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The Influence of The Level of Credit Risk and Liquidity Risk on Profitability in Banking Listed on The Bei for the 2018-2021 Period

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ABSTRACT

The type of research used is descriptive quantitative, the type of data used is secondary data obtained from financial report data, research location via the official website of the Indonesia Stock Exchange (www. Idx.id). The population and sample in this research are banking companies with a sample size of 35 banking companies listed on the Indonesia Stock Exchange for the 2018-2021 period. The research results show that Non Performing loans (NPL) have a negative and significant effect on Return On Assets (ROA) with a t-value < t-table. Loan to Deposit Ratio (LDR) has a significant effect on Return On Assets (ROA) with t-count > t-table. Simultaneous research results show that Non Performing Loans, Loan to Deposit Ratio to Return On Assets with a significant value is smaller than the standard value, the calculated f value is > f fable. The influence of the level of credit risk and liquidity risk on profitability in banks listed on the Indonesian Stock Exchange (BEI) for the 2018-2021 period is 28.2%.

Keywords: *Credit Risk, Liquidity Risk, Profitability*

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INTRODUCTION

The problem that is very often faced in banking is credit problems which are caused by frequent payment failures by customers so that banks face credit risk problems. The occurrence of this credit risk can result in a decline in profitability or profits of a bank. One thing that can be used to measure a bank is through the condition of the financial statements by looking at the profitability of a bank. Profitability is the ability achieved by a company or bank in a certain period Hayat (2018). The profitability variable in this research uses the ROA (Return On Asset) ratio to measure or compare the profitability of a bank. This ratio functions to find out how much profit is generated by banking. The efficiency of a bank can be seen through a comparison of the profits obtained with the capital or assets that generate profits, quoted from the book by Garindya and Egi (2023).

To manage risks that arise in banking, policy procedures, methods and ways of measuring each type of risk that arise in the bank's business activities will be required.

Performance is the result of doing the work assigned. It's not just about what is done, but the process of doing certain work to get results. Sadir, Muhammad Nadir, Sri Utami Permata, N.F. (2020). Financial reports are basically the result of an accounting process that is used to communicate financial data or company activities to interested parties (quoted from Prayitno, Rate & Tulung, 2022). Financial reports are the final result of the activity process of recording and summarizing transaction data for a business Hery (2020).

To manage risks that arise in banking, policy procedures, methods and ways of measuring each type of risk that arise in the bank's business activities will be required. One of the bank's activities or activities is distributing funds or providing credit to customers. Debtors who do not make payments on time or after the due date set by the bank will create a credit risk or what is known as bad credit which can cause losses to the bank. The risk that usually occurs in banking activities is liquidity risk. Liquidity risk is a risk that arises due to the limited availability of bank liquid assets, resulting in an inability to fulfill responsibilities, both in terms of fulfilling fund withdrawal requests by depositors and in providing loans to prospective debtors Pandia 2017).

METHOD

This research is research using quantitative methods and is classified as causal research. According to Sugiyono (2019), the Quantitative method is positivist research which is used to research certain populations or samples. This research uses secondary data, namely data obtained indirectly. This data refers to information obtained from existing data sources. The data source obtained is in the form of financial reports from all banks registered on the IDX which have been published by the banks from 2018-2021. This research uses a population of all banks registered on the IDX for the 2018-2021 period, totaling 47 banking companies. The researcher used a purposive sampling technique, namely taking samples based on criteria determined by the researcher with a total of 35 samples.

RESULT

Table 1
Descriptive statistics test

	N	Minimum	Maximum	Mean	Std. Deviation
NPL	140	,00	4,96	1,7998	1,29285
LDR	140	12,35	952700,00	6937,6366	80508,66016
ROA	140	,02	13,58	1,8608	2,11284
Valid N (listwise)	140				

Source: Data processing SPSS 26 (2023)

Based on the table above showing Non Performing Loans (X1) from 140 samples, it is known that the minimum value is 0.00, the maximum value is 4.96, the mean value is 1.7998, and the standard deviation value is 1.29285 so the mean value > standard deviation means The distribution of NPL data is good because it is close to the mean value and it can be concluded that NPL is homogeneous and shows less variation in data.

Loan to Deposit Ratio (X2) from 140 samples shows that the minimum value is 12.35, the maximum value is 952700.00, the mean value is 6937.6366 and the standard deviation value is 80508.66016. If the mean < standard deviation means the LDR data varies or is inaccurate because the data is not close to the mean.

Return On Assets (Y) from 140 samples shows that the minimum value is 0.02, the maximum value is 13.58, the mean value is 1.8608, and the standard deviation value is 2.11284. If the mean < standard deviation means the ROA data varies or is inaccurate because the data is not close to the mean.

Table 2 Normality test

One-Sample Kolmogorov-Smirnov Test		
		SORT_x1
N		140
Normal Parameters[a,b]	Mean	1,2356
	Std. Deviation	,52439
Most Extreme Differences	Absolute	,054
	Positive	,054
	Negative	-,049
Test Statistic		,054
Asymp. Sig. (2-tailed)		,200[c,d]
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
a. This is a lower bound of the true significance.		
Source: Data processing SPSS 26 (2023)		

Based on the results of the Kolmogorov Smirnov test above, it is stated that the Asymp. Sig with a value of 0.200, which means the value is >0.05 so it can be concluded that the Residual value is normally distributed or meets the requirements of the data normality test.

Table 3 Multicollinearity test Coefficients[a]

Model	Collinearity Statistics		
	Tolerance	VIF	
1	NPL	,990	1,010
	LDR	,990	1,010

a. Dependent Variable: ROA

Source: Data processing SPSS 26 (2023)

Based on the table above, the results of the Multicollinearity test show that the tolerance value of the two variables, namely Non Performing Loan and Loan to Deposit Ratio, shows a Tolerance number below 0.10 and a VIF value of no more than 10. So it can be concluded that in the regression model there is no Multicollinearity problem. , so the existing regression is suitable to be used.

Table 4
Heteroscedacity test

Correlations

			NPL	LDR	Unstandardized Residual
Spearman's rho	NPL	Correlation Coefficient	1,000	-,031	,099
		Sig. (2-tailed)	.	,715	,245
		N	140	140	140
	LDR	Correlation Coefficient	-,031	1,000	,209*
		Sig. (2-tailed)	,715	.	,013
		N	140	140	140
	Unstandardized Residual	Correlation Coefficient	,099	,209*	1,000
		Sig. (2-tailed)	,245	,013	.
		N	140	140	140

*. Correlation is significant at the 0.05 level (2-tailed).

Source: Data processing SPSS 26 (2023)

Based on the table above, the heteroscedasticity test was carried out using the Spearman rank method. If the value is significant or sig. (2-tailed) is greater than 0.05, it can be said that there is no heterocasticity problem, on the other hand, if the value is significant or sig. (2-tailed) is smaller than 0.05, it can be said that there is a heteroscedasticity problem. As can be seen in the table above, the residual value is sig. (2-tailed) NPL variable (X1) 0.245 and LDR variable (X2) 0.013, because the second value of the independent

variable (X) is greater than the value 0.05, it can be concluded that there are no problems or symptoms of Heteroscedacity

Table 5 Multiple linear regression analysis test Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,557	,262		9,751	,000
	NPL	-,432	,118	-,264	-3,659	,000
	LDR	1,170	,000	,446	6,171	,000

a. Dependent Variable: ROA

Source: Data processing SPSS 26 (2023)

Based on the table, the multiple regression equation obtained is as follows:

ROA = 2,557-0,432NPL+1,170LDR+e

Based on the regression equation above, the regression coefficient above, the regression coefficient can be explained as follows:

a. The constant value (a) of 2.557 means that if the independent variables, namely NPL (X1) and LDR (X2), are assumed to be constant, then the dependent, namely ROA, is 2.557.
b. NPL (X1) has a negative value (-0.432). This shows that every 1% increase in NPL will cause a decrease in ROA of -0.432 and the variable remains.
c. LDR (X1) has a value of 1.170, indicating that if there is an increase in variable X2 by 1%, ROA will increase by 1.170. So the coefficient value of LDR shows a unidirectional or positive relationship with ROA.

Table 6 Partial test Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,557	,262		9,751	,000
	NPL	-,432	,118	-,264	-3,659	,000
	LDR	1,170	,000	,446	6,171	,000

a. Dependent Variable: ROA

Source r: Data processing SPSS 26 (2023)

a. H1: There is an influence of Non-Performing Loans (X1) on Return on Assets (Y)

From the research results, it was obtained that the NPL (X1) t value was -3.659 with a significance level of 0.00 < 0.05 and the t table value was 1.692 or in other words t-count

< t-table (-3.659 < 1.692). Because the significant value is <0.05, Ho is rejected and Ha is accepted, meaning that there is an influence between variable X and variable Y so that the hypothesis which states that NPL has a negative and significant effect on ROA can be accepted.

b. H2: There is an influence of Loan to Deposit Ratio (X2) on Return on Assets (Y)

From this research, the t-count value of LDR (X2) was 6.171 with a significance level of 0.00 < 0.05, the t-count value was 6.171 and the t-table value was 1.692 or in other words t-count > t-table (6.171 > 1.692). Because the significant value is 0.00 < 0.05, Ho is rejected and Ha is accepted, so it can be concluded that there is a significant influence between LDR and ROA which is acceptable.

Table 7 Simultaneous test ANOVA[a]

Model		m of Squares	Df	Mean Square	F	Sig.
1	Regression	181,446	2	90,723	28,308	,000[b]
	Residual	439,061	137	3,205		
	Total	620,507	139			

a. Dependent Variable: ROA

b. Predictors: (Constant), LDR, NPL

Source: Data processing SPSS 26 (2023)

Based on the results of simultaneous testing, NPL and LDR have a significant effect on ROA, as shown by the F-test results. This can be seen from the Fcount value (28.308) > (3.24) with a significant level of 0.000 < 0.05 (a = 0.05) so it can be concluded that there is a significant simultaneous influence between Non-Performing Loans, Loan to Deposit Ratio on Return On Assets.

Table 8 Coefficien of determination Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,541[a]	,292	,282	1,79020
a. Predictors: (Constant), LDR, NPL				
b. Dependent Variable: ROA				

Sumber: Data processing SPSS 26 (2023)

Based on the table above, the Adjusted R Square value (coefficient of determination) is 0.282, which means that the influence of the independent variables Non Performing Loan (X1), Loan to Deposit Ratio (X2) on Return On Assets (Y) is 28.2%, so from

this result shows that credit risk and liquidity risk influence profitability by 28.2% and the remainder is influenced by other factors outside this research.

DISCUSSION

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

These results indicate that there is an influence of Non-Performing Loans on Return On Assets as evidenced by the results of SPSS data processing showing negative results so that the hypothesis states that Non-Performing Loans have a significant negative effect on Return On Assets. This shows that Non-Performing Loans are in the opposite direction to Return On Assets.

This significant negative influence means that NPL or Credit Risk has an influence on increasing Return On Assets or profitability in a bank listed on the Indonesia Stock Exchange for the 2018-2021 period, so that the opposite direction between Non-Performing Loans and Return On Assets shows that each increase in risk credit will experience a decline in banking profitability. An increase in credit risk is caused by banks experiencing losses due to non-receipt of funds that have been disbursed or interest income that cannot be received because customers do not fulfill their responsibilities in accordance with the time set by the banking sector. So in this case, the higher the NPL ratio, the lower the ROA of a bank, which causes no money coming in, either in the form of principal payments or interest on loans from bad loans. The stability of a bank's NPL must meet and not exceed standards, therefore banks must maintain NPL stability so that the bank does not experience an increase in credit risk which causes a decrease in profitability.

According to (Riyadi 2017) an increase in Non-Performing Loans will affect Return On Assets. This condition means that the lower a company's NPL, the higher the return on assets of the company and if the NPL increases, the return on assets will decrease.

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

These results show significance so that the hypothesis states that the Loan to Deposit Ratio has a significant effect on Return On Assets. This significant influence means that the Loan to Deposit Ratio or liquidity risk has an influence on Return On Assets or profitability in banks listed on the Indonesia Stock Exchange for the 2018-2021 period. This indicates that an increase or decrease in Liquidity Risk (LDR) during the research period influences the increase or decrease Profitability (ROA) significantly. These results indicate that the size of a bank's LDR has an influence on Return On Assets because the size provided is supported by good credit quality. This risk occurs due to the distribution of funds in the form of credit in excess of the amount of customer deposits or savings, thereby creating a risk borne by the bank. The stability of a bank's LDR must meet and not exceed standards, therefore banks must maintain LDR stability so that the bank does not experience liquidity risk which causes a decrease in profitability. The results of this research are in line with existing theory, which states that the higher the credit disbursed by the bank, the more profitability obtained by the bank will increase Kasmir (2017).

The Influence of Non Performing Loans (NPL) and Loan to Deposit Ratio (LDR) on Return On Assets (ROA)

These results show that Non Performing Loans and Loan to Deposit Ratio together have a significant effect on Return On Assets as evidenced by the SPSS data processing results which show that the results have a joint effect.

CONCLUSION

Non-performing loans (NPL) have a negative and significant effect on Return On Assets (ROA) in banking companies listed on the Indonesia Stock Exchange for the 2018-2021 period. This result is proven by the SPSS test results which show that the Non-Performing Loan variable partially has a negative and significant influence on Profitability which shows the opposite direction so that every increase in NPL will result in a decrease in ROA.

Loan to Deposit Ratio (LDR) has a significant effect on Return On Assets (ROA) in banking companies listed on the Indonesia Stock Exchange for the 2018-2021 period. This result is proven by the SPSS test results showing that partially the Loan to Deposit ratio variable has a significant effect on Return On Assets so that the size of the LDR will have an effect on ROA.

Non Performing Loans and Loan to Deposit Ratio have an influence on Return On Assets. This result is proven by the SPSS test results which show the f test results, it can be seen that the Non-Performing Loan (X1) and Loan to Deposit ratio (X2) variables simultaneously influence Return On Assets (ROA).

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