FACTORS AFFECTING CAPITAL ADEQUACY RATIO AT COMMERCIAL BANKS ON THE INDONESIA STOCK EXCHANGE

By:

Supriyatun[1], Danik Karyawati[2], Eny Kusumawardhani[3], Prayitno[4]

[1,2,3,4] Tantular Cooperative Management Academy

Email: apri.priatn@amkoptantular.ac.id

ABSTRACT

Capital Adequacy Ratio (CAR) is one of the main indicators used to measure the level of security and financial stability of a bank. This research aims to analyze the factors that influence the Capital Adequacy Ratio in commercial banks listed on the Indonesia Stock Exchange. The data used is panel data from 2016 to 2020 which includes 20 commercial banks. The independent variables used in this research are Return on Equity (ROE), Net Interest Margin (NIM), Loan to Deposit Ratio (LDR), and Non-Performing Loans (NPL). The research results show that ROE and NIM have a significant influence on the Capital Adequacy Ratio. However, LDR and NPL do not have a significant influence on CAR. The implication of this research is the importance of credit risk management, asset management and liquidity management in maintaining bank capital adequacy levels.

Keywords: CAR; Return on Equity. Net Interest Margin; Loan to Deposit Ratio; Non-Performing Loans

INTRODUCTION

A bank is a place to store money, borrow money, and invest in an official and trusted institution. Banks are the suppliers of most of the money supply used as a means of payment, so the monetary policy mechanism can run. This shows that banks are a very important financial institution in carrying out economic and trade activities (Alajmi & Alqasem, 2015)

The current high complexity of banking businesses can increase the risks faced by banks in Indonesia. Banking problems in Indonesia are caused by the depreciation of the rupiah, the increase in the interest rate on Bank Indonesia Certificates (SBI), which has led to an increase in non-performing loans (Kartika et al., 2020). Banks need to maintain their health levels. Maintaining the health of

banks is carried out, among others, by maintaining its liquidity so that banks can fulfill their obligations, considering the role of banks as institutions that function to facilitate payment traffic. In addition to the liquidity factor, the success of the bank's business is also determined by the ability of the managers to maintain the financial confidentiality of the customers entrusted to them as well as the security of money or other assets entrusted to the bank (Ristianawati et al., 2021). Therefore, Bank Indonesia implements rules on bank health. Factors that affect the assessment of the bank's health level include: (1) Risk profile; (2) Good Corporate Governance (GCG); (3) Rentability (earning); (4) Capital. The rules on bank health assessment implemented by Bank Indonesia are contained in Bank Indonesia Regulation No. 13/1/PBI/2011.

In an effort to ensure that bank capital

is always healthy and supported by healthy asset quality, the monetary authority has determined the bank's capital health rules in addition to other rules that function as prudential banking supervision, so that banks do not waver in the face of difficulties that may arise (Rozak et al., 2021). Capital Adequacy Ratio (CAR) is capital adequacy which shows the ability of banks to maintain sufficient capital and the ability of bank management to identify, measure, supervise, and control risks that can affect the size of the bank's capital. In accordance with the rules set by Bank Indonesia, PBI No.15/12/PBI/2013, the amount of Capital Adequacy Ratio that must be achieved by a bank is at least 8%.

Factors that affect the Capital Adequacy Ratio (CAR) include Return on Equity (ROE), Net Interest Margin (NIM), Loan to Deposit Ratio (LDR) and Non-Performing Loan (NPL). These variables are related to the Capital Adequacy Ratio (CAR), in the sense that each variable has an influence on CAR.

The profitability ratio is an aspect to determine the bank's ability to generate profits. The assessment can be done using Ratio on Equity (ROE). Return on Equity is a ratio used to measure net profit after tax with own capital (Sugiharti et al., 2023). The relationship between ROE and CAR is positive, because with an increase in ROE, the bank's profit increases, and finally CAR also increases.

Net Interest Margin (NIM) is a ratio in the management of productive assets to obtain net interest income as a tool in measuring bank management capabilities. Interest received from loans minus interest costs from the source of funds collected can obtain net interest income. Higher NIM indicates the effectiveness of banks in placing productive assets and reducing problematic conditions, so that the bank's performance will improve CAR

Loan to Deposit Ratio (LDR) is a comparison between credit to third-party funds. The credit in question is as regulated in Bank Indonesia's provisions regarding the assessment of the asset quality of commercial banks, while third-party funds such as current accounts, savings, and deposits do not include current accounts and deposits originating from between banks (Sugiharti, 2023). The higher the LDR value of a bank, the greater the profit of a bank, because the bank is considered to be able to channel third-party funds well. Likewise, vice versa, the lower the LDR value of a bank, indicating that third-party funds are not properly channeled and profits are decreasing, then it can be described that the bank's capital adequacy will also decrease.

The asset quality ratio is an aspect used to determine the allocation of funds received from the community and then distributed to productive assets. The level of asset quality is measured using financial ratios, namely Non-Performing Loans (NPL) (Rozak et al., 2023). Non-performing loans are a comparison of the ratio of non-performing loans to total loans disbursed by banks. The use of NPL variables reflects credit risk. The higher the NPL level, the greater the credit risk borne by the bankEach bank tries to minimize the amount of NPL to ensure smooth operation. bank activities as a fundraiser and lending (Sugiharti et al., 2023)

LITERATURE REVIEW

Meanwhile, researchers Anjani and Purnawati (2014)) stated that ROE has a significant negative effect on CAR. These results are inconsistent by researchers Odunayo et al. (2023) who stated that ROE has a negative and insignificant effect on CAR. Research conducted by Anjani and Purnawati (2014) stated that NIM has a significant positive effect on CAR. However, the results of research from Yonas (2015) show that NIM has a significant negative effect on CAR. These results are not supported by Pamuji, Dedi, Adler and Tubagus (2014) who stated that NIM has a positive and insignificant effect on CAR.

Anjani and Purnawati (2014) stated

that LDR has a significant negative effect on CAR. In contrast to researchers Moeidh and Khalid (2015) who stated that LDR has a significant positive effect on CAR.

Based on research by Keynes and Achmad (2015), it is shown that NPLs have a significant positive effect on CAR. In contrast to researchers Anjani and Purnawati (2014) who stated that NPL has a positive and insignificant effect on CAR.

Based on previous studies that gave different results and showed inconsistencies in the results of the study, the researcher tried to re-examine the factors that affect the Capital Adequacy Ratio (CAR), namely Profitability (ROE), Net Interest Margin (NIM), Loan to Deposit Ratio (LDR), and Non-Performing Loan (NPL).

Capital Adequacy Ratio (CAR)

According to Dendawijaya (2005:121) CAR is "a ratio that shows how far all bank assets that contain risks (credits, inclusions, securities, bills at other banks) are financed from the bank's own capital funds in addition to obtaining funds from sources outside the bank, such as funds from the community, loans, and others". CAR is an indicator of a bank's ability to cover a decline in its assets as a result of bank losses caused by risky assets. According to the International Standard, namely Banking for International Sattlement (BIS) based in Geneva, the minimum weight of the Capital Adequacy Ratio is 8% and from time to time will be adjusted according to the banking conditions and developments that occur.

The higher the CAR, the better the bank's ability to bear the risk of any risky credit or productive asset. The magnitude of CAR is measured by the risk between bank capital and Risk-Weighted Assets (ATMR). According to PBI No. 10/14/PBI/2008 Article 2, banks are required to provide a minimum capital of 8% of the ATMR. A bank is exposed to bank risk if it cannot provide a minimum capital of 8%. Some of the factors that determine CAR include:

Return on Equity (ROE)

Return on Equity (ROE) indicates the level of a bank's ability to earn profits from its business activities. If the profit level of a bank is higher, it will have an impact on increasing its own capital (assuming most of the profits earned are reinvested into the bank's capital in the form of retained earnings). With the increase in its own capital, the health of banks related to the Capital Adequacy Ratio (CAR) ratio is increasing.

Net Interest Margin (NIM)

Net Interest Margin (NIM) is a ratio of productive asset management to obtain net interest income as a tool in measuring bank management capabilities. The interest received from the loan minus the interest cost from the source of funds collected can be obtained from net income (Anjani & Purnawati, 2014)

Loan to Deposit Ratio (LDR)

Loan to Deposit Ratio (LDR) is a ratio used to measure the composition of the amount of credit provided compared to the amount of public funds and own capital used. Magnitude Loan to Deposit Ratio According to government regulations the maximum is 110% (Odunayo et al., 2023). The higher the ratio, the lower the liquidity ability of the bank concerned, so that the possibility of a bank in a problematic condition will be greater. This ratio describes the bank's ability to repay withdrawals made by depositor customers by relying on the credit provided as a source of liquidity. The higher this risk, the lower the liquidity ability of the bank concerned, this is because the amount of funds needed to finance credit is larger. (Dendawijaya, 2000:118)

Non-Performing Loan (NPL)

Non-Performing Loans (NPLs) or non-performing loans are a proxy of the credit ratio contained in the publication's financial statements, which is a comparison of total loans that are not returned by

debtors (bad loans) with total loans disbursed by banks to the public Anjani and Purnawati (2014). Non-Performing Loan (NPL) is a financial ratio that can be used to analyze the performance of a bank. If a bank's NPL ratio is high, it means that the bank in question is experiencing a large bad loan risk problem. On the other hand, if the NPL ratio is low, the bank has little credit risk. Bad loans can disrupt the bank's financial condition and even result in the cessation of a bank's operations.

RESEARCH METHODS
Research Object

The research object used in this study is a commercial bank that has gone public on the Indonesia Stock Exchange (IDX) with a research period of 2016-2020.

Population and Sample

Population is a unit that wants to be researched. Meanwhile, the sample is a part of the population that is selected with a certain procedure and can be representative of a population. Appropriate sampling is expected to be representative of all members of the population and be able to provide information related to the population being studied. The population in this study is the financial statements of banking companies in Indonesia published by the IDX.

The sample selection process uses the purposive sampling method. The purposive sampling method is the determination of samples based on certain criteria in order to be representative of the population and meet the objectives of the study (Ghozali, 2021). The criteria for selecting samples in this study consist of several conditions, namely the following:
1. Banking companies listed consecutively in the 2016-2020 period.
2. It has complete available data on Capital Adequacy Ratio (CAR), Return On Equity (ROE), Net Interest Margin (NIM), Loan to Deposit Ratio (LDR), and Non Performing Loan (NPL).

3. Commercial Bank companies that have been listed on the IDX that do not get negative profits.

Data Types and Data Sources

In this study, the type of data based on its nature is quantitative because it is in the form of numbers. This study uses secondary data in the form of financial statements and annual reports on commercial banks in Indonesia.

Data can be obtained from www.idx.co.id or from the Indonesia Stock Exchange. The reason researchers use secondary data is because secondary data is easier to obtain, and more reliable in its validity.

Data Acquisition Techniques

The data collection technique in this study uses documentation. Documentation is a technique for collecting data through intermediaries in the form of evidence, records of past or historical events that have been compiled in archives. The technique in this study takes data obtained from financial statements and annual reports published by the Indonesia Stock Exchange from the official website of the IDX.

Concept Definition

The variables of this research are everything in any form determined by the researcher to be studied, so that information is obtained and then conclusions are drawn. This study analyzes the factors that are predicted to affect the Capital Adequacy Ratio (CAR) of banks listed on the Indonesia Stock Exchange. The variables used in this study are:

Dependent Variable
Capital Adequacy Ratio (CAR)

The CAR ratio reflects the adequacy of capital owned by banking companies. To calculate the CAR ratio, it is done by comparing the capital owned by the bank with the number of risk-weighted assets (Dreca, 2014; Kartika et al., 2023). The capital used in the calculation of CAR is the

amount of core capital and complementary capital. Meanwhile, ATMR is the value of each bank asset after multiplied by the risk weight of the asset (Susilo, et al: 2000).

CAR = (Modal Bank / ATMR) x 100%

Independent Variable
Return on Equity (ROE).

Return on Equity (ROE) indicates the level of a bank's ability to earn profits from its business activities. If the profit level of a bank is higher, it will have an impact on increasing its own capital (assuming most of the profits earned are reinvested into the bank's capital in the form of retained earnings). With the increase in its own capital, the health of banks related to the Capital Adequacy Ratio (CAR) ratio is increasing. Profitability indicates the ability of a bank to generate profits over a certain period. Profitability in this study uses Return on Equity (ROE). ROE is used to compare profit after tax with the average of own capital. The higher the ROE achieved by the bank, the higher the net profit after tax will also be high, so that the own capital increases and the CAR also increases (Sugiyarso, 2005:111).

ROE = (Profit after tax / Average Own Capital) x 100%

Net Interest Margin (NIM)

Net Interest Margin (NIM) is a ratio in the management of productive assets to obtain net interest income as a tool in measuring bank management capabilities. Interest received from loans minus interest costs from the source of funds collected can obtain net interest income. A higher NIM indicates the effectiveness of banks in placing productive assets and reducing problematic conditions, so that the bank's performance will improve CAR.

BEFORE= (Net interest income / Productive assets) x 100%

Loan to Deposit Ratio (LDR)

Liquidity management is a fairly complex problem in banking operations anywhere. This is because most of the funds managed by banks are funds from the community which are short-term and can be withdrawn at any time. Bank liquidity means that the bank has sufficient sources of funds available to meet all obligations (Siamat, 2005).

LDR is a ratio that describes how capable a bank is in managing the quality of bank liquidity. The more liquid a bank is, the better its performance. The LDR ratio is obtained by comparing the total loans disbursed by the bank with the total third-party funds successfully collected by the bank. The greater the distribution and in the form of credit by the bank, the greater the liquidity risk that the bank will face. Therefore, banks must continue to maintain their liquidity (Susilo, et al: 2000). This ratio shows one of the bank's liquidity assessments and can be formulated as follows: (Bank Indonesia, 1993)

LDR = (Total Kredit / Total DPK) x 100%

Non-Performing Loan (NPL)

NPL is a ratio used to measure the amount of non-performing loans compared to the total loans disbursed by the bank. In the classification of bank supervision, based on Bank Indonesia's provisions, the best figure for the NPL ratio according to Bank Indonesia Regulation No. 15/2/PBI/2013 is below 5%. To minimize business risks, good corporate governance practices and the implementation of risk management include active supervision of bank management, policies, information systems, and risk control, as well as internal control. In the banking industry, bank health assessment is a very important one. Bank health assessments are currently carried out with a risk management-based system or known as Risk Based Bank Rating (RBBR) (PBI No. 13/1/PBI/2011).

NPL= (Non-Performing Loans / Credits channeled) x 100%

Multiple Regression Analysis

Regression analysis, in addition to measuring the strength of the relationship between two or more variables, also shows

the relationship between dependent variables and independent variables (Ghozali, 2016). Multiple linear regression analysis is used to determine the effect by determining the value of Y (as a dependent variable) and to estimate the values related to X (as an independent variable) using the following equation:

$$CAR = a + b1ROE + b2NIM + b3LDR + b4NPL + e$$

Information:

CAR (CAR)	= Capital adequacy Ratio
a	= kostanta
b1b2b3,...	= regression coefficient
ROE	= Return on Asset
BEFORE	= Net Interest Margin
LDR	= Loan to Deposit Ratio
NPL	= Non-Performing Loan
and	= error terms (bugger error)

RESULTS AND DISCUSSION
Table 1. Population and Sample Distribution

Information	2016	2017	2018	2019	2020	Number of Companies
Commercial Bank Companies that have *gone public*	31	33	35	38	38	175
Commercial Bank Company not consecutively listed	4	4	6	8	8	(30)
Commercial Bank Companies that have negative profit data	5	7	7	8	8	(35)
Total company data for 5 years	22	22	22	22	22	110

Source: IDX in 2016-2020

From table 1 above, a research sample with predetermined criteria was obtained and obtained as many as 110 banking companies listed on the IDX. The observation period for 5 consecutive years, it can be concluded that the sample is 110.

Table 2. Results of Descriptive Analysis

	N	Min	Max	Mean	Std. Deviation
CAR	110	10.44	55.58	19.9496	6.31548
ROE	110	.85	32.60	11.4286	6.99857
NIM	110	.00	13.10	5.1276	2.34076
LDR	110	45.83	105.66	82.4575	12.86100
NPL	110	.08	4.77	2.1181	1.14951

From the descriptive statistical test presented in table 2, the following can be explained:

Capital Adequacy Ratio in the table above, it can be seen that Capital adequacy Ratio variable has a minimum value (lowest value) of 10.44, a maximum value (the highest value) of 55.58; a mean (average value) of 19.9496 and a standard deviation of 6.31548.

Return on Equity in the table above, it can be seen that the minimum value (lowest value) of the Return on Equity variable is 0.85; the maximum value (highest value) is 32.60; the mean (average value) is 11.4286; and the standard deviation is 6.99857.

Net Interest Margin in the table above, it can be seen that the Net Interest Margin variable has a minimum value (lowest value) of 0.00; a maximum value (the highest value) of 13.10; a mean (average value) of 5.1276; and a standard deviation of 2.34076.

Loan to Deposit Ratio, in the table above, it can be seen that the Loan to Deposit Ratio variable has a minimum value (lowest value) of 48.83; a maximum value (the highest value) of 105.66; a mean (average value) of 82.4575 and a standard deviation of 12.86100.

Non-Performing Loan in the table above, it can be seen that the Non-Performing Loan variable has a minimum value (lowest value) of 0.08; a maximum value (the highest value) of 4.77; a mean (average value) of 2.1181 and a standard deviation of 1.14951.

Residual Normality Testing
Table 3 Kolmogorov-Smirnov non-parametric test

		Unstandardized Residual
N		95
Normal Parameters a,b	Mean	.0000000
	Std. Deviation	4.14658467
Most Extreme Differences	Absolute	.107
	Positive	.107
	Negative	-.063
Kolmogorov-Smirnov Z		1.040
Asymp. Sig. (2-tailed)		.230

a. Test distribution is Normal.

b. Calculated from data.

The magnitude of the Kolmogorov-Smirnov value is 1.040 and significant at 0.230 this means that H0 is accepted, which means that the residual data is normally distributed.

Classic Assumption Testing
Multicolinieity Test
Table 4. Multicolinieity Test

Model		Collinearity Statistics	
		Tolerance	VIF
1	ROE	.716	1.396
	NIM	.684	1.462
	LDR	.917	1.090
	NPL	.909	1.100

a. Dependent Variable: CAR

Based on the table above, it is known that the VIF value of all free variables is less than 10 and the value of tolerance more than 0.1 so it can be concluded that all independent variables have no problem with multicololinieity.

Autocorrelation Test
Table 5. Autocorrelation tests

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
.383a	.147	.109	4.23773	2.182

a. Predictors: (Constant), NPL, ROE, LDR, NIM

b. Dependent Variable: CAR

From the Durbin-Watson statistical test of 2,182 as shown by table 5 above. The DW value will be compared with the table value using a significant level of 5% with a sample number of 95 and 4 independent variables. So from Durbin Watson's table,

we will get a dl value of 1.579 and a du value of 1.754. Because the DW value is calculated between the upper limit (du) and the lower bound (4-du) or du <dw< 4-du is 1.754 < 2.182 < 2.246. Thus it can be said that the model is free from autocorrelation.

Heteroscedasticity Test

The Heteroscedasticity test aims to test whether in the regression model there is an unevenness in variance from the residual of one observation to another. A good regression model is Homoskedastiness or no Heteroscedasticity. How to predict the existence or absence of heteroscedasticity in a model can be seen in the following table:

Table 6. Park Test

Model		t	Sig
1	Constant	1.363	.176
	ROE	-1.973	.052
	NIM	1.468	.146
	LDR	-.090	.928
	NPL	-1.416	.160

The output results of SPSS show that there is no significant independent variable value, namely a value less than 0.05. So it can be concluded that the regression model is not heteroscedasticity.

Model Testing
Determination Testing (R^2)

The determination coefficient (R^2) is a coefficient used to measure how far the model is able to explain the variation of dependent variables. Based on the determination coefficient test, the following results were obtained:

Table 7. Determination Coefficient Test (R^2)

R	R Square	Adjusted R Square	Std. Error of the Estimate
.383a	.147	.109	4.23773

a. Predictors: (Constant), NPL, ROE, LDR, NIM

From the results of the test above, it is known that the Adjusted R Square value is 0.109 which shows that 10.9% of the CAR variation can be explained by ROE, NIM,

LDR, NPL. While the remaining 89.1% is explained by other variables outside this research model.

Statistical Testing (F-Test)

The F test basically shows whether all the independent variables used in this research model have an influence on the dependent variables. The test results on the F test can be seen in the following table

Table 8. Statistical Test F

ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	278.081	4	69.520	3.871	.000b
	Residual	1616.251	90	17.958		
	Total	1894.333	94			

a. Dependent Variable: CAR

b. Predictors: (Constant), NPL, ROE, LDR, NIM

Based on the calculation of the table above, it appears that the independent variables, namely NPL, ROE, LDR and NIM simultaneously have a significant effect on CAR. This is shown by the value of F - calculated at 3.871 with a probability of 0.006 the number is smaller than the value of 0.05 (5%).

Multiple Regression Test

The results of multiple regression analysis were carried out to determine the influence of independent variables as a whole on dependent variables, namely the influence between ROE, NIM, LDR and NPL on CAR is shown in the following table 9

Table 9. Multiple Analysis Estimation Results

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	20.176	3.091		6.528	.000
ROE	-.273	.077	-.407	-3.539	.001
NIM	.734	.306	.283	2.399	.018
LDR	-.003	.038	-.008	-.078	.938
NPL	-.741	.443	-.171	-1.675	.097

a. Dependent Variable: CAR

Based on table 9, the linear regression equation can be determined as follows:

CAR = 20,176 – 0,273 ROE + 0,734 NIM – 0,003 LDR – 0,741 NPL + e

The equation shows that the constant coefficient based on the regression result is 20.176 with a positive value, this can be interpreted that the capital adequacy will be worth 20.176 if the ROE, NIM, LDR and NPL are each valued at 0 (zero).

Hypothesis Testing Results

t-tests basically show how far the influence of individual independent variables is in explaining the variation of dependent variables. The test results can be seen in the following table:

Table 10. Statistical Test Results t

Model	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
(Constant)	20.176	3.091	6.528	.000
ROE	-.273	.077	-3.539	.001
1 BEFORE	.734	.306	2.399	.018
LDR	-.003	.038	-.078	.938
NPL	-.741	.443	-1.675	.097

Hypothesis 1: *Return on Equity* (ROE) has a positive effect on *Capital Adequacy Ratio* (CAR)

Based on table 10, the results of the statistical test t obtained a calculated t-value of -3.539 with a significance of 0.001 so that it is smaller than the significance level of 0.05. Thus, pearsially H1 is rejected. This means that the ROE variable has a statistically significant negative effect on CAR.

Hypothesis 2: *Net Interest Margin* (NIM) has a positive effect on *Capital Adequacy Ratio* (CAR)

Based on table 10, the results of the statistical test t obtained a calculated t-value of 2.399 with a significance of 0.018 so that it is smaller than the significance level of 0.05. Thus, partially H2 is accepted. This means that the NIM variable has a statistically significant positive effect on CAR.

Hypothesis 3 testing: *Loan to Deposit Ratio* **(LDR) has a negative effect on** *Capital Adequacy Ratio* **(CAR)**

Based on table 10, the results of the statistical test t, a calculated t-value of -0.078 with a significance of 0.938 so that it is greater than the significance level of 0.05. Thus, H3 is partially rejected. This means that the LDR variable has a statistically negative and insignificant effect on CAR.

Hypothesis 4 testing: *Non-Performing Loans* **(NPLs) have a negative effect on Capital Adequacy Ratio (CAR)**

Based on table 10, the results of the statistical test t, a calculated t-value of -1.675 with a significant value of 0.097 is greater than the significance level of 0.05. Thus, H4 is partially rejected. This means that the NPL variable statistically has a negative effect and is not significant in CAR.

DISCUSSION

The influence of Return on Equity (ROE) on the Capital Adequacy Ratio (CAR)

The results show that *Return On Equity* (ROE) has a negative and significant effect on the Capital Adequacy Ratio (CAR). A negative result on ROE indicates that if ROE increases, the CAR value will decrease. According to the *pecking order theory,* increased profits will be allocated to increase capital, so ROE is high, so CAR is also high. However, the findings of this research contradict the *pecking order theory*, which is that increasing ROE actually decreases CAR. So it seems that the increase in ROE has been integrated as a result of the placement of funds in assets that provide high income or high risk. The placement of high-risk assets will be negatively responded to, thereby reducing the value of the stock capital market. Consequently, if the value of the stock capital market falls, the CAR will fall. So an increase in ROE will reduce CAR. The results of this study are consistent with the research of Keynes and Achmad (2014) and

supported by the research of Anjani and Purnawati (2014) which shows that ROE has a negative and significant effect on CAR. However, these results are not in line with the research of Odunayo et al. (2023) which showed that ROE had a negative and insignificant effect on CAR.

Effect of *Net Interest Margin* **(NIM) on** *Capital Adequacy Ratio* **(CAR)**

The results of the study show that *Net Interest Margin* (NIM) has a positive and significant effect on *the Capital Adequacy Ratio* (CAR). The results of this study mean that the higher the NIM achieved by the bank, shown by the effective management and placement of productive assets, the better the bank's performance, so that CAR is also increasing, and vice versa. The results of this study are consistent with Anjani and Purnawati (2014) which show that NIM has a positive and significant effect on CAR. However, these results are not in line with Yonas' (2015) research which shows that NIM has a negative and significant effect on CAR.

Influence of Loan to Deposit Ratio (LDR) on Capital Adequacy Ratio (CAR)

The results showed that *the Loan to Deposit Ratio* (LDR) had a negative and insignificant effect on *the Capital Adequacy Ratio* (CAR). This negative result means that if the LDR increases, the CAR will decrease. The increase in LDR indicates that the credit placement is greater than that of third-party funding sources. Large credit placements indicate that the credit portfolio is concentrated in high-risk assets (high risk weight), as a result of which CAR decreases. Thus increasing LDR lowers CAR. This study is in line with the research of (Kartika et al., 2020) which showed that LDR had a negative and insignificant effect on CAR. However, these results are not in line with the research of (Alajmi & Alqasem, 2015)which showed that LDR had a significant positive effect on CAR.

Effect of Non-Performing Loans (NPL) on Capital Adequacy Ratio (CAR)

The results show that *Non-Performing Loans* (NPLs) have a negative and insignificant effect on the Capital Adequacy Ratio (CAR). The decrease in NPLs can be caused by the credit disbursed by the bank running well, in the sense that the bank is not exposed to the risk of default from the provision of the credit. In addition, NPLs have no effect on CAR because the banks in this study sample have a CAR value or capital adequacy of more than 8%, which shows that even if a loss occurs, the bank can still overcome the loss with its capital. The results of this study are consistent with the Mega (2015) study which showed that NPL had a negative and insignificant effect on CAR. However, the results of the study are not in line with the research of Keynes and Achmad (2015) showing that NPL has a significant positive effect on CAR.

CONCLUSIONS AND SUGGESTIONS

Based on the results of the multiple linear regression analysis carried out, it can be concluded as follows:
1. Based on the results of the discussion analysis and some conclusions and limitations in this study, the suggestions that can be given through the results of this study in order to get better results, namely:
2. For Academics; For researchers, it is a learning process that provides a lot of additional knowledge and aligns what can be done during lectures with reality in the field.
3. For Professionals; For Managers
4. Providing a basis for the preparation of good and directed plans and strategies to be used as a reference for future researchers related to the issue of Capital Adequacy Ratio (CAR) to be more effective and efficient.
5. For Organizational; For banks to consider more regulations on CAR and pay attention to the growth or development of CAR so that it

continues to increase.

Based on the results of the discussion analysis and some conclusions and limitations in this study, the suggestions that can be given through the results of this study in order to get better results, namely:
1. For Academic; For researchers, it is a learning process that provides a lot of additional knowledge and aligns what can be done during lectures with reality in the field.
2. For Professionals; For Managers, Providing a basis for the preparation of good and directed plans and strategies to be used as a reference for future researchers related to the issue of Capital Adequacy Ratio (CAR) to be more effective and efficient.
3. For Organizational; For banks to consider more regulations on CAR and pay attention to the growth or development of CAR so that it continues to increase.

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