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The Impact of Financial Performance on the Profitability of the Indonesian Banking during the Covid-19 Pandemic

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Abstract:- This research paper is to determine the effect of capital, liquidity, operational efficiency and bad loans on profitability in banking. For the 2020-2022 period, this research was conducted on banking companies that have the largest number of assets with 4 state banks and 4 private banks listed on the Indonesia Stock Exchange. The sampling technique used in this study was purposive sampling. The samples in this study were 4 state and private banks listed on the Indonesia Stock Exchange from 2020 to 2022. The data analysis method is panel data regression analysis which was processed using the EViews 12 program. The results of this reaserch indicate that it simultaneously influences ROA. the partial results show that CAR has no effect on ROA, LDR has a positive effect on ROA, BOPO has a negative effect on ROA and NPL has no effect on ROA.

Keywords:- *Profitability, Banks, ROA, CAR, LDR, BOPO, NPL.*

I. INTRODUCTION

The global crisis that began in 2020 due to the Covid-19 pandemic has been felt by the whole world. Each country's economy has begun to slow down in various sectors, including the banking sector. The recession of the economy due to the impact of the Covid-19 pandemic has had greatly affected, a huge impact, starting with state-owned and private banks. The Covid-19 pandemic is spreading very quickly, so the government has issued regulations so that people can carry out activities at home to prevent the spread of this virus. A person affected by this virus finds it difficult to breathe until death, so it is possible to break this chain by performing activities at home. Indonesia is among the countries affected by the Covid-19 epidemic, causing a decline in banking and financial activities in Indonesia. The efficiency of banking and financial activities seen from profitability. The banking sector continues to exist, so the impact is not too profound. Below is the evolution of Covid-19 entering Indonesia.

Fig 1. Data on the spread of the Covid-19 in Indonesia

Bank profitability is the ability of a bank to generate a profit using its assets over a period of time. ROA is the comparison between profit after tax and total assets for a period. ROA is used to measure the ability of a bank's management to generate a profit (earnings before tax) from the average total assets of the bank concerned. The higher the ROA, the more profit the bank makes, so the chances of the bank getting into trouble are reduced. Profit before tax is the net profit from business activities before tax. While average total assets are volume of business or assets (Luciana and Winni, 2005).

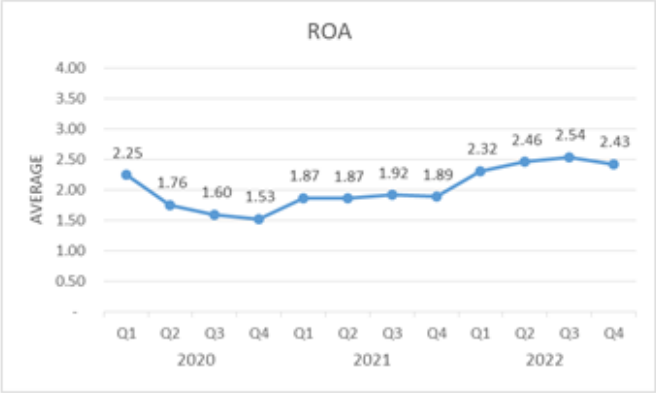

Fig 2. Banking ROA decline data

From Fig 2, it can be seen that ROA decreased when the Covid-19 epidemic began to spread in Indonesia in the first quarter, in some cases it decreased by 0.75% in the fourth quarter. This drop occurred due to the onslaught of Covid-19. all countries reduce each country's economy. This new phenomenon is a problem in every field. Public and private banks conduct operations with a state decree requiring them to conduct business from home. However, after a year of the Covid-19 pandemic, banks need to operate effectively to increase bank revenue. It can be seen that, in the first quarter

of 2021, the growth rate began to increase, although not high, but the banking system is trying to continue to do so.

II. READING REVIEW

There are various literature reviews on bank profitability as well as research on bank performance which is always interesting to discuss.

A. Banking Performance

According to Rose (2002), bank performance is very important as a tool for evaluating bank performance and for determining management plans. Banks play a role in economic growth. So if the bank's performance is good, the overall economy will also be good. Banking performance exemplifies the achievements of banking operations, both in terms of finance, marketing, capital mobilization and distribution, technology and human resources. A bank's financial performance is a description of a bank's financial position over a period of time both in terms of funding and funding channels, typically measured by capital adequacy, liquidity, and financial ratios. profitability of banks (Jumingan, 2011).

B. Return on Asset (ROA)

Return on assets (ROA) is used to measure a company's efficiency in generating profits using its assets. Return on assets is the ratio of net income inversely proportional to total assets to generate a profit. This ratio indicates the net profit a company makes, as measured by the value of that company's assets. Asset return analysis or often translated in Indonesian is economic profit that measures the growth of profitable businesses in the past. This analysis is then projected into the future to see the company's ability to generate profits in the future. According to Simamora (2006) Return on Assets, more precisely "return on assets (ROA) is a measure of a company's overall profitability".

Return on assets (ROA) is a measure of a bank's profitability. Return on Assets Analysis (ROA) or commonly translated in Indonesian is economic profitability that measures a company's ability to generate profits in the past (Hery, 2018). ROA is used to measure a company's ability to generate profits using the total assets (wealth) held by the company (Hanafi & Halim, 2018) The higher the bank's ROA, the more profit. tallest. Many banks build and strengthen their position from assets. The lower the ratio, the less the bank is able to manage assets to increase revenue or reduce costs. According to Prihadi (2008), ROA (return on assets) is a measure of return on assets used to generate this return.

C. Capital Adequacy Ratio (CAR)

Capital adequacy ratio (CAR) is the capital adequacy ratio used to account for the risk of loss a bank may face. The higher the CAR, the better the risk tolerance of any risky credit/asset. If the CAR is high, the bank is able to finance the business and contribute significantly to profitability. Capital adequacy ratio according to Dendawijaya (2009) is "a ratio that indicates the degree to which all bank assets are exposed to risk (credit, participation, securities, claims in other banks) as well as be taken into account". funded by the bank's own fund in addition to raising funds from other sources - sources outside the bank, such as public funds, loans, etc. Valuation based on the amount of equity held by the bank (Kasmir, 2019) One of the valuation methods includes the use of the CAR (Capital Adequacy Ratio) method. According to Sudirman (2013), assets have risk corresponding to the risk scale of assets shown in balance sheet and bank management account. in this case.

Research conducted by Yusriani (2018), Sasin (2019) and Elshaday (2018) shows that CAR has a positive effect on ROA, which means that an increase in CAR will increase ROA on bank profitability. Meanwhile, different results were shown by the research by Gladis (2020), Nadi (2020) and Abu (2022) that CAR has a negative effect on ROA. In contrast to the research results of Astohar (2019), Asima (2017) and Ihsanul (2022) that CAR has no effect on ROA. So it can be concluded that the hypothesis is made as follows:

H1: CAR has a positive effect on ROA during the covid-19.

D. Loan to Deposit Ratio (LDR)

According to Mulyono (2007), the LDR ratio is the ratio between the amount of capital transferred to the public (credit) and the amount of public and equity capital used. This ratio illustrates a bank's ability to repay depositors' withdrawals by relying on loans as a source of liquidity. The higher this ratio, the weaker the liquidity of the bank (Dendawijaya, 2009). Most banking practitioners agree that the bank's LDR safe limit is around 85%. However, the tolerance limit varies from 85% to 100% or according to Kasmir (2012), the safe limit for LDR according to government regulations is up to 110%. Liquidity is the term used to refer to the supply of cash and other assets that can be easily converted to cash. The most commonly used measure of a bank's strength in terms of liquidity is the Loan to Deposit Ratio (LDR). Darmawi (2011).

Research conducted by Yusriani (2018), Asima (2017) and Ihsanul (2022) shows that LDR has a positive effect on ROA, which means that an increase in LDR will increase ROA on bank profitability. Meanwhile, different results were shown by the research by Gladis (2020), Putri (2020) and Ketama (2020) that LDR has a negative effect on ROA. In contrast to the research results of Astohar (2019), Nadi (2020) and Nouran (2019) that LDR has no effect on ROA. So it can be concluded that the hypothesis is made as follows:

H2: LDR has a positive effect on ROA during the covid-19.

E. Operating Costs to Operating Income (BOPO)

The financial dictionary operating expense to operating income (BOPO) ratio is a group of ratios that measure a company's performance and efficiency by comparing them with each other. Income and expense figures differ from the income statement and from the balance sheet figures. The operating expense ratio is a comparison between operating expenses and operating income. The operating expense ratio is used to measure the efficiency and ability of a bank to carry out its business activities. The lower the BOPO, the

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more effectively the bank controls operating costs, and the more profitable it is, the greater the bank's profit. According to Hasibuan (2008), BOPO is formed as a comparison/ratio of operating expenses for the past 12 months with operating profit for the same period. Here are the health metrics.

Research conducted by Astohar (2019), Gladis (2020) and Elshaday (2018) shows that BOPO has a negative effect on ROA, which means that a decrease in BOPO will increase ROA on bank profitability. Meanwhile, the different results shown by the research of Yusriani (2020), Abdu (2018), and Ela (2022) show that CAR has a positive effect on ROA. In contrast to the results of research by Sasin (2019), Asima (2017) and Ketama (2020) that BOPO has no effect on ROA, it can be concluded that the hypothesis is made as follows:

H3: BOPO has a negative effect on ROA during the covid-19.

F. Non Performing Loan (NPL)

Based on Bank Indonesia Regulation No. 5 2003, one of the banking risks is credit risk or commonly known as bad debt (NPL). It is the risk arising from the counterparty's failure to fulfill its obligations. It can also be defined as a loan that has difficulty repaying or is commonly referred to as bad credit in the bank (Slamet, 2006). According to Sudarmanta (2016) Bad debt (NPL) is the credit risk ratio that represents the ratio between the number of bad debts and the total debt. Bad debts are loans that are substandard, problematic, and of poor quality. Bad debt reflects credit risk, the smaller the bad debt, the smaller the credit risk that the bank bears.

Research conducted by Putri (2020), Elshady (2018) and Ni kadek (2021) shows that NPL has a negative effect on ROA, which means that a decrease in NPL will increase ROA on bank profitability. Meanwhile, the research by Yusriani (2020) and Reyhan (2020) shows that the NPL has a positive effect on ROA. In contrast to the results of the research by Gladis (2020), Sasin (2019) and Ketama (2020) that NPL has no effect on ROA. So it can be concluded that the hypothesis is made as follows:

H4: NPL has a negative effect on ROA during the covid-19.

G. Framework

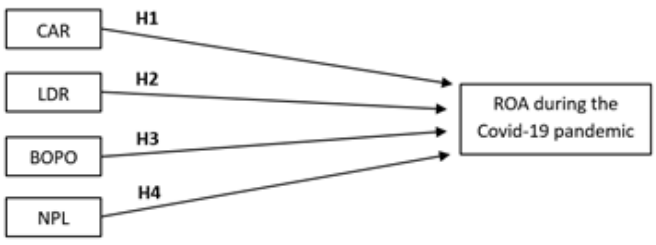

Fig 3Framework

III. STUDY METHODS

This study is descriptive quantitative. The dependent variables in this study are CAR, LDR, BOPO and NPL and the independent variables in this study are ROA. The total of this study includes 4 public banks and 4 private banks that have the largest amount of assets and are listed on the Indonesia Stock Exchange (IDX) and publish quarterly financial statements from January 2020 to December 2022. Sampling method has a purpose of sampling with criteria for banks to issue quarterly reports during the observation period. There are 4 public banks namely BRI, MANDIRI, BNI, BTN and 4 private banks namely BCA, CIMB NIAGA, PANIN and PERMATA.

This study uses the panel data regression method by Eviews 12 software. The panel data regression model includes panel data to determine the impact of one or more predictor variables on the Answer variable. Panel data is a combination of time series data and cross-sectional data. So, according to Gujadari in Ghozali (2016), the panel data regression equation model is as follows:

$$ROA_{it} = \alpha + \beta_1 CAR_{it} + \beta_2 LDR_{it} + \beta_3 BOPO_{it} + \beta_4 NPL_{it} + eit$$

This research was conducted using 4 stages, namely:

- *Descriptive Statistical Analysis*

- *Selection of the best model*

Select the best model between the common effect model, the fixed effect model or the random effect model by performing Chow test, Hausman test and Lagrange multiplier test.

- *Hypothesis Test*

Hypothesis tests are performed in response to the provisional conjectures made. These tests include F-test, t-test, and coefficient of determination.

IV. RESULTS

A. Descriptive Statistical Analysis

Table 1. Descriptive Statistics

	ROA	CAR	LDR	BOPO	NPL
Mean	2.0357	22.796	82.925	75.845	0.9030
Maximum	3.9700	35.680	114.22	93.520	2.4000
Minimum	0.5400	16.070	60.540	46.540	0.2600
Std. Dev.	0.9487	5.0912	9.8797	11.217	0.4719
Observ	96	96	96	96	96

Source: Eviews 12 Output

The statistical results described in Table 1 show that the average value of bank ROA is 2.03%. This value is still good in a portfolio that yields between a maximum value of 3.97% and a minimum value of 0.54% with a standard deviation of 0.9487. The mean value of the bank CAR is 22.79%

indicating it is still in good shape with a maximum value of 35.68% and a minimum value of 16.07% and a standard deviation value of 5, 0912. The mean value of the bank LDR is 82.92% indicating it is still in good shape with the maximum value of 114.22% and the minimum value of 60.54% and a standard deviation of 9. 8797. The mean value of the bank BOPO is 75.84% indicating it is still in good standing with a maximum value of 93.52% and a minimum value of 46.54% and a standard deviation of 11,217. A mean bank PNP value of 0.90% indicates it is still in good shape with a maximum value of 2.40% and a minimum value of 0.26% and a standard deviation value of 0.4719 .

B. Model Selection Test

Select the best model to use in panel regression using Chow test, Hausman test and Lagrange multiplier test. The test results are as follows:

Table 2. Chow Test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	29.336619	(7,84)	0.0000
Cross-section Chi-square	118.736844	7	0.0000

Source: Eviews 12 Output

In Table 2, the chow test seen from the probability results of the chi squared fraction shows a probability value of 0.0000 0.05 indicating that the best model is a random effects model. Then proceed to check the Lagrange multiplier.

Table 3. Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	5.467501	4	0.2426

Source: Eviews 12 Output

In Table 3, the Hausman test from the random cross-probability results shows that 0.2426 > 0.05 shows that the best model is the random effects model. Then proceed to check the Lagrange multiplier.

Table 4. LM Test

	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	138.1205	2.137451	140.2579
	(0.0000)	(0.1437)	(0.0000)

Source: Eviews 12 Output

In Table 4, the Lagrange coefficient test can be seen from the Breusch-pagan value of 0.0000 < 0.05, so the model is chosen as the random effects model. From the three model selection trials, it can be concluded that the best model to use in this study is the random effects model.

C. Hypothesis Testing

Hypothesis testing is performed partially and concurrently. By testing the hypothesis, it is possible to determine the influence between the variables. The coefficient of determination can see if the variables in this study have an effect on profitability. Here is the result of the data processing:

Table 5. Hypothesis Testing

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.4644	0.5298	10.312	0.0000
CAR	-0.0058	0.0087	-0.6646	0.5080
LDR	0.0200	0.0041	4.7825	0.0000
BOPO	-0.0644	0.0034	-18.788	0.0000
NPL	-0.0786	0.0844	-0.9320	0.3538
F-statistic	111.869	R-squared		0.831005
Prob(F-stat)	0.00000	Adjusted R-squared		0.823576

Source: Eviews 12 Output

Based on the summary of the test results by entering into the regression model are as follows:

ROA = 5.4644 + Ci – 0.0058 CAR + 0.0200 LDR – 0.0644 BOPO – 0.0786 NPL + e

The F-statistical test was used to prove the hypothesis about the influence of the independent variables (CAR, LDR, BOPO and NPL) on the dependent variable Profitability (ROA). The above F-test results show that the Prob(F-stat) value shows the value 0.000 <0.05, so it can be concluded that the variables CAR, LDR, BOPO and NPL simultaneously affect profitability (ROA).

The coefficient of determination (R2) was used to measure the percentage significance between the independent and dependent variables. The test results show that the R-squared Adj is 0.823576, which means that the variables Capital Adequacy Ratio, Loan to Deposit Ratio, BOPO and Non Performing Loan contribute 82.36% to Return On Asset, while 17.64% are still affected by other factors. in addition to the tested variables.

Partial test (regression coefficient) also known as t-test, involves checking the significance of each constant and independent variable included in the above equation if they affect the dependent variable. Based on the test results, the following results were obtained:

- In Covid-19, the impact of CAR on ROA was negative, with a coefficient value of -0.0058 and probability of 0.5080 > 0.05. It may be said that during the Covid-19 outbreak in Indonesia, the Capital Adequacy Ratio had little impact on ROA.
- A positive coefficient value of 0.0200 and a probability value of 0.0000 0.05 were found for the impact of LDR on ROA during Covid-19. It can be said that during the Covid-19 outbreak in Indonesia, the Loan to Deposit Ratio had a favourable impact on ROA.

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- The impact of BOPO on ROA during COVID-19 was negative, as indicated by the coefficient value of -0.0644 and probability value of 0.0000 0.05. It may be said that during the Covid-19 outbreak in Indonesia, BOPO had a detrimental impact on ROA.
- The impact of NPL on ROA during Covid-19 was negatively correlated with a likelihood value of 0.3538 > 0.05 and a coefficient value of -0.0786. It may be said that during the Covid-19 outbreak in Indonesia, non-performing loans had no impact on ROA.

V. DISCUSSION

➢ *Effect of CAR on ROA*

It is said that CAR has no effect on ROA, so hypothesis 1 is rejected. The higher the CAR, the better the risk tolerance of any risky credit/assets. A high CAR can finance operations and contribute commensurately to profitability. The Covid-19 epidemic hit Indonesia, causing the CAR of the banking system to decrease, so the capital for professional activities was not large. The impact of Covid-19 caused investors to hold money to invest due to the decrease in investor confidence due to Covid-19. This is in line with the research results of Astohar (2019), Asima (2017) and Ihsanul (2022) that CAR has no effect on ROA.

➢ *The effect of LDR on ROA*

LDR is stated to have a positive effect on ROA, so Hypothesis 2 is accepted. The increasing LDR value will affect the increase in ROA. During the Covid-19 pandemic, banks tried to keep the LDR value stable. Because in the midst of a declining economy, many customers use their money for health needs and customers withdraw funds for their economy. Liquid banking must be able to provide funds to be taken by its customers so that distribution to third parties and the availability of funds to be taken by customers must be maintained so that the level of banking liquidity is maintained. The more liquid the banking, the higher the level of trust from customers. This is in line with research conducted by Yusriani (2018), Asima (2017) and Ihsanul (2022) showing that LDR has a positive effect on ROA.

➢ *Effect of BOPO on ROA*

BOPO is stated to have a negative effect on ROA, so Hypothesis 3 is accepted. During the Covid-19 pandemic, banking tried to continue to increase operational efficiency due to limited banking operational activities which made it difficult for banks to extend credit. Lower operational activities will increase banking ROA. Government regulations as regulators that prohibit work activities in offices have hampered banking operational activities. Utilization of costs from operational activities has a good impact on increasing ROA. This is in line with research conducted by Astohar (2019), Gladis (2020) and Elshaday (2018) showing that BOPO has a negative effect on ROA

➢ *Effect of NPL on ROA*

Non-performing loans are assumed to have no effect on ROA, so hypothesis 4 is rejected. A high credit allocation leads to a high risk of default. The Covid-19 pandemic has caused the Indonesian economy to shrink This had an impact on the bank since shutdown-related government restrictions that demanded operations be carried out at home made production and trade activities challenging and problematic prevented creditors from making payments. trouble making payments. The government as a regulator issues regulations so that banks provide relief to creditors to postpone the installment payment period so that banking NPLs do not rise high. This is in line with the results of the research by Gladis (2020), Sasin (2019) and Ketama (2020) that NPL has no effect on ROA

VI. CONCLUSION

The objective of this study was to examine the impact of the Covid-19 pandemic on Indonesia, which has reduced the profits of public and private banks. The selected banks are the 4 banks that have the largest number of assets. The LDR and BOPO variables had an effect on ROA during the Covid-19 pandemic but on the other hand the CAR and NPL variables had no effect on ROA. Banks must be able to maintain ROA ratios so that the level of investor confidence can grow. With so many investors, the operational activities and distribution of bank credit funds will be even greater because one of the sources of bank income is through credit interest. There are still limited variables in this study, for that further researchers can add other variables to produce more accurate research. The number of companies and periods has also been added to make the results more accurate.

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