THE EFFECT OF CAPITAL ADEQUACY RATIO (CAR), NET INTEREST MARGIN (NIM), AND LOAN TO DEPOSITS RATIO (LDR) ON RETURN ON ASSET (ROA) IN PT BANK NEGARA INDONESIA PERSERO TBK PERIOD OF 2011-2021

Palupi Permata Rahmi[1], Listri Herlina[2], Shanty Novitasary[3]
Universitas Indonesia Membangun, Bandung, Indonesia
palupi.permata@inaba.ac.id[1], listriherlina1@gmail.com[2], shantynovita11@gmail.com[3]

ABSTRACT

One measure to assess the level of soundness or performance of a bank's profitability is Return On Assets (ROA). The level of Return On Assets (ROA) is used to measure bank profitability and focuses on the company's ability to earn profits in its operations, Bank Indonesia sets a minimum amount of Return On Assets (ROA) of 1.5%. However, the Return on Assets (ROA) at PT Bank Negara Indonesia Persero, Tbk for the 2011-2021 period fluctuated with a downward trend. Many factors can affect the rise and fall of Return On Assets (ROA). This study aims to explain the effect of Capital Adequacy Ratio (CAR), Net Interest Margin (NIM), and Loan to Deposits Ratio (LDR) on Return On Assets (ROA).

This research uses quantitative methods with descriptive and verification approaches. The type of data is secondary data sourced from www.idx.co.id and the annual report of PT Bank Negara Indonesia, Tbk. The data analysis method used is descriptive analysis and verification analysis (classical assumption test, multiple regression analysis, correlation coefficient analysis, coefficient of determination analysis, and hypothesis testing).

The results showed that: 1) Return on Assets (ROA) fluctuated with a downward trend with an average of 2.53% and a standard deviation of 0.87. 2) Capital Adequacy Ratio (CAR) fluctuates with a downward trend with an average of 17.97% and a standard deviation of 1.59. 3) Net Interest Margin (NIM) fluctuated with a downward trend with an average of 5.63% and a standard deviation of 0.68%. 4) Loan to Deposits Ratio (LDR) fluctuates with an increasing trend with an average of 84.79% and a standard deviation of 6.36. 5) Capital Adequacy Ratio (CAR) has no significant effect on Return On Assets (ROA). 6) Net Interest Margin (NIM) has a significant effect on Return On Assets (ROA). 7) Loan to Deposits Ratio (LDR) has no significant effect on Return On Assets (ROA). 8) Capital Adequacy Ratio (CAR), Net Interest Margin (NIM), and Loan to Deposits Ratio (LDR) simultaneously (together) have a significant effect on Return On Assets (ROA). With the influence contribution of 67.50%, while the remaining 32.50% is influenced by other factors that are not included in the study.

Keywords: Capital Adequacy Ratio (CAR), Net Interest Margin (NIM), Loan to Deposits Ratio (LDR), and Return On Assets (ROA))

INTRODUCTION

The development of the financial sector, especially changes in the composition or structure of the banking sector in Indonesia, is expected to bring positive changes to the national economy. In particular, banking has a very important role in the movement of the wheels of the Indonesian economy. According to Fahmi (2015) a bank is a financial intermediary institution that functions as an intermediary, namely the party that connects those who have financial surplus (surplus) and those who are financially deficient. This intermediation function is also part of realizing the banking function as an agent of development.

An assessment is needed to assess the performance of management at a bank whether the bank is in good condition or not, especially in activities involving the economy of a country. One indicator to see the financial performance of a bank is by looking at the

level of profitability generated by the bank. According to Kasmir (2017: 196) profitability is the company's ability to seek profit. Measurement of profitability can be measured using the ratio of Return on Assets (ROA). According to Kasmir (2016:201) Return on Assets (ROA) is a ratio that shows the company's ability to generate profits by using the total assets owned. According to Garcia and Guerreiro (2015), Return on Assets (ROA) was chosen because it shows how efficiently the bank is run to show how much profit is generated by each unit of assets. According to Dietrich and Wanzenried (2014) Return on Assets (ROA) has emerged as a key ratio for evaluating bank profitability and has become the most common measure of bank profitability in the literature.

The following is the Return on Assets (ROA) value at PT Bank Negara Indonesia, Tbk for the 2011-2021 period as shown in Figure 1.1.
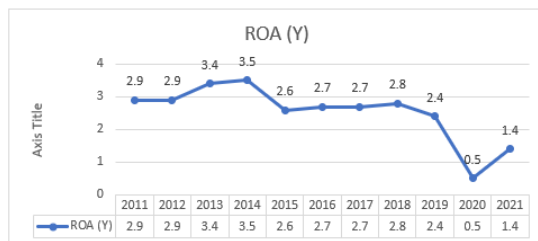
Source: www.idx.co.id (Data processed)

Figure 1. Graph of ROA Value of PT Bank Negara Indonesia Tbk Period of 2011-2021

Based on Figure 1, the Return on Assets (ROA) at PT Bank Negara Indonesia (BNI), Tbk for the period 2011-2021 fluctuated with a downward trend. Even in the last year, 2020, the Return on Assets (ROA) was the smallest value of the last 11 years, which was 0.5%, this indicates that the bank's performance is not going well (unhealthy) because it produces small profits. If there is a decrease in the value of profitability (ROA), it is necessary to know what factors affect the rise and fall of the value of profitability (ROA). Factors that influence the fluctuation of profitability are Capital Adequacy Ratio (CAR), Non Performing loan (NPL), Net Interest Margin (NIM), and Loan to Deposit Ratio (LDR) (Purwoko and Sudiyatno, 2013); (Wahyudi and Kartikasari, 2021); (Wityasari and Pangestuti, 2014). The most dominant factors affecting profitability are Capital Adequacy Ratio (CAR), Net Interest Margin (NIM), and Loan to Deposit Ratio (LDR).

One of the analytical tools used to determine the soundness of a bank is known as CAMELS analysis. CAMELS analysis consists of Capital, Asset Quality, Management, Earning, Liquidity, and Sensitivity to Market Risk (Kasmir, 2012:48). Financial ratios included in CAMELS which are predictor factors in this study are Capital Adequacy Ratio (CAR), Net Interest Margin (NIM), and Loan to Deposit Ratio (LDR).

According to Fahmi (2015: 153) the Capital Adequacy Ratio (CAR) or often referred to as the bank's capital adequacy ratio

is how a bank is able to finance its activities with its capital ownership. According to Kasmir (2014: 197), the higher the capital adequacy ratio, the more credit is given, thereby increasing bank profits and thereby increasing bank profitability.

According to Pandia (2012:71) Net Interest Margin (NIM) is a ratio used to measure the ability of bank management to manage their productive assets to generate net interest income. The greater the ratio, the higher the interest income on productive assets managed by the bank, so that the probability of a bank being in trouble is getting smaller.

According to Kasmir (2014:225) Loan to Deposit Ratio (LDR) is a ratio that measures the ratio of the amount of credit to the amount of funds and public capital used. The higher this ratio, the higher the bank's profit, the bank believes that the profit can guide credit well, so that increasing bank profits can improve bank performance.

The position of the predictor factors that affect profitability (ROA) is shown in Figure 2.

Source: www.idx.co.id (Data processed)

Figure 2. Value of Capital Adequacy Ratio (CAR), Net Interest Margin (NIM), and Loan to Deposit Ratio (LDR) at PT Bank Negara Indonesia, Tbk Period of 2011-2021.

In Figure 2, the value of the Capital Adequacy Ratio (CAR) at PT Bank Negara Indonesia, Tbk for the period 2011-2021 fluctuates and tends to decrease. The phenomenon of a decrease in the CAR value means that it shows a reduced capital so that the credit provided is reduced which consequently reduces profitability.

The value of Net Interest Margin (NIM) at PT Bank Negara Indonesia, Tbk for the period 2011-2021 fluctuated and tended to decrease. It can be seen in Table 2 that the NIM value for the last 5 years has decreased, funds at the end of 2020 reached the lowest point for a period of 11 years.

Loan to Deposit Ratio (LDR) at PT Bank Negara Indonesia, Tbk for the period 2011-2021 fluctuated and tended to increase. The higher this ratio, the lower the bank's liquidity capacity and the greater the possibility of a bank in troubled conditions.
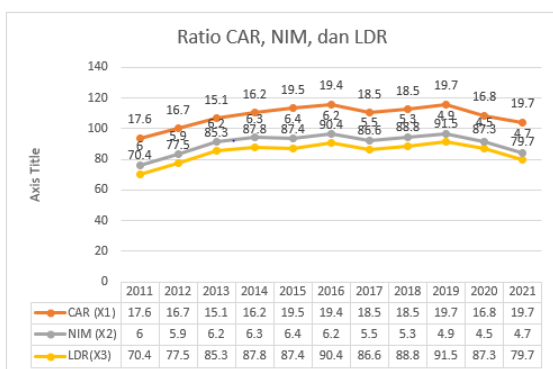
The higher the Capital Adequacy Ratio (CAR), the better the bank's ability to bear the risk of any credit or risky productive assets. In addition, if the value of the Capital Adequacy Ratio (CAR) is high, the bank is able to finance operational activities and make a sizeable contribution to profitability, which means that the Capital Adequacy Ratio (CAR) has a positive effect on Return on Assets (ROA) (Pardede and Pengestuti, 2016) . This is in line with research conducted by Pratama et al (2021), Syamsuddin (2013), Setyarini (2020), and Rembet and Baramuli (2020) which state that the Capital Adequacy Ratio (CAR) has a positive effect on Return on Assets (ROA). However, this is different from the research conducted by Sudarmawanti and Pramono (2017), Wahyudi and Kartikasari (2021), Nurhasanah and Maryono (2021), and Devi (2021) which state that the Capital Adequacy Ratio (CAR) has no effect on Return on Assets (ROA).).

Based on the phenomena and research gaps that have been described, the researchers are interested in conducting research on "The Effect of Capital Adequacy Ratio (CAR), Net Interest Margin (NIM), and Loan to Deposit Ratio (LDR) on Return On Assets (ROA) at PT Bank Negara Indonesia Persero, Tbk in Indonesia Period 2011-2021".

METHOD

Research Methods Used

Sugiyono (2018) explains that, "The research method is defined as a scientific way to obtain data with certain purposes and uses." The research method is the main method used by researchers to achieve goals and determine answers to the problems posed. The research method used in this research is to use quantitative methods with descriptive and verification approaches.

Variable Operations

According to Sugiyono (2018:38) a variable is anything that is determined by the researcher to be studied so that information is obtained about it, then conclusions are drawn. In this study there are two types of variables studied, namely the independent variable (independent variable) and the dependent variable (dependent variable). The operational definition for each variable according to Sugiyono (2018:39) is as follows:

1. The dependent variable (Dependent Variable) according to Sugiyono (2018:39) is a variable that is affected or is the result, because of the independent variable. The dependent variable studied in this study is Return On Assets (ROA) (Y).

2. The Independent Variable according to Sugiyono (2018:39) is a variable that will affect or be the cause of the change or the emergence of the dependent variable (bound). The independent variables studied in this study are Capital Adequacy Ratio (CAR) (X1), Net Interest Margin (NIM) (X2), Loan to Deposits Ratio (LDR) (X3).

Data Types and Sources

The type of data used in this study is quantitative data, the source of data taken by researchers using secondary data (Secondary Data), namely sources obtained from the Indonesia Stock Exchange (IDX) and the Annual Report of PT Bank Negara Indonesia, Tbk Period of 2011-2021. Quantitative data was obtained from the websites www.idx.co.id and www.bni.co.id.

Data collection technique

Data is a unit of information recorded by media that can be distinguished from other data, can be analyzed and relevant to a particular program. Data collection is a systematic and standard procedure to obtain the required data.

Data collection techniques refer to how the required data can be obtained. The data collection used by the author is a literature study technique and data search via the internet (documentation). Literature study is the collection of data through books, articles, journals and others related to the research conducted by the author.

Sampling Technique
Population

According to Sugiyono (2018:215) Population is a generalization area consisting of objects or subjects that have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions. The population used in this study is the financial statements of PT Bank Negara Indonesia, Tbk for the period 2011-2021.

Research Sample

According to Sugiyono (2018:81) the sample is part or the number and characteristics possessed by the population. If the population is large, and the research is not possible to study everything in the population, for example due to limited funds, manpower and time, the researcher will take a sample from that population. What is learned from the sample, the conclusions will be applied to the population. For this reason, samples taken from the population must be truly representative.

In this study, the researcher used the purposive sampling method. According to Sugiyono (2016: 85) the purposive sampling method was sampling data sources with certain considerations. The author chooses purposive sampling which establishes certain considerations or criteria that must be met by the samples used in this study.

In this study, the sample is companies that meet certain criteria. The criteria used as research samples are:

1) Financial Statements of PT Bank Negara Indonesia, Tbk which are listed on the IDX in a row for 11 periods 2011-2021.
2) Financial Report of PT Bank Negara Indonesia, Tbk which provides Sustainability Report and Annual Report respectively for the period 2011-2021.
3) Financial Report of PT Bank Negara Indonesia, Tbk which provides data related to research variables Capital Adequacy Ratio, Net Interest Margin and Loan to Deposits Ratio for the period 2011-2021.
4) Financial statements ending on December 31 for the period 2011-2021.
5) The financial statements of PT Bank Negara Indonesia, Tbk which have a fluctuating Return On Assets (ROA) tend to fall.

Data Analysis Techniques and Hypothesis Testing

Descriptive Analysis

This study uses descriptive analysis to describe the research variables, Return On Assets (ROA), Capital Adequacy Ratio (CAR), Net Interest Margin (NIM), and Loan to Deposits Ratio (LDR).

Verification Analysis

The verification method according to Sugiyono (2013:8) is defined as research conducted on a particular

population or sample with the aim of testing the established hypothesis. This analysis is used to determine how strong the influence of the independent variables Capital Adequacy Ratio (CAR), Net Interest Margin (NIM) and Loan to Deposits Ratio (LDR) on Return On Assets (ROA) at PT Bank Negara Indonesia, Tbk.

In this study there are four variables, of which three are independent variables, namely Capital Adequacy Ratio (CAR) (X1), Net Interest Margin (NIM) (X2), Loan to Deposits Ratio (LDR) (X3) and Return On Assets (ROA).) (Y). The general form of the multiple linear regression equation is as follows: (Sugiyono, 2017:277)

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + Y + e$$

Explanation:

Y : *Return On Asset* (ROA)

a : Koefisien konstanta

X_1 : *Capital Adequacy Ratio* (CAR)

X_2 : *Net Interest Margin* (NIM)

X_3 : *Loan to Deposits Ratio* (LDR)

$b1-b3$: Regression coefficient, is the amount of change in the dependent variable due to change in each unit of the independent variable.

e : Residual Error (error), disturbance variable

Correlation Coefficient Analysis

According to Kuncoro (2013: 240) the correlation coefficient test is used to measure how big the linear relationship of the independent variables studied is to the dependent variable. The correlation coefficient (R) has a value between -1.00 to +1.00. The closer R approaches the number 1.00, it can be interpreted that the relationship between the independent variable and the dependent variable is getting stronger and negative and vice versa.

Coefficient of Determination Analysis

The coefficient of determination is used to measure or find out how much change in the dependent variable is explained or determined by the independent variable. To explore this, it can be determined by calculating the coefficient of determination with the following formula:

$$Kd = R^2 \times 100\%$$

Explanation:

Kd : How far is the change in variable Y influenced by variable X

R^2 : The square of the correlation coefficient

Hypothesis Test

T Test (Partial Test)

According to Ghozali (2016: 97) the partial test basically shows how far the influence of one explanatory/independent variable individually in explaining the variation of the independent variable. To find out the significant level of the regression coefficient, the authors use student t test statistics with the following formula:

$$t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

Source: Sugiyono, (2017:251)

Explanation:

t = t test value

r = correlation coefficient value

n = number of samples

The basis for decision making based on the significance number according to Suharyadi and Purwanto (2009: 191), states:

- The probability number (GIS) < 0.05 the relationship between the two variables is significant.

- The probability number (GIS) > 0.05 the relationship between the two variables is not significant.

F Test (Simultaneous Test)

The F test is used to determine the simultaneous effect of the independent variable on the dependent variable. the formula proposed by Sugiyono (2017:252) is as follows:

$$F_{hit} = \frac{R^2 / (k-1)}{(1-R^2)/(n-k-1)}$$

Explanation :

F_h = F test value (Calculate)

K = Number of independent variables

N = Number of sample members

The significance level in this study is 0.05, meaning that the risk of making a decision error is 0.05.

RESULTS AND DISCUSSION

Descriptive Analysis

The variables used in this study consisted of: Return On Assets (ROA) (Y) as the dependent variable and Capital Adequacy Ratio (CAR) (X1), Net Interest Margin (NIM) (X2) and Loan to Deposits Ratio (LDR) (X3) as the independent

variable. The explanation of descriptive analysis in this study is as follows::

1. Return on Assets (ROA) at PT Bank Negara Indonesia Persero, Tbk for the period 2011-2021 fluctuated with a tendency to

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-3.049	3.750		-.813	.443
	CAR	-.042	.125	-.077	-.336	.746
	NIM	1.013	.284	.801	3.563	.009
	LDR	.007	.030	.054	.246	.813

a. Dependent Variable: ROA

decline, with an average value (mean) of 2.53% with a standard deviation of 0.87.

2. Capital Adequacy Ratio (CAR) at PT Bank Negara Indonesia Persero, Tbk period 2011-2021 fluctuated with a tendency to decline, with an average value of 17.97% with a standard deviation of 1.59.

3. Net Interest Margin (NIM) at PT Bank Negara Indonesia Persero, Tbk for the period 2011-2021 fluctuated with a tendency to decline, with an average value of 5.63% with a standard deviation of 0.68.

4. Loan to Deposits Ratio (LDR) at PT Bank Negara Indonesia Persero, Tbk period 2011-2021 fluctuated with a tendency to increase, with an average value of

84.79% with a standard deviation of 6.36.

Verification Analysis

Multiple linear regression analysis

The following are the results of the multiple linear analysis test shown in Table 1.

Table 1. Multiple linear regression analysis

Based on Table 1, the values of the constants and regression coefficients are obtained so that the regression model equation formed is as follows:

$Y = -3.049 - 0,042X_1 + 1.013X_2 + 0,007X_3 + e$

Dimana:

Y = *Return On Asset* (ROA) (Y)

X_1 = *Capital Adequacy Ratio* (CAR)

X_2 = *Net Interest Margin* (NIM)

X_3 = *Loan to Deposits Ratio* (LDR)

From the regression equation above, it can be interpreted as follows:

1. Constant value (a) is -3,049 units and it means that all variables, namely Capital Adequacy Ratio (CAR) (X1), Net Interest Margin (NIM) (X2) and Loan to Deposits Ratio (LDR) (X3) in this study are 0. or constant, then the value of the

Return On Asset (ROA) (Y) variable is -3.049 units.

2. The value of the Capital Adequacy Ratio (CAR) (X1) variable is 0.042 units and is negative,

Model Summaryb

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.822ᵃ	.675	.536	.59084	1.913

a. Predictors: (Constant), LDR, NIM, CAR
b. Dependent Variable: ROA

meaning that if the Capital Adequacy Ratio (CAR) (X1) variable increases by one unit and the other variables are constant, then the Return On Asset (ROA) (Y) variable) decreased by 0.042 units, and vice versa.

3. The value of the Net Interest Margin (NIM) (X2) variable is 1.013 units and has a positive value, meaning that if the Net Interest Margin (NIM) (X2) variable increases by one unit and the other variables are constant, the Return On Asset (ROA) variable (Y) increased by 1,013 units and vice versa.

4. The value of the Loan to Deposits Ratio (LDR) (X3) variable is 0.007 units and has a positive value, meaning that if the Loan to Deposits Ratio (LDR) (X3) variable increases by one unit and

the other variables are constant, then the Return On Asset (ROA) variable (Y) increased by 0.007 units and vice versa.

Correlation Coefficient Analysis

Table 2. Correlation Coefficient Analysis

Based on Table 2, it can be seen that the correlation of Capital Adequacy Ratio (CAR) (X1), Net Interest Margin (NIM) (X2) and Loan to Deposits Ratio (LDR) (X3) simultaneously with Return On Assets (ROA) (Y) is of 0.822. Based on the correlation criteria included in the interval 0.80 - 1,000, it means that the relationship between variables is very strong and unidirectional. This means that if the Capital Adequacy Ratio (CAR) (X1), Net Interest Margin (NIM) (X2) and Loan to Deposits Ratio (LDR) (X3) increase, the Return On Asset (ROA) (Y) will increase. Likewise, if the Capital Adequacy Ratio (CAR) (X1), Net Interest Margin (NIM) (X2) and Loan to Deposits Ratio (LDR) (X3) decrease, the Return On Assets (ROA) (Y) will also decrease..

Analysis of the coefficient of determination (R^2)

The coefficient of determination is used to see how much influence the independent variable has on the dependent variable in the form of percent (%). The following is the result of calculating the coefficient of partial determination with the help of SPSS 21.0 which is shown in Table 3.

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	-3.049	3.750		-.813	.443
	CAR	-.042	.125	-.077	-.336	.746
	NIM	1.013	.284	.801	3.563	.009
	LDR	.007	.030	.054	.246	.813
a. Dependent Variable: ROA						

Coefficients[a]

Table 3. Analysis of the coefficient of determination

From Table 3, it can be seen that the R Square value is 0.675. The value of R Square shows the value of the coefficient of determination. So, it can be concluded that the K D value = 0.675 (67.50%). This means that Return on Assets (ROA) is influenced by the Capital Adequacy Ratio (CAR), Net Interest Margin (NIM), and Loan to Deposits Ratio (LDR) of 67.50%, while the remaining 32.50% is influenced by other factors that not included in the research.

Hypothesis Test

Hypothesis testing in this study aims to test whether there is an influence between the Independent Variables on the Dependent Variables. The null hypothesis (H0) indicates that there is no influence between the Independent Variables and the Dependent Variables. The alternative hypothesis (Ha) shows that there is an influence between the Independent Variables and the Dependent Variables. The hypothesis testing technique in this study used the t test and the F test.

Table 4. Partial Test (t Test)

Based on Table 4, the following results were obtained:

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.822[a]	.675	.536	.59084	1.913
a. Predictors: (Constant), LDR, NIM, CAR					
b. Dependent Variable: ROA					

1. The t-count value of Capital Adequacy Ratio (CAR) to Return On Assets (ROA) is -0.336 with a significant 0.746 greater than =0.05 (0.746 > 0.05). So that Ho is accepted (Ha is rejected) thus partially there is no significant effect of Capital Adequacy Ratio (CAR) on Return On Assets (ROA).

2. The t-count value of Net Interest Margin (NIM) to Return On Assets (ROA) is 3.563 with 0.009 significantly smaller than =0.05 (0.009 <0.05). So Ha is accepted (Ho is rejected) thus partially there is a significant effect of Net Interest Margin (NIM) on Return On Assets (ROA).

3. The t value of Loan to Deposits Ratio (LDR) to Return On Assets (ROA) is 0.246 with a significant 0.813 greater than =0.05 (0.813 > 0.05). So that Ho is accepted (Ha is rejected) thus partially there is no significant effect of Loan to Deposits Ratio (LDR) on Return On Assets (ROA).

Simultaneous Test (F Test)

Table 5. F Test

		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.078	3	1.693	4.849	.039[b]
	Residual	2.444	7	.349		
	Total	7.522	10			

a. Dependent Variable: ROA
b. Predictors: (Constant), LDR, NIM, CAR

Based on Table 5, the F-count value is 4.849 with a significant 0.039 less than 0.05 (0.039 <0.05), it can be concluded that Ha is rejected and Ho is accepted, meaning that simultaneously there is a significant

effect of Capital Adequacy Ratio (CAR), Net Interest Margin (NIM), and Loan to Deposits Ratio (LDR) to Return On Assets (ROA) at PT Bank Negara Indonesia Persero, Tbk period 2011-2021.

Discussion of Research Results
Effect of Capital Adequacy Ratio (CAR) on Return On Assets (ROA)

Based on the results of the study, it was stated that there was no significant effect of Capital Adequacy Ratio (CAR) on Return On Assets (ROA). This can be seen in the associative hypothesis testing (t test) where the t value of the Capital Adequacy Ratio (CAR) to Return On Assets (ROA) is -0.336 with a significant 0.746 greater than = 0.05 (0.746 > 0, 05). So Ho is accepted (Ha is rejected) thus there is no significant effect of Capital Adequacy Ratio (CAR) on Return On Assets (ROA) at PT Bank Negara Indonesia Persero, Tbk period 2011-2021.

These results are in line with research conducted by Sudarmawanti and

Pramono (2017), Wahyudi and Kartikasari (2021), Nurhasanah and Maryono (2021), and Devi (2021) which state that the Capital Adequacy Ratio (CAR) has no effect on Return on Assets (ROA).

Effect of Net Interest Margin (NIM) on Return On Assets (ROA)

Based on the results of the study, it was stated that there was a significant effect of Net Interest Margin (NIM) on Return On Assets (ROA). This can be seen in testing the associative hypothesis (t test) where in the study the t value of Net Interest Margin (NIM) on Return On Assets (ROA) was 3.563 with 0.009 significantly smaller than = 0.05 (0.009 <0.05). So that Ha is accepted (Ho is rejected) thus partially there is a significant effect of Net Interest Margin (NIM) on Return On Assets (ROA) at PT Bank Negara Indonesia Persero, Tbk for the period 2011-2021.

This is in line with research conducted by (Sudarmawanti and Pramono, 2017), Nurhasanah and Maryono (2021), Pratam et al (2021), Syamsuddin (2013), and Setyarini (2020) which state that Net Interest Margin (NIM) has a positive effect to Return on Assets (ROA).

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

Based on the results of the study, it was stated that there was no significant effect of Loan to Deposits Ratio (LDR) on Return On Assets (ROA). This can be seen in testing the associative hypothesis (t test) where the t value of the Loan to Deposits Ratio (LDR) to Return On Assets (ROA) is 0.246 with a significant 0.813 greater than =0.05 0.813> 0.05). So that Ho is accepted (Ha is rejected) thus partially there is no significant effect of Loan to Deposits Ratio (LDR) on Return On Assets (ROA) at PT Bank Negara Indonesia Persero, Tbk for the period 2011-2021.

This is in line with research conducted by Nurhasanah and Maryono (2021), Alphamalana and Paramita (2021), and Rembet and Baramuli (2020) which state that the Loan to Deposit Ratio (LDR) does not have a positive effect on Return on Assets (ROA).

Effect of Capital Adequacy Ratio (CAR), Net Interest Margin (NIM), and Loan to Deposits Ratio (LDR) on Return On Assets (ROA)

The correlation coefficient test value simultaneously between Capital Adequacy Ratio (CAR), Net Interest

Margin (NIM) and Loan to Deposits Ratio (LDR) to Return On Assets (ROA) is 0.822, meaning that the relationship between variables is very strong and unidirectional. This indicates that if the Capital Adequacy Ratio (CAR), Net Interest Margin (NIM) and Loan to Deposits Ratio (LDR) increase, the Return On Assets (ROA) will increase. The value of the coefficient of determination simultaneously between Capital Adequacy Ratio (CAR), Net Interest Margin (NIM) and Loan to Deposits Ratio (LDR) to Return On Assets (ROA) is 67.50%, meaning that Return On Assets (ROA) is influenced by Capital Adequacy Ratio (CAR), Net Interest Margin (NIM), and Loan to Deposits Ratio (LDR) were 67.50%, while the remaining 32.50% was influenced by other factors not included in the study.

Based on the results of the study, it was stated that there was a significant effect of Capital Adequacy Ratio (CAR), Net Interest Margin (NIM), and Loan to Deposits Ratio (LDR) on Return On Assets (ROA). This can be seen in the F test, where the F-count value is 4, 849 with a significant 0.039 less than 0.05 (0.039 <0.05), it can be concluded that Ha is rejected and Ho is accepted, meaning that simultaneously there is a significant effect

of Capital Adequacy Ratio (CAR), Net Interest Margin (NIM), and Loan to Deposits Ratio (LDR) to Return On Assets (ROA) at PT Bank Negara Indonesia Persero, Tbk for the period 2011-2021.

This is in line with research conducted by Moorcy (2020) and Pratama et al (2021) which state that simultaneously Capital Adequacy Ratio (CAR), Net Interest Margin (NIM), and Loan to Deposit Ratio (LDR) have a significant effect on Return on Assets (ROA).

CONCLUSIONS
Conclusion

Based on the results of research and discussion on "The Influence of Capital Adequacy Ratio (CAR), Net Interest Margin (NIM), and Loan to Deposits Ratio (LDR) on Return On Assets (ROA) at PT Bank Negara Indonesia Persero, Tbk period 2011-2021. ", then the writer can draw the following conclusions, 1). Return on Assets (ROA) at PT Bank Negara Indonesia Persero, Tbk for the period 2011-2021 fluctuated with a tendency to decline, with an average value (mean) of 2.53% with a standard deviation of 0.87. 2). Capital Adequacy Ratio (CAR) at PT Bank Negara Indonesia Persero, Tbk period 2011-2021 fluctuated

with a tendency to decline, with an average value of 17.97% with a standard deviation of 1.59. 3). Net Interest Margin (NIM) at PT Bank Negara Indonesia Persero, Tbk for the period 2011-2021 fluctuated with a tendency to decline, with an average value of 5.63% with a standard deviation of 0.68. 4). Loan to Deposits Ratio (LDR) at PT Bank Negara Indonesia Persero, Tbk period 2011-2021 fluctuated with a tendency to increase, with an average value of 84.79% with a standard deviation of 6.36. 5).Partially, the Capital Adequacy Ratio (CAR) has no significant effect on Return On Assets (ROA) at PT Bank Negara Indonesia Persero, Tbk for the period 2011-2021. 6). Partially, Net Interest Margin (NIM) has a significant effect on Return On Assets (ROA) at PT Bank Negara Indonesia Persero, Tbk for the period 2011-2021. 7). Partially the Loan to Deposits Ratio (LDR) has no significant effect on Return On Assets (ROA) at PT Bank Negara Indonesia Persero, Tbk for the period 2011-2021.8).Capital Adequacy Ratio (CAR), Net Interest Margin (NIM), and Loan to Deposits Ratio (LDR) together (simultaneously) have a significant effect on Return On Assets (ROA) at PT Bank Negara Indonesia Persero, Tbk period 2011-2021.

Suggestion

As for this research, it will be useful for certain parties who are used according to its purpose, so the suggestions that can be given are as follows::

A. For Companies:

1. The Capital Adequacy Ratio (CAR) at PT Bank Negara Indonesia Persero, Tbk for the 2011-2021 period in this study did not have a significant effect on Return On Assets (ROA) but the company still needed to maintain the CAR value so that it did not decrease to the standard set by Bank Indonesia. which is 8% where the value of the bank in this study is still above 8% so the bank is still in a safe condition. By maintaining the CAR value, the bank can control and develop the bank in a better direction. However, it should be noted that a very high CAR value can also indicate a large number of idle funds.

2. The Net Interest Margin (NIM) at PT Bank Negara Indonesia Persero, Tbk for the period 2011-2021 in this study has a significant

effect on Return On Assets (ROA, so management needs to pay more attention to the NIM factor so that banks do not have problems in the future. In this study, the NIM value is at the safe limit, which is above 3% which indicates the bank's net interest income is in good condition. However, it should be noted in this research that the bank has been continuously declining for the last 5 years, this condition indicates the bank is experiencing problems. So management needs to overcome this problem. so as not to experience a decline in the coming year.

3. Loan to Deposits Ratio (LDR) at PT Bank Negara Indonesia Persero, Tbk for the period 2011-2021 in this study did not have a significant effect on Return On Assets (ROA). The LDR value in this study is below 100%, this indicates the bank is working quite well. However, in the last year the bank experienced a decline, this also needs to be considered so that the bank remains healthy in the eyes of investors. In maintaining the LDR value in order to remain good, banks need to be selective in lending so that non-performing loans do not occur in the future, where this will also hamper the bank's opinion.

B. For Further Researchers

This research is limited to 3 independent variables, namely Capital Adequacy Ratio (CAR), Net Interest Margin (NIM), and Loan to Deposits Ratio (LDR) which affect Return On Assets (ROA), so further researchers are advised to choose and add independent variables. which affects Return on Assets (ROA) with a greater influence and contribution than this study.

BIBLIOGRAPHY

Fahmi, Irham. (2016). *Analisa Kinerja Keuangan*. Bandung: Alfabeta.

Fahmi, Irham. (2017). *Pengantar Manajemen Keuangan Teori dan Soal Jawab*. Bandung: Alfabeta.

Ghozali, Imam. (2016). "*Aplikasi Analisis Multivariate Dengan Program IBM SPSS 23 Edisi 8*". Semarang: Badan Penerbit Universitas Diponegoro.pur

Kasmir. (2012). *Manajemen Perbankan, Edisi Revisi*. Jakarta: PT Raja Grafindo Persada.

Kasmir. (2014). *Bank dan Lembaga Keuangan Lainnya.* Jakarta: Kencana Prenada Media.

Kasmir. (2015). *Pengantar Manajemen Keuangan*. Jakarta: Prenadamedia Group.

Kasmir. (2017). *Analisis Laporan Keuangan*. Jakarta: PT Raja Grafindo Persada.

Kuncoro, M. (2013). *Metode Riset Untuk Bisnis dan Ekonomi Edisi 4*. Jakarta: Erlangga.

Pandia, Frianto. (2012). *Manajemen Dana dan Kesehatan Bank. Cetakan Pertama*. Jakarta: Rineka Cipta.

Sugiyono. (2016). *Metode Peneltiain Kuantitatif dan Kombinasi (Mixed Methods)*. Bandung: Alfabeta

Sugiyono. (2017). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.

Sugiyono. (2018). *Metode Penelitian Kuantitatif*. Bandung: Alfabeta.

Journal Source:

Alphamalana, I. L., & Paramita, S. (2021). Pengaruh Capital Adequacy Rasio, Dana Pihak Ketiga, dan Non Performing Loan, terhadap Profitabilitas dengan LDR sebagai Variabel Intervening pada Bank Umum Konvensional di Indonesia. *Jurnal Ilmu Manajemen*, *9*(2).

Devi, Heidy Paramitha. (2021). Pengaruh Rasio Kesehatan Bank Terhadap Return on Assets pada Bank Umum Syariah di Indonesia. *Owner Riset & Jurnal Akuntansi,* Vol 5 (1).

Dietrich, A., & Wanzenried, G. (2014). The determinants of commercial banking profitability in low-, middle-, and high-income countries. *The Quarterly Review of Economics and Finance*, *54*(3), 337-354.

Garcia, M. T. M., & Guerreiro, J. P. S. M. (2015). Internal and External Determinants of Banks' Profitability: *The Portuguese Case Journal of Economic Studies* Vol 43 no 1.

Moorcy, N. H. (2020). Pengaruh Capital Adequacy Ratio, Net Interest Margin, Dan Loan To Deposit Ratio Terhadap Return On Assets Pada PT. BANK BNI (PERSERO), TBK. *Jurnal GeoEkonomi*, *11*(2), 164-175.

Nurhasanah, D., & Maryono, M. (2021). Analisa Pengaruh Rasio Keuangan Terhadap Profitabilitas Pada

Perusahaan Perbankan Periode 2016–2018. *KEUNIS*, *9*(1), 85-95.

Pratama, M. S., Mubaroh, S., & Afriansyah, R. (2021). Pengaruh CAR, LDR, NIM, BOPO terhadap ROA Pada Sektor Perbankan Go Public di BEI 2016-2018. *INOVASI*, *17*(1), 118-126.

Purwoko, D., & Sudiyatno, B. (2013). Faktor-Faktor yang Mempengaruhi Kinerja Bank (Studi Empirik Pada Industri Perbankan di Bursa Efek Indonesia). *Jurnal Bisnis dan Ekonomi*, *20*(1).

Rembet, W. E., & Baramuli, D. N. (2020). Pengaruh CAR, NPL, NIM, BOPO, LDR Terhadap Return On Asset (ROA)(Studi Pada Bank Umum Swasta Nasional Devisa Yang Terdaftar DI BEI). *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, *8*(3).

Setyarini, A. (2020). Analisis Pengaruh CAR, NPL, NIM, BOPO, LDR Terhadap ROA (Studi Pada Bank Pembangunan Daerah di Indonesia Periode 2015-2018). *Research Fair Unisri*, *4*(1).

Sudarmawanti, E., & Pramono, J. (2017). Pengaruh CAR, NPL, BOPO, NIM dan LDR Terhadap ROA (Studi kasus pada Bank Perkreditan Rakyat di Salatiga yang terdaftar di Otoritas Jasa Keuangan Tahun 2011-2015). *Among Makarti*, *10*(1).

Syamsuddin. (2013). Pengaruh CAR, NPL, BOPO, LDR, dan NIM Terhadap Profitabilitas (ROA). *Business & Management Journal*, 2013 10(1):1-14.

Wahyudi, C., & Kartikasari, M. D. (2021). Analisa Rasio Keuangan terhadap Profitabilitas pada Perbankan yang Terdaftar di BEI. *Permana: Jurnal Perpajakan, Manajemen, dan Akuntansi*, *13*(1), 124-138.

Other Sources:

https://www.idx.co.id/
https://www.bni.co.id/