

THE INFLUENCE OF CREDIT RISK, CAPITAL ADEQUACY AND OPERATIONAL EFFICIENCY ON THE PROFITABILITY OF BANKS LISTED ON THE INDONESIAN STOCK EXCHANGE

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Abstract: The purpose of this research is to determine and analyse the effect of credit risk, capital adequacy level and operational efficiency on the profitability of banking companies listed on the Indonesia Stock Exchange in 2019-2021. This study is a type of quantitative research that uses a descriptive design. In this study, researchers used secondary data obtained from the financial statements of banking companies. Researchers obtained a population of 46 banking companies listed on the Indonesia Stock Exchange in 2019-2021. The sampling technique uses initial public offering (IPO) sampling, which is a purposive method. Based on the sample characteristics, the authors found 31 banking companies with 93 financial data respondents. The data analysis technique is multiple linear regression using SPSS version 25. The results of this study indicate that credit risk has a negative and significant effect on profitability, capital adequacy has a positive and significant effect on profitability, operational efficiency has a negative and significant effect on profitability. Credit risk, capital adequacy and operational efficiency together have a significant effect on profitability. The result of the coefficient of determination (R²) of 0.627 shows that 62.7% of the variation in the adjusted R-squared is explained by variations in the factors Credit Risk (X1), Capital Adequacy (X2), Operational Efficiency (X3). While the remaining 37.3% is influenced by other unobserved factors affecting the profitability variable (Y). Therefore, further research using other variables is needed.

Keywords: Credit risk, capital adequacy, operational efficiency and profitability

1. Introduction

According to Firmansyah (2019) Banks are financial institutions whose main activity is to collect funds from the public and channel these funds back to the public and provide other bank services. One of the capital market sectors managed by the Indonesia Stock Exchange is finance. The financial sector is a sector consisting of companies that provide financial services to commercial and retail customers, including investment fund companies, banks and insurance. In this study, researchers examined banking financial services listed on the Indonesia Stock Exchange (IDX). The existence of the banking sector has an important role, where most people's lives involve services from the banking sector. Indonesia in its economic activities cannot be separated from the banking sector. In The development of the banking world does not always experience an increase but there are times when banks experience setbacks. Banking institutions have an important role in the economic life of society. It is said to be an important role, because banking has a function as an intermediary between capital owners and the money market in channeling investment funds to people who need business capital. The phenomenon of fluctuations in the banking business in the 2018-2022 period affects the value of public trust. This fluctuation situation, of course, has a cause. One of the factors causing fluctuations is the

declining level of profitability of a bank, causing the bank's financial performance and performance to decline (Soares and Yunanto, 2018).

Public confidence in saving funds at the bank is strongly influenced by the information obtained about the quality and performance of the bank concerned, one of the indicators is to assess the health level of the bank. One measure to see the financial performance of banks is through profitability. In the banking business, the profitability ratio is very influential on the development of the banking business in the future or the future of the banking company. Profitability ratios are very influential because, profitability ratios provide information about the development of the growth rate of corporate profits obtained by the company in a certain period of time as well as the productivity of the use of corporate funds used by banks, both loan capital and own capital. Profitability is used by investors and potential investors as a basis for decision making in making investments. Profitability is not only important for investors and potential investors, but profitability is also important for management to set targets and evaluate the effectiveness of the company's management and become a public assessment of the company. One of the challenges that often becomes a problem for banks is the level of profitability of a bank that decreases, causing the financial performance and performance of the bank to decline (Soares and Yunanto, 2018). Investors, creditors, and stakeholders must follow the trend of the profitability ratio of banking companies from time to time. Whether the banking company shows an upward trend (increase), stable, or even a decline.

Profitability ratio is a financial metric that measures a company's capability to generate profits from its business operations. The higher the profitability ratio, the better the company is doing business. Conversely, a low or even negative profitability ratio indicates poor financial health of the company. An important profitability ratio for banks is Return on Asset (ROA). Return on Asset (ROA) is the company's ability to earn profits comprehensively, converting sales into profits and cash flow, Sirait (2017). The greater the ROA (Return on Asset) shows that the company's performance is getting better because the rate of return is getting bigger and according to Bank Indonesia's provisions, the best standard for Return on Asset (ROA) in the size of Indonesian banks is 1.5%. One of the challenges that often becomes a problem for banks is the level of bank profitability that decreases, causing the financial performance and performance of the bank to decline. Many factors can affect bank profitability, including Non Performing Loan (NPL), Capital Adequacy Ratio (CAR), Operational Efficiency. Generally, the sustainability of the bank depends on the bank's performance and profitability, the bank must generate the necessary income to cover the operational costs incurred. Therefore, to comprehensively evaluate and analyse the company's financial performance, banking companies should use profitability ratios.

Based on the description and phenomena described above, the problem formulations in this study are: (1) Does Non Performing Loan affect Profitability in Banking companies? (2) Does Capital Adequacy Ratio affect Profitability? (3) Does Operational Efficiency affect Profitability in Banking companies?. While the objectives of this study are: (1) to test and analyse Non Performing Loan on Profitability, (2) to test and analyse Capital Adequacy Ratio on Profitability, (3) to test and analyse Operational Efficiency on Profitability. The following is the development of financial ratios of conventional commercial banks listed on the Indonesia Stock Exchange for the period 2019 - 2021.

Table 1. Development of Financial Ratios of Conventional Commercial Banks

Description	Year		
	2019	2020	2021
NPL	2.53%	3.06%	3.00%
CAR	23.31%	23.89%	25.66%
BOPO	79.58%	86.58%	83.55%
ROA	2.44%	1.59%	1.83%

Source: Secondary Data Processed (2021)

2. Literature Review

Bank

In the general public, most people think that banks are the same as banking. Based on scientific theory, these two words have different meanings. In several banking books explaining the meaning of banks, namely: According to Ajuha (2017) Banks channel capital from those who cannot use it profitably to those who can make it more productive for society. According to Kasmir (2017), a bank is a financial institution whose main activity is to collect funds from the public and channel these funds back to the public and provide other bank services. According to Law of the Republic of Indonesia Number 7 of 1992 as amended by Law of the Republic of Indonesia Number 10 of 1998 concerning Banking, in article 1 number 2, it is stated that a Bank is a business entity that raises funds from the public in the form of credit deposits and or other forms in order to improve the lives of many people.

Credit Risk

Credit risk, defined as the risk of loss associated with the possible failure of a counterparty to fulfil its obligations or the risk that the debtor will not repay its debt. There are several experts who argue about the definition of credit risk, including: According to the Indonesian Bankers Association (2016), credit risk is the risk due to the failure of customers or other parties to fulfil obligations to banks in accordance with agreed agreements. In measuring credit risk, banks use the Non Performing Loan (NPL) ratio, which is a ratio that shows the bank's ability to manage non-performing loans. Bank Indonesia determines that a bank is in the healthy category if its Non Performing Loan (NPL) is below 5% (BI Circular Letter Number 13/30/DPNP dated 16 December 2011).

Capital Adequacy Level

In banking operations, capital plays a very important role. The provision of a minimum limit on the value of the capital adequacy ratio in principle aims to protect customers from the risk of losses that may be experienced by the bank. In addition, it also maintains the stability of the financial system as a whole. Some experts define the level of capital adequacy as follows: According to Dewi (2017), Capital Adequacy Ratio (CAR) is a capital adequacy ratio that shows the bank's ability to maintain adequate capital.

Operational Efficiency

Operational efficiency affects the performance of the bank, which shows whether the bank has used all its production factors appropriately. Some experts define efficiency as follows: According to Sedarmayanti, (2014), operational efficiency is a measure of the level of resource use in a process. The more efficient or less the use of resources, the more efficient the process

is said to be. An efficient process is characterised by process improvements so that it becomes cheaper and faster. According to Mulyadi (2014) Efficiency is the determination of the way (effort, work) in carrying out something by not wasting time, energy, costs. Efficiency also means between input and output or cost and profit. In this study, operational efficiency is calculated by looking at the ratio of Operating Expenses to Operating Income (BOPO). Operating costs are costs incurred by banks in order to carry out their main business activities such as interest costs, marketing costs, labour costs, and other operating costs. While operating income is the main income of the bank, namely income earned from the placement of funds in the form of credit and other operating income.

The smaller this ratio means the more efficient the operating costs incurred by the bank in question so that the possibility of a bank in problematic conditions is getting smaller, with cost efficiency, the bank's profits will be greater and this will affect the level of profitability of a bank. Any increase in operating costs will result in reduced profit before tax which in turn will reduce the profit or profitability (ROA) of the company concerned. A healthy bank must have $BOPO < 93.52\%$. If a bank has a BOPO of more than the BI provisions then the bank is categorised as unhealthy and inefficient.

Profitability

Financial ratios describe the relationship between certain amounts and other amounts. The financial ratios obtained will be analysed and used to compare the performance of a company and the status of the company compared to other companies or to the company itself in a certain period. Financial statement analysis is the basis for assessing and analysing the company's operating performance. Definition of profitability in the opinion of several experts: According to Sirait (2017), Profitability or the company's ability to earn profits comprehensively, converting sales into profits and cash flow. According to Kasmir (2016), Profitability Ratio is a ratio to assess the company's ability to seek profit. This ratio also provides a measure of profitability. According to Bank Indonesia regulations, the best standard for Return On Asset (ROA) in the size of Indonesian banks is 1.5%. This means that the bank must have a Return On Asset (ROA) above the percentage set by the bank, because if the Return On Asset (ROA) is below the percentage limit then the bank is said to be an ineffective and efficient bank. In calculating profitability, Return On Asset (ROA) is used as a measuring tool.

Hypothesis Development

Effect of Credit Risk on Profitability

According to the Indonesian Bankers Association (2016), credit risk is the risk due to the failure of customers or other parties to fulfil obligations to banks in accordance with agreed agreements. Credit risk is the loss associated with the possible failure of a counterparty to fulfil its obligations or the risk that a debtor will not repay its debt. Obligations arising from the asset side, for example, the provision of funds for the withdrawal of approved loans or withdrawals of loan drawdown allowances. Previous research conducted by Wea (2022), Nafi (2020), Diah (2019), and Sinaga (2018), showed that Credit Risk has a negative and significant effect on Profitability. Meanwhile, research conducted by Syukrina (2017), shows that Credit Risk has an insignificant effect on Profitability. In this study, the results of the analysis of Credit Risk on Profitability show that Credit Risk has a significant effect on profitability. This can be seen from the t count of -4.671 with a Credit Risk of 0.000. With t count -4,671 smaller than t-table 1.696 or Credit Risk 0.000 smaller than 0.05; These results indicate that the Credit Risk variable

partially or individually has a negative and significant effect on profitability in banking companies.

Effect of Capital Adequacy on Profitability

According to Cashmere (2016) the profitability ratio is a ratio to assess the company's ability to seek profit. This ratio also provides a measure of the effectiveness of a company's management. This is indicated by the profit generated from sales and investment income. The point is the use of ratios. Research conducted by Indrayani (2021), Rasyid (2020) shows that Profitability has a significant effect on Profitability. Meanwhile, research conducted by Andrian (2021) shows that Profitability has an insignificant effect on Profitability. In this study, the results of the analysis of Capital Adequacy on Profitability, the t value is 2.044 with a probability of 0.044. With t count 2.044 greater than t-table 1.696 or probability 0.044 greater than 0.05; These results indicate that the capital adequacy variable partially or individually has a positive and significant effect on profitability.

Effect of Operational Efficiency on Profitability

According to Sedarmayanti (2014), operational efficiency is a measure of the level of resource use in a process. The more efficient or less the use of resources, the more efficient the process is said to be. An efficient process is characterised by process improvements so that it becomes cheaper and faster. Research conducted by Sinaga (2018), shows that operational efficiency has a negative and significant effect on profitability. Meanwhile, research conducted by Syukrina (2017) shows that operational efficiency has no effect on profitability. In this study, the results of the analysis of Operational Efficiency on Profitability, the t value is -7,201 with a probability of 0.000. With t count -7.201 smaller than t-table 1.696 or Operational Efficiency 0.000 smaller than 0.05. These results indicate that the operational efficiency variable partially or individually has a negative and significant effect on profitability.

3. Method

Type of Research

The type of research used by the author in this study is quantitative research using a causal comparative research approach. In this study the authors will explain the relationship between the dependent variable, namely; Profitability with independent variables which include Credit Risk, Capital Adequacy Level and Operational Efficiency.

Population

According to Sugiyono (Sugiyono, 2016) Population is a generalisation area consisting of objects or subjects that have certain quantities and characteristics set by researchers to study and then draw conclusions. In this study, the authors used the conventional commercial bank sector listed on the Indonesia Stock Exchange in 2019-2021, totalling 46 banks as the research population.

Sampling Technique

According to Sugiyono (2016) Samples are part of the number and characteristics of the population. The sample is a representative of the population whose results represent the overall symptoms that have been studied or observed. In this study the authors used the purposive method as a sampling technique, namely sampling based on certain criteria. The reason for

selecting samples using purposive sampling technique is because not all samples have criteria in accordance with what the author has determined. From 46 companies as a population, 31 bank companies listed on the IDX for the 2019-2021 period were obtained which met the criteria for research. The following is a sample grouping table based on predetermined criteria

Table 2. Sampling Process

NO	Criteria	Amount
1	Banking companies listed on the Indonesia Stock Exchange for the 2019-2021 period	46
2	Banking companies that did not publish financial reports on the Indonesia Stock Exchange in the 2019-2021 period.	1
3	Banking companies that publish annual financial reports with incomplete financial ratios (NPL, CAR, BOPO and ROA) that do not meet the research needs for the 2019-2021 period.	14
Number of companies used as research samples		31

Source: Secondary Data Processed (2021)

Type of Data

The type of data used in this study is documentary data. According to Bungin (2007: 121), states that the documentary method is one of the data collection methods used in social research methodology to trace historical data. Based on its nature, the type of data used in this research is quantitative data.

Data Source

The data source used in this research is secondary data, which uses data collection techniques through secondary data sources. According to Sugiyono (2018: 456) secondary data is a data source that does not directly provide data to data collectors, for example through other people or through documents. The data source in this study comes from the 2019-2021 financial statements of banking companies provided by the Indonesia Stock Exchange (idx.co.id).

Dependent Variable

According to Kasmir (2016), Profitability Ratio is a ratio to assess the company's ability to seek profit. Return On Asset (ROA) is used to show the company's ability to generate profits using its total assets. Return On Asset (ROA) can be formulated as follows:

$$ROA = \frac{\text{Laba bersih}}{\text{Total Asset}} \times 100\%$$

Independent Variable

Credit Risk

According to the Indonesian Bankers Association (2016), credit risk is the risk due to the failure of customers or other parties to fulfil obligations to banks in accordance with agreed agreements. The Non Performing Loan ratio is formulated as follows:

$$NPL = \frac{\text{Kredit Bermasalah}}{\text{Total Kredit}} \times 100\%$$

Capital Adequacy Level

According to Kasmir (2016), CAR is the ratio between the ratio of capital to risk-weighted assets and in accordance with government regulations. Based on Bank Indonesia Circular Letter Number 13/30 / DPNP dated 16 December 2011, the formula for calculating the Capital Adequacy Ratio (CAR) is as follows:

$$CAR = \frac{\text{Modal}}{\text{Asset Tertimbang Menurut Risiko}} \times 100\%$$

Operational Efficiency

According to Sedarmayanti (2014), operational efficiency is a measure of the level of resource use in a process. According to Bank Indonesia circular number 6/23/DPNP dated 31 May 2004, the BOPO ratio formula is:

$$BOPO = \frac{\text{Beban Operasional}}{\text{Pendapatan Operasional}} \times 100\%$$

Data Analysis Technique

Multiple Regression Analysis

Multiple linear analysis (multiple linear regression) is used to determine the relationship between two or more variables, also shows the direction between the independent variable (X) and the dependent variable (Y), with the help of the use of a statistical data processing program, namely the Statistical Package for Social Science (SPSS) for windows, which can be formulated as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Where:

Y = Company Profitability (ROA)

$\beta_1, \beta_2, \beta_3, \beta_4$ = Variable regression coefficients

β_0 = Constant

X1 = Credit Risk (NPL)

X2 = Capital Adequacy Level (CAR)

X3 = Operational Efficiency

e = Error (Error Rate)

Classical Assumption Test

In this study, the researcher used the classical assumption test to test the relevance and validity of the data. Based on the data on the dependent and independent variables, the researcher assumed that there was a linear relationship between the two variables so that the results of the study were not biased. According to Ghazali (2018), there are 4 classical assumption tests used to determine the feasibility of the test, namely: Normality test, Multicollinearity test, Heteroskedasticity test, Autocorrelation test. Each of these tests has different purposes and uses, but still provides test *output* from the study.

Model Feasibility Test

F Test

The feasibility test of the F statistical model, to compare the calculated F with the F table with the provisions: if the calculated F value > F table then the hypothesis is accepted, meaning that the independent variable has an effect on the dependent variable. And vice versa if the calculated F < is small from the F table then the hypothesis is rejected, meaning that the

independent variable does not have an effect on the dependent variable. Researchers use the F test to predict the effect of Credit Risk, Capital Adequacy Level, and Operational Efficiency on Company Profitability

Coefficient of Determination Test (R²)

The feasibility test of the statistical model of the coefficient of determination (R square or R squared) or symbolized by "R²" which means the contribution of the influence given by the independent variable (X) to the dependent variable (Y). or in other words, how much contribution of the influence given by the X variable simultaneously to the Y variable. According to Ghozali (2016) the value of the coefficient of determination ranges between 0 and 1. The value of R² is between 0-1, if the value of R² is ^{small} or close to 1, the greater the independent variable influences the dependent variable. The value of the coefficient of determination is 0 and 1 which means the following: (a) If R² = 1 or close, then the relationship between the independent variable and the dependent variable is positive or in the same direction or very strong. (b) If R² = 0 or close, then the relationship between the independent variable and the dependent variable is very weak or has no relationship at all. (c) If R² = -1 or close, then the relationship between the independent variable and the dependent variable is very strong but the direction is reversed or negative.

Hypothesis Test (t-Test)

According to Ghozali (2016:97) the t-statistic test will show how far the influence of one independent variable individually in explaining the variation of the dependent variable. This can be seen through the significance of each research variable. Testing criteria: (a) If the significant value > 0.05 then partially it does not have a significant effect. (b) If the significant value ≤ 0.05 then partially it has a significant effect. The t-statistic test in this study was used to determine the effect of Credit Risk, Capital Adequacy Level, and Operational Efficiency on Company Profitability. In general, the t-statistic test is used to make decisions in analyzing data with the help of SPSS. To test the effect of independent variables on dependent variables, researchers used SPSS software version 25.

4. Result and Discussion

Data analysis

Descriptive Statistical Test

Table 3. Descriptive Statistics Analysis Results

		NPL	CAR	BOPO	ROA
N	Valid	93	93	93	93
	Missing	0	0	0	0
Mean		2,6819	22,3138	81,2227	2,1424
Median		2,8400	21,9400	80,6900	2,0300
Mode		1.25 ^a	14.93 ^a	75.95 ^a	2.00 ^a
Std. Deviation		1.26588	4.23579	10.05229	,81412
Variance		1,602	17,942	101,049	,663
Range		5.98	24.67	45.28	3.60
Minimum		,29	13.29	65.81	,13
Maximum		6.27	37.96	111.09	3.73

Multiple modes exist. The smallest value is shown ^a

Source:Secondary Data Processed (2021)

The table above shows the minimum value, maximum value, average value, and standard deviation level of each tested variable. Minimum column shows the lowest value of the results above, the maximum column shows the highest value. height of the results above, the average column is the average value obtained from amount mark all over sample Which shared with amount sample, whereas column standard deviation show the magnitude level standard deviation or deviation data from the results descriptive analysis.

Variable Non Performing Loan

Non Performing Loan Variable have a minimum value of 0.29 and the maximum value of 6.27. The average value shows the number of 2.6819 and the standard deviation value shows a figure of 1.26588 matter This shows that the standard deviation value is smaller than the average value. meaning the level of variation of the data small . *Non Performing Loan* Variable informs how much the problematic debt is worth exist in banking companies when compared to the total existing credit .

Variable Capital Adequacy Ratio

Capital Adequacy Ratio Variable has a minimum value of 13,29 And The maximum value is 37.96. The average value shows a figure of 22.3138 and the standard deviation value shows a figure of 4.23579, this shows that that the standard deviation value is smaller than the average value, which means the level of variation the data small . Variables *Capital Adequacy Ratio* measured with risk-weighted capital *and assets* , to inform the company's capital capabilities banking to cover possible losses in credit .

Variable Operational Efficiency

Operational Efficiency Variable has a minimum value of 65.81 And mark maximum as big as 111.09. Mark average show number as big as 81,2227 And mark standard deviation show number as big as 10.05229 matter This shows that the standard deviation value is greater smaller than the average value meaning the level of variation of the data small . Operational Efficiency variables are measured using a comparison of operational expenses and operational income , description accuracy in the use of company resources through a process of activities during a certain period .

Variable Profitability

Variables Profitability own mark minimum as big as ,13 And mark maximum as big as 3.73 . The average value shows a figure of 2.1424 and the standard deviation value show number as big as ,81412 matter This show that mark standard deviation more small from mark average Which It means level variation the data small . Profitability variables are measured using Return On Assets (ROA), to show the company's ability to generate profits using total assets owned in a certain period.

Classical Assumption Test

Test Normality

The results of the normality test on 93 research data show that the data is normally distributed, as indicated by the significance value in the Kolmogorov-Smirnov test above, which is greater than 0.05 , namely 0.200.

Table 4. Normality Test Results (Statistics)

One-Sample Kolmogorov-Smirnov Test

		Standardized Residual
N		93
Normal Parameters ^{a,b}	Mean	,0000000
	Std. Deviation	,97801929
Most Extreme Differences	Absolute	,057
	Positive	,040
	Negative	-,057
Test Statistics		,057
Asymp. Sig. (2-tailed)		,200 ^{c,d}

a. Test distribution is Normal .

b. Calculated from data.

c . Lilliefors Significance Correction .

d. This is a lower bound of the true significance .

Source: Secondary Data Processed (2021)

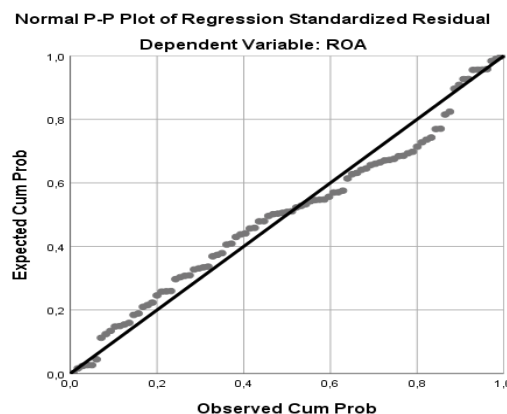


Figure 1: Normal Probability Plot

Source: Secondary Data Processed (2021)

It can be seen that the data is spread around the diagonal line and follows the direction of the diagonal line, so the regression model meets the normality assumption.

Test Multicollinearity

Table 5. Multicollinearity Test Results

Coefficients ^a

Model	VIF	Tolerance
NPL	,740	1,351
CAR	,877	1,140
BOPO	,767	1,303

a. Dependent Variable : ROA

Source: Secondary Data Processed (2021)

From the table above, it can be seen that all independent variables have VIF values below 10. Thus, it can be concluded that there is no multicollinearity between independent variables in

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the regression model.

Test Heteroscedasticity

Table 6. Test Results Heteroskedasticity
 Level significance of each independent variable (Sig.)

		Coefficients ^a				
Model		Unstandardized		Standardized		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	5,062E-16	,670		,000	1,000
	NPL	,000	,048	,000	,000	1,000
	CAR	,000	,013	,000	,000	1,000
	BOPO	,000	,006	,000	,000	1,000

a. Dependent Variable: Abresid

Source: Secondary Data Processed (2021)

The table above shows that the probability or level of significance of each independent variable is 1,000, so it can be ascertained that the model does not experience symptoms of heteroscedasticity.

Test Autocorrelation

Table 7. Autocorrelation Test Results
 Model Summary ^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,802 ^a	,643	,627	,49731	1,401

a. Predictors: (Constant), BOPO, CAR, NPL

b. Dependent Variable : ROA

Source: Secondary Data Processed (2021)

The results of the autocorrelation test on 93 research data show that there is no autocorrelation interference in the research model, which is indicated by the significance value in the Model Summary ^b test being in between -2 until +2 which is 1,401 .

Analysis Regression Linear Multiple

Table. 8
 Results Test Regression Linear Multiple
 Coefficients ^a

Model		Unstandardized		Standardized		Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance VIF
1	(Constant)	5,163	,670		7,701	,000	
	NPL	-,222	,048	-,346	-4,671	,000	,740 1,351
	CAR	,027	,013	,139	2,044	,044	,877 1,140
	BOPO	-,042	,006	-,524	-7,201	,000	,767 1,303

a. Dependent Variable : ROA

Source: Secondary Data Processed (2021)

From table the can arranged equality regression linear multiple asfollowing:

$$Y = 5,163 - 0.222 X_1 + 0.027 X_2 - 0.042 X_3$$

Based on the multiple linear regression equation above, it can be described as following:

Constant has a value as big as 5,163 matter This show if the Credit Risk variables (X_1), Capital Adequacy Level (X_2) and Operational Efficiency (X_3) value is zero, then Profitability (Y) as much as 5,163. Credit Risk Variable (b_1) has a coefficient value of -0.222 (negative), this means that if the value of other independent variables remains the same or constant, then every 1% increase in the Credit Risk variable will decrease the Profitability (Y) value by -0.222. Capital Adequacy Level Variable (b_2) has a coefficient value of 0.027 (positive), this means that if the other independent variables remain constant, then every 1% increase in the Capital Adequacy Level variable will increase the Profitability (Y) value by 0.027. Operational Efficiency Variable (b_3) has a coefficient value of -0.042 (negative), this means that if the value of other independent variables remains constant, then every 1% increase in the Operational Efficiency variable will reduce the Profitability (Y) value by -0.042.

Testing Hypothesis

Hypothesis Test (t-Test)

Table. 8
t-Test or Partial Results
Coefficients^a

Model		Unstandardized B	Std. Error	Standardized Beta	t	Sig.
1	(Constant)	5,163	,670		7,701	,000
	NPL	-,222	,048	-,346	-4,671	,000
	CAR	,027	,013	,139	2,044	,044
	BOPO	-,042	,006	-,524	-7,201	,000

a. *Dependent Variable* : ROA

Source: Secondary Data Processed (2021)

Based on table 8, it is concluded that: **(a)** The results of the hypothesis show that the t-test results are -4.671 with a significance value of $0.000 < 0.05$, which means that the Credit Risk variable has a positive and significant effect on the profitability of banking companies on the Indonesia Stock Exchange. These results indicate that the Credit Risk variable partially or individually has an effect on the profitability of banking companies on the Indonesia Stock Exchange. **(b)** the significance value of the processing results, the Capital Adequacy Level variable (X_2) on the profitability variable obtained a t-value of 2.044 with a significance value of $0.044 < 0.05$. which means that the Credit Risk variable has a positive and significant effect on the Profitability of banking companies on the Indonesia Stock Exchange. This result shows that the Capital Adequacy Level variable partially or individually has a positive and significant effect on the Profitability of banking companies on the Indonesia Stock Exchange. **(c)** the significance value of the results of processing the Operational Efficiency variable (X_3) on the profitability variable obtained a t-value of -7.201 with a significance value of $0.000 < 0.05$; This result shows that the Operational Efficiency variable partially or individually has a positive effect on the Profitability of banking companies on the Indonesia Stock Exchange.

F Test (Simultaneous Test)

The F test is used to determine the influence of the independent variable, namely the influence of Credit Risk. (X_1), Capital Adequacy (X_2), Operational Efficiency (X_3) together on the

dependent variable Profitability (Y) in banking companies. If the significant value of F count > 0.05 then there is no joint influence between the independent variables on the dependent variable. Decision making if the probability > 0.05 then there is no relationship between X and Y, if the probability < 0.05 then there is an influence of X and Y. The following is a table of F test results for commercial banking companies.

Table 9. F Test Results or Silmutan

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	39,212	4	9,803	39,637	,000 ^b
	Residual	21,764	88	,247		
	Total	60,976	92			

a. Dependent Variable: ROA

b. Predictors: (Constant), BOPO, CAR, NPL

Source: Secondary Data Processed (2021)

Based on table 9, the analysis results for the F value are 39.637 while the F table value is 2.475. The calculated F value is 39.637 with a significance of $0.000 < 0.05$, so there is an influence between X and Y. This proves that there is a significant influence between Credit Risk (X₁), Capital Adequacy (X₂), Operational Efficiency (X₃), together (simultaneously) on Profitability (Y) in banking companies listed on the Indonesia Stock Exchange.

Test Coefficient Determination (R^2)

Testing This used For count how much far from the model's ability to explain variation variable dependent Which can explained by variables independent. R^2 Which used is R^2 Which has consider amount variable independent in a regression model or called adjusted R^2 (Adjusted- R^2). In study This used Adjusted- R^2 Because amount variable independent Which investigated more from two variable. Following This on Table 10 can seen results Test Adjusted- R^2 .

Table 10. Adjusted- R^2 Test Results

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,802 ^a	,643	,627	,49731

a. Predictors: (Constant), BOPO, CTR, CAR, NPL

b. Dependent Variable : ROA

Source: Secondary Data Processed (2021)

Based on Table 10 can seen results *Adjusted- R^2* with help SPSS program in multiple regression analysis obtained the determination number adjusted or *Adjusted- R^2* of 0.627. This means that 62.7 % of the *Adjusted Variation R Square* explained by variation change factors, Credit Risk (X₁), Capital Adequacy (X₂), Operational Efficiency (X₃). While the remainder is 37.3 % influenced by factors other Which No follow observed Which influence variable Profitability (Y). By because That, required development study more carry on.

Discussion

The Impact of Credit Risk on Profitability

Credit Risk Analysis Results on Profitability shows that Credit Risk has a positive effect on profitability. This can be seen from the results of the t-test showing a significance value of $0.000 < 0.05$. Credit Risk is a loss associated with the possibility of a counterparty failing to fulfill its obligations or the risk that the debtor will not repay its debt. Obligations arising from the asset side, for example, the provision of funds for approved loan withdrawals or withdrawals of loan withdrawal relaxation. The results of this study are in line with research conducted by several previous studies: 1) Wea (2022), 2) Nafi (2020), 3) Diah (2019), 4) Sinaga (2018), research The results obtained were that Credit Risk has an influence and is significant to Profitability. The Influence of Cash Turnover on Profitability

The Impact of Capital Adequacy On Profitability.

Capital Adequacy Analysis Results on Profitability shows that Capital Adequacy has a positive effect on profitability. This can be seen from the results of the t-test showing a significance value of $0.044 < 0.05$. These results indicate that the capital adequacy variable partially or individually has a significant effect on Profitability in banking companies. The capital adequacy ratio (CAR) is a measure of the availability of bank capital expressed as a percentage of the bank's risk-weighted credit exposure. This study is in line with research conducted by Indrayani (2021) and Muhammad Andryan Rasyid (2020). The study found that Capital Adequacy has a significant effect on profitability.

Impact of Operational Efficiency On Profitability

Results of Operational Efficiency analysis on Profitability shows that Operational Efficiency has an effect on probability. This can be seen from the results of the t-test showing a significance value of $0.000 < 0.05$; This result shows that the operational efficiency variable partially or individually has a positive and significant effect on Profitability in banking companies. Efficiency operational is a measure of the level of resource use in a process. The more efficient or less resource use, the more efficient the process is said to be. An efficient process is characterized by process improvements so that it becomes cheaper and faster. This study is in line with research conducted by Sinaga (2018). The study found that operational efficiency influential significant to Profitability.

5. Conclusions

Based on the results of data analysis and previous discussions, the research results can be concluded as follows: 1). Ratio Credit Risk influential negative and significant to Profitability of banking companies listed on the Stock Exchange Effect Indonesia. 2). Capital Adequacy Ratio has a positive and significant effect on Profitability on banking company listed on the Stock Exchange Indonesia. 3). Ratio Operational Efficiency negative impact and significant to Profitability on banking company listed on the Stock Exchange Indonesia. 4) Credit Risk Ratio, Capital Adequacy, and Operational Efficiency have a significant impact on Profitability in banking companies Which registered in Exchange Indonesia Effect.

Based on the results of the research and discussion that has been done, here are some suggestions that are expected to be useful for companies and other parties involved in this research, as follows: (1) For banking companies, it is better to provide the latest information about their financial performance so that investors become interested and invest in the

company. (2) For prospective investors who want to invest in the company, banking should pay attention to the company's financial performance to avoid losses in the future . (3) For researchers with similar topics, it is recommended to conduct further studies on the financial performance of similar companies using different variables. (4) Further research should extend the research period, so that a clearer and more recent picture of the company's financial performance will be obtained.

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