ROA and has tended to decrease over the last 5 years.

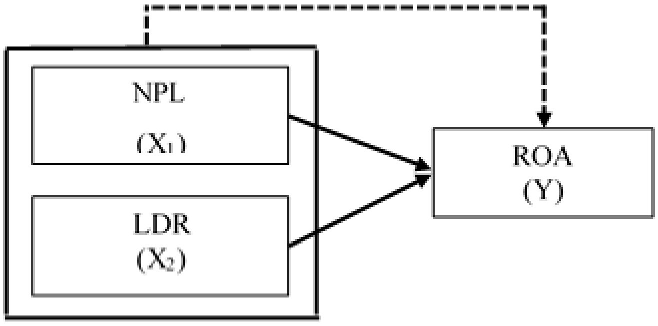
Based on the background and according to the financial statements of PT. Bank Sulselbar which is the novelty in this study, the purpose of this research is to examine and analyze the influence of Non Performing Loans (NPL) and Loan to Deposit Ratio (LDR) on Return On Assets (ROA) at PT. Sulselbar Bank.

2. RESEARCH METHOD

This research is a quantitative analysis research using descriptive approach method. This research is causal, this research looks for a causal relationship between the independent variable (X) and the dependent variable (Y). In this study the independent variables are Non Performing Loans (NPL) (X1) and Loan to Deposit Ratio (LDR) (X2) while the dependent variable is Return On Assets (ROA) (Y). The research design used cross sectional. Data collection was obtained through the Financial Control Group Lt.4 Head Office PT. Sulselbar Bank on Jl. Ratulangi No. 16 Makassar. The population of this research is the Financial Statements of PT. Bank Sulselbar published from August 2017 to December 2021 for a total of 53 (fifty three) samples.

The technique used to collect data in this study is documentation where the technique is carried out by collecting and recording and then reviewing the secondary data obtained in the form of PT. Bank Sulselbar through www.banksulselbar.co.id and from every appropriate book, research journal and other sources. Research testing uses descriptive analysis, classic assumption test which consists of normality test, heteroscedasticity test and multicollinearity test and hypothesis test.

Figure 1 Variable Relationship Scheme



1. The first hypothesis: Non Performing Loan (NPL) has a negative and significant effect on Return On Assets (ROA) at PT. Sulselbar Bank.
2. Second Hypothesis: Loan To Deposit Ratio (LDR) has a positive and significant effect on Return On Assets (ROA) at PT. Sulselbar Bank.
3. Third Hypothesis: Non Performing Loans (NPL) and Loan To Deposit Ratio (LDR) have

a positive and significant effect on Return On Assets (ROA) at PT. Sulselbar Bank.

3. RESULTS AND DISCUSSION

3.1 Descriptive Analysis

Table 2. Descriptive Analysis

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
NPL	53	,52	1,43	,8857	,38166
LDR	53	83,86	120,41	97,7985	9,33161
ROA	53	2,07	5,68	3,4304	,47600
Valid N (listwise)	53				

3.2 Classical Assumption Test

3.2.1. Normality test

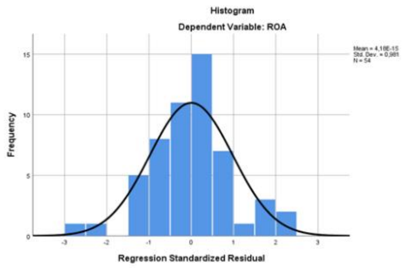


Figure 2. Normal Probability Plots **Figure 3. Histogram**

By looking at Figure 2, it can be seen that the PP regular and standard regression plots have points distributed around the diagonal and Figure 3 shows that the distribution pattern is close to normal. This can be seen from the bell-shaped histogram image. It was concluded that the data in this study were normally distributed and the regression analysis was valid.

3.2.2. Multicollinearity Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	5,206	,665		7,825	,000		
	NPL	-,067	,164	-,053	-,406	,686	,997	1,003
	LDR	,018	,007	-,353	-2,694	,010	,997	1,003

a. Dependent Variable: ROA

Table 4. Multicollinearity Test

Based on the results of the analysis in the table, it can be seen that there is no multicollinearity between the independent variables in the regression model. This can be seen from the tolerance value of the NPL variable (X1) of 0.997 and LDR (X2) of 0.997. see the Tolerance value is greater than > 0.1 and the Variance Inflating Factors (VIF) value is less than 10.

3.2.2. Heteroscedasticity Test

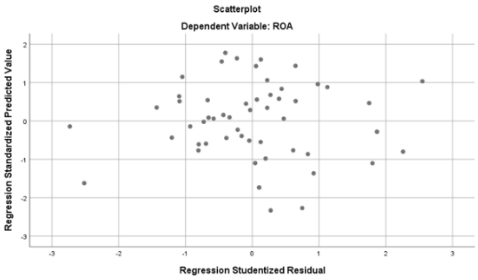


Figure 4. Heteroscedasticity Test

Based on the Sacatterplot graphical images, the model is irregular or has no pattern that appears to be randomly distributed and distributed above and below the number 0 on the Y axis. There is no non-uniform variance of the independent variables.

3.3 Hypothesis Testing

3.3.1. Partial Test (T Test)

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5,222	,690		7,572	,000
	NPL	-,067	,166	-,054	-,406	,687
	LDR	,018	,007	,347	2,614	,012
a. Dependent Variable: ROA						

Table 5. T test

Based on the results of the partial test in table 5 above, it can be seen the effect of each independent variable consisting of Non Performing Loans (NPL) and Loan To Deposit Ratio (LDR) on the dependent variable, namely Return On Assets (ROA) which will be explained as follows:

a. Testing the effect of NPL on ROA produces a t value of -0.406 with a significance value of 0.687. Based on these results it can be said that the significant value of NPL is greater than the test level value (0.000 > 0.05) then H0 is rejected and H1 is accepted.
b. Testing the effect of LDR on ROA produces a t value of 2.614 with a significance value of 0.12. Based on these results it can be said that the significance value of LDR is greater than the test level value (0.000 > 0.05) then H0 is rejected and H1 is accepted.

3.3.2. Simultaneous Test (Test F)

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1,429	2	,714	3,450	,039[b]
	Residual	10,353	50	,207		
	Total	11,782	52			
a. Dependent Variable: ROA						
b. Predictors: (Constant), LDR, NPL						

From the table above, it is obtained that the calculated F value is 3.450 with a probability of 0.039 which is greater than the significant value of 0.05 or a significant level of 5%. While the F table value is 2.79, it can be concluded that F count > F table, meaning that the X variables consisting of Non Performing Loans (NPL) and Loan To Deposit Ratio (LDR) in this study simultaneously (simultaneously) has a positive and insignificant effect on Return On Assets (ROA) as a variable Y, in other words the hypothesis is accepted.

3.3 Coefficient of Determination

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,354[a]	,126	,091	,45061
a. Predictors: (Constant), LDR, NPL				

Figure 7. The coefficient of determination

Based on the table above, it can be seen that the value (R) is 0.354. To find out the magnitude of the variation obtained from the coefficient of determination R Square of 0.126 which means that the variable NPL (X1) and LDR (X2) is 12.6%. The remaining 87.4% are other factors that influence ROA (Y) which are not yet known.

3.4 Discussion

3.4.1 The Effect of Non Performing Loans (NPL) on Return On Assets (ROA) at PT. Sulselbar Bank

Based on the results of the hypothesis that was tested with the t test, it can be seen that the NPL variable has a t count of -0.406 with a significance value of 0.687, which means it has no significant and negative effect on Bank Sulselbar's ROA for the period August 2017 to December 2021.

This indicates that NPL is not in line with ROA. The higher the NPL value generated by the company, the lower the ROA value obtained and vice versa. The results that show the non-significance of the acquisition of the NPL value to ROA at bank Sulselbar can be seen from the acquisition of the financial reports for the period August 2017-December 2021 which shows that in certain periods the value of the NPL ratio has increased, the ROA ratio will have decreased, for example it occurred in January-March 2019 where the NPL ratio has increased which indicates the funds held by customers have also increased and will result in a decrease in profits and vice versa.

Based on the results of this study, the NPL value does not have a significant effect on the fluctuations in the income level of Bank Sulselbar. It is known that the average NPL ratio of Bank Sulselbar is below 1.3%, this indicates that Bank Sulselbar's NPL is in the good category. During the research period, lending to debtors was still relatively small compared to the financing or expenses incurred by the bank. In practice, banks prefer to switch to sectors with low risk so that the NPL ratio can be maintained according to the category of the soundness level of the bank.

The results of this study are in line with the results of research conducted by Kurniawati (2017) from the results of his research stated that Non Performing Loans (NPL) have a negative and significant effect on Return On Assets (ROA), Suciatay (2019) from the results of his research stated that Non Performing Loans (NPL) has a negative and insignificant effect on Return On Assets (ROA) and research conducted by Alfian (2021) from the results of his research it is stated that Non Performing Loans (NPL) have a negative and significant effect on Return On Assets (ROA).

The results of research conducted at Bank Sulselbar for the period August 2017-December 2021 have differences from previous researchers, where the results showed that the NPL ratio did not have a significant effect on ROA.

3.4.2 Effect of Loan To Deposit Ratio (LDR) on Return On Assets (ROA) at Bank Sulselbar

Based on the results of the hypothesis tested with the t test, it can be seen for the Loan To Deposit Ratio (LDR) variable with a t count of 2.614 with a significance value of 0.012 which means that it has no significant and positive effect on Return On Assets (ROA) at Bank Sulselbar in the period August 2017 to December 2021.

This indicates that LDR is in line with ROA. The higher the LDR value produced by the company, the higher the ROA value obtained and vice versa. The results that show the insignificance of the acquisition of the LDR value to ROA at bank Sulselbar can be seen from the acquisition of the financial reports for the period August 2017-December 2021 which shows that in certain periods the value of the LDR ratio has increased but the ROA ratio has decreased, for example it occurred in January-March 2021 where the LDR ratio has increased which indicates greater lending so that the opportunity to generate higher returns, which means it will have an impact on increasing the value of the ROA ratio,

The results of this study are in line with the results of research conducted by Kurniawati (2017) and Suciaty (2019) from the results of their research it was stated that the Loan To Deposit Ratio (LDR) has a positive and significant effect on Return On Assets (ROA).

The results of research conducted at Bank Sulselbar for the period August 2017-December 2021 have differences from previous researchers, where the results showed that the LDR ratio did not have a significant effect on ROA.

3.4.3 Effect of Non Performing Loan (NPL) and Loan To Deposit Ratio (LDR) on Return On Assets (ROA) at Bank Sulselbar

Based on the results of the hypothesis tested with the F test, it can be seen that the independent variables consist of NPL and LDR with an F count of 3.450 with a significance value of 0.039 which means that it has a significant and positive effect on ROA at Bank Sulselbar in the period August 2017 - December 2021 .

The results of this study are in line with the results of research conducted by Kurniawati (2017) and Suciaty, et al (2019) from the results of their research it was stated that simultaneously NPL LDR has a positive effect on ROA. This indicates that NPL and LDR are in line with ROA, which means that increases and decreases in the value of a bank's NPL and LDR will have an impact on profit. So that the bank is expected to be able to manage and manage finances properly so as not to have an impact on the health of the bank itself.

The results of research conducted at Bank Sulselbar for the period August 2017-December 2021 have differences from previous researchers, where the results show that the NPL and LDR ratios simultaneously do not have a significant effect on ROA. acquisition of ROA value.

4. CONCLUSIONS AND SUGGESTIONS

4.1 Conclusion

Based on the results of the study, the researchers drew the conclusion that:

1. Non Performing Loan (NPL) has a negative and insignificant effect on Return On Assets (ROA), this is evidenced by the negative regression coefficient value of -0.067 and a significance value of 0.687 which is greater than the error tolerance $\alpha = 0.05$ so that H1 is accepted.
2. The Loan To Deposit Ratio (LDR) has a positive and insignificant effect on Return On Assets (ROA), this is evidenced by the positive regression coefficient value of 0.018 and a significance value of 0.012 which is greater than the error tolerance $\alpha = 0.05$ so that H2 is accepted.
3. The results of simultaneous testing or the F test show that NPL and LDR simultaneously affect ROA, this is evidenced by the F count of 3.450 with a probability of 0.039 which is greater than the significant value of 0.05. While the F table value is 2.79, it can be concluded that F count > F table so that H3 is accepted.

4.2 Suggestions

Based on these conclusions, the following suggestions can be put forward:

1. According to the results of this study, the ratio of Non Performing Loans (NPL) at PT. Bank Sulselbar is in the healthy category, but it is known that there has been an increase in non-performing loans in the non-performing category which will continue to increase every month in 2021. It is hoped that the bank will monitor and evaluate the causes of this increase so that it can reduce the risk of non-performing loans and increase profits for the bank.
2. In accordance with the results of this study, the Loan to Deposit Ratio (LDR) ratio of PT. Bank Sulselbar is in the less healthy category. Banks are expected to pay attention to the total amount of loans given to their customers so as to minimize the number of non-performing loans, reduce liquidity risk and maintain the stability of their capital.

3. In accordance with the results of this study, the ratio of Return On Assets (ROA) at PT. Bank Sulselbar is in the healthy category, but there has been a decline in the ROA ratio at Bank Sulselbar over the last 5 years. This decline is expected to be a reference for paying more attention to and supervising the factors that cause a decline in bank profits, especially on issues related to bank credit problems so that it is expected that bank profits will increase in the following period.

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