

# The Effect of Impaired Loan And CAR To Banking Performance At Private National Bank (Listed on Indonesia Stock Exchange 2015-2019)

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## ABSTRACT

**The purpose** of this study was to determine the effect of impaired loans and capital adequacy ratios on banking performance at Private Commercial Banks listed on Indonesia Stock Exchange for period 2015-2019.

**Research method** uses a quantitative approach with multiple regression analysis. The source of this research uses secondary data. The sample of this study were 18 companies Private Commercial Banks using purposive sampling technique.

**Finding** test results show that Impaired Loans have no significant effect on banking performance while the Capital Adequacy Ratio has a significant effect on banking performance. Simultaneously, it shows that Impaired Loans and the Capital Adequacy Ratio have a significant effect on banking performance.

**Value** the determination coefficient of 0.075 indicates that the Impaired Loan and the Capital Adequacy Ratio provide a variation of 7.5% on banking performance, while the remaining 92.5% is influenced by other factors that are not observed.

**Keywords:** Impaired Loan, NPL, CAR

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## INTRODUCTION

The banking sector has an important role as a business entity with main task as a financial intermediary institution, which distributes funds from parties who need funds or lack of funds in the form of credit or other forms in order to improve the people's standard of living . So that the existence of banks is very important and plays a role in encouraging the country's economic growth. Credit is a way for banks to channel the funds that have been collected from the community. Amount credit will affect the amount of interest income earned (Kasmir, 2004).

One of the activities of the bank as an intermediary institution is to carry out lending to increase profitability (Ismail, 2014). Credit that problematic results in losses due to non-receipt of the funds has been distributed as

well as interest income so that there is a decrease in total income (Ismail, 2014). Impaired loan is a credit risk management that assesses whether there is evidence of an impaired loan which is known as Non-Performing Loans. Credit risk that occurs due to failure or uncertainty of the debtor in returning or fulfilling his obligations (Deutshce, 2017). Meanwhile, non performing loan can be interpreted as a loan that experiencing difficulties in paying off due to intentional factors and or due to external factors beyond the debtor's control. Non performing loan is credit since maturity cannot be repaid by the debtor as it should be in accordance by agreement.

Non performing loan is a related financial ratio with credit risk (Nursyahriana, Hadjat, & Tricahyadinata, 2017). Non performing loan is a loan that is experiencing difficulties by the debtor to fulfill obligations that have been mutually agreed upon between the creditors and debtors due to intentional or uncontrollable factors.

Credit problems will result in bank losses, namely losses due to not the return of funds that have been disbursed, as well as interest income not acceptable. That is, the bank loses the opportunity to earn interest, which result in a decrease in total income. The bank's financial performance can be assessed from the bank's financial ratios, including: are Impaired loan and Capital Adequacy Ratio (CAR). Impaired loan ratio used to measure the ability of bank management in managing credit problem provided by the bank. Credit risk accepted by the bank is one of the bank's business risks, which is caused by uncertainty in the return or as a result of not being paid back credit provided by the bank to the debtor (Hasibuan, 2007). The more The higher this ratio, the worse the quality of bank credit will cause the number of non-performing loans is getting bigger and causing losses, on the contrary if the NPL is lower, the profit or profitability of the bank will increase more increasing.

Increased Non-Performing Loans (NPL) or more non-performing loans caused by high interest rates on deposits which automatically followed by high lending rates above interest rates savings of around 3-5% according to the Ideal Spread. It would be no wonder non performing loan increasing due to interest rates that are not at all real (Mulyono, 1996). The level of capital adequacy in this study is represented by Capital Adequacy Ratio (CAR). CAR is a ratio that shows how much the total amount of bank assets that contain risk (credit, investment, letters, etc.) valuable, bills on other banks) are also financed from their own capital in addition to obtain funds from sources outside the bank (Christianto, Parengkuan, & Saerang, 2014).

Bank Indonesia (2003) determined the Capital Adequacy Ratio (CAR) is the minimum capital requirement that must be maintained by each bank as a certain proportion of total weighted assets according to risk (RWA) of 8%. With these provisions, banks are required to maintain the availability of capital due to every increase in bank activities especially those resulting in an increase in assets must be balanced with increase in capital 100 versus 8.

Capital Adequacy Ratio is a capital ratio that shows the ability of banks to provide funds for business development purposes and accommodate the possible risk of loss caused in bank operations. The bigger the ratio, the better the capital position (Achmad & Kusumo, 2003). This ratio shows how far the whole assets that contain risks are also financed from the bank's own capital funds, in In addition to obtaining funds from sources outside the bank, such as community, loans and so on (Hermina & Supriyanto, 2014)

Based on the Circular Letter of Bank Indonesia (SEBI) No.13/30/DPNP/2011, to measure the level of the bank's ability to earn profits used profitability ratios. These ratios consist of ROA (Return) on Assets) and (Return on Equity). ROA is the calculation of profit before tax divided by total assets. ROE is the calculation of profit after tax divided by core capital. Return On Asset (ROA) measures the rate of return investment of all funds or assets both from loan capital and capital itself, while Return On Equity (ROE) is to measure the level of return on investment or net profit after tax using funds from own capital. However, in this study, researchers only used Return On Asset (ROA) indicator to measure banking profitability.

In Table 1.1 it can be seen about the development of Impaired Loans, Capital Adequacy Ratio (CAR), and Return On Assets (ROA) of Commercial Banks Private National Foreign Exchange from 2015-2019

**Table 1.1. CAR, NPL/IL and ROA Average 2015 - 2019**

TAHUN	CAR AVERAGE	NPL/ IL AVERAGE	ROA AVERAGE
2015	19.04	2.92	1.25
2016	21.93	3.01	0.47
2017	22.85	2.05	1.14
2018	23.73	3.09	1.46
2019	23.83	4.47	1.36

Source : National Private Bank Listed PT BEI

## Objectives

Based on the introduction described above, this research is further developed with the following objectives: 1. To determine the condition of Impaired Loan and Capital Adequacy Ratio (CAR) at Foreign Exchange National Private Commercial Banks listed on the Indonesia Stock Exchange (IDX) for the 2015-2019. 2. To determine the performance of banks in measuring profitability. 3. To determine the effect of Impaired Loan and Capital Adequacy Ratio (CAR) both partially and simultaneously on banking performance (proxied by ROA) at National Private Foreign Exchange Commercial Banks listed on the Indonesia Stock Exchange for the 2015-2019.

## LITERATURE REVIEW

### Lending Principles

Credit assessment criteria that must be carried out by banks to get really profitable customers are carried out by 5c and 7p analysis (Kasmir, Financial Statement Analysis, 2008).

#### Credit assessment using the 5c analysis method, namely:

##### a. Character

Is a measure to assess the willingness of customers to pay credit. According to (Dendawijaya, Banking Management, 2005) information about prospective debtors can be obtained by collaborating in banking circles and other business circles. Information from the banking sector is obtained through correspondence or correspondence between banks known as information banks, including official requests to Bank Indonesia (BI) to obtain information about prospective debtors, both about themselves and their companies or businesses.

##### b. Capacity

To see the ability of prospective customers to pay credit related to their ability to manage the business and their ability to make a profit. So that it will show its ability to restore credit that is channeled.

##### c. Capital

That is to find out the sources of financing owned by the customer for the business to be financed by the bank.

##### d. Collateral

It is a guarantee provided by prospective customers, both physical and non-physical. Collateral should exceed the amount of credit given.

##### e. Condition

Namely economic conditions, whether general or specific in the field that the customer runs. If indeed the economic condition is not good or the customer's business sector is not promising, usually the bank will reconsider in providing credit.

#### 7Ps of credit are as follows:

##### a. Personality

That is assessing the debtor in terms of his personality or his daily and past behavior. Includes attitudes, emotions, behavior and actions of the debtor in dealing with a problem.

b. party

Namely classifying debtors in certain classifications or certain groups based on their capital, loyalty, and character so that debtors can be classified into certain groups and will get different credit facilities from banks.

c. Purpose

That is to find out the purpose of the debtor in taking credit, including the type of credit the debtor wants. The purpose of taking credit can vary whether for consumptive, productive or commercial purposes.

d. prospect

That is to assess the debtor's business in the future whether it is profitable or not, or in other words has prospects or vice versa. This is important considering that if a credit facility is financed without prospects, it is not only the bank that loses but also the debtor.

e. Payment

Is a measure of how the debtor returns the credit that has been taken or from any source of funds for the return of the credit he has obtained. The more sources of income the debtor has, the better it will be so that if one of his businesses loses, it will be covered by other sectors.

f. Profitability

To analyze how the debtor's ability to seek profit. Profitability is measured from period to period whether it will remain the same or will it increase, especially with the additional credit that will be obtained from the bank.

g. Protection

### **Profitability**

The profit earned from the activities carried out is a reflection of the performance of a company in running its business. Profitability as one of the references in measuring the amount of profit becomes so important to know whether the company has run its business efficiently, because the new efficiency can be known by comparing the profit earned with the assets or capital that generates the profit in other words is calculating profitability.

According to (Riyadi, 2006) bank profitability ratios can be measured using the ratio:

1. Return On Assets (ROA) the ratio between profit (before tax) with total assets, can be calculated by the formula:

$$ROA = \frac{\text{Net Income}}{\text{Total Assets}}$$

2. Return On Equity (ROE) is the ratio between profit (after tax) and bank capital (core capital), can be calculated by the formula :

$$ROE = \frac{\text{Net Income}}{\text{Shareholder's Equity}}$$

3. Net Interest Margin (NIM) is the ratio of Interest Income minus Interest Expense divided by Average Interest Earning Operations, can be calculated by the formula :

$$\text{Net Interest Margin} = \frac{(\text{Interest Received} - \text{Interest Paid})}{\text{Average Invested Assets}}$$

4. Operating Expenses Operating Income (BOPO) is the ratio comparison between operating costs and operating income, can be calculated by the formula :

$$BOPO = \frac{\text{Operational Costs}}{\text{Operational Income}}$$

Profitability or called profitability is the ability of a company to generate profits during a certain period. The company's profitability shows the comparison between profits and assets or capital that generates these profits. Profitability in banks is measured by ROA which measures the ability of bank management to obtain overall profits (Dendawijaya, 2000). ROA is a ratio used to measure a bank's ability to generate relative profits compared to its total assets.

The goal is how to keep the credit disbursed by the bank, but through a protection. Protection can be in the form of guarantees of goods or people or insurance guarantees.

### **Impaired Loan/ Non Performing Loan**

Impaired Loan/ Non-Performing Loan is the failure of the customer to return the loan amount received from the bank along with the compensation within the specified period. With such activities will cause the level of non-performing loans (NPL) in a bank (Dahlan, 2004). According to (Rivai, 2007) that credit risk is defined as the risk that occurs due to the failure of the counterparty in fulfilling its obligation. According to (Dahlan, 2004) that "Credit risk is a risk due to the failure or inability of the customer to return the amount received from the bank along with the interest according to a predetermined or scheduled period of time."

Impaired Loan reflects credit risk, the smaller the Impaired Loan, the smaller the credit risk borne by the bank. In order for the bank's value to this ratio to be good, Bank Indonesia obtains the Impaired Loan ratio criteria below 5%. In accordance with SE No. 62/23/DPNP dated May 31, 2014. Ratio amount NPL can be calculated by the formula:

$$\frac{\text{Impaired Loan} \times 100\%}{\text{Total Credit}}$$

According to Siamat (2003:358) that Impaired Loans or often called data non-performing loans are defined as loans that have difficulty repaying due to intentional factors and or external factors beyond the control of the debtor.

This ratio shows the ability of bank management in managing non-performing loans provided by banks. That is, the higher this ratio, the worse the quality of bank credit, which causes the number of non-performing loans to be greater, the greater the possibility of a bank in troubled conditions, namely losses caused by the rate of return on bad loans. If credit is related to the level of collectability, then what is classified as non-performing loans are loans that have quality in special mention, substandard, (doubtful), and jammed (loss).

### Capital Adequacy Ratio (CAR)

CAR is a banking performance ratio that serves to measure the adequacy of capital owned by banks to support assets that are potentially exposed to risk, such as the amount of credit extended by banks (Sudarmawati & Pramono, 2017). In a simpler explanation, CAR can be interpreted as the ratio of capital that must be owned by banks to loans extended by banks. CAR is one of the variables used to measure the soundness of banks. If the CAR value of a bank is high, then the bank is in good condition, and vice versa. The high CAR in a bank also indicates the bank's profits are getting bigger and at the same time indicates that the bank is in a healthy condition. The amount of the CAR ratio can be calculated by the formula:

$$\text{CAR} = \frac{\text{Equity}}{\text{Risk Weighted Assets}}$$

CAR is also related to loans extended by banks to customers. In distributing credit, banks need capital or funds. Sources of capital obtained by banks come from a number of parties such as bank owners or shareholders, the government, the central bank, investors both from abroad and domestically. In addition to being used to channel credit, banks can also use these funds for profit, such as making interbank call money with a term of one day to one week (Fajari & Sunarto, 2017).

## METHOD

In this study, the sampling technique used was purposive sampling. (Sugiyono, Business Research Methods, 2012, p. 112) This purposive sampling technique is done by selecting a sample with a specific purpose in accordance with predetermined criteria, of the 44 National Private Foreign Exchange Commercial Banks (BUSN) listed on the IDX for 5 consecutive years starting from 2015-2019 which meet the criteria as many as 18 banks.

To find out the extent of the Impact of Impaired Loan and Capital Adequacy Ratio (CAR) to Return On Assets (ROA) at Foreign Exchange National Private Commercial Banks, the data that has been collected will be analyzed and then processed.. The data analysis process is carried out by means of Classical Assumption Testing, Panel Data Regression, Analysis Correlation Coefficient and Coefficient of Determination Analysis.

## RESULT AND DISCUSSION

### Overview of Impaired Loans at Foreign Exchange National Private Commercial Banks (Listed on PT BEI).

Impaired Loans in this study were measured using Non Performing Loans (NPL). Non-Performing Loans (NPLs) show the ability of bank management to manage non-performing loans provided by banks, so that each bank must be able to manage its credit well in providing credit to the public and in repaying loans in accordance with applicable terms and conditions. The descriptive analysis is carried out to find out the description of Impaired Loans at Foreign Exchange National Private Commercial Banks Listed on the Indonesia Stock Exchange, which will then be shown in the following figure 4.1. :

Figure 4.1 Development of Impaired Loans

Listed on the Indonesia Stock Exchange 2015-2019

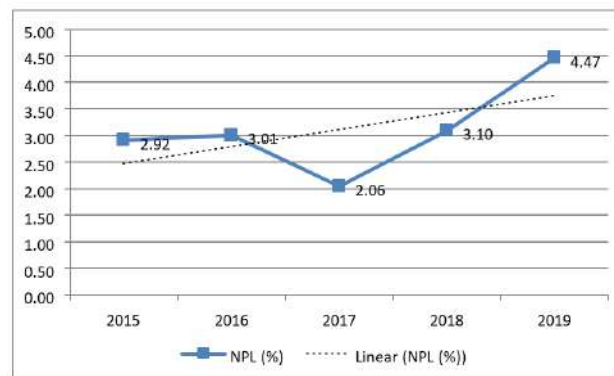


Figure 4.1 above shows the percentage of Impaired Loans owned by each banking company, it can be seen that companies that have a high average Impaired Loan ratio are PT Bank Mega Tbk which is 19.51% and companies that have an average Impaired Loan ratio the lowest was PT Bank Central Asia Tbk, which was 0.36%.

**Table 4.2 Overview of Impaired Loans at Foreign Exchange National Private Commercial Banks (Listed on PT BEI).**

Descriptive Statistic	NPL (%)
Mean	3.11
Median	1.61
Maximum	26.21
Minimum	0.20
Std. Dev.	5.12

Based on the table 4.2. above, it shows the average Impaired Loan ratio at Foreign Exchange National Private Commercial Banks Listed on the Stock Exchange

Indonesia ranges from 0.2% to 26.21% with an average of 3.11% and a standard deviation of 5.12%.

#### Overview of Capital Adequacy Ratio in National Private Commercial Banks Foreign Exchange Listed on the Indonesia Stock Exchange in 2015 - 2019

CAR is a financial ratio regarding the bank's capital which has an impact on the bank's ability to run its business. Descriptive analysis is carried out to find out the description of the Capital Adequacy Ratio in Foreign Exchange National Private Commercial Banks Listed on the Indonesia Stock Exchange, which will then be shown in the following figure 4.2:

**Figure 4.2. Overview of Capital Adequacy Ratio (Listed on the Indonesia Stock Exchange in 2015 – 2019)**

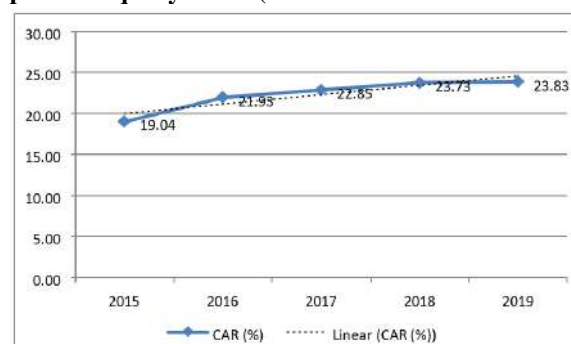




Figure 4.2. above shows the Capital Adequacy Ratio of each banking company, it can be seen that the company that has the lowest average Capital Adequacy Ratio is PT Bukopin Tbk which is 11.9% and the company that has the highest average Capital Adequacy Ratio is PT Bank of India Indonesia Tbk which is 37.26%.

**Table 4.3. Descriptive Statistic Capital Adequacy Ratio**

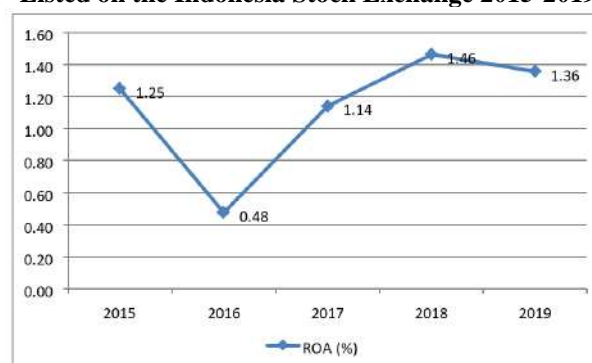
<u>Descriptive Statistic</u>	<b>CAR (%)</b>
Mean	22.28
Median	21.09
Maximum	45.85
Minimum	10.57
Std. Dev.	7.28

Based on the table above, it shows that the average Capital Adequacy Ratio in Foreign Exchange National Private Commercial Banks Listed on the Indonesia Stock Exchange ranges from 10.57% to 45.85% with an average of 22.28% and a standard deviation of 7.28%. Based on Figure 4.4 it can be seen that the average Capital Adequacy Ratio experienced an increasing trend during the study year, this was due to anticipating a decrease in liquidity so that most banks strengthened reserves, because the article, credit relaxation policies provided by the regulator had the potential to become non-performing loans that could disrupt banking business continuity. The highest average Capital Adequacy Ratio was in 2019 while the lowest was in 2015. Figure of 4.2 above shows the development of the Capital ratio Adequacy Ratio at Foreign Exchange National Private Commercial Banks Registered in Indonesia Stock Exchange 2015-2019 period.

#### **Overview of Banking Performance at National Private Foreign Exchange Commercial Banks Listed on the Indonesia Stock Exchange 2015-2019**

Banking performance in this study is proxied by Return on Assets (ROA). Return on Assets (ROA) is a ratio showing the results (return) of the total assets used by the company, both from borrowed capital and from own capital. The descriptive analysis is carried out to find out the description of the Banking Performance at the National Private Foreign Exchange Commercial Banks Listed on the Indonesia Stock Exchange, which will then be shown in Figure 4.3. as follows:

**Figure 4.3. : Overview of Banking Performance at National Private Foreign Exchange Commercial Banks Listed on the Indonesia Stock Exchange 2015-2019**



Based on Figure 4.3, it can be seen that the banking performance fluctuated during the research year where in 2016 there was a sharp decline, this is based on the information from the Financial Services Authority (OJK) quoted from the Republika.co.id daily news portal (2017) which says that the profitability ratio of assets or Return on Assets (ROA) in the banking industry during 2016 decreased due to the need for banks to inflate reserve costs due to the increasing ratio of non-performing loans or Impaired Loans. However, it increased again until 2018 and in 2019 it decreased again. The highest average banking performance was in 2018 while the lowest was in 2016.

**Table 4.4. Descriptive Return on Assets**

<u>Descriptive Statistic</u>	<u>ROA (%)</u>
Mean	1.14
Median	1.53
Maximum	4.00
Minimum	-11.15
Std. Dev.	2.02

Based on the table 4.4. above, the average banking performance at National Private Foreign Exchange Commercial Banks Listed on the Indonesia Stock Exchange ranges from -11.15% to 4.00% with an average of 1.14% and a standard deviation of 2.02%.

**Data analysis in this study used multiple linear regression analysis, with the aim of obtaining a comprehensive picture of the effect of one variable on another. Prior to multiple linear regression analysis, there are several assumptions that must be met, namely Normality Test, Multicollinearity Test, Heteroscedasticity Test and Test Autocorrelation,**

Classical assumption test is a requirement that must be met in the linear regression model based on Ordinary Least Square (OLS).

### Hypothesis testing

#### Determination Coefficient

The coefficient of determination of 0.075 indicates that the Impaired Loan and Capital Adequacy Ratio provide a diversity of 7.5% on Banking Performance, while the remaining 92.5% is influenced by other factors not observed in this study.

**Table 4.9. Determination Coefficient**

R-squared	0.074659	Mean dependent var	0.291010
Adjusted R-squared	0.052089	S.D. dependent var	0.465176
S.E. of regression	0.456618	Sum squared resid	17.09701
F-statistic	3.307969	Durbin-Watson stat	0.996292
Prob(F-statistic)	0.041532		

#### Partial Test.

Partial Test aims to determine whether Impaired Loan and Capital Adequacy Ratio partially significant effect on Banking Performance at National Private Foreign Exchange Commercial Banks Listed on the Indonesia Stock Exchange.

**Table 4.10. Partial Significant Test Results (t test)**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.802228	0.408716	1.962802	0.053
NPL	-0.018312	0.016049	-1.140999	0.2572
CAR	0.031613	0.014107	2.240925	0.0277

Based on the first hypothesis testing, it was obtained that the Impaired Loan variable obtained a  $t_{\text{count}}$  of -1.141 so that the value of  $-t_{\text{count}} > t_{\text{table}}$  was  $-1.141 > -1.989$  and the value of prob. greater than the significance value of  $0.257 > 0.05$  so that  $H_0$  is accepted, meaning that partially Impaired Loan variables have no significant effect on Return On Assets (ROA) at Commercial Banks National Private Foreign Exchange Listed on the Indonesia Stock Exchange for the 2015-2019 period.

Based on the second hypothesis testing, it was obtained that the Capital Adequacy Ratio variable obtained a  $t_{\text{count}}$  of 2.241 so that the value of  $t_{\text{count}} > t_{\text{table}}$  was  $2.241 > 1.989$  and the value of prob. smaller than the significance value of  $0.027 < 0.05$  so  $H_0$  is rejected, meaning that partially the Capital . variable Adequacy Ratio



has a significant effect on Return On Assets (ROA) at Foreign Exchange National Private Commercial Banks Listed on the Indonesia Stock Exchange for the 2015-2019 period.

### Simultaneous Test (Test F)

Simultaneous hypothesis testing aims to test the significance of the effect of all independent variables together on the dependent variable.

**Table 4.10. Simultaneous Test**

R-squared	0.074659	Mean dependent var	0.291010
Adjusted R-squared	0.052089	S.D. dependent var	0.465176
S.E. of regression	0.456618	Sum squared resid	17.09701
F-statistic	3.307969	Durbin-Watson stat	0.996292
Prob(F-statistic)	0.041532		

Based on the table above, the value of  $F_{\text{count}} = 3.308$  is greater than  $F_{\text{table}} = 3.108$ , thus  $H_0$  is rejected which indicates the regression model means that there is a significant effect between Impaired Loan and Capital Adequacy Ratio simultaneously against Return On Assets (ROA) at National Private Foreign Exchange Commercial Banks Listed on the Stock Exchange Indonesia for the 2015-2019 period.

## CONCLUSION

The results of hypothesis testing regarding the effect of Impaired Loans and Capital Adequacy Ratio on Banking Performance at Foreign Exchange National Private Commercial Banks Listed on the Indonesia Stock Exchange for the 2015-2019 period, the results show that the value of  $F_{\text{count}} = 3.308$  is smaller than  $F_{\text{table}}(2.82) = 3.108$  and prob value. smaller than 5% which indicates that  $H_0$  is rejected or in other words the regression model means that Impaired Loan and Capital Adequacy Ratio together have a significant effect on Banking Performance. With a coefficient of determination of 0.075, it shows that the Impaired Loan and Capital Adequacy Ratio provide a variation of 7.5% on Banking Performance, while the remaining 92.5% is influenced by other factors that are not observed.

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