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THE EFFECT OF CAPITAL ADEQUACY RATIO AND OPERATING INCOME OPERATING EXPENSES ON RETURN ON ASSETS IN BANKING COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE

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ARTICLEINFO

ABSTRACT

Keywords: Capital Adequacy Ratio Return On Asset Operating Income Operating Expenses

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This study aims to determine the effect of Capital Adequacy Ratio and Operating Expenses operating income on Return On Assets. The research method used is a quantitative descriptive method, a population of 43 banking companies listed on the Indonesia Stock Exchange for the 2017-2020 period, sampling techniques using purposive sampling so that a sample of 10 companies was obtained. Based on hypothesis testing, the ttest of the CAR of the calculated t value > to the table (2.660 > 1.686) with a significant degree (0.011<0.05), meaning that there is a partial influence between the CAR and the Return On Asset. Meanwhile, Operating Expenses of Operating Income have a calculated value>tof the table (-13,151 > -1,686) with a significant level (0.000 < 0.05). meaning that BOPO partially affects the Return On Asset. and the calculated f value > table (120.260 > 2.86), with a significance value of 0.000 < 0.05, meaning that there is a significant influence between CAR and BOPO together on Return On Assets. The conclusion in this study is that the capital Adequacy ratio partially affects return on assets, BOPO partially affects return on assets, and simultaneously CAR and BOPO affected ct return on assets,

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1. INTRODUCTION

There is no doubt that banks also support the pillars of the economy in Indonesia. In essence, banks function as financial institutions that collect public funds in deposits and re-channel them in the form of loans or as financial intermediaries. However, along with the times, banks have proliferated, not only in Indonesia but also throughout the world. The function of the bank is no longer limited to deposits and loans. Banks also play an essential role in the country's economy by contributing to the business and business.

According to the Banking Law No. 10 of 1998, Indonesian banks have the goal of supporting the implementation of national development in increasing equity, economic growth, and the ability to improve the stability of many people. According to Munawir, the objectives of measuring the company's financial performance are: (1) Knowing the level of liquidity. Liquidity indicates the ability of an enterprise to meet financial obligations that must be completed immediately at the time of being billed; (2) Knowing the degree of solvency. Solvency indicates the company's ability to meet its financial obligations if it is liquidated, both short-term and long-term finances; (3) Knowing the level of rentability. Rentability or what is often referred to as profitability indicates the company's ability to make a profit over a certain period; (4) know the level of stability. Stability indicates the company's ability to conduct its business stably, which is measured by taking into account its ability to repay its debts and pay interest expenses on its debts on time.

Financial performance is an analysis carried out to see the extent to which a company has used the rules of financial implementation properly and correctly. Such as by making a financial statement that has met the standards and provisions in the SAK (Financial Accounting Standards) or GAAP (General Accepted Accounting Principle). The good or bad financial performance of banks and the success or failure to



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achieve satisfactory business performance can be measured by financial benchmarks called financial ratios.

Of the various financial ratios, profitability is the most appropriate indicator for measuring a bank's performance. The intended ratio is Return On Asset (ROA) because ROA focuses on the company's ability to obtain earnings by utilizing all the assets it manages so that ROA is used as a measuring tool for banking performance. In addition, ROA also reflects the ability of bank management to manage its assets effectively.

One of the factors that affect financial performance is the Capital Adequacy Ratio (CAR), the Capital Adequacy Ratio is a ratio to measure capital and write-off reserves in bearing credit, especially the risks that occur due to interest failing to be billed. According to Dendawijaya in the Journal of Sitepu (2016), the Capital Adequancy Ratio (CAR) is a ratio that is shown as much as a result of bank assets that are covered by risks (kredit, peyertaan, berharga letters, bills at other banks) also financed from bank capital funds that are outside the memproleh funds from outside the bank, such as public funds, loans (debt), and others.

Herman Darmawi stated that Bank Indonesia stipulates that every bank is obliged to maintain its capital adequacy, where the Capital Adequacy Ratio is at least 4% to 7 September 1997 and a minimum of 8% since 7 September 2001. The bank's capital must be sufficient to meet the costs of the organization and operation to provide a sense of protection to the depositor. If there is an increase in risky assets and the purchase of fixed assets, the productivity of assets is reduced. This affects the bank's profit, which is a component of its capital, if the provisions of the capital adequacy ratio are not met, will reduce the ability to expand credit and affect the level of health of the bank. One of the ways to test capital adequacy is to look at the capital ratio that the sister adapts to the assets of the bank in question. The level of capital adequacy of banks is expressed by a certain ratio called the Capital Adequacy Ratio (CAR).

The Capital Adequacy Ratio (CAR) is an indicator of a company's ability to cover a decrease in its assets due to losses – company losses caused by risky assets. This ratio is important because keeping the CAR at a safe limit (at least 8%) means also protecting customers and maintaining the financial system's stability as a whole. If CAR's value is high, the company can finance operational activities and contribute considerably to profitability.

In addition to the Capital Adequacy Ratio, Operating Income Operating Expenses (BOPO) is also one of the essential components in measuring financial performance, a company is given a significant focus space for attention to advance a company or corporation. According to Pandia, operating expenses are an efficiency ratio used to measure the company's ability to control operating costs to operating income. So, the primary function of Operating Expenses operating income is to balance the company's balance sheet related to the income obtained from the company's operations with the expenses incurred during the company's operational activities.

Operating Expenses on Operating Income (BOPO) compares total operating costs and income. The bank carries out the efficiency of operations to find out whether the bank in its operations related to the bank's principal business, are carried out correctly (by the expectations of the management and shareholders) and is used to indicate whether the bank has used all its production factors appropriately.

The various contexts contained in financial performance are certainly not all used as an empirical continuity when a study is carried out in research. For this reason, the researcher in this case only chose two things that will be the focus of this study.

During the Covid-19 pandemic, the financial services industry, especially the banking sector, experienced a slowdown. This slowdown results from a slowdown in activity in the real sector and the corporate sector that is not yet fully operational. Based on research observations conducted through online literacy studies, researchers found several problems related to financial performance over the last 5 years of several banking companies. Chairman of the Board of Commissioners of the Keuanga Services Authority (OJK) Wimboh Santoso said that the intermediation performance of the banking industry in 2020 was under pressure. Bank lending was minus 2.41 percent. Bank loans contrasted at minus 2.41 percent because many corporate companies have not been fully running, so these working capital loans are still on hold.

Based on the phenomenon in the background that the researcher has described in the background description of the problem, the issue of capital adequacy ratio and operating expenses of operating income



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of banking companies listed on the Indonesia Stock Exchange for the 2017-2020 period has a vital urgency to be studied in more depth. Therefore, the author is interested in conducting the research outlined in this article

2. METHOD

Research methods are a way for researchers to formulate research governance procedurally. In determining research methods, researchers can consider the proper methods for their research. According to Husein Umar, a person who wants to research should be scientific and think scientifically.

This research uses a descriptive quantitative approach method. Descriptive research is a study that aims to find out the influence of two or more variables. This study explains the relationship affecting and influenced by the variable l-variable to be studied. Using a quantitative approach, the data used to analyze the relationships between variables is expressed by an angka or numerical scale. This study analyzes the effect of the Capital Adequacy Ratio and Operating Expenses of Operating Income on Return On Assets in banking companies listed on the Indonesia Stock Exchange for the 2017-2020 period.

3. RESULT AND DISCUSSION

This research analyzes data obtained and collected from various reliable sources, namely www.IDX.id, company websites in the form of financial statements from banking companies that become the object of study. As for the election of samples using the non-probability method with the purpose sampling technique, the companies that meet the criteria in the sample selection are as many as 10 banking companies, so that data that can be collected as much as $10 \times 4 = 40$ financial statement data used as research data.

Descriptive Statistics of Research

		ROA	CAR	BOPO
N	Valid	40	40	40
	Missing	0	0	0
Mean		2,2843	21,1805	76,6130
Std. Error	of Mean	,13722	,47793	1,39995
Median		2,1600	21,3850	76,4100
Mode		3.10a	18,50	58.20a
Std. Devia	tion	2,2843	3,02273	8,85403
Variance		,753	9,137	78,394
Skewness		,231	,773	-,345
Std. Error of Skewness		,374	,374	,374
Kurtosis		-,533	1,276	-,496
Std. Error	of Kurtosis	,733	,733	,733
Range		3,50	14,41	35,10
Minimum		,50	16,63	58,20
Maximum		4,00	31,04	93,30
Sum		91,37	847,22	3064,52

Source: SPSS, data processed 2021

Descriptive statistics is a method used to summarize and record in the form of a table, graphs, or numerical data. The variables used in this study include Return On Assets as dependent variables, Capital



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Adequacy Ratio, and Operating Expenses and operating income as independent variables. These variables were tested for descriptive statistics using the program SPSS 25.

Multiple regression is the process of simplifying data into a form that is easier to read and interpret. This study was used to determine the influence on Y. X_1 X_2

Coefficients

	Unstandardized Coefficients		Standardized Coefficients	
Type	В	Std. Error	Beta	
1 (Constant)	7,636	,734		
CAR	,049	,019	,172	
ВОРО	-,084	,006	-,852	

Based on the table above can be developed using the regression equation model as follows : $Y = 7.636 - 0.049X_1 - 0.084X_2 + e$

The results of the multiple regression analysis equations that have been carried out can be explained as follows:

- 1. The value of the constant-coefficient is 7.636 meaning that if the results of the Capital Adequacy Ratio (X_1) and Operating Expenses operating income (X_2) are considered constant, then the amount of the Return On Asset (Y) value is -7.636
- 2. The value of *the Capital Adequacy Ratio* coefficient (X_1) is -0.049. The negative coefisein value means that every addition of 1 value to the Capital Adequacy Ratio variable will reduce the value of *Return On Asset* by 0.049.
- 3. The value of the coefficient of Operating Expenses of Operating Income (X₂) is -0. 084. The value of the coefficient is negative artinya that any addition of 1 value to the variable Operating Expenses of Operating Income, will decrease the value of Return On Assets by 0.084.

A correlation coefficient is a number used to calculate the relationship between *Capital Adequacy Ratio* and Operating Expenses operating income with the variable *Return On Asset* (Y). Further can be seen from the following table:

Model Summary

Type	R	R Square	Adjusted R Square	Std. The error in the Estimate
1	,931a	,867	,859	,32534

Based on the table above, it can be seen that the value of the correlation coefficient (R) is 0.931 b, meaning that the strength of the relationship between the *Capital Adequacy Ratio* variable (X_1) and operating expenses of operating income (X_2) with the variable *Return On Asset* (Y) is 93.1%.

It is used to see how much the independent variable (X) affects the dependent variable (Y) expressed in percentage. Coefficient of determination of the variable X1 against Y

Model Summary

				Std. The error in the
Type	R	R Square	Adjusted R Square	Estimate
1	0.493a	0,244	0,224	0,76471

Based on the table, an R *Square* value of 0.244 or the results showed that the Capital Adequacy Ratio influenced 22.4% of the Return On Assets. While the remaining 77.6% was influenced by other factors not studied in this study.

Model Summary

				Std. The error in the
Type	R	R Square	Adjusted R Square	Estimate
1	0.917a	0,841	0,837	0,35039



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Based on the table above, the R *Square* value of 0.841 or the results showed that Operating Expenses of Operating Income influenced 84.1% of the Return On Assets. While the remaining 15.9% was influenced by other factors not studied in this study.

Simultaneous coefficient of determination

			Adjusted D	Ctd The error in
Туре	R	R Square	Adjusted R Square	Std. The error in the Estimate
1	,931a	,867	,859	,32534

Based on the table, the value of R *Square* of 0.867 or the results of INi showed that 86.70% of *the Return On Assets* was influenced by *the Capital Adequacy Ratio* and Operating Expenses operating income. While the remaining 13.3% was influenced by other factors not studied in this study.

The t-test aims to see the free variables, namely *the Capital Adequacy Ratio* (CAR) and Operating Expenses operating income (BOPO) partially affecting the *Return On Assets* in banking companies listed on the Indonesia Stock Exchange 2017-2020 period.

Coefficients

	Unstandardized Coefficients		Standardized Coefficients			
	Std.					
Type	В	Error	Beta	t	Sig.	
1 (Constant)	7,636	,734		10,398	,000	
CAR	,049	,019	,172	2,660	,011	
ВОРО	-,084	,006	-,852	-13,151	,000	

Source: SPSS, data processed 2021

- 1. To test the effect of *Capital Adequacy Ratio* on *Return On Asset* is carried out with the following steps:
 - a. Formulating statistical hypotheses

 $H_0:\beta_1 \le 0$: It is suspected that there is no dominant influence between the *variable Capital Adequacy Ratio* on *Return On Assets*

 $H_0:\beta_1 \ge 0$: It is suspected that there is a dominant influence between the *Capital Adequacy Ratio* variables on *Return On Assets*

b. Specify t_{table}

Mdeterminant of real level (α)= 0.05

(df) = (
$$\alpha$$
); n-k
= 0.05; 40-2
= 0.05; 38

The table's t value i.e. (α ; df)

= 1.686

c. Determining count

Magnitude searched using SPSS obtained a count result of 2,660.

Kriteria testing

H₀ is accepted when: count a</sub> is rejected when: count > table

Because the $_{calculated}$ t value > t of the table is (2.660 > 1.686) with a significant value of 0.011 > 0.05. This shows that the capital variable Adequacy Ratio (X₁) significantly affects the Return On Asset in banking companies listed in Bursa Efek Indonesia pPeriode201 7-2020, and it can be concluded that hypothesis 1 accepts

- 2. To test the effect of Operating Expenses on *Return On Assets*, it is carried out with the following steps:
 - a. Formulating statistical hypotheses

 $H_0:$ β₁ \le : It is suspected that there is no dominant influence between the variable Operating Expenses of Operating Income on *Return On Assets*.



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 H_0 : $β_1 ≥ 0$: It is suspected that there is a dominant influence between the variable Operating Expenses of Operating Income on *Return On Assets*.

b. Specify table

Mdeterminant of real level (α)= 0.05

(df)=n-k

= 0.05 ; 40-2

= 0.05; 38th

The_{table's} t value is $(\alpha; df) = 1.686$

c. Determining count

Besarnya searched using SPSS and obtained a count result of -13.151.

Kriteria testing

 H_0 is accepted when: count H_a is rejected when: count > table

Because the $_{calculated}$ t value > t of the table is (-13.151> -1.686) with a significant value of 0.000 < 0.05. This shows that Operating Expenses of Operating Income affect the *Return On Assets* in banking companies listed in Bursa Efek Indonesia period 201 7-2020, so it can be concluded that hypothesis 2 is accepted.

The simultaneous test (Test F) determines the effect of simultaneous free variables on *Return On Assets* on banking companies listed on the Indonesia Stock Exchange for the 2017-2020 period.

ANOVA

Ту	pe	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	25,458	2	12,729	120,260	,000b
	Residual	3,916	37	,106		
	Total	29,374	39			

Source: SPSS, data processed 2021

1. Formulating Statistical Hypotheses

 H_0 : $β_{1.2} \le 0$: It is suspected that there is no influence between *the variable Capital Adequacy Ratio* and operating expenses of the company's Operating Income on *Return On Assets*.

 $H_a:\beta_{1.2}\ge 0$: It is suspected that there is an influence between the variable *Capital Adequacy Ratio* and Operating Expenses of Operating Income on *Return On Assets*

2. Specify Fable

Based on the table above, it can be seen that the calculated F value of 120,260 is then compared with the F of the table. Using a 95% confidence level is significant α = 5%, df-1 (number of variables-1) means df1 (3-1) = 2, and df2 (n-k-1) or 40-2-1 = 37. The result of F_{of the table} was obtained by 2.86.

3. Determining F_{count}

Besarnya searched using SPSS and obtained a result count of 120.260.

4. Testing Criteria

Since the $_{calculated}$ f value > for $_{the\ table}$ (120.260 > 2.86) with a significant value of 0.000 < 0.05, then $_{H_0}$ is rejected and $_{H_0}$ is accepted. Based on this, it can be concluded that there is a significant influence between the *Capital Adequacy Ratio* and Operating Expenses operating income together on *the Return On Asset* in banking companies listed in Bursa Efek Indonesia Periode 2017 -2020

4. **CONCLUSION**

Based on the results of research and discussion in the previous chapter, the author can make the following conclusions The results of the t-test showed that the *Capital Adequacy Ratio* variable had a calculated t of 2.660 with a significant rate of 0.011 more minor than the significance level α = 0.05 (0.011 < 0.05). The calculated value of t > table (2,660 > 1,686), then H₀ is rejected and H_a is accepted, meaning that there is a partial influence between *the Capital Adequacy Ratio* and *the Return On Asset* in banking companies listed on the Indonesia Stock Exchange for the 2017-2020 period. This result shows that banking companies for the 2017-2020 period have a high average *Capital Adequacy Ratio* (CAR) rate but do not utilize the capital for profit-making, such as increasing their credit expansion. The enactment of



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regulations that require each bank to have capital or a car ratio level of at least 8% results in banks always trying to make sure that the value of their CAR is by that capital for things that can generate profits. The ttest results showed that the variable Operating Expenses operating income had a calculated t of -13.151 with a significant level of 0.000 more minor than the significance level of $\alpha = 0.05$ (0.000 < 0.05). The calculated value of t > table (-13.151 > -1.686), then H₀ is rejected and H_a is accepted, meaning that partially operating expenses hurt the return on assets in banking companies listed on the Indonesia Stock Exchange for the 2017-2020 period. This result shows that if the ratio of Operational Costs of Operational Income (BOPO) of a bank has a level that is berarti efisiensi menurun, then the *Return On Asset* (ROA) level that the bank has invested will menurun Obtained the value of count > table (120.260 > 2.86) then H₀ is rejected and Ha is accepted. With a significance value of 0.000 < 0.05, it can be concluded that there is a significant influence between the Capital Adequacy Ratio and Operating Expenses of Operating Income together on the Return On Assets of banking companies listed on the Indonesia Stock Exchange for the 2017-2020 period. The above results show that to increase profits using ROA, it must go together between CAR and BOPO, because the higher the BOPO level, the lower the ROA level of a bank. The low level of BOPO indicates good bank management's ability to meet operational costs by generating optimal profits. So that has an impact on ROA for the better.

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