JEMPER(Jurnal Ekonomi Manajemen Perbankan) http://jurnal.usbypkp.ac.id/index.php/jemper

# ANALYSIS OF THE INFLUENCE OF CAPITAL, NON-PERFORMING LOANS, EFFICIENCY, LIQUIDITY, AND NET INCOME ON PROFITABILITY (Case Study of Neo Commerce Bank 2013-2022 Period)

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#### Abstrak

Penelitian ini bertujuan menganalisis pengaruh CAR, NPL, BOPO, LDR, dan NIM Terhadap Profitabilitas pada PT Bank Neo Commerce Tbk secara simultan maupun parsial. Populasi penelitian adalah laporan keuangan PT Bank Neo Commerce Tbk periode 2013-2022. Teknik sampling yang digunakan adalah teknik sampling purposive dan didapatkan 40 data laporan keuangan. Metode analisis data yang digunakan adalah regresi linear berganda. Teknik analisis data menggunakan Uji Statistik F, Uji Statistik t, dan Koefisien Determinasi (R2). Hasil penelitian menunjukkan variabel CAR, NPL, BOPO, LDR, dan NIM secara simultan berpengaruh signifikan terhadap ROA PT Bank Neo Commerce Tbk. Hasil uji t disimpulkan bahwa variabel BOPO dan NIM berpengaruh signifikan terhadap ROA PT Bank Neo Commerce Tbk. Variabel CAR, NPL, dan LDR berpengaruh tidak signifikan terhadap ROA PT Bank Neo Commerce Tbk. Adjusted R2 sebesar 0,977, menunjukkan bahwa kontribusi pengaruh variabel lainnya yang tidak diteliti.



#### Abstract

The study investigates the influence of Capital Adequacy Ratio (CAR), Non-Performing Loans (NPL), Bank Operating Profit Over Operating Income (BOPO), Loan to Deposit Ratio (LDR), and Net Interest Margin (NIM) on the Profitability of Bank Neo Commerce. The study uses financial statements of the bank from 2013 to 2022, analyzing 40 data points using multiple linear regression. The findings indicate that CAR, NPL, BOPO, LDR, and NIM collectively have a significant impact on Return on Assets (ROA). However, when examined individually, only BOPO and NIM demonstrate a significant influence on ROA, while CAR, NPL, and LDR do not. The adjusted R-squared of 0.977 suggests that 97.7% of the variation in ROA can be explained by the independent variables, leaving 2.3% to be attributed to other factors.

Keywords: ROA, CAR, NPL, OER, LDR, and NIM



JEMPER (Jurnal Ekonomi Manajemen Perbankan) Volume 6 Nomor 1 Halaman 12 – 26 Bandung, Januari – Juni 2024

p-ISSN : 2655 - 2922

Tanggal Masuk : **12 Agustus 2023** Tanggal Revisi : **12 Agustus 2023** Tanggal Diterima : **30 Juni 2024** 

# INTRODUCTION

The banking industry has an essential role in the development of the Indonesian economy. Banking acts as an economic driver, namely growing the community's economic sector in the micro and macro sectors. Banking performs its function as a collector of public funds and distributes funds to the public to carry out business activities in the form of credit. In carrying out their functions, banks must pay attention to financial performance each year. According to Fahmi (2015: 149), financial performance is an analysis seen from the implementation of financial implementation rules so that it can see the extent to which a company is running it properly and correctly. One of the objectives of financial performance is to determine the level of profitability or profitability through profitability ratios. According to Riyadi (2004) profitability indicators in the banking sector in general, while Return on Asset (ROA) is used. Return on Asset (ROA) is a ratio used to determine the amount of assets owned by the company to achieve the expected rate of return (Fahmi, 2015, p. 157). According to Cashmere (2010: 202), the smaller (lower) this ratio, the less good the results (return) on the number of assets used in the company.

PT Bank Neo Commerce Tbk (formerly PT Bank Yudha Bhakti Tbk) is a bank for retired military soldiers, but has transformed into a digital bank since March 2021. When the Covid-19 pandemic occurred in Indonesia, PT Bank Neo Commerce Tbk saw an opportunity for banking digitalization which showed an increase in digital transactions in the community. In the fourth quarter of 2021, PT Bank Neo Commerce Tbk (BNC) recorded several remarkable achievements. The neobank digital application is in the highest position in the digital bank category since its soft launch at the end of March 2021. More than 10 million downloads have been received on both AppStore and Google PlayStore (https://pressrelease.kontan.co.id/). On the other hand, PT Bank Neo Commerce recorded a loss. PT Bank Neo Commerce Tbk incurred losses as a result of a significant increase in capital costs or capital expenditure to invest in technology utilization and development (https://finansial.bisnis.com/).

Below is a graph of the Return on Asset (ROA) of PT Bank Neo Commerce Tbk for the last eight years:

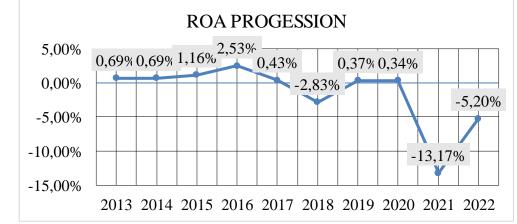


Figure 1. Graph of ROA at PT Bank Neo Commerce Tbk Period 2013 - 2022 Source: Annual Report Bank Neo Commerce 2022 (data processed)

Table 1 above shows that the ROA at PT Bank Neo Commerce Tbk for eight periods, where from 2013 - 2022 ROA only increased four times. In 2013 ROA growth only reached 0.69% and in 2014 it did not experience growth with the same percentage as the previous year to 0.69%. In 2015 ROA growth reached 1.16% then in 2016 it increased to 2.53%. In 2017, PT Bank Neo Commerce Tbk's ROA decreased to 0.43% and decreased again in 2018 to - 2.83%. In 2019, ROA growth reached a positive position of 0.37%. However, in 2020 it decreased to 0.34%. Furthermore, in 2021 PT Bank Neo Commerce Tbk experienced a

decline until it reached -13.17%. And in 2022 the ROA of PT Bank Neo Commerce Tbk has increased, but is still in a minus position to -5.20%.

Capital Adequacy Ratio (CAR) or commonly called the bank's capital adequacy ratio is a ratio of how a bank is able to finance its activities (Fahmi, 2015, 153). Research on the effect of CAR on ROA has been conducted by Setyarini, (2020), Fanny et al., (2020), and Rizky & Mandagie (2021) shows that CAR has a positive and significant effect on ROA. Meanwhile, different results obtained by Yogianta (2013), Prasanjaya & Ramantha (2013), and Riski (2016) show that CAR has a positive, but insignificant effect on ROA.

Non performing loan (NPL) is a ratio to measure the ability of a bank's management to overcome non-performing loans that have been given by the bank (Dendawijaya, 2003). Research on the effect of NPL on ROA has been conducted by Yogianta (2013), Fanny et al., (2020), and Rizky & Mandagie (2021) which state that NPL has a negative and significant effect on ROA. However, these results differ from research conducted by Setyarini (2020), Hidayanti, Winarni, & Wahyuni, (2023), and Masril (2018) which state that NPL has a negative and insignificant effect on profitability. Research on the effect of NPL on ROA has also been conducted by Zulfikri & Halim (2022), Andika et al., (2021), and Pratiwi & Wiagustini (2016) which state that NPL has a positive and significant effect on ROA. However, these results differ from research conducted by Lestari & Setianegara (2020), Rinofah et al., (2022), and Susilowati & Tiningrum (2019) which state that NPL has a positive and insignificant effect on profitability.

The ratio known as operational efficienty ratio (OER), also known as the efficiency ratio, shows how well bank management can offset operating costs with operating income (Hariyani, 2010). Research on the effect of OER on ROA has been conducted by Zulfikri & Halim (2022), Alazis (2020), and Rohmiati et al., (2019) showed that OER has a significant negative effect on ROA. Meanwhile, different results were obtained by Siagian et al., 2021) and Nugroho, Mangantara, & Tulung, (2019) which stated that OER had a negative and insignificant effect on ROA.

Loan To Deposit Ratio (LDR) is the ratio of the ratio between total loans granted and total public and own capital (Kasmir, 2010, p. 225). Research on the effect of LDR on ROA has been conducted by Fanny et al., (2020) and Liniarti (2021) shows that LDR has a negative and significant effect on ROA. Meanwhile, different results obtained by Lestari & Setianegara, (2020), Masril (2018), and Moorcy (2020) state that LDR has an insignificant negative effect on ROA.

The ability of a bank to place earning assets to generate net interest income is shown by the Net Interest Margin (NIM) ratio. (Taswan, 2017). Research on the effect of NIM on ROA has been conducted by Setyarini (2020), Lestari & Setianegara (2020), and Rohmiati & Winarni (2019) shows that it has a positive and significant effect on ROA. Meanwhile, research conducted by Nufus & Munandar (2021), Yogianta (2013), and Moorcy (2020) states that NIM has a positive and insignificant effect on ROA. Research on the effect of NIM on ROA has also been conducted by Alazis (2020), Murdiyanto (2020), and Siagian et al., (2021) showing that it has a negative and significant effect on ROA.

The formulation of this research problem is to increase Return on Asset (ROA) with the approach of Capital Adequacy Ratio (CAR), Non-Performing Loan (NPL), Operartional Efficiency Ratio (OER), Loan to Deposit Ratio (LDR), and Net Interest Margin (NIM).

## LITERATURE

#### Capital Adequacy Ratio (CAR)

According to (Dendawijaya, 2003) Capital Adequacy Ratio (CAR) or often called the risk of bank capital adequacy is a performance ratio used to measure the adequacy of bank capital to support assets that contain or generate risk. The higher the CAR, the greater the bank's ability to take the risk of each productive asset or risky credit (Hidayati, 2013).

$$CAR = \frac{Capital}{RIsk - Weighted Assets} X 100$$

#### Non Performing Loan (NPL)

Non performing loan (NPL) is a ratio to measure the ability of bank management to overcome non-performing loans granted by the bank (Dendawijaya, 2003). According to Sudarmawanti & Joko, (2017) the higher the NPL ratio, the worse the credit quality, which means more non-performing loans, which can increase the likelihood of a bank being in trouble.

$$NPL = \frac{Credit}{Third - Party Funds} X 100$$

#### **Operating Efficiency Ratio (OER)**

The ratio known as operating efficiency Ratio OER), also known as the efficiency ratio, shows how well bank management can balance operating costs with operating income (Hariyani, 2010). According to Dendawijaya (2003), the lower the OER ratio, the more efficient the bank's operating costs.

$$OER = \frac{\text{Total Operating Cost}}{\text{Total Operating Income}} X \ 100$$

#### Loan to Deposit Ratio (LDR)

The ability of a bank to provide funds to its borrowers with capital owned by the bank and funds that can be collected by the public is known as the Loan Deposit Ratio (LDR) (Sudarmawanti & Joko, 2017). The greater this ratio indicates that the bank is more aggressive in liquidity, on the other hand, the smaller this ratio, the more funds are not used for credit placement (a lot of idle funds) (Lestari & Setianegara, 2020).

$$LDR = \frac{Credit}{Third - Party Funds} X 100$$

#### **Net Interest Margin (NIM)**

A ratio called Net Interest Margin (NIM) shows how well bank management manages earning assets to generate net interest income (Murdiyanto, 2020). The higher the change in Net Interest Margin (NIM) of a bank, the higher its profitability, which indicates an increase in financial performance (Sudarmawanti & Joko, 2017).

$$NIM = \frac{Profit Before Tax}{Average Total Assets} X 100$$

#### **Hypothesis**

- H1 = It is assumed that CAR, NPL, OER, LDR, and NIM simultaneously have a significant effect on to ROA
- H2 = It is assumed that CAR partially has a significant effect on ROA
- H3 = It is assumed that NPL partially has a significant effect on ROA
- H4 = It is assumed that OER partially has a significant effect on ROA

H5 = It is assumed that LDR partially has a significant effect on ROA

H6 = It is assumed that NIM partially has a significant effect on ROA

## **RESEARCH METHOD**

This research uses a quantitative type of research method, which is carried out chronologically. This method is referred to as a quantitative method because the research data used is in the form of numbers and analysis using statistics (Sugiyono, 2013). Quantitative data used in conducting this research are CAR, NPL, OER, LDR, NIM, and ROA. Secondary data in this study were obtained from quarterly publication financial reports for the period 2013-2022 sourced from the official website of PT Bank Neo Commerce Tbk. The research object chosen in this study is PT Bank Neo Commerce Tbk. The research object conduct research on PT Bank Neo Commerce Tbk is 40 samples from the quarterly financial statements of PT Bank Neo Commerce Tbk from 2013 to 2022 published by the Financial Services Authority. The data analysis model used in this study was carried out using multiple linear regression analysis.

# **Multiple Linear Regression**

This analysis is used to measure the strength of the relationship between two or more variables and also shows the direction of the relationship between the dependent variable and the independent variable (Ghozali, 2018).

The form of the mathematical equation for multiple linear regression analysis is as follows:

$$Y = a + b_1 X_1 - b_2 X_2 - b_3 X_3 - b_4 X_4 + b_5 X_5$$

- Y = Return on Assets (ROA).
- a = Constant value
- $X_1$  = Capital Adequacy Ratio (CAR)

 $X_2 = Non Performing Loan (NPL)$ 

- $X_3$  = Operational Efficiency Ratio (OER)
- $X_4$  = Loan to Deposit Ratio (LDR)
- $X_5 =$ Net Interest Margin (NIM)
- $b_1$ ,  $b_2$ ,  $b_3$ ,  $b_4$ , dan  $b_5$ = Regression Coefficient of each Independent Variable
- e = Standard Error

# **Normality Test**

According to Ghozali (2018: 161), the purpose of the normality test is to test whether in the regression model, confounding variables or have a normal distribution. How to find out whether the residuals are normally distributed using graph analysis and statistical tests. The statistical test used is to look at the skewness value of the residuals.

# **Multicollinearity Test**

According to Ghozali (2018: 107), the multicollinearity test has the aim of testing whether the regression model found a correlation between independent variables. In this study, to detect the absence of multicollinearity, the Tolerance value  $\geq 0.10$  or the same as VIF  $\leq 10$ .

#### **Autocorrelation Test**

According to Ghozali (2018: 111), the autocorrelation test has the aim of testing whether in the linear regression model, there is a correlation between confounding errors in period t and confounding errors in period t-1 (previous). The Lagrange Multiplier test, or LM test, can be used to determine the presence or absence of correlation. According to (Ghozali, 2018, p. 115). The LM test will produce Breusch-Godfrey statistics (BG Test).

## **Heteroscedasticity Test**

According to Ghozali (2018), the heteroscedasticity test aims to determine whether there is inequality in the regression model in terms of residual differences between observations. Several ways to detect the presence or absence of heteroscedasticity include the scatterplot graph and the Glejser test.

# Test Coefficient of Determination (R<sup>2</sup>)

The Coefficient of Determination  $(\mathbb{R}^2)$  is a measure of how far the model's ability to explain variations in the dependent variable (Ghozali, 2018, p. 97).

## **F** Statistical Test

The F Statistical Test is basically a test of the feasibility of the model as a whole, to determine whether all independent variables developed in the model have a simultaneous or simultaneous influence on the dependent variable Ghozali (2018: 98). If the significance value (Sign.) <0.05 or  $F_{count}$ >  $F_{table}$ , it means that there is an influence between the independent variables simultaneously on the dependent variable.

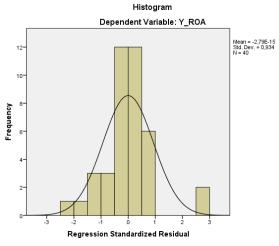
## Statistical Test t

According to Ghozali (2018: 98), basically the t statistical test shows how far the influence of one explanatory or independent variable individually in explaining the dependent variation. If the significance value (Sign.) <0.05 or  $t_{count}$ >  $t_{table}$ , it means that there is an influence between the independent variables partially on the dependent variable.

# **RESULTS AND DISCUSSION**

#### **Normality Test**

Graphical tests for normality testing can be done by analyzing the appearance of the histogram graph, the normal probability plot graph, and statistical test.

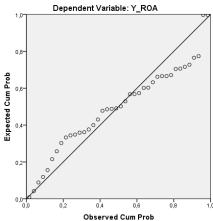


#### Figure 2. Histogram Graph

Source: SPSS 22 output, 2023 (data processed)

Based on Figure 2, it can be concluded that the histogram graph provides a distribution pattern that is close to normal because it is symmetrical and does not lean to the left or right. However, by only looking at the histogram, this can give dubious results, especially for small sample sizes.





**Figure 3. Normal Probability Plot** 

Source: SPSS 22 output, 2023 (data processed)

Based on Figure 3 Normal Probability Plot shows that the data spreads around the diagonal line and follows the direction of the diagonal line, and shows a normal distribution pattern, so it can be concluded that the normality assumption is met.

The second statistical test used is to look at the skewness value.

Table 1. Skewness Test					
Descriptive Statistics					
	Ν	Skew	ness		
	Statistic	Statistic	Std. Error		
Unstandardized Residual	40	,635	,374		
Valid N (listwise)	40				

Source: SPSS 22 output, 2023 (data processed)

The statistical z value for skewness can be calculated using the formula:

$$Zskewness = \frac{Skewness}{\sqrt{6/N}} = \frac{0,635}{\sqrt{6/40}} = 1,64$$

From the above calculations, the Zskewness result is 1.64, which means that it is still in the range of -1.96 to 1.96. This shows that all variables in this study have been normally distributed, similar to the results of the graph test.

#### **Multicolonierity Test**

Table 2. Multicolonierity Test							
Coefficients <sup>a</sup>							
Collinearity Statistics							
Model		Tolerance	VIF				
1	X1_CAR	,473	2,115				
	X2_NPL	,649	1,542				
	X3_OER	,157	6,367				
	X4_LDR	,178	5,608				
	X5_NIM	,804	1,243				
a. Depender	nt Variable: Y ROA						

Source: SPSS 22 output, 2023 (data processed)

Based on Table 3, it can be seen that the VIF value for each research variable is below 10 and the Tolerance value is above 0.10 so that each dependent variable is declared not to have multicolonierity symptoms.

 Table 3. Lagrange Multiplier Test (LM Test)

		Co	efficients <sup>a</sup>			
		Unstand	lardized	Standardized		
		Coeffi	cients	Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	-,983	1,984		-,496	,623
	X1_CAR	,004	,015	,071	,284	,778
	X2_NPL	-,013	,057	-,051	-,235	,816
	X3_OER	,002	,007	,115	,260	,797
	X4_LDR	,007	,016	,175	,412	,683
	X5_NIM	,017	,051	,065	,327	,746
	RES_2	,151	,160	,172	,943	,353

### Autocorrelation Test

a. Dependent Variable: Unstandardized Resid

Source: SPSS 22 output, 2023 (data processed)

Table 4 shows that the parameter coefficient for residual reg 2 (RES\_2) has a significance value above 0.05. So, it can be concluded that the regression model shows that there is no autocorrelation.

## **Heteroscedasticity Test**

The test results to detect the presence or absence of heteroscedasticity are by looking at the Scatterplot Graph and Glejser Test.

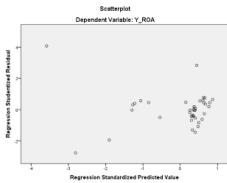


Figure 4. Normal Probability Plot

Source: SPSS 22 output, 2023 (data processed)

Based on Figure 4 on the scatterplot graph, it can be seen that the points spread evenly above and below the zero line, so they do not gather in one place, and do not form a certain pattern so it can be concluded that in this regression test there is no heteroscedasticity problem.

Table 4. Glejser Test							
		Coe	efficients <sup>a</sup>				
	Unstandardized Standardized						
		Coeffi	cients	Coefficients			
Model		В	Std. Error	Beta	t	Sig.	
1	(Constant)	,480	1,210		,396	,694	
	X1_CAR	,018	,010	,358	1,875	,069	
	X2_NPL	-,008	,036	-,034	-,207	,837	
	X3_OER	,003	,004	,214	,645	,523	
	X4_LDR	-,006	,010	-,189	-,609	,546	
	X5_NIM	-,040	,032	-,181	-1,239	,224	
a. Depende	ent Variable: AB	RESID					

Based on Table 5, it can be seen that the significance levels of the CAR, NPL, OER, LDR, and NIM variables are above 0.05 or 5%. So it can be concluded that the regression model is free from heteroscedasticity problems.

Table 5: Wultiple Linear Regression Test								
Coefficients <sup>a</sup>								
		Unstandardized		Standardized				
		Coefficients		Coefficients				
Model		В	Std. Error	Beta	t	Sig.		
1	(Constant)	15,239	2,142		7,114	,000		
	X1_CAR	,008	,017	,016	,450	,655		
	X2_NPL	,050	,064	,024	,783	,439		
	X3_OER	-,128	,008	-,983	-16,076	,000		
	X4_LDR	-,010	,018	-,033	-,579	,566		
	X5_NIM	-,291	,057	-,139	-5,147	,000		
a. Depende	nt Variable: Y	ROA						

#### Multiple Linear Regression Analysis Table 5. Multiple Linear Regression Test

a. Dependent Variable: Y\_ROA Source: SPSS 22 output, 2023 (data processed)

Based on the table of coefficient test results above, the regression model used is as follows.

ROA = 15.239 + 0.008CAR + 0.050NPL - 0.128OER - 0.010LDR - 0.291NIM Constant = 15.239, meaning that the independent variables namely CAR, NPL, OER, LDR, and NIM are assumed to be zero (0), then the dependent variable (ROA) has a positive value of 15.239. CAR Variable Coefficient = 0.008, meaning that every increase in CAR by 1 (one) unit will cause an increase in CAR of 0.008, assuming the NPL, OER, LDR, and NIM variables have a constant value (fixed). NPL Variable Coefficient = 0.050, meaning that each increase in NPL by 1 (one) unit will cause an increase in NPL of 0.050, assuming the variables CAR, OER, LDR, and NIM have a constant value (fixed). OER Variable Coefficient = -0.128, meaning that every increase in OER by 1 (one) unit will cause a decrease in OER by 0.128, assuming the variables CAR, NPL, LDR, and NIM have a constant value (fixed). LDR Variable Coefficient = -0.010, meaning that every increase in LDR by 1 (one) unit will cause a decrease in LDR of 0.010, assuming the variables CAR, NPL, OER, and NIM have a constant value (fixed). NIM Variable Coefficient = -0.291, meaning that any increase in NIM by 1 (one) unit will cause a decrease in NIM of 0.291, assuming the variables CAR, NPL, OER, and LDR have a constant value (fixed).

Table 6. Simultaneous Significance Test								
ANOVA								
	Sum of							
Model		Squares	df	Mean Square	F	Sig.		
1	Regression	632,852	5	126,570	334,103	,000 <sup>b</sup>		
	Residual	12,880	34	,379				
	Total	645,732	39					
a. Dependent Variable: Y_ROA								
b. Predictors:	(Constant), X5	5_NIM, X1_CAF	R, X2_NP	L, X4_LDR, X	3_OER			

# F Statistical Test

Source: SPSS 22 output, 2023 (data processed)

Based on Table 7, Fcount = 334.103 > Ftable = 2.49 or significance = 0.000 <0.05, which means that there is a significant influence between the variables CAR, NPL, OER, LDR, and NIM on ROA. Thus hypothesis 1 (one) is accepted.

### t Statistical Test

Coefficients <sup>a</sup>								
		Unstandardized		Standardized				
		Coefficients		Coefficients				
Model		В	Std. Error	Beta	t	Sig.		
1	(Constant)	15,239	2,142		7,114	,000		
	X1_CAR	,008	,017	,016	,450	,655		
	X2_NPL	,050	,064	,024	,783	,439		
	X3_OER	-,128	,008	-,983	-16,076	,000		
	X4_LDR	-,010	,018	-,033	-,579	,566		
	X5_NIM	-,291	,057	-,139	-5,147	,000		
a. Dependent	Variable: Y_	ROA						

#### **Table 7. Partial Significance Test**

Source: SPSS 22 output, 2023 (data processed)

The proof of hypothesis 2 (two) resulted in  $t_{count} = 0.450 < t_{table} = 2.032$  or significance = 0.655 > 0.05, which means that there is no significant effect between CAR partially on ROA. Therefore, hypothesis 2 (two) is rejected. CAR has an insignificant effect on Return on Assets (ROA) because during the study period, the average CAR ratio at PT Bank Neo Commerce Tbk was 22.560%, this value is already above the CAR standard set by *Surat Edarang Bank Indonesia* No.13/24 / DPNP / 2011. These results are supported and in accordance with the research of Yogianta (2013), Prasanjaya & Ramantha, (2013), Riski (2016), dan Susilowati & Tiningrum (2019) which state that CAR has a positive and insignificant effect.

The proof of hypothesis 3 (three) resulted in  $t_{count} = 0.783 < t_{table} = 2.032$  or significance = 0.439 > 0.05, which means that there is no significant effect between NPL partially on ROA. Therefore, hypothesis 3 (three) is rejected. NPL has an insignificant effect on Return on Assets (ROA) because during the study period, the average NPL ratio at PT Bank Neo Commerce Tbk was 3.029%, this value is already below the maximum NPL standard set by *Surat Edaran Bank Indonesia* No.13/24 / DPNP / 2011. These results are supported and in accordance with the research of Lestari & Setianegara (2020), Rinofah et al., (2022), dan Susilowati & Tiningrum (2019) which state that NPL has a positive and insignificant effect on NPLs.

The proof of hypothesis 4 (four) resulted in  $t_{count} = -16.076 > t_{table} = -2.032$  or significance = 0.000 < 0.05, which means there is a significant influence between OER partially on ROA. Therefore, hypothesis 4 (four) is accepted. According to Maroni & Simamora (2020) the OER ratio affects the bank's ability to measure their level of efficiency and ability to carry out operational activities. The smaller the OER ratio, the more efficient the bank's operating costs, so there is less chance of the bank facing problems. Based on this, the OER ratio has a negative relationship with the level of bank profitability (ROA). This is supported and in accordance with the research of Zulfikri & Halim (2022), Alazis (2020), and Rohmiati et al., (2019). Taswan (2017) which state that BOPO has a negative and significant effect.

The proof of hypothesis 5 (five) resulted in  $t_{count} = -0.579 < t_{table} = -2.032$  or significance = 0.566 > 0.05, which means that there is no significant effect between LDR partially on ROA. Therefore, hypothesis 5 (five) is rejected. LDR has an insignificant effect on Return on Assets (ROA) because during the study period, the average LDR ratio at PT Bank Neo Commerce Tbk was 87.590%, this value is above the standard NPL provisions set by *Surat Edaran Bank Indonesia* No.13/24 / DPNP / 2011. These results are supported and in accordance with the research of Lestari & Setianegara, (2020), Masril (2018), and Moorcy (2020) which state that LDR has a negative and insignificant effect.

The proof of hypothesis 6 (six) resulted in  $t_{count} = -5.147 > t_{table} = -2.032$  or significance = 0.000 < 0.05, which means there is a significant influence between NIM partially on ROA.

Therefore, hypothesis 6 (six) is accepted. NIM shows a significant and negative effect due to the digital transformation at PT Bank Neo Commerce Tbk. In 2021 PT Bank Neo Commerce Tbk needs a large enough fund to transform from a conventional bank to a conventional and digital bank. This is supported by data in 2021 which shows that NIM has increased by 1.12% to 5.15%. On the other hand, ROA decreased by 13.51% to -13.17%. This is supported and in accordance with the research of Murdiyanto (2020) and Siagian et al., 2021) which states that NIM has a negative and significant effect.

Table 8. Test of the Coefficient of Determination $(\mathbb{R}^2)$							
Model Summary <sup>b</sup>							
Adjusted R Std. Error of							
Model	R	R Square	Square	the Estimate			
1	,990 <sup>a</sup>	,980	,977	,61550			
a. Predictors: (Constant), X5_NIM, X1_CAR, X2_NPL, X4_LDR, X3_OER							
b. Dependent Variable: Y_ROA							

# **Test Coefficient of Determination (R<sup>2</sup>)**

Source: SPSS 22 output, 2023 (data processed)

Based on the proof of hypothesis 1 as evidenced in the results of simultaneous testing (F statistical test) in Table 9 shows that the Fcount value is 334.103 greater than  $F_{table}$  2.49 or the significance value of 0.000 is smaller than 0.05. This means that any changes that occur in the independent variables, namely the Capital Adequacy Ratio (CAR), Non Performing Loan (NPL), Operational Efficient Ratio (OER), Loan to Deposit Ratio (LDR), and Net Interest Margin (NIM) simultaneously or together will have a significant effect on Return on Assets (ROA) at PT Bank Neo Commerce Tbk 2013-2022 period.

# CONCLUSIONS

Based on the results of the study, it is obtained that CAR, NPL, OER, LDR, and NIM simultaneously have a simultaneous effect on the ROA of PT Bank Neo Commerce Tbk for the 2013-2022 period. Then, CAR, NPL, and LDR have an insignificant effect on ROA PT Bank Neo Commerce Tbk Period 2013-2022. While OER and NIM have a significant negative effect on ROA PT Bank Neo Commerce Tbk Period 2013-2022.

CAR partially has an insignificant effect with a positive direction on ROA at PT Bank Neo Commerce Tbk for the 2013-2022 Period. These findings support the results of research conducted by Yogianta (2013), Prasanjaya & Ramantha (2013), and Riski (2016). CAR is the amount of own capital needed to cover the risk of loss caused by investing in risky assets and financing all fixed assets and bank investments (Murdiyanto, 2020).

NPL partially has an insignificant effect with a positive direction on ROA at PT Bank Neo Commerce Tbk for the 2013-2022 Period. These findings support the results of research conducted by Lestari & Setianegara (2020), Rinofah et al., (2022), and Susilowati & Tiningrum (2019). NPL shows the credit risk experienced by the bank, where the smaller the NPL, the smaller the credit risk that will be borne by the bank (Yogianta, 2013).

OER partially has an insignificant influence with a negative direction on ROA at PT Bank Neo Commerce Tbk for the 2013-2022 Period. These findings support the results of research conducted by Zulfikri & Halim (2022), Alazis (2020), and Rohmiati et al., (2019). Taswan (2017) also said that the higher the Operational Efficiency Ratio (OER) ratio shows that the bank's operating costs are increasingly inefficient, which means the possibility of the bank getting lower profitability. In the research period OER during 2013-2022 experienced a continuous increase, this means that during the research period the costs incurred by PT Bank Neo Commerce Tbk were less efficient. PT Bank Neo Commerce Tbk should streamline operational costs that should not need to be incurred, for example avoiding costs

due to penalties by Bank Indonesia. PT Bank Neo Commerce Tbk should also be able to maximize operating income by increasing fee-based income as much as possible by issuing more diverse service products and services.

LDR partially has an insignificant influence with a negative direction on ROA at PT Bank Neo Commerce Tbk for the 2013-2022 Period. These findings support the results of research conducted by Lestari & Setianegara, (2020), Masril (2018), and Moorcy (2020). The higher the LDR ratio, the lower the bank's liquidity ability because the funds needed to finance credit will become even greater (Dendawijaya, 2003).

NIM partially has an insignificant effect with a negative direction on ROA at PT Bank Neo Commerce Tbk for the 2013-2022 Period. These findings support the results of research conducted by Murdiyanto (2020) and Siagian et al., (2021). According to Taswan (2017), the greater the Net Interest Margin (NIM) ratio, the better the financial performance to generate interest income on productive assets managed by the bank. The bank must manage funds properly from the placement of funds and raising funds. The bank is expected to be able to manage its productive assets to increase net interest income so that the possibility of a bank in problematic conditions is getting smaller. The bank must also regularly calculate the cost of capital (Cost of Fund) to determine a competitive lending rate. In addition, PT Bank Neo Commerce Tbk must also pay attention to investment policies on large expenses so that they do not have an impact on decreasing profitability.

Recommendations for further research are to expand the object of research and not stick to one bank in order to see comparisons regarding the condition of the bank's financial performance with other banks. Sertam uses a longer period so that it can see the development of the bank's profitability performance (ROA).

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