

## Analysis of the Effect of Financial Ratios on Banking Profit Levels of State Owned Enterprises



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**ABSTRACT:** This study was conducted to determine how much influence financial ratios consisting of: Non-Performing Loans, Capital Adequacy Ratio, and Operating Expenses on Operating Income on profitability. In this study the method used is quantitative method. The population is a group of Bank Band Usaha Milik Negara listed on the Indonesia Stock Exchange for the period 2017 – 2021. The sample in this study was 4 (four) Bank Band Usaha Milik Negara selected using the purposive sampling method. The type of data used in this study is secondary data. The data collection method used is the documentation method. The model used is in the form of multiple linear regression processed with eViews 10 software. Based on the results of the analysis conducted, it was obtained that: Non-Performing Loans do not negatively affect the level of profit. Capital Adequacy Ratio has a significant positive effect on the level of profit, while Operating Expenses on Operating Income has a significant negative effect on the company's profit level.

**KEYWORDS:** non-performing loan, capital adequacy ratio, operating expenses to operating income, return on assets

### INTRODUCTION

One way that can be used to project a company's profit in the future is to use financial ratios. By calculating and interpreting the company's financial ratios, it can be known whether the company's profits experience profit growth or not. According to Sugiono & Untung (2016), what is meant by financial ratios is a number that shows the relationship between elements in financial statements and the relationship is expressed in a simple mathematical form. This can be further interpreted that financial ratio analysis is a technique for processing numbers contained in the forms of financial statements. By using these ratios, it can be known the strengths and weaknesses of the company in the financial sector. The profitability performance of state-owned banks in this study is proxied using *Return on Assets* (ROA). In this profitability, the ROA ratio focuses on the ability of an entity to earn revenue/profit in its operational activities by utilizing its assets. ROA is important for banks because ROA is used to measure the effectiveness of companies in generating profits by utilizing assets owned by the bank.

Banks are financial institutions that collect public funds and distribute them back, so it is very important for banks to be able to convince the public so that they do not worry about the risk that will arise if they put their money in the Bank. The lower the concern that arises in the community, who will later become customers of the Bank, to raise funds, about the financial risk that will occur, the probability of the Bank to obtain profits becomes higher. Based on this, there is a ratio called the Capital Adequacy Ratio (CAR). CAR is a calculation of the percentage of authorized capital that must be met by the bank. CAR is a ratio that shows how <sub>1</sub> the ability of a bank to be able to raise funds that will be used to carry out business development and overcome risks caused by bank operations. If the CAR level at a bank reaches the ideal number, it will increase public confidence as fund owners in the bank and make people more confident to save more funds in the bank. That way, the bank will have sufficient funds to carry out its operational activities such as providing credit to the public which allows the bank to be able to earn more profit from the increase in loan interest income it disburses (Dewi, Sinarwati, & Darmawan, 2014). Research on the effect of CAR on ROA has been conducted by Kurniasih (2016); Sari & Fajar (2018); Maulana, et al (2021) who found that CAR has a significant positive effect on ROA. In contrast to the research results from Wahyuni (2016); Ali & Laksono (2017); Rahmi (2022) states that CAR does not have a significant influence on ROA. While the results of research conducted by Patni & Darma (2017); Juwita et al. (2018) found that CAR has a significant negative influence on ROA.

One of the Bank's other important functions is to provide loans and credit to parties / customers who submit applications. It is very important for the Bank to ensure that the credit provided does not have a large enough potential to become a non-performing loan and become a bad loan in the future so that it can cause losses to the Bank that provides and affects the Bank's

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profitability level. Related to this, *Non-Performing Loan* (NPL) is a ratio that shows the comparison of the number of non-performing loans with the total loans provided. Existing NPLs will be able to increase lending rates and high lending rates can lead to low demand for credit. According to Hanafi (2014), banks face credit risk (bad or unpaid). Loans that will be bad will be made a reserve of bad loans. If the figures related to bad loans increase, then it must be watched out, because the bank can experience difficulties. According to research from Ali & Laksono (2017); Darmawan, Laksana, & Danisworo (2020) NPL does not have a significant effect on ROA, while according to research from Patni & Darma (2017) NPL has a significant influence on ROA.

From within the Bank itself, the Bank must carry out its operational activities effectively and efficiently to be able to maximize the profits that can be obtained. Related to this, the ratio of Operating Costs to Operating Income (BOPO) can be used to be able to measure this. BOPO is a ratio obtained based on a comparison between operating costs and operating income. The smaller the value of BOPO, it shows that the operational costs incurred by the bank are more efficient. With the more efficient banks in carrying out their operations, they can maximize the profits obtained. According to research from Wahyuni (2016), BOPO has a significant influence on ROA, while according to research from Kurniasih (2016) BOPO does not have a significant influence on ROA.

Based on previous studies described above, in this study the author will conduct further research to determine the effect of financial ratios on banking profit levels. The financial ratios used in this study include: CAR, NPL, and BOPO of state-owned banks. Meanwhile, the level of bank profit is proxied with Return On Assets at state-owned banks.

### LITERATURE REVIEW

Return on asset (ROA) is a profit ratio that links profit to investment. According to Syamsuddin (2016) that return on assets (ROA) which is often also called return on investment (ROI) is a measurement of the company's ability to generate profits as a whole with the total 2 number of assets available in the company. The higher this ratio, the better the state of an enterprise. Return on asset (ROA) according to Kasmir (2019) is the result of return on investment or better known as return *on* investment (ROI) or return on total assets is a ratio that shows the return on the amount of assets used in the company. The greater the ROA, the greater the level of profit achieved by the company and the better the company's position in terms of asset use. Conversely, if the lower the return on assets, the lower the net profit generated. Return on Asset (ROA) shows the company's ability to generate profits using the assets owned. Based on this, ROA consists of the following main elements: 1) Net Profit, Net profit is the main indicator of the bank's business success. The size of the profit obtained will provide an overview of the performance or performance achieved by the bank for the success of its business. In general, net profit can be distinguished from net profit before tax (earnings before tax) and net profit after tax (earning after tax). Net profit before tax (EBIT) is the difference between income and profit over other expenses incurred before deducting tax. Meanwhile, net profit after tax (EAT) is the difference in excess of income on costs charged after deducting tax. 2) Assets (assets) are assets owned by business activities carried out and expressed in units of money. ROA is one of the profitability ratios used for the effectiveness of the company in generating profits by utilizing the assets or assets it has. For the determination of the rating and predicate of the bank's ROA ratio is determined in Table 1.

**Table 1 ROA Profitability Rating**

Rank	Information	Criterion
1	Very Healthy	$ROA \leq 1,5\%$
2	Healthy	$1,25\% < ROA \leq 1,5\%$
3	Quite Healthy	$0,5\% < ROA \leq 1,25\%$
4	Less	$0,\% < ROA \leq 0,5\%$
5	Unhealthy	$ROA > 0\%$

**Source:** Financial Services Authority

Return on Assets (ROA) as one of the ratios to measure profitability, can be influenced by various factors. The factors chosen to be used in this study include NPL, CAR, and BOPO.

Non-Performing Loan (NPL) or bad credit is part of bank credit management, because non-performing loans themselves are a risk faced by the banking business. According to Pandia (2012), Non-Performing Loan (NPL) or bad credit is a condition where customers are unable to pay part or all of their obligations to the bank as agreed. Meanwhile, according to Kasmir (2019), Non-Performing Loan (NPL) is a credit in which there are obstacles caused by two elements, namely from the bank in analyzing and from the customer who intentionally or unintentionally in their obligations do not make payments. This Non-Performing Loan

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(NPL) is one of the indicators of the health of bank asset quality. The indicator is a basic financial ratio that can provide information on the assessment of capital condition, profitability, credit risk, market risk and liquidation. NPLs, also known as non-performing loans, can indeed have an impact on reducing bank capital. If this is left unchecked, it will certainly have an impact on credit distribution in the next period.

**Table 2 Health Level Assessment Criteria NPL Ratio**

Rank	Information	Criterion
1	Very Healthy	3% NPL < 2%
2	Healthy	2% ≤ NPL < 5%
3	Quite Healthy	5% ≤ NPL < 8%
4	Less	8% ≤ NPL < 12%
5	Unhealthy	NPL ≥ 12%

**Source:** Financial Services Authority

Based on Table 2, Bank Indonesia sets the NPL value at 5 percent. The smaller the NPL, the smaller the credit risk borne by the bank. Banks with high NPLs will increase the cost of both reserves of productive assets and other costs, thus potentially causing bank losses. Non-Performing Loan (NPL) is one of the indicators of the health of a bank's asset quality. The indicator is a basic financial ratio that can provide information on the assessment of capital condition, profitability, credit risk, market risk and liquidation. The smaller the NPL, the smaller the credit risk borne by the bank. Banks with high NPLs will increase the cost of both reserves of productive assets and other costs, thus potentially causing bank losses. According to the results of research conducted by Patni & Darma (2018) stated that NPL has a significant negative effect on ROA.

Capital Adequacy Ratio (CAR) is a ratio between the ratio of capital to Risk-Weighted Assets (ATMR) and according to government regulations. Meanwhile, according to Bank Indonesia (No. 9/13/PBI/2007). CAR is a minimum capital provision for banks based on asset risk in a broad sense, both assets listed in the balance sheet and administrative assets as reflected in contingent obligations and/or commitments provided by banks for third parties and market risks. According to experts, CAR is a bank performance ratio to measure the adequacy of capital owned by banks to support assets that contain or generate risk, such as credit provided. Capital Adequacy Ratio (CAR) is an indicator of a bank's ability to cover the decline in its assets as a result of bank losses caused by risky assets. Kinanti (2015) stated that the greater the Capital Adequacy Ratio (CAR), the greater the profitability obtained by the bank. Because the greater the Capital Adequacy Ratio (CAR), the higher the bank's capital in maintaining the possibility of loss risk in its business activities, so that bank performance will also increase. Improved bank performance means contributing more to profitability. The hypothesis regarding the effect of CAR on ROA is supported by the results of research Kurniasih (2016); Sari & Fajar (2018); Maulana et al (2021) who revealed that CAR has a significant positive effect on ROA. The CAR assessment is based on Bank Indonesia Circular Letter No.13/24/DPNP dated 25th October 2011.

**Table 3. Health Level Assessment Criteria CAR Ratio**

Rank	Information	Criterion
1	Very Healthy	CAR ≥ 11%
2	Healthy	9,5% ≤ CAR < 11%
3	Quite Healthy	8% ≤ CAR < 9,5%
4	Unhealthy	6,5% ≤ CAR < 8%
5	Unhealthy	CAR < 6,5%

**Source:** Bank Indonesia

Operating Expenses Operating Income (BOPO) is the ratio of the ratio between operating expenses and operating income. The lower the level of BOPO ratio means the better the performance of the bank's management, because it is more efficient in using the resources in a bank. According to Rivai (2013), BOPO is a ratio used to measure the level of efficiency and ability of banks to carry out their operations. Then Harmono (2018) suggests that BOPO is a ratio that shows the amount of comparison between expenses or operating costs to the operating income of a company in a certain period. BOPO shows the level of bank efficiency with a ratio close to 75 percent means that the bank's performance shows good efficiency. If the ratio is above 90 percent and

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close to 100 percent, it means low efficiency performance (not good). According to Bank Indonesia Regulation No. 13/1/PBI/2011, Bank Indonesia tolerates a maximum BOPO ratio of 93.25 percent. Operating expenses are calculated based on the sum of total interest expenses and total other operating expenses. Operating income is the sum of total interest income and total other operating income. Based on Bank Indonesia Circular Letter No.13/24/DPNP dated 25th October 2011, the criteria for assessing the health level of BOPO can be seen in Table 4.

**Table 4. BOPO Ratio Health Level Assessment Criteria**

Rank	Information	Criterion
1	Very Healthy	50-75%
2	Healthy	76-93%
3	Quite Healthy	94-96%
4	Less	96-100%
5	Unhealthy	>100%

**Source:** Bank Indonesia

Harmono (2018) suggests that BOPO is a ratio that shows the amount of comparison between expenses or operating costs to the operating income of a company in a certain period. Patni & Darma (2017) stated that based on the results of their research, BOPO has a significant negative influence on ROA. The BOPO ratio shows the level of bank efficiency with a ratio close to 75 percent means that the bank's performance shows good efficiency. Referring to the theory and results of previous research, the hypothesis proposed in this study is as follows:

H<sub>1</sub> = Non Performing Loan negatively affects Return on Assets at State-Owned Banks in Indonesia.

H<sub>2</sub> = Capital Adequacy Ratio has a positive effect on Return on Assets at state-owned banks in Indonesia.

H<sub>3</sub> = Operating Expenses Operating Income negatively affects Return on Assets at state-owned banks in Indonesia.

## RESEARCH METHODOLOGY

The research method used is an associative research method with a quantitative approach. Associative research according to Sugiyono (2019) is a study that aims to determine the influence or relationship between two or more variables. Associative research was conducted to determine whether or not there is an influence of NPL, CAR, and BOPO on ROA in state-owned banks. An analysis of his research is carried out with a quantitative approach aimed at testing hypotheses. According to Sugiyono (2019) describes the quantitative approach as a research method based on the philosophy of positivism, used to examine certain populations or samples, data collection using research instruments, quantitative / statistical data analysis with the aim of testing hypotheses that have been set.

The variables used consist of dependent variables and independent variables. A dependent variable is a variable whose value is influenced by the independent variable. In this study, the ROA of state-owned banks is the dependent variable. Unlike the dependent variable, the independent variable is the variable that affects the dependent variable. The independent variables referred to in this study are NPL, CAR, and BOPO. The data source used to obtain all variables comes from the annual financial statements for the period 2017 to 2021, each of each State-Owned Bank or State-Owned Enterprise. The population in this study consists of 4 (four) state-owned banks. Sampling technique with purposive sampling with saturated sample method, so that the number of samples is equal to the population, namely 4 (four) state-owned banks. The four banks are: PT Bank Mandiri (Pesero), Tbk., PT Bank Negara Indonesia (Pesero), Tbk., Bank Rakyat Indonesia (Pesero), Tbk., and Bank Tabungan Negara (Pesero), Tbk.

## DISCUSSION

Descriptive statistics describe the mean, median, minimum, maximum, standard deviation and probability values of the data used in the study. Table 5 shows the descriptive statistical value of all variables used in this study.

**Table 5. Descriptive Statistics**

Criterion	ROA	NPL	CAR	BOPO
Mean	2.296.500	1.183.500	2.012.550	7.724.850
Median	2.550.000	0.980000	2.012.000	7.337.500
Maximum	3.840.000	2.960.000	2.296.000	9.812.000
Minimum	0.130000	0.400000	1.680.000	6.648.000

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Std. Dev.	1.087.171	0.625260	1.775.415	9.426.443
Probability	0.603300	0.029083	0.729565	0.334586

Source: Output *Eviews* 10

In Table 5, Non-Performing Loan (NPL) shows that the highest value is 2.96 percent owned by PT Bank Tabungan Negara (Persero) Tbk in 2019. While the lowest NPL was 0.40 percent owned by PT Bank Negara Indonesia (Persero) Tbk in 2017. Then the average NPL was 1.18 percent with a standard deviation of 0.62 percent in the observed state-owned banks. This indicates that state-owned banks have low variability in Non-Performing Loans (NPLs).

The CAR value of each state-owned bank for the period 2017-2021, has an average CAR above 12 percent. Banks that have sufficient capital can be said to have a very healthy ratio. Meanwhile, if a bank has a CAR below eight percent, then the bank is in the criteria for a bank under special supervision because the capital adequacy ratio (CAR) is below the standard set by Bank Indonesia, which is 8 (eight) percent. The highest CAR value was obtained by PT Bank Rakyat Indonesia (Persero) Tbk at 22.96 percent in 2017 and the lowest at 16.80 percent owned by PT Bank Negara Indonesia (Persero) Tbk in 2020. The average Capital Adequacy Ratio (CAR) was 20.12 percent with a standard deviation of 1.77. This indicates that state-owned banks have low *Capital Adequacy Ratio (CAR)* variability. The highest BOPO value was obtained by PT Bank Tabungan Negara (Persero) Tbk. by 98.12 percent in 2019 and the lowest of 66.48 percent owned by PT Bank Mandiri (Persero) Tbk. In 2018.

The hypothesis test is carried out to determine whether or not there is a significant influence (both positive and negative) between independent variables in the form of NPL, CAR and BOPO on the dependent variable in the form of ROA in state-owned bank companies listed on the Indonesia Stock Exchange. The financial statements used are audited financial statements for the period ended December 31 during the period 2017-2021. There are three tests carried out on the hypothesis test, namely the F test (model feasibility test), the coefficient of determination  $_{test} (R^2)$ , and the t test (partial test).

**Table 6. Goodness Of Fit Test**

R-squared	0.987708	Mean dependent var	2.296.500
Adjusted R-squared	0.982034	S.D. dependent var	1.087.171
S.E. of regression	0.145721	Akaike info criterion	-0.745034
Sum squared resid	0.276048	Schwarz criterion	-0.396528
Log likelihood	1.445.034	Hannan-Quinn criter.	-0.677002
F-statistic	1.740.941	Durbin-Watson stat	1.760.479
Prob(F-statistic)	0.000000		

Source: Output *Eviews* 10

The results of the goodness of fit test obtained a probability p-value of 0.000000 smaller than the significance level of 0.05 so that it can be stated that the estimated regression model is feasible to use to explain the effect of NPL, CAR and BOPO on ROA. The coefficient of determination obtained by the *Adjusted R-squared* value is 0.982034. This value can be explained that NPL, CAR and BOPO have a proportion of influence on ROA of 98.8 percent, while the remaining 1.2 percent is influenced by other factors outside this research model.

Uji partial coefficient (t-Test) is used to determine whether or not the independent variable partially has a significant effect on the dependent variable. A variable can be said to have a significant influence on the dependent variable if the value of the probability (*p-value*) of each independent variable is less than the significance level  $\alpha = 0.05$ .

**Table 7. Partial Hypothesis Test ( t-Test)**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	6.957.073	1.605.395	4.333.559	0.0005
NPL	-0.065167	0.136621	0.476990	0.6398
CAR	0.135233	0.046958	2.879.869	0.0109
BOPO	-0.096554	0.011641	-8.294.381	0.0000

Source: Ouput *Eviews* 10

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The p-value of the ratio of Non-Performing Loans to ROA shows 0.6398, meaning that the p-value is greater than the level of significance ( $0.6398 > 0.05$ ) which means  $H_1$  is rejected. The value of the Non-Performing Loan regression coefficient is -0.06517. This means that Non-Performing Loans have no significant effect on ROA. The results of the Capital Adequacy Ratio (CAR) test to ROA showed a coefficient value of 0.135233. The pvalue in the Capital Adequacy Ratio is 0.0109, meaning that the p-value is smaller than the level of significance ( $0.0109 < 0.05$ ) so that it can be stated that  $H_2$  is accepted. So it can be stated that the Capital Adequacy Ratio has a significant positive effect on ROA. The results of the statistical t test show a p-value in BOPO of 0.0000 so that it can be said that the p-value is smaller than the level of significance ( $0.0000 < 0.05$ ) which means  $H_3$  is accepted and the regression coefficient *value* is -0.096554. In the results of this study, it is stated that 7 BOPO has a significant negative effect on ROA.

The Non-Performing Loan (NPL) ratio is obtained by dividing the total nonperforming loans (substandard collectibility, doubtful, and non-performing loans) by the total loans provided by the Bank to the debtor. This NPL ratio shows that the increasing value of the NPL ratio, the worse the bank's credit quality will be, causing the number of nonperforming loans to be larger, and therefore the bank must bear losses in its operational activities so that it affects the decrease in profits obtained by the bank. The importance of NPL value to be maintained, especially applies to state-owned banks which are the largest credit distributors to the public compared to other private banks. This is because state-owned banks function as state/government tools that function not only to seek profit but also to increase economic growth, one of which can be influenced by the value of public consumption and investment. Therefore, the government hopes that state-owned banks can distribute credit to the public optimally, but while still taking into account the risk of default that has the potential to arise from the provision of credit to debtors.

If we look at the trend of NPL ratio values in the period 2017-2021, it can be seen that the NPL ratio as a whole increased in 2019 after the previous few years the value tended to be stable and even decreased. Some of the things that cause this include the lack of credit distribution due to the global economic slowdown making corporate parties to reconsider the source of funds to be taken. Based on the data used, it can be seen that Bank BTN has the largest NPL value when compared to other state-owned banks. This is because Bank BTN has a mandate from the government as a Home Ownership Credit (KPR) distribution bank to the public. The increase in Bank BTN's NPL ratio in 2019 itself was partly due to the subsidized low-cost housing fulfillment program made by the government. The relaxation of credit requirements for the implementation of the subsidized affordable housing fulfillment program has caused an increase in the value of non-performing loans faced by Bank BTN. Despite the increase in 2019, the average NPL ratio of 1.51 percent at the four state-owned banks is still in the very healthy category based on the NPL Ratio Health Assessment Criteria set by Bank Indonesia, because the value is still below 2 percent.

Meanwhile, the global economic crisis in 2020 caused by the Covid-19 pandemic should be enough to affect the level of credit collectibility of debtors. However, the establishment of the credit restructuring program is enough to help debtors so that the NPL ratio in 2020 did not increase but decreased compared to 2019. The results of this study are in line with research conducted by Siwu, Murni & Tulung (2018) which states that NPL has a negative effect not significantly on ROA, but is different when compared to the results of research conducted by Patni & Darma (2017); Darmawan, Laksana, & Danisworo (2020) who stated that NPL has a significant negative influence on ROA. The meaning of the results of this study is that the higher the NPL ratio value, the lower the ROA value and vice versa even though the value is not so significant because there are several other influential factors. One of these factors is government intervention in policies related to credit and the allocation of capital participation to state-owned banks to fulfill credit distribution in the context of implementing government programs. A small credit risk (still far below the safe limit of  $< 5$  percent in accordance with the NPL Ratio Health Assessment Criteria set by Bank Indonesia) also affects the research results which makes the results insignificant because the four banks sampled have high capital so that the results are not significant. The risk can be overcome with <sup>8</sup> the capital owned by the Bank. In addition, the results of the study conducted showed insignificant results because in the research period 2017-2021 the change in NPL levels experienced by state-owned banks was not significant when compared to other variables that affect ROA.

Capital Adequacy Ratio (CAR) is a ratio used to measure the adequacy of capital owned by a Bank to bear the possibility of losses due to activities carried out by the Bank. If the condition of the Bank is assumed with the CAR ratio to have sufficient capital and is considered healthy (CAR Ratio  $> 8$  percent based on Bank Indonesia's determination), it can be assumed that the Bank can carry out its operational activities optimally which is an important factor to get maximum profit. Therefore, the greater the CAR ratio at a Bank, the greater the benefits that can be obtained by the Bank. From 2017 to 2021 the CAR ratio at the four state-owned banks tended to be stable although overall it decreased in 2020. The decline occurred due to weak banking activity due to the global economic crisis caused by the Covid19 pandemic. This makes the Bank have to make changes in running its business and implementing operational activities to accommodate New Normal conditions due to the Covid19 pandemic. One of the important things done is to maximize the role of banking technology. The development of this technology, of course, requires a lot of capital while the Bank's own income has decreased. That is what affected the capital of state-owned banks in 2020 so that

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it experienced a decrease in the ratio of CAR a compared to 2019. Among the four state-owned banks that became the object of research, Bank BRI has the highest CAR ratio value compared to other banks. The results of this study are in accordance with research conducted by Kurniasih (2016); Sari & Fajar (2018); Maulana et al (2021) who stated that the CAR ratio has a significant positive effect on ROA. However, it is different from the results of research conducted by Patni & Darma (2017); Juwita et al. (2018) who stated that CAR has a significant negative effect on the ROA of state-owned banks. Meanwhile, the results of research by Rahmi et al. (2022), stated that CAR has no effect on ROA.

The ratio of Operating Expenses to Operating Income (BOPO) is a ratio used to calculate how much of the Bank's operating income is used to measure the level of efficiency and ability of the bank to carry out its operations. BOPO is often called the efficiency ratio and is used to measure the ability of bank management to control its operating expenses against the bank's operating income. Based on this explanation, it can be seen that the smaller the BOPO ratio, the more efficient the operational costs incurred by the bank concerned. With the more efficient operational costs incurred, the Bank can further maximize the revenue obtained. Bank BRI has the lowest BOPO ratio value when compared to other state-owned banks. This shows that Bank BRI has the highest level of efficiency when compared to other state-owned banks. If we look at the value of the BOPO ratio between these four state-owned banks in the period 2017-2019 tends to be stable, there are increases and decreases but not significantly. Meanwhile, in 2020 there was a significant increase in the BOPO ratio from the previous year. If the average BOPO ratio at the four state-owned banks in 2019 was 77.22 percent, then in 2020 the value reached 86.54 percent. This happened, of course, inseparable from the impact of the Covid-19 pandemic that hit the entire world throughout 2020, causing a global economic crisis. The economic crisis made the Bank experience a lack of revenue while operational activities had to continue to run so that the Bank's efficiency level in using operational costs decreased. The results of this study are in line with the results of research<sup>9</sup> conducted by Wahyuni (2016); Maulana et al. (20, 21) which states that BOPO has a

Significant negative influence on ROA. Therefore, with the results of the research conducted, it can be stated that there is a compatibility between the results of research with theory and previous research if BOPO has an influence on ROA.

## CONCLUSIONS AND RECOMMENDATIONS

Non-Performing Loans (NPLs) are unable to affect Return On Assets (ROA) at state-owned banks. Several things that make NPLs do not have a significant influence on the ROA of state-owned banks include government interference in policies related to credit and the allocation of capital participation to state-owned banks to fulfill credit distribution in the context of implementing government programs. The credit risk at state-owned banks is quite small so that it can still be overcome by the Bank. In addition, changes in NPL levels experienced by state-owned banks in the period 2017-2021 were not significant when compared to other variables that affect ROA.

The higher the Capital Adequacy Ratio (CAR), it will increase the ROA value of state-owned banks. CAR is a ratio used to measure the adequacy of capital owned by a Bank to bear the possibility of losses due to activities carried out by the Bank. Therefore, if the condition of the Bank is assumed with the CAR ratio to have sufficient capital and is considered healthy, it can be assumed that the Bank can carry out its operational activities optimally which is an important factor to get maximum profit.

The ratio of Operating Expenses to Operating Income (BOPO) has a significant negative influence on ROA in state-owned banks, which means that the higher the BOPO ratio, the smaller the ROA value and vice versa. This is because the smaller value of BOPO indicates that the Bank can use its operating income more efficiently so that the profits obtained by the Bank concerned become more optimal.

The recommendation that can be given by the author based on the results of research that has been done is in further research so that it can be redeveloped and add other independent variables in the study, for example such as LDR, NIM, and CR, so as to further expand the range of research related to factors that affect ROA in state-owned banks.

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