

**THE EFFECT OF CAPITAL ADEQUACY, LIQUIDITY AND CREDIT RISK ON PROFITABILITY  
(Study of National Commercial Banks Listed on the Indonesian Stock Exchange for the  
2018-2022 Period)**

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**Abstract**

Based on Law of the Republic of Indonesia Number 10 of 1998 concerning Banking, banks are business entities that collect funds from the public in the form of savings and distribute them to the public in the form of credit and/or other forms in order to improve the standard of living of many people. The bank's performance in maintaining its stability can be seen from the bank's ability to gain profits so that what is used is profitability. This research aims to test and analyze the influence of capital adequacy, liquidity and credit risk on profitability. This research is quantitative research in associative form, which was conducted at national commercial banks listed on the Indonesia Stock Exchange for the 2018-2022 period. The sample determination method in this research is a non-probability sampling technique with a purposive sampling method. The number of samples obtained was 27 banks with 135 observation data. Multiple linear analysis is used to test the effect of capital adequacy, liquidity and credit risk on profitability. The results of this research indicate that capital adequacy has an insignificant negative effect on profitability. Liquidity does not have a significant effect on profitability. Credit risk has a significant negative effect on profitability. The theoretical implications of this research can provide additional information and empirical evidence related to theory and can strengthen the results of previous research regarding capital adequacy, liquidity and credit risk on profitability. The practical implications of this research are able to contribute to the management of national commercial banks in the form of risk management study material and considerations for customers.

**Keywords:** Capital Adequacy, Liquidity, Credit Risk, Profitability

**INTRODUCTION**

In a country's economy, the financial sector, namely banking, plays a crucial role in economic stability and driving a country's economic progress. The main pillar in the development of the economic system is banks which have an important role as financial intermediaries, namely financial intermediaries who connect parties who have funds with parties who need funds.(Rafinur et al., 2023). Through investment financing and real

sector development, banking in Indonesia plays a central role in driving economic growth. Based on Law of the Republic of Indonesia Number 10 of 1998 concerning Banking, banks are business entities that collect funds from the public in the form of savings and distribute them to the public in the form of credit and/or other forms in order to improve the standard of living of many people.

The banking sector is the sector that dominates the financial sector in Indonesia. Based on a study of financial developments in 2022 published by the Financial Services Authority, the banking sector has the largest share of assets in the financial sector in Indonesia, namely conventional banking at 92.91% and sharia banking at 7.09%. Based on this, banks are considered the lifeblood of driving the wheels of the economy which have a strategic position as supporting economic development, so banks are required to maintain their stability. As a financial institution, banks must have good performance to maintain their stability in order to build trust from their customers (Rahma & Sutrisno, 2023). The financial performance of a bank is an analysis that describes how efficiently the company uses its funds to generate net profits after tax through relevant information.(Antari & Baskara, 2020). A bank's financial performance can be seen through the bank's annual financial report which contains financial ratios. Financial reports are used to predict financial difficulties experienced by the company, the results of bank operational activities, and the bank's past financial performance are used as a guide for stakeholders regarding company performance.

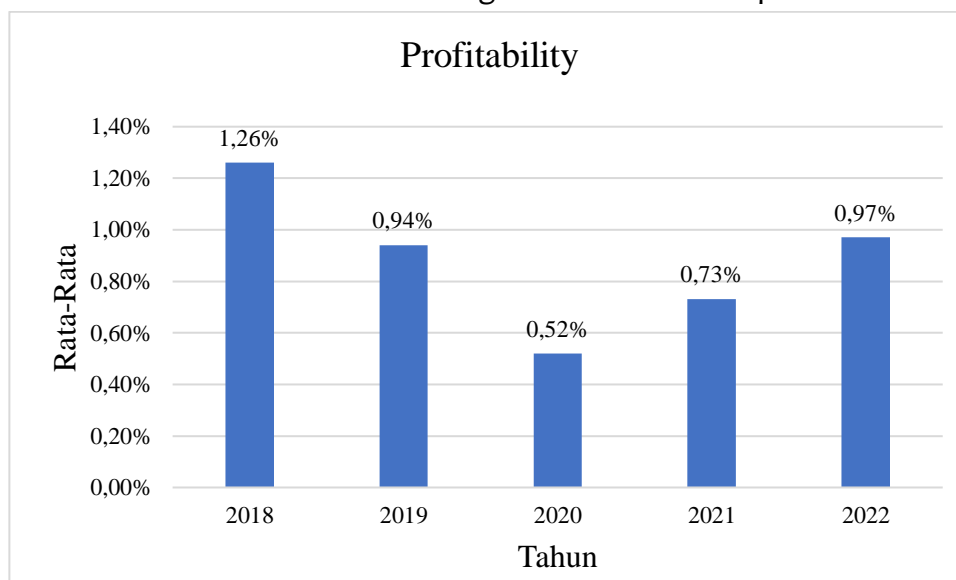
Stakeholders are groups or individuals who have the ability to influence or be influenced by the activities of an organization. Stakeholder theory states that a company is an entity that not only operates for its own interests, but must also be able to provide benefits to its stakeholders such as shareholders, creditors, consumers, suppliers, government, society, analysts and other parties. (Mulyanti et al., 2023). Bank financial reports are a form of communication implementation carried out by companies to build relationships and trust from stakeholders. Financial performance is usually measured by financial ratios, namely solvency, liquidity and profitability ratios contained in bank financial reports (Ayuningtyas & Sufina, 2023).

The bank's performance in maintaining its stability can be seen from the bank's ability to gain profits so that what is used is profitability. This is because profitability shows the company's ability to gain profits from the use of its capital. Profitability is generally measured using two main financial ratios, namely Return on Equity (ROE) which measures the return obtained from the company owner's investment in the business, while Return on Assets (ROA) which measures in terms of all assets owned by the bank.

Based on the Financial Services Authority (OJK) Circular Letter Number 14/SEOJK.03/2017 concerning Bank Soundness Assessment, it is stated that the

assessment of profitability or profitability of commercial banks uses the Return on Assets (ROA) indicator. This indicator is considered better considering that ROA is a ratio to measure bank management's ability to obtain overall profits (Pramana Putra & Rahyuda, 2021). This statement is supported by Know et al. (2023) states that ROA is used to measure banking profitability because ROA is more focused on calculating the ability of banking effectiveness to generate profits in managing the assets it owns. Apart from that, for investors, ROA is used to find out how much net profit the company earns and how much return it receives (Tanaya, 2023).

Based on SE OJK No.14/SEOJK.03/2017, banks with good performance are banks that have an ROA value above 1.5%. A banking company with a high level of ROA shows that the company makes maximum use of its assets so that it can obtain high profits (Ken & Santioso, 2022). The following is a graph of the movement in profitability of banks listed on the Indonesian stock exchange for the 2018-2022 period.



Source: Annual Report (Data processed, 2023)

**Picture1. Statistics on Profitability Movements of National Commercial Banks Listed on the Indonesian Stock Exchange for the 2018-2022 Period**

Figure 1 above shows the profitability of national commercial banks listed on the Indonesia Stock Exchange for the 2018-2022 period which tends to fluctuate, where profitability as proxied by Return on Assets (ROA) has experienced a significant decline in 2020. In 2018 the average ROA was 1.26%, decreasing in 2019 to 0.94%, then decreasing again in 2020 to 0.52%. Then in 2021 it increased to 0.73% and increased again in 2022 to 0.97%. Fluctuating profitability values are caused by various factors, namely external factors related to macroeconomic conditions which include inflation rates, interest rates and exchange rates, while internal factors are the company's management itself. Judging

from external factors, this fluctuation in profitability occurred due to the Covid-19 pandemic.

The emergence of the Covid-19 pandemic was confirmed to attack the world at the end of 2019 and entered Indonesia at the beginning of March 2020. The spread of the Covid-19 pandemic was a shock to all sectors, where this phenomenon had a significant impact on the financial sector in Indonesia so that it could reduce stability. economy. This is because the financial sector plays a very good role, so difficult economic conditions certainly affect the performance of the financial sector in achieving profitability. It is important for banks to keep their profitability stable and even increase to maintain the bank's health. Ratios that can influence bank profitability are capital adequacy as measured by the Capital Adequacy Ratio (CAR), liquidity as measured by the Loan to Deposit Ratio (LDR) and credit risk as measured by Non-Performing Loans (NPL).

Capital adequacy is a bank's performance ratio which is measured using the Capital Adequacy Ratio (CAR) to support assets that contain or generate risk. Capital adequacy shows the amount of a bank's required capital expressed as a percentage of risk-weighted assets as a hedge against possible losses experienced by the bank.(Spaseska et al., 2022). A high value of capital adequacy can increase bank profitability, this is because fulfilling sufficient capital can help the bank in dealing with risks that may occur(Anggreningsih & Negara, 2021). Research with similar results was also carried out byKenzen & Afandy (2023), Nikmah et al. (2023)And Wardana & Setiadi (2023). However, this is different from research conducted byIhsani & Yudiantoro (2022) And Rafnur et al. (2023) states that capital adequacy has no significant positive effect on profitability.

Liquidity is measured using the Loan to Deposit Ratio (LDR) by comparing the number of loans disbursed by the bank with the number of deposits received (Gazi et al., 2022). Liquidity describes the majority of funds managed by banks sourced from third parties which will be returned at maturity. Third party funds managed by this bank will be distributed in the form of credit as part of the bank's efforts to gain profits. So, increasing liquidity can potentially increase bank profits through lending (Nikmah et al., 2023). Corresponding research was carried out byKorri & Baskara (2019), Anggreningsih & Negara (2021), And Heliani et al. (2023). However, this is different from research conducted byDwiningtyas & Yoewono (2023) AndSetyaningsih et al. (2023) which states that liquidity has no significant positive effect on profitability.

Credit risk is measured using Non-Performing Loans (NPL), where a decrease in credit risk will increase bank profitability, while a greater credit risk will indicate poor credit quality. This will of course cause an increase in the number of bad loans. So, the bank will experience losses resulting in a decrease in profits for the bank (Korri & Baskara, 2019). This is in line with research conducted by Giri & Purbawangsa (2022), Bandara et al.

(2021), Spaseska et al. (2022), AndWardana & Setiadi, (2023). However, this is different from research conducted byHamidah et al. (2023) And Rafinur et al. (2023) which states that credit risk does not affect the profits generated by banks in managing profitability.

Based on the phenomenon and research gap, this has led to the author's interest in conducting further research to determine the influence related to capital adequacy, liquidity and credit risk on profitability, especially in the banking sector and to see the magnitude of banking influence on economic stability. The choice of national commercial banks listed on the Indonesian Stock Exchange is because the Indonesian Stock Exchange provides banking company financial reports for each period and has been audited. So, on the Indonesian Stock Exchange, banks are monitored in an integrated manner over all activities so that they can provide trust for financial service users (Sakdiyah et al., 2023).

In this context, the Indonesian Stock Exchange (BEI) functions as the main platform for financial institutions, especially banks, to access funds needed for expansion and growth. (Kenzen & Afandy, 2023). Thus, the researcher wants to research again by raising the research title "The Influence of Capital Adequacy, Liquidity and Credit Risk on Profitability in National Commercial Banks Listed on the Indonesian Stock Exchange for the 2018-2022 Period".

## **RESEARCH METHODS**

The research design used in this research is a quantitative design. A quantitative approach in associative form is the approach used in this research. A quantitative approach is research where the results can be obtained through measurement or statistical methods (Handayani et al., 2022). All data used in this research is supported by empirical theories to prove the hypothesis.

The population used in this research is all banks listed on the Indonesia Stock Exchange for the 2018-2022 period, totaling 47 banks. Determining the sample in this research by obtaining the sample size is carried out statistically and through research estimates and must reflect the nature of the population without forgetting the nature of its representation. The sampling method used by the author in this research is non-probability sampling. According to Sugiyono (2019: 128) non-probability sampling is a sampling technique that does not give all members of the population the same opportunity to be selected as sample members. The non-probability sampling technique used in this research is purposive sampling, namely a sampling technique with considerations based on certain criteria.

## RESULTS AND DISCUSSION

### Analysis Results

#### Classic assumption test

The classical assumption test is a test carried out before carrying out multiple linear analysis which aims to determine the feasibility of the analysis model.

##### 1) Normality test

The normality test aims to test and determine whether the data from the independent variable and dependent variable are normally distributed or not. Testing was carried out using the Kolmogorov-Smirnov (KS) test. Data is declared to be normally distributed if the Kolmogorov-Smirnov (KS) significance result is greater than 0.05 (Sig. > 0.05). Normality Test Results are presented in Table 1 below.

**Table 1. Normality Test Results**  
**One-Sample Kolmogorov-Smirnov Test**

		Unstandardized Residuals
N		135
Normal Parameters, b	Mean	0.0000000
	Std. Deviation	1.27685459
Most Extreme Differences	Absolute	0.073
	Positive	0.052
	Negative	-0.073
Statistical Tests		0.073
Asymp. Sig. (2-tailed)		0.075c

Source: Processed data, 2024

Based on the results of the analysis using the One-Sample Kolmogorov-Smirnov Test presented in Table 1, it shows that the value Asymp. Sig. (2-tailed) Kolmogorov-Smirnov is 0.075, where this value is greater than 0.05 (Sig. = 0.075 > 0.05) thus indicating that the data used in this research is normally distributed.

##### 2) Autocorrelation Test

The autocorrelation test is carried out to determine whether there is a correlation between incorrect errors in period  $t$  and incorrect errors in the previous period or  $t_1$ . To determine whether there is autocorrelation or not, you can use the Durbin-Watson (dW) test. If the dW value is greater than the dU value in the table and smaller than  $-dU$  then the model is said to be free from autocorrelation. The regression model is free from autocorrelation if the Durbin-

Watson (dW) value is greater than dU (upper limit) and the dW value is smaller than 4-dU (upper limit). If the upper limit is ( $dU < dW < 4-dU$ ), then there is no autocorrelation. The results of the autocorrelation test in this study are presented in Table 2 below.

**Table 2. Autocorrelation Test Results  
Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.678a	0.459	0.447	1.29139	2,103

Source: Processed data, 2024

Based on the results of the analysis, it is known that the number of data (n) in this study is 135, and data with a number of variables (k) of 3, resulting in a dU value of 1,764 (attachment 5). Based on the analysis results presented in Table 2, the Durbin-Watson (dW) value is 2,103. Decision making does not have autocorrelation if ( $dU < dW < 4-dU$ ) = ( $1,764 < 2,103 < 2,236$ ) then it can be concluded that it is free from autocorrelation symptoms

### 3) Multicollinearity Test

The multicollinearity test is a test that aims to find a strong correlation between independent variables linearly in the regression model. Identification of the presence or absence of multicollinearity is done by Variance Inflation Factor (VIF) and tolerance value. Tolerance value more than 10% (tolerance < 0.10) or VIF less than 10 ( $VIF > 10$ ) indicates that there is no multicollinearity between independent variables in the regression model. The results of the multicollinearity test in this study are presented in Table 3 below.

**Table 3. Multicollinearity Test Results  
Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	Capital Adequacy	0.973	1,027
	Liquidity	0.937	1,067
	Credit Risk	0.958	1,044

Source: Processed data, 2024

Based on the results of the analysis presented in Table 3, it shows that the tolerance values of the three independent variables, namely capital adequacy, liquidity and credit risk, each have values greater than 0,10 (tolerance = 0,973;

0,937; 0.958 > 0,10) with values VIF for all independent variables has a value of less than 10 (VIF = 1,027; 1,067; 1,044 < 10). Therefore, it can be concluded that there is no multicollinearity or no correlation between the regression model variables.

#### 4) Heteroscedasticity Test

The heteroscedasticity test is carried out with the aim of testing whether or not there are similarities in variance and residual values from one observation to another in the regression model. Symptoms of heteroscedasticity can be seen from its significance value. If the significance value is above 0,05 (Sig. > 0,05) then the regression model does not contain heteroscedasticity. The results of the heteroscedasticity test in this study are presented in Table 4 below.

**Table 4. Heteroscedasticity Test Results**  
**Coefficients<sup>a</sup>**

Mode	I	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.964	0.327		2,952	0.004
	Capital Adequacy	0.002	0.006	0.028	0.315	0.754
	Liquidity	-0.002	0.003	-0.047	-0.522	0.602
	Credit Risk	0.027	0.027	0.090	1,012	0.313

Source: Processed data, 2024

Based on the results of the heteroscedasticity test presented in Table 4, it shows that the significance values of all independent variables, namely capital adequacy, liquidity and credit risk, each have values greater than 0.05 (Sig = 0.754; 0.602; 0.313 > 0.05). Therefore, it can be concluded that there are no symptoms of heteroscedasticity in the regression model.

#### **Multiple Linear Regression Analysis**

The multiple linear regression analysis model is used to obtain regression coefficients which will determine whether the hypothesis created will be accepted or rejected. The results of this analysis refer to the results of the influence of capital adequacy, liquidity and credit risk variables on profitability in national commercial banks listed on the Indonesia Stock Exchange for the 2018-2022 period. The results of multiple linear regression analysis are presented in Table 5 below.

**Table 5. Summary of Multiple Linear Regression Analysis Results  
Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,472	0.507		4,880	0,000
	Capital Adequacy	-0.003	0.009	-0.025	-0.377	0.706
	Liquidity	0.002	0.005	0.029	0.440	0.660
	Credit Risk	-0.436	0.042	-0.684	-10,422	0,000

Source: Processed data, 2024

Based on the analysis results presented in Table 5, it can be seen that the constant value ( $\alpha$ ) is 2.472, the capital adequacy regression coefficient ( $\beta_1$ ) is -0.003, the liquidity regression coefficient ( $\beta_2$ ) is 0.002 and the credit risk regression coefficient ( $\beta_3$ ) is -0.436 so that the multiple linear regression equation can be formulated as follows:

$$Y = 2.472 - 0.003X_1 + 0.002X_2 - 0.436X_3 + e$$

The multiple linear regression equation shows the direction of each variable. The interpretation of the regression equation above is as follows:

- 1) The constant ( $\alpha$ ) is 2.472, indicating that if capital adequacy, liquidity and credit risk are equal to 0, profitability will increase by 2.472 percent.
- 2) The regression coefficient for the capital adequacy variable ( $\beta_1$ ) with a value of -0.003 which has a negative sign indicates that if capital adequacy increases by one percent, profitability will decrease by 0.003 percent.
- 3) The regression coefficient for the liquidity variable ( $\beta_2$ ) with a value of 0.002 has a positive sign, indicating that if liquidity increases by one percent, profitability will increase by 0.002 percent.
- 4) The risk variable regression coefficient ( $\beta_3$ ) with a value of -0.436 which has a negative sign indicates that if credit risk increases by one percent, profitability will decrease by 0.436 percent.

The regression equation shows the direction of influence of each independent variable on the dependent variable.

### Model Feasibility Test (F Test)

The model feasibility test (F test) is used to test whether capital adequacy, liquidity and credit risk in the regression model have a simultaneous effect on profitability. If the significance level  $F < 0.05$ , then the independent variables significantly influence the dependent variable and the regression model is considered suitable for testing, conversely if the significance level  $F > 0.05$ , then the independent variables do not significantly influence the dependent variable. The results of the model feasibility (F test) are presented in Table 6 below.

**Table 6. Model Feasibility Test Results (F Test)**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	185,633	3	61,878	37,104	0,000b
	Residual	218,468	131	1,668		
	Total	404,101	134			

Source: Processed data, 2024

Based on the analysis results presented in Table 6, it shows a significance value of 0.000. smaller than 0.05 ( $0.000 < 0.05$ ). So, it can be concluded that the variables of capital adequacy, liquidity and credit risk simultaneously have a significant effect on profitability.

### Hypothesis Test (t Test)

Hypothesis testing or t test is a statistical test used to determine the difference between two variables. The t test basically shows how far the influence of one independent variable explains the dependent variable. Hypothesis testing is accepted if Sig. t-count  $< 0.05$ , which means that the independent variable significantly influences the dependent variable. On the other hand, if Sig. t-count  $> 0.05$  then the hypothesis is rejected, which means that the independent variable does not have a significant influence on the dependent variable. The results of the hypothesis test (t test) are presented in Table 7 below.

**Table 7. Hypothesis Test Results (t Test)**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,472	0.507		4,880	0,000

Capital Adequacy	-0.003	0.009	-0.025	-0.377	0.706
Liquidity	0.002	0.005	0.029	0.440	0.660
Credit Risk	-0.436	0.042	-0.684	-10,422	0,000

Source: Processed data, 2024

Based on the results of the hypothesis test analysis (t test) presented in Table 7, it shows the test results of each independent variable on the dependent variable which are described as follows:

- 1) The capital adequacy variable ( $X_1$ ) on profitability shows a significance value of 0.706 which is greater than 0.05 (Sig. = 0.706 > 0.05) indicating that the results of the hypothesis test indicate that  $H_0$  is accepted and  $H_1$  is rejected. Therefore, these results mean that capital adequacy does not have a significant effect on profitability in national commercial banks listed on the Indonesia Stock Exchange for the 2018-2022 period.
- 2) The liquidity variable ( $X_2$ ) on profitability shows a significance value of 0.660 which is greater than 0.05 (Sig. = 0.660 > 0.05) indicating that the results of the hypothesis test indicate that  $H_0$  is accepted and  $H_2$  is rejected. Therefore, these results mean that liquidity does not have a significant effect on profitability in national commercial banks listed on the Indonesia Stock Exchange for the 2018-2022 period.
- 3) The credit risk variable ( $X_3$ ) on profitability shows a significance value of 0.000 which is smaller than 0.05 (Sig. = 0.000 < 0.05), indicating that the results of the hypothesis test indicate that  $H_3$  is accepted and  $H_0$  is rejected. Therefore, these results mean that credit risk has a negative and significant effect on profitability in national commercial banks listed on the Indonesia Stock Exchange for the 2018-2022 period.

#### Coefficient of Determination Test ( $R^2$ )

The coefficient of determination test measures how far the model's ability to explain variations in the dependent variable. In this research, determining the value of the coefficient of determination is expressed as a value Adjusted R Square which is presented in Table 8 below.

**Table 8. Coefficient of Determination Test Results ( $R^2$ )**

Model Summary <sup>b</sup>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.678a	0.459	0.447	1.29139

Source: Processed data, 2024

Based on the analysis results presented in Table 8, the values Adjusted R Square in this study it was 0.447 which means that it was 44.7 percent profitability (Y) is influenced by capital adequacy (X1), liquidity (X2) and credit risk (X3) while the remaining 55.3 percent is influenced by other variables outside the regression model examined in this research.

## **Discussion of Research Results**

### **The Effect of Capital Adequacy on Profitability**

Based on the results of testing the first hypothesis in this research, it can be seen that the significance value of the capital adequacy variable on profitability is 0.706 is greater than 0.05 with a coefficient value of -0.003 then The capital adequacy variable has no significant effect on profitability at national commercial banks listed on the Indonesia Stock Exchange for the 2018-2022 period. These results explain that the first hypothesis (H1) in this study was rejected and the null hypothesis (H0) was accepted. This indicates that if there is an increase or decrease in capital adequacy it will not have an impact on profitability bank. The results of this research are in line with research conducted by Rafinur et al. (2023), Ihsani & Yudiantoro (2022), Yulianah & Seno Aji (2021), Meidawati et al. (2024), Handayani & Yanti (2023), Ken & Santiago (2022), Widyastuti & Aini (2021), and Putri et al. (2022). The results of this research are also supported by Hamidah et al. (2023) who found that capital adequacy had no significant effect on profitability.

Capital adequacy describes the bank's efficiency in managing the bank's risky assets and the bank's ability to fund its operations. Based on Gray's stakeholder theory, Kouhy and Adams (1995) say that a company's survival depends on stakeholder support so that the company's activities are to seek that support. (Mulyanti et al., 2023). At this ratio investors (shareholders) is one part of stakeholders which plays an important role in capital. The capital of a bank does not only come from the owner's capital, but in banks there is capital investment made by investors (shareholders).

Based on the average capital adequacy value for national commercial banks listed on the IDX, it is 26.2859%. This means that these banks on average have high capital, this condition of capital adequacy being too high can be an indicator that there are unused funds (idle funds) which will have an effect on decreasing profits, thereby reducing profitability. (Sofyan, 2019). A high value of capital adequacy that exceeds a predetermined limit indicates that the bank's capital is too large which will cause an increase in cash reserves, thus indicating that there is idle money that is only being held and is not used optimally for allocation. (Wardana & Setiadi, 2023). This indicates that even though the bank has high capital, if it is not balanced with good investment and

distribution of funds, capital adequacy will not affect profitability.(Korri & Baskara, 2019). Based on government regulations through the Financial Services Authority (OJK) which refers to the Bank of International Settlement (BIS), banks are required to maintain a capital adequacy ratio of at least 8% to maintain the bank's soundness level.(Sutrisno, 2023). This provision may also indicate why capital adequacy does not affect profitability(Meidawati et al., 2024), because banks continue to optimize their capital to prepare funds to be used as reserves to meet minimum requirements in accordance with circulars as well as anticipating credit risk.

### **The Effect of Liquidity on Profitability**

Based on the results of testing the second hypothesis in this research, the significance value of the variables can be seen liquidity to profitability of 0.660 is greater than 0.05 with a coefficient value of 0.002 then the liquidity variable does not have a significant effect on profitability at national commercial banks listed on the Indonesia Stock Exchange for the 2018-2022 period. These results explain that the second hypothesis (H<sub>2</sub>) in this study was rejected and the null hypothesis (H<sub>0</sub>) was accepted. This indicates that if there is an increase or decrease in liquidity it will not affect profitability bank. The results of this research are in line with research conducted by Setyaningsih et al. (2023), Tanaya (2023), Wardana & Setiadi (2023), Antari & Baskara (2020), Komariah & Mahatmyo (2023), Astuti et al. (2023), Yulianah & Seno Aji (2021), Parulian & Freeri (2024), Pramana Putra & Rahyuda (2021), Ken & Santiago (2022), Widyastuti & Aini (2021), dan et Putri et al. (2022). The results of this study are also supported by research Meidawati et al. (2024) who found that liquidity had no significant effect on profitability.

Liquidity shows how a bank manages its funds to obtain profitability. The insignificant effect of liquidity value on profitability is due to high liquidity indicating that more funds are needed to finance credit and the amount of credit provided is not supported by good credit quality. This can happen because to increase profitability, what is more important is not the quantity or size of the amount of third party funds disbursed, but what is more important is the quality of the credit disbursed. If the amount of credit disbursed is large but not balanced with smooth credit payments, it will actually burden the company so that it has no effect on increasing profitability (Astuti et al., 2023). Referring to stakeholder theory, stakeholders are groups or individuals who have the ability to influence or be influenced by the activities of an organization, either directly or indirectly.

This condition illustrates that banks are unable to maximize the value of income from funds lent to the public. This can happen because many loans have failed or the level of non-performing loans is increasing. So banks as internal stakeholders will be more

careful in distributing credit. This is due to the potential for uncollectible credit which will increase the risk which will result in high credit interest rates. Credit interest rates that are too high will reduce public demand as external stakeholders for credit (Putri et al., 2022).

This causes banks to also choose to place safer assets such as securities in banks or other financial institutions with low interest risk and diversification of income through fee-based income.(Pramana Putra & Rahyuda, 2021).Another possibility is that banks not only receive income from interest on loans disbursed, but banks also receive other income such as banks that invest in a variety of profitable financial instruments that have the potential to achieve good profitability, even if their liquidity is at the lowest level.(Widyastuti & Aini, 2021).

### **The Effect of Credit Risk on Profitability**

The credit risk calculated in this research is proxied by Gross NPL to determine the effect of credit risk on profitability in terms of non-performing loans which include doubtful, substandard and non-performing loans. Based on the results of testing the third hypothesis in this research, it can be seen that the significance value of the credit risk variable on profitability iso.000 is smaller than 0.05with a coefficient value of -0.436 thenThe credit risk variable has a significant negative effect on profitabilityat national commercial banks listed on the Indonesia Stock Exchange for the 2018-2022 period. These results explain that the null hypothesis (H<sub>0</sub>) in this study was rejected and the third hypothesis (H<sub>3</sub>) was accepted. This indicates that if there is an increase in credit risk, the credit quality will worsen for a bank, which can reduce profitabilitybank. The results of this research are in line with research conducted byKnow et al. (2023),Korri & Baskara (2019),Wardana & Setiadi (2023), Antari & Baskara (2020),Meidawati et al. (2024), Nikmah et al. (2023), Dewi & Badjra (2020), Sofyan (2019) Spaseska et al. (2022),Giri & Purbawangsa (2022),AndWidyastuti & Aini (2021).The results of this research are also supported by research by Anggreningsih & Negara (2021) who found that credit risk had a significant negative effect on profitability.

Based on theorstakeholders,which emphasizes the importance of banks in paying attention to all stakeholders because they will influence each other. In this context,A high credit risk value reflects the bank's inability to actstakeholdersinternally in assessing the borrower's creditworthiness accurately before disbursing credit. This of course causes a high credit risk value if the number of problem loans is greater than the amount of credit granted. In other words, higher credit risk will make credit quality worse, resulting in decreased profitability and will cause losses for the bank.(Dwiningtyas & Yoewono, 2023).

Loans that experience default will cause an increase in the Allowance for Productive Asset Losses (PPAP) or reserves for losses which will reduce loan interest income so that bank profitability will decrease.(Anggreningsih & Negara, 2021). Therefore,

banks must take anticipatory steps to prevent high credit risk values, namely by improving the quality of credit distribution more carefully and thoroughly in the credit analysis stage. Often, to increase credit expansion, banks are negligent in the initial credit analysis stage, so that the credit given is too high and even companies that are not worthy of credit are given it. After distribution, the analyst must ensure that the credit provided is used according to its intended purpose (Korri & Baskara, 2019).

## **CONCLUSION**

Based on the tests that have been carried out and the results of the research analysis that have been described, the following conclusions can be drawn:

- 1) Capital adequacy has an insignificant negative effect on profitability in national commercial banks listed on the IDX for the 2018-2022 period. These results indicate that the level of capital adequacy does not determine the magnitude of its influence on bank profitability.
- 2) Liquidity has a positive and insignificant effect on profitability in national commercial banks listed on the IDX for the 2018-2022 period. These results indicate that the level of bank liquidity does not determine the magnitude of its influence on the level of profitability.
- 3) Credit risk has a significant negative effect on profitability in national commercial banks listed on the IDX for the 2018-2022 period. These results indicate that high credit risk seen from the large number of problematic loans at banks can reduce the level of bank profitability.

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