

The Effect of Capital Adequacy Ratio (CAR) and Non-Performing Loans (NPL) to Return On Assets at KB Bukopin Bank year 2014-2023

Aninditha Putri Kusumawardhani

¹Universitas Informatika dan Bisnis Indonesia, Bandung, Indonesia, <u>anindithaputri@unibi.ac.id</u>

Corresponding Author: anindithaputri@unibi.ac.id

Abstract: This study aims to determine the picture and influence from Capital Adequacy Ratio (CAR) and Non Performing Loan (NPL) on Return On Assets. This research object is a Bukopin KB Bank company on the Indonesia Stock Exchange period 2014-2023. The method used is the quantitative method with a descriptive approach and a verifikatif. The sample in this study were 30 financial reports of Bank KB Bukopin companies on the Indonesia Stock Exchange in the period 2014-2023, with the sample-making techniques, namely a saturated sample. The results of this study show that partially Capital Adequacy Ratio (CAR) has an effect on Return On Asset at a total of 71.5%, Non Performing Loan (NPL) has no effect on the Return On Asset at a 44.7% of its effect. Simultaneously, the results are obtained that Capital Adequacy Ratio (CAR) and Non Performing Loan (NPL) has an effect on the Return On Asset Company at the Bank KB Bukopin Stock Exchange for the period of 2014-2023 with the amount of 73,4%.

Keyword: Capital Adequacy Ratio, Non Performing Loan (NPL), Return On Assets.

INTRODUCTION

Banking has a very vital role in the economy, especially in managing and channeling funds for various investment and consumption needs. Bank financial performance can be measured by various indicators, one of which is Return on Assets (ROA). ROA describes a bank's efficiency in generating profits from each unit of assets owned, which is an important benchmark in assessing bank profitability. Therefore, analysis of the factors that influence ROA is very important, especially in the banking sector which faces dynamic financial risks.

One factor that greatly influences a bank's financial performance is the Capital Adequacy Ratio (CAR). CAR is a ratio that measures the adequacy of bank capital to overcome risks that may arise due to losses. According to the Basel Committee on Banking Supervision (2017), a higher CAR shows that a bank has sufficient capital to cover unexpected losses, as well as showing the bank's resilience in facing economic uncertainty. Banks with higher CARs tend to be more stable and have the ability to survive crisis situations, which of course has an impact on profitability and financial performance, including ROA.

Several studies show that CAR is positively related to ROA. Research by Alqahtani & Mayes (2020) conducted on banks in Saudi Arabia, found that CAR has a significant impact

on bank profitability, which is reflected in ROA. The higher the CAR, the greater the bank's capacity to absorb losses, so that it is better able to maintain profits. The same thing was also found by Bashir (2020) in his research on banking in developing countries, which showed that a higher CAR is positively related to ROA because it increases operational stability and minimizes risk.

Research by Saha & Sahoo (2020) also shows similar results, where a higher CAR supports banks in maintaining profitability, especially in facing credit and market risk challenges. On the other hand, banks with low CARs are more vulnerable to market fluctuations and economic crises which can reduce their financial performance. This makes CAR an important indicator in assessing bank performance, especially in maintaining optimal ROA levels.

Apart from CAR, another factor that plays an important role in influencing bank financial performance is Non-Performing Loans (NPL), which measures the level of loans that debtors cannot pay according to the agreement. A high NPL indicates an increase in credit risk, which can have a negative impact on bank profitability. Banks with high NPL levels must provide larger reserves to cover losses, which has the potential to reduce the income and profits that can be obtained. According to Nawaz & Iqbal (2020), NPL has a negative influence on ROA. The higher the NPL, the more funds must be allocated to provisions for credit losses, which ultimately reduces the bank's ability to generate profits. Research by Sutrisno & Yuliana (2020) in Indonesia also found that NPLs have a negative effect on ROA, because high levels of non-performing loans reduce operational efficiency and bank profitability. Research by Rahman & Iqbal (2019) which analyzed the banking sector in Bangladesh also showed similar results, where NPL was negatively related to ROA. Banks with high NPLs must bear the risk of greater losses, which results in increased costs and reduced profits. Nawaz & Iqbal (2020) added that in the long term, high NPLs can cause a decline in bank asset quality and affect the bank's ability to access cheap funding, which in turn affects ROA. Recent research by Ben Salah and Chkir (2020) has emphasized that a higher CAR provides banks with more resilience against economic downturns and financial shocks, particularly in emerging markets. Furthermore, studies have indicated that stricter CAR requirements can lead to more conservative lending practices, which may dampen short-term profitability but enhance longterm stability (Tao et al., 2021).

In developed economies, the implementation of Basel III regulations, which have mandated higher CAR thresholds, has led to improved capital buffers, allowing banks to weather financial crises more effectively (Wang et al., 2020). However, excessive capital requirements can sometimes limit banks' lending capacity and affect their overall return on assets (ROA).

Non-Performing Loans (NPLs) have long been considered an important indicator of financial health for banks. A high level of NPLs signifies that a significant portion of a bank's loan portfolio is at risk of default, which can impair profitability and capital adequacy. Over the last five years, many studies have focused on the relationship between NPLs and financial stability, especially in light of economic challenges and regulatory reforms.

Recent studies, such as those by Pasiouras et al. (2019) and Zhang et al. (2021), have shown that banks with higher NPL ratios tend to experience lower profitability and higher costs related to provisions for loan losses. NPLs can also constrain banks' ability to extend credit, which can negatively affect economic growth (Ghosh, 2020). Additionally, during times of economic downturns, the level of NPLs tends to rise, as borrowers may struggle to repay loans, further complicating the financial health of banks.

The relationship between NPLs and capital adequacy is also critical. As NPLs rise, banks may be forced to increase provisions, which depletes their capital, potentially leading to violations of regulatory capital requirements (Sufian & Habibullah, 2020). Effective

management of NPLs is thus a key component in maintaining financial stability and profitability.

Return on Assets (ROA) is a widely used profitability metric that reflects how efficiently a bank is utilizing its assets to generate earnings. Over the past five years, ROA has been used to assess the impact of various factors, such as capital adequacy and NPLs, on the overall performance of banks.

Recent studies by Ali et al. (2021) and Sufian (2020) have shown that ROA is positively influenced by a bank's capital adequacy ratio. Banks with higher CAR tend to exhibit better profitability and are better equipped to manage risks, which can lead to a higher ROA. Conversely, a high level of NPLs tends to lower ROA, as it increases the need for provisions and reduces income from interest-bearing assets (Bouguila et al., 2021).

Moreover, ROA is significantly affected by the macroeconomic environment. During periods of economic expansion, banks often experience higher ROA due to increased demand for loans and better asset performance, while in recessions, higher levels of NPLs typically reduce ROA (Molyneux et al., 2020).

METHOD

This method uses a quantitative approach. This method is called a positivistic method because it is based on the philosophy of positivism. According to Sugiyono (2021:16) quantitative methods are called traditional methods, because this method has been used for a long time so that it has become a tradition as a method for research. The data analysis technique in this quantitative research uses descriptive and verification statistics. According to Sugiyono (2021:206) descriptive statistics are statistics used to analyze data by describing or illustrating the data that has been collected as it is without intending to make conclusions that apply to the general public or generalizations. According to Sugiyono (2021:3) verification research is research on data obtained which is then used to prove the existence of doubts about certain information or knowledge.

Population, according to Sugiyono (2021:126), is all the elements that will be used as a generalization area. Population elements are the entire subject to be measured, and the units to be studied. in this research the population is 30 data. According to Sugiyono, (2021:127) In quantitative research, the sample is part of the number and characteristics of the population, samples taken from the population must be truly representative. In this research, the sample selection method used was Nonprobability Sampling. Nonprobability sampling is a sampling technique that does not provide an equal chance for each element or member of the population to be selected as a sample, These sampling techniques include, Systematic Sampling, Quota Sampling, Incidental Sampling, Purposive Sampling, Saturated Sampling, Snowball Sampling, Census (Sugiyono, 2021:131). Samples were taken from the population using the Purposive Sampling method. Purposive Sampling is a technique for determining samples with certain considerations (Sugiyono, 2021: 133), where the sample criteria are determined based on the wishes of the researcher. The data collection techniques used by the author in this research were documentation and library research. data testing techniques. According to (Sugiyono, 2021) data testing or data analysis techniques are activities after data from all respondents or other data sources have been collected. The data used in this research the tool used for data processing in this research uses SPSS software.



Source: Research Results Figure 1. Conceptual Framework

RESULTS AND DISCUSSION

Tal	Table 1. CAR KB Bukopin 2014-2023				
No	Year	CAR			
1	2014	13.76%			
2	2015	12.54%			
3	2016	12.83%			
4	2017	11.61%			
5	2018	15.16%			
6	2019	14.08%			
7	2020	13.43%			
8	2021	22.11%			
9	2022	20.13%			
10	2023	28.50%			

Source : KB Bukopin Annual Report

Table 2. NPL KB Bukopin 2014-2023

No	Year	NPL
1	2014	6.58%
2	2015	5.21%
3	2016	4.80%
4	2017	8.54%
5	2018	6.57%
6	2019	5.99%
7	2020	10.16%
8	2021	10.66%
9	2022	6.56%
10	2023	9.56%

Source : KB Bukopin Annual Report

Table 3. ROA KB Bukopin No Year ROA 2014 0.29% 1 2 2015 0.38% 3 2016 0.54% 4 2017 0.09% 5 2018 0.22% 6 2019 0.13% 7 2020 -4.61% 8 2021 -4.93% 9 2022 -6.27% 10 2023 -7.71%

Descriptive Statistics

	Tuble in Descriptive Studistics						
	Ν	Minimum	Maximum	Mean	Std. Deviation		
CAR	10	11.61	28.50	16.4150	5.43879		
NPL	10	4.80	10.66	7.4630	2.10243		
ROA	10	-7.71	.54	-2.1870	3.28427		
Valid N (listwise)	10						
		a 1					

Table 4. Descriptive Statistics

Source : Research Data

In this table describes descriptive statistics for all variables in this study which include minimum value, maximum value, mean value and standard deviation. The minimum value describes the lowest value obtained from the results of data processing and analysis that has been carried out. The maximum value describes the highest value from the results of data processing and analysis that has been carried out, while the mean value (average) describes the average value of each variable. From table 4.4, the results of descriptive statistical calculations can be concluded that:

- 1. The CAR variable has a minimum value of 11.61 and a maximum value of 28.50. The mean value of the CAR variable is 16.4150.
- 2. The NPL variable has a minimum value of 4.80 and a maximum value of 10.66. The mean value of the NPL variable is 7.4630.
- 3. The ROA variable has a minimum value of -7.71 and a maximum value of 0.54. The mean value of the ROA variable is -2.1870.

Data Processing Results Classic Assumption Test

1. Normality Test

The normality test is carried out to test whether in the regression model, confounding or residual variables have a normal distribution (Ghozali, 2021). A good regression model has a normal or close to normal data distribution. The normality test can be carried out by looking at the significant value of the Kolmogorov-Smirnov test. If the significant value is above 5% or 0.05, then the data has a normal distribution. The results of the normality test using the Kolmogorov-Smirnov Test are as follows:

		Unstandardized
		Residual
Ν		10
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	1.49495584
Most Extreme Differences	Absolute	.256
	Positive	.168
	Negative	256
Test Statistic		.256
Asymp. Sig. (2-tailed)		.062°

Table 5. One-Sample Kolmogorov-Smirnov Test

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Based on the table... it can be seen that the results of the normality test using the One-Sample Kolmogorov-Smirnov Test show an Asymp.sig (2-tailed) Unstandardized Residual value of 0.062 > 0.05. So it can be concluded that the residual values are normally distributed.

2. Multicolinearity Test

The multicollinearity test aims to test whether the regression model finds a correlation between independent variables (Ghozali, 2021). A good regression model means there is no correlation between the independent variables. Multicollinearity testing uses Variance Inflation Factors (VIF) values. The cut-off value that is commonly used is a tolerance value < 0.10 or the same as a VIF value > 10, which means that the regression model shows multicollinearity. The following are the results of the multicollinearity test:

		Collinearity Statistics		
Model		Tolerance	VIF	
1	CAR	.743	1.346	
	NPL	.743	1.346	

Table 6. Coefficients^a

a. Dependent Variable: ROA

Based on the table, It can be seen that the tolerance value and VIF value for the dependent variable are as follows:

- 1) CAR has a tolerance value of more than 0.10 (0.743 > 0.10) and a VIF value of less than 10 (1.346 < 10).
- 2) NPL has a tolerance value of more than 0.10 (0.743 > 0.10) and a VIF value of less than 10 (1.346 < 10).

So it can be concluded that there is no multicollinearity problem in the regression model of this research.

3. Heteroscedasticity Test

The heteroscedasticity test is carried out to see whether there is an inequality of variance from the residuals of one observation to another (Sahir, 2022). In this study, the Glejser Test was used. The Glejser test is by regressing the absolute value of the residual on the independent variable. The following are the results of the heteroscedasticity test using the Glejser test.

				Standardized		
		Unstandardize	d Coefficients	Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	.068	1.306		.052	.960
	CAR	004	.071	022	054	.958
	NPL	.148	.183	.336	.810	.445

Table 7. Coefficients^a

a. Dependent Variable: ABS_RES

Source : Research Data

Based on the table, the results of the heteroscedasticity test show that the CAR variable has a significant value of 0.958, and the NPL variable has a significant value of 0.445. These results explain that the CAR and NPL variables have a significant value of > 0.05. Therefore, the results of the heteroscedasticity test in this study can be concluded that heteroscedasticity does not occur.

Source : Research Data

4. Autocorrelation Test

The autocorrelation test aims to test whether in the linear regression model there is a correlation between the residual error in period t and the confounding error in period t-1 (previous). A good regression model is a regression that is free from autocorrelation (Ghozali, 2021). Autocorrelation testing in this study used the Durbin-Watson test. The following are the results of the autocorrelation test:

Table 8. Model Summary^b

			Adjusted R	Std. Error of the	
Model	R	R Square	Square	Estimate	Durbin-Watson
1	.890ª	.793	.734	1.69512	2.690

a. Predictors: (Constant), NPL, CAR

b. Dependent Variable: ROA

Source : Research Data

The results of the autocorrelation test show a Durbin Watson value of 2,690, which according to (Ghozali, 2021) if the value Du < Dw < 4 - du then there is no negative or positive autocorrelation. In this study, the value of Du = 1.5666, the value of 4 - du = 2.4334, and the value of Dw = 2.690 or (1.5666 < 2.690 < 2.4334). Therefore, it can be concluded that in this study there was no positive or negative autocorrelation.

Multiple Linear Regression Coefficient Test

The analysis used in this research is multiple linear regression analysis. Multiple linear regression analysis is used to determine the effect of the independent variables, namely CAR and NPL, on the dependent variable, namely ROA. The following are the results of the multiple linear regression coefficient test:

		Unstandardize	d Coefficients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	8.338	2.225		3.748	.007
	CAR	412	.121	682	-3.419	.011
	NPL	504	.312	323	-1.617	.150

Table 9. Coefficients^a

a. Dependent Variable: ROA

Source : Research Data

Based on the table, the results of the multiple linear regression coefficient test, a multiple linear equation can be formed as follows:

 $Y = 8.338 - 0, 412X_1 - 0, 504X_2 + e$

This linear equation can be interpreted as follows :

- 1) The value of a (constant) is 8.338, meaning that if the CAR and NPL variables are ignored $(X_1, X_2 = 0)$ then the value of the ROA variable remains (constant) at 8.338.
- 2) The CAR regression coefficient is -0.412. this shows that the CAR has a negative regression coefficient direction, which means that every time the CAR increases. By one unit, the company's opportunity to achieve ROA decreases by -0.412.
- 3) The NPL regression coefficient is -0.504. this shows that NPL has a negative regression coefficient, which means that for every one unit increase in NPL, the company's opportunity to achieve ROA descreases -0.504.

Multiple Correlation Coefficient Test

The multiple correlation coefficient test shows the direction and strength of the relationship between two independent variables which are equal to or more than one dependent variable. There are several methods for determining the correlation coefficient according to (Muhajirin & Panorama, 2017), namely as follows:

- 1) Chi-Square, which functions for nominal scales
- 2) Tau Kendal. Which functions for an ordinal scale
- 3) Product-Moment Correlation, which functions as a ratio scale

In this research, a ratio scale is used, so the method used is Product-Moment Correlation to determine the direction and strength of the relationship between two independent variables. The following are the results of the multiple linear correlation test:

Table 10. Model Summary						
			Adjusted R	Std. Error of the		
Model	R	R Square	Square	Estimate		
1 .890 ^a .793 .734 1.69512						
a. Predictors: (Constant), NPL, CAR						

Source : Research Data

Based on the table, The results of the multiple linear correlation test show an R value of 0.890, which means the value is in the interval 0.80 - 1.000, which shows a very strong relationship between the CAR and NPL variables on ROA.

Coefficient of Determination Test

The coefficient of determination is used to measure how far the model's ability to explain variations in the dependent variable. The following are the results of the determination test in this study:

CAR Determination Coefficient of ROA

Table 11. Model Summary

			Adjusted R	Std. Error of the
Model	R	R Square	Square	Estimate
1	.846ª	.715	.680	1.85838

a. Predictors: (Constant), CAR

Source : Research Data

Based on the table, CAR coefficient of determination referring to the R-Square value is 0.715 or 71.5%. This shows that the independent variable CAR can explain the dependent variable ROA by 71.5%, while the remaining 28.5% is influenced by other variables not examined in this research.

Coefficient of Determination of NPL on ROA

Table 12. Model Summary						
			Adjusted R	Std. Error of the		
Model	R	R Square	Square	Estimate		
1	.668ª	.447	.378	2.59081		

a. Predictors: (Constant), NPL

Source : Research Data

Based on the table, the NPL determination coefficient value referring to the R-Square value is 0.447 or 44.7%. This shows that the independent variable NPL can explain the

dependent variable ROA by 44.7%, while the remaining 55.3% is influenced by other variables not examined in this research.

Coefficient of Determination of CAR and NPL on ROA

Table 13. Model Summary					
			Adjusted R	Std. Error of the	
Model	R	R Square	Square	Estimate	
1	.890ª	.793	.734	1.69512	

a. Predictors: (Constant), CAR, NPL

Source : Research Data

Based on the table, The coefficient of determination value for CAR (According to Gozali (2021), if the R-square value is 0.734, it is categorized as strong, and the greater the R2 value, the better the research will be. This shows that the independent variables CAR and NPL can explain the dependent variable ROA

Table 14.	Hypothesis	Testing	Results
	4 4 9 9 4		

Pr	0.25	0.10	0.05	0.025	0.01	0.005	0.001					
df	0.50	0.20	0.10	0.050	0.02	0.010	0.002					
1	1.00000	3.07768	6.31375	12.70620	31.82052	63.65674	318.30884					
2	0.81650	1.88562	2.91999	4.30265	6.96456	9.92484	22.32712					
3	0.76489	1.63774	2.35336	3.18245	4.54070	5.84091	10.21453					
4	0.74070	1.53321	2.13185	2.77645	3.74695	4.60409	7.17318					
5	0.72669	1.47588	2.01505	2.57058	3.36493	4.03214	5.89343					
6	0.71756	1.43976	1.94318	2.44691	3.14267	3.70743	5.20763					
7	0.71114	1.41492	1.89458	2.36462	2.99795	3.49948	4.78529					
8	0.70639	1.39682	1.85955	2.30600	2.89646	3.35539	4.50079					
9	0.70272	1.38303	1.83311	2.26216	2.82144	3.24984	4.29681					
10	0.69981	1.37218	1.81246	2.22814	2.76377	3.16927	4.14370					
11	0.69745	1.36343	1.79588	2.20099	2.71808	3.10581	4.02470					
12	0.69548	1.35622	1.78229	2.17881	2.68100	3.05454	3.92963					
13	0.69383	1.35017	1.77093	2.16037	2.65031	3.01228	3.85198					
14	0.69242	1.34503	1.76131	2.14479	2.62449	2.97684	3.78739					
15	0.69120	1.34061	1.75305	2.13145	2.60248	2.94671	3.73283					
16	0.69013	1.33676	1.74588	2.11991	2.58349	2.92078	3.68615					
17	0.68920	1.33338	1.73961	2.10982	2.56693	2.89823	3.64577					
18	0.68836	1.33039	1.73406	2.10092	2.55238	2.87844	3.61048					
19	0.68762	1.32773	1.72913	2.09302	2.53948	2.86093	3.57940					
20	0.68695	1.32534	1.72472	2.08596	2.52798	2.84534	3.55181					
21	0.68635	1.32319	1.72074	2.07961	2.51765	2.83136	3.52715					
22	0.68581	1.32124	1.71714	2.07387	2.50832	2.81876	3.50499					
23	0.68531	1.31946	1.71387	2.06866	2.49987	2.80734	3.48496					
24	0.68485	1.31784	1.71088	2.06390	2.49216	2.79694	3.46678					
25	0.68443	1.31635	1.70814	2.05954	2.48511	2.78744	3.45019					
26	0.68404	1.31497	1.70562	2.05553	2.47863	2.77871	3.43500					
27	0.68368	1.31370	1.70329	2.05183	2.47266	2.77068	3.42103					
28	0.68335	1.31253	1.70113	2.04841	2.46714	2.76326	3.40816					
29	0.68304	1.31143	1.69913	2.04523	2.46202	2.75639	3.39624					
30	0.68276	1.31042	1.69726	2.04227	2.45726	2.75000	3.38518					
31	0.68249	1.30946	1.69552	2.03951	2.45282	2.74404	3.37490					
32	0.68223	1.30857	1.69389	2.03693	2.44868	2.73848	3.36531					
33	0.68200	1.30774	1.69236	2.03452	2.44479	2.73328	3.35634					
34	0.68177	1.30695	1.69092	2.03224	2.44115	2.72839	3.34793					
35	0.68156	1.30621	1.6895 7	2.03011	2.43772	2.72381	3.34005					
36	0.68137	1.30551	1.68830	2.02809	2.43449	2.71948	3.33262					

40	0.68067	1.30308	1.68385	2.02108	2.42326	2.70446	3.30688			
39	0.68083	1.30364	1.68488	2.02269	2.42584	2.70791	3.31279			
38	0.68100	1.30423	1.68595	2.02439	2.42857	2.71156	3.31903			
37	0.68118	1.30485	1.68709	2.02619	2.43145	2.71541	3.32563			

Source : Research Data

The t test was carried out to determine whether each independent variable, namely CAR and NPL, partially influences the dependent variable, namely ROA. If the value of t count > t table then the independent variable partially influences the dependent variable. In this study t table was obtained using the degree of freedom ($\alpha/2$; n-k-1) at a significance level of 0.05 ($\alpha = 5\%$), where n is the number of samples and k is the number of independent variables, then The obtained value of df = (0.025; 30-2-1) is 27, so the t table value is 2.051. After obtaining the t table value, it can be concluded that:

		Т	able 15. Coeffici	ents ^a		
				Standardized		
		Unstandardize	d Coefficients	Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	8.338	2.225		3.748	.007
	CAR	412	.121	682	-3.419	.011
	NPL	504	.312	323	-1.617	.150

a. Dependent Variable: ROA

Source : Research Data

F test

Percentage Point Distribution F Probability = 0,05															
	Df (N1)														
df (N2)	Ň	,													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	161	199	216	225	230	234	237	239	241	242	243	244	245	245	246
2	18.51	19.00	19.16	19.25	19.30	19.33	19.35	19.37	19.38	19.40	19.40	19.41	19.42	19.42	19.43
3	10.13	9.55	9.28	9.12	9.01	8.94	8.89	8.85	8.81	8.79	8.76	8.74	8.73	8.71	8.70
4	7.71	6.94	6.59	6.39	6.26	6.16	6.09	6.04	6.00	5.96	5.94	5.91	5.89	5.87	5.86
5	6.61	5.79	5.41	5.19	5.05	4.95	4.88	4.82	4.77	4.74	4.70	4.68	4.66	4.64	4.62
6	5.99	5.14	4.76	4.53	4.39	4.28	4.21	4.15	4.10	4.06	4.03	4.00	3.98	3.96	3.94
7	5.59	4.74	4.35	4.12	3.97	3.87	3.79	3.73	3.68	3.64	3.60	3.57	3.55	3.53	3.51
8	5.32	4.46	4.07	3.84	3.69	3.58	3.50	3.44	3.39	3.35	3.31	3.28	3.26	3.24	3.22
9	5.12	4.26	3.86	3.63	3.48	3.37	3.29	3.23	3.18	3.14	3.10	3.07	3.05	3.03	3.01
10	4.96	4.10	3.71	3.48	3.33	3.22	3.14	3.07	3.02	2.98	2.94	2.91	2.89	2.86	2.85
11	4.84	3.98	3.59	3.36	3.20	3.09	3.01	2.95	2.90	2.85	2.82	2.79	2.76	2.74	2.72
12	4.75	3.89	3.49	3.26	3.11	3.00	2.91	2.85	2.80	2.75	2.72	2.69	2.66	2.64	2.62
13	4.67	3.81	3.41	3.18	3.03	2.92	2.83	2.77	2.71	2.67	2.63	2.60	2.58	2.55	2.53
14	4.60	3.74	3.34	3.11	2.96	2.85	2.76	2.70	2.65	2.60	2.57	2.53	2.51	2.48	2.46
15	4.54	3.68	3.29	3.06	2.90	2.79	2.71	2.64	2.59	2.54	2.51	2.48	2.45	2.42	2.40
16	4.49	3.63	3.24	3.01	2.85	2.74	2.66	2.59	2.54	2.49	2.46	2.42	2.40	2.37	2.35
17	4.45	3.59	3.20	2.96	2.81	2.70	2.61	2.55	2.49	2.45	2.41	2.38	2.35	2.33	2.31
18	4.41	3.55	3.16	2.93	2.77	2.66	2.58	2.51	2.46	2.41	2.37	2.34	2.31	2.29	2.27
19	4.38	3.52	3.13	2.90	2.74	2.63	2.54	2.48	2.42	2.38	2.34	2.31	2.28	2.26	2.23
20	4.35	3.49	3.10	2.87	2.71	2.60	2.51	2.45	2.39	2.35	2.31	2.28	2.25	2.22	2.20
21	4.32	3.47	3.07	2.84	2.68	2.57	2.49	2.42	2.37	2.32	2.28	2.25	2.22	2.20	2.18

22	4.30	3.44	3.05	2.82	2.66	2.55	2.46	2.40	2.34	2.30	2.26	2.23	2.20	2.17	2.15
23	4.28	3.42	3.03	2.80	2.64	2.53	2.44	2.37	2.32	2.27	2.24	2.20	2.18	2.15	2.13
24	4.26	3.40	3.01	2.78	2.62	2.51	2.42	2.36	2.30	2.25	2.22	2.18	2.15	2.13	2.11
25	4.24	3.39	2.99	2.76	2.60	2.49	2.40	2.34	2.28	2.24	2.20	2.16	2.14	2.11	2.09
26	4.23	3.37	2.98	2.74	2.59	2.47	2.39	2.32	2.27	2.22	2.18	2.15	2.12	2.09	2.07
27	4.21	3.35	2.96	2.73	2.57	2.46	2.37	2.31	2.25	2.20	2.17	2.13	2.10	2.08	2.06
28	4.20	3.34	2.95	2.71	2.56	2.45	2.36	2.29	2.24	2.19	2.15	2.12	2.09	2.06	2.04
29	4.18	3.33	2.93	2.70	2.55	2.43	2.35	2.28	2.22	2.18	2.14	2.10	2.08	2.05	2.03
30	4.17	3.32	2.92	2.69	2.53	2.42	2.33	2.27	2.21	2.16	2.13	2.09	2.06	2.04	2.01
31	4.16	3.30	2.91	2.68	2.52	2.41	2.32	2.25	2.20	2.15	2.11	2.08	2.05	2.03	2.00
32	4.15	3.29	2.90	2.67	2.51	2.40	2.31	2.24	2.19	2.14	2.10	2.07	2.04	2.01	1.99
33	4.14	3.28	2.89	2.66	2.50	2.39	2.30	2.23	2.18	2.13	2.09	2.06	2.03	2.00	1.98
34	4.13	3.28	2.88	2.65	2.49	2.38	2.29	2.23	2.17	2.12	2.08	2.05	2.02	1.99	1.97
35	4.12	3.27	2.87	2.64	2.49	2.37	2.29	2.22	2.16	2.11	2.07	2.04	2.01	1.99	1.96
36	4.11	3.26	2.87	2.63	2.48	2.36	2.28	2.21	2.15	2.11	2.07	2.03	2.00	1.98	1.95
37	4.11	3.25	2.86	2.63	2.47	2.36	2.27	2.20	2.14	2.10	2.06	2.02	2.00	1.97	1.95
38	4.10	3.24	2.85	2.62	2.46	2.35	2.26	2.19	2.14	2.09	2.05	2.02	1.99	1.96	1.94
39	4.09	3.24	2.85	2.61	2.46	2.34	2.26	2.19	2.13	2.08	2.04	2.01	1.98	1.95	1.93
40	4.08	3.23	2.84	2.61	2.45	2.34	2.25	2.18	2.12	2.08	2.04	2.00	1.97	1.95	1.92
41	4.08	3.23	2.83	2.60	2.44	2.33	2.24	2.17	2.12	2.07	2.03	2.00	1.97	1.94	1.92
42	4.07	3.22	2.83	2.59	2.44	2.32	2.24	2.17	2.11	2.06	2.03	1.99	1.96	1.94	1.91
43	4.07	3.21	2.82	2.59	2.43	2.32	2.23	2.16	2.11	2.06	2.02	1.99	1.96	1.93	1.91
44	4.06	3.21	2.82	2.58	2.43	2.31	2.23	2.16	2.10	2.05	2.01	1.98	1.95	1.92	1.90
45	4.06	3.20	2.81	2.58	2.42	2.31	2.22	2.15	2.10	2.05	2.01	1.97	1.94	1.92	1.89

The test is carried out to show whether all the independent variables included in the model have an overall influence on the dependent variable. The following are the results of the F test in this research:

		1 415		.,.		
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	76.964	2	38.482	13.392	.004 ^b
	Residual	20.114	7	2.873		
	Total	97.078	9			

Table 16. ANOVA^a

a. Dependent Variable: ROA

b. Predictors: (Constant), NPL, CAR

Source : Research Data

Based on table, the F test results show that the calculated F value is 13,392. The F table value can be searched through the F distribution table at a significance level of 0.05 with the following formula:

$$dk_1 = (k-1) = (3-1) = 2$$
; $dk_2 = (n-k) = (30-3) = 27$; $F_{tabel} = 3,35$

Information :

n : number of samples

k : number of independent and dependent variables

dk : degrees of freedom

Based on table, it shows that the F count value is 13.392 > 3.35, so based on the hypothesis testing criteria it can be concluded that the independent variable simultaneously influences the dependent variable, meaning that the CAR and NPL variables influence ROA.

F table value as the boundary of the acceptance and rejection area is 3.35. The value of F calculated CAR and NPL of 13.392 is in the H_0 revenue area, in the following sense:

 $H0: pxy1 \cdot pxy2 = 0$, Each variable X (CAR (X1), NPL (X2)) does not have a significant influence on Y (ROA).

Ha : pxy1 . $pxy2 \neq 0$, Each variable X (CAR (X1), NPL (X2)) has a significant influence on variable Y (ROA).

From the results of the hypothesis above, it shows that CAR and NPL have a simultaneous effect on ROA.

CONCLUSION

The results of this study indicate that Capital Adequacy Ratio (CAR) has a partial effect on Return On Asset with a total of 0.715 or 71.5%, Non Performing Loan (NPL) has no partial effect on Return Assets with a total of 0,447 or 47.4%, its effect. Simultaneously, the results obtained that Capital Adequacy Ratio (CAR) and Non Performing Loan (NPL) has a simultaneous effect on Return On Asset Company on the Bank KB Bukopin company on the Indonesia Stock Exchange period of 2014-2023 with the size of 0,734 or 43,4%.

For the next researcher, if a type of research will be conducted, the researcher should increase the number of research samples, increase other variables so that they can obtain better results so that they can research the influence of Capital Adequacy Ratio (CAR) and Non Performing Loan (NPL) on Return Asset at a higher accuracy rate. Apart from that, it is recommended to add other variables that have not been researched to form better research models.

REFERENCES

- Ali, M., Shaukat, M., & Naseem, S. (2021). Impact of capital adequacy on bank performance: A case of Pakistan. Journal of Financial Studies, 27(2), 105-119.
- Alqahtani, F., & Mayes, D. G. (2020). "The Impact of Capital Adequacy and Non-Performing Loans on Bank Profitability." *International Journal of Financial Studies*, 8(1), 12-24.
- Bashir, A. (2020). "Capital Adequacy, Asset Quality, and Profitability of Banks in Developing Economies." *Journal of Economics and Finance*, 44(2), 187-202.
- Ben Salah, A., & Chkir, I. (2020). Bank capital regulation and stability: Evidence from Tunisia. Journal of Financial Stability, 50, 100791.
- Bouguila, F., Chkir, I., & Omri, A. (2021). The relationship between non-performing loans and profitability in the banking sector: A global perspective. Economic Modelling, 95, 124-134.
- Ghosh, S. (2020). Determinants of non-performing loans in emerging economies: A dynamic panel data analysis. Economic Modelling, 89, 72-83.
- Ghozali, I. (2021). *Aplikasi analisis multivariate dengan program IBM SPSS 26*. Badan Penerbit Universitas Diponegoro.
- Kurniawan, F., & Irawan, D. (2021). "Pengaruh CAR dan NPL terhadap ROA pada Bank di Indonesia." *Jurnal Ekonomi dan Bisnis Indonesia*, 36(1), 45-58.
- Molyneux, P., Thornton, J., & Wilson, J. O. S. (2020). Determinants of bank profitability in Europe and the United States. Journal of Banking and Finance, 109, 105667.
- Mursito, W., & Yuliana, D. (2020). "Pengaruh CAR dan NPL terhadap Profitabilitas pada Bank Syariah di Indonesia." *Jurnal Akuntansi dan Keuangan*, 19(2), 110-125.
- Nawaz, A., & Iqbal, M. (2020). "The Effects of Non-Performing Loans on Bank Profitability: Evidence from Pakistan." *Journal of Banking and Finance*, 47(1), 56-71.

- Pasiouras, F., Tanna, S., & Gaganis, C. (2019). Non-performing loans and bank profitability: Evidence from Europe. Journal of International Financial Markets, Institutions and Money, 60, 54-67.
- Rahman, M., & Iqbal, N. (2019). "Determinants of Bank Profitability: Evidence from Bangladesh." *Global Journal of Management and Business Research*, 19(4), 45-52.
- Saha, A., & Sahoo, S. (2020). "Impact of CAR and NPL on Bank Profitability in Emerging Markets." *Economic and Political Weekly*, 55(8), 123-136.
- Sufian, F. (2020). Bank-specific and macroeconomic determinants of profitability: Evidence from emerging markets. Asian Economic and Financial Review, 10(9), 1015-1030.
- Sufian, F., & Habibullah, M. S. (2020). Bank-specific and macroeconomic determinants of non-performing loans: Evidence from Asian countries. Research in International Business and Finance, 52, 101122.
- Sugiyono. (2021). Metode penelitian kuantitatif, kualitatif, dan R&D. Alfabeta.
- Sutrisno, H., & Yuliana, D. (2020). "Pengaruh Capital Adequacy Ratio dan Non-Performing Loan terhadap Return on Assets pada Bank di Indonesia." *Jurnal Ekonomi dan Bisnis Indonesia*, 35(1), 12-24.
- Tao, Z., Ma, Q., & Li, S. (2021). The impact of capital adequacy ratio on bank risk-taking: Evidence from China. Finance Research Letters, 39, 101550.
- Wang, Y., Zhang, X., & Xu, Q. (2020). Basel III and the stability of Chinese commercial banks: The moderating effect of capital adequacy ratio. Economic Modelling, 90, 22-34.
- Zhang, M., Sun, L., & Li, H. (2021). Non-performing loans and economic performance: The role of bank efficiency. Economic Modelling, 99, 105502.