



The Performance of Regional Development Banks during Covid-19 Pandemic

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Abstract

This study aims to determine and analyze the performance of BPD during the 2020 Covid-19 pandemic in Indonesia. The variables used are return on assets, operating expenses and operating income, gross non-performing loans, net interest margin, and loan to deposit ratio. The method used in this research is panel data regression analysis using E-Views 9.0 software. The data used is panel data consisting of cross data of 27 Regional Development Banks in Indonesia and time series data from the I-IV quarter of 2020. The results show that during the Covid-19 pandemic in 2020 BOPO has a significant negative effect on ROA, NPL Gross. has no effect on ROA, NIM and LDR has a significant positive effect on ROA.

Keywords: *Performance of Banking, ROA, BOPO, NPL GROSS, NIM, LDR*

Abstrak

Penelitian ini bertujuan untuk mengetahui dan menganalisis kinerja BPD selama pandemi Covid-19 tahun 2020 di Indonesia. Variabel yang digunakan yaitu *return on assets*, beban operasional dan pendapatan operasional, *non performing loan gross*, *net interest margin*, dan *loan to deposit ratio*. Metode yang digunakan dalam penelitian adalah analisis regresi data panel menggunakan software *E-Views 9.0*. Data yang digunakan adalah data panel yang terdiri dari data silang sebanyak 27 Bank Pembangunan Daerah di Indonesia dan data runtut waktu dari kuartal I-IV tahun 2020. Hasil penelitian menunjukkan bahwa selama pandemi Covid-19 tahun 2020 BOPO berpengaruh negatif signifikan terhadap ROA, NPL *Gross* tidak berpengaruh terhadap ROA, NIM dan LDR berpengaruh positif signifikan terhadap ROA.

Kata Kunci: *Kinerja Perbankan, ROA, BOPO, NPL GROSS, NIM, LDR*

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INTRODUCTION

Global conditions are being confronted by several obstacles, one of which is the Covid-19 pandemic. Coronavirus Disease 2019 is a relatively new type of disease not previously identified in humans, and the coronavirus causes its existence. This disease is a disease with the transmission that tends to be fast and initially appeared in Wuhan City, Hubei Province, China, and was reported on December 31, 2019.

The World Health Organization (WHO) made an official statement that on March 11, 2020, Covid-19 was declared a pandemic. The Covid-19 pandemic has been the outbreak of a contagious disease that is the top tier for a global health emergency and indicates that the outbreak continues to spread and impact many regions around the world. Joko Widodo, as the President of the Republic of Indonesia, said that Covid-19 at the beginning of its appearance had an immediate impact on the economy, social and financial sectors. Please note that on March 2, 2020, the Covid-19 case was first confirmed in Indonesia.

On April 9, 2020, this pandemic spread to various provinces in Indonesia, including DKI Jakarta, Central Java, and East Java, which are the provinces most exposed to Covid-19 in Indonesia. Figure 1 is data on Covid-19 cases related to new case confirmations and total cases at the end of the month, taken at the beginning of Covid-19 appearing in Indonesia, namely March 2020.

Based on Figure 1. it can be concluded that the Covid-19 cases in Indonesia from time to time are increasing in number. The number of confirmed Covid-19 cases at the end of March 2020 had reached 114 new cases, and the total

cases in that month were around 1,528 cases. They were followed in September 2020, right in the third quarter of 2020, the number of new cases was 4,284 with a total of 287,008 cases. Thus, the largest number of increases between March and September and the most devastating spike in cases was from August to September 2020 with 112,212 cases.

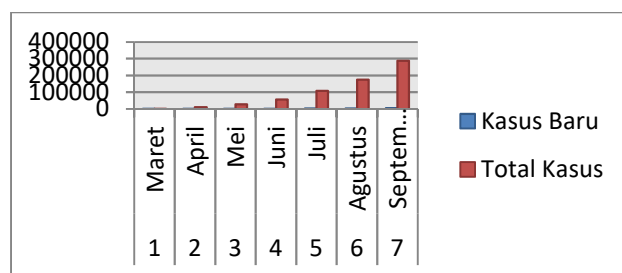


Figure 1. New Cases and Total Covid-19 Cases in Indonesia

Source: JHU CSSE COVID-19 data, 2020

The emergence of Covid-19 in Indonesia has had an impact on several sectors, one of which is the economic sector. The paralysis of an economic activity in a country will result in slowing economic growth, weak economic activity is also caused by the application of physical distancing carried out to prevent the Covid-19 disease. Economic growth is known to have declined sharply due to the pandemic in the second quarter of 2020 (Herlina, 2020).

Various kinds of financial institutions, especially banks, fully contribute to the country's activities in terms of the economy. However, the Covid-19 pandemic in Indonesia impacted the banking sector. The banking sector was chosen to be examined because of non-current financing caused by delinquent debtors. Too many people had difficulty making financing payments due to losing a job. Many banks are facing unsustainable

credit payments by customers because people lose their jobs during a pandemic, and this affects the installment payment process from loans owned by the community so that it can affect bank income (Handayani, Ananto, & Ferdawati, 2020).

According to Aminah (2020), economic capacity has decreased due to reduced income due to scarcity of consumers, the PSBB policy which results in the closure of businesses, and layoffs, so that Covid-19 reduces one's economy. Unforeseen conditions that may occur require the role of banks in providing funds (Kholisudin, 2012). A bank is a financial institution with a role as a financial intermediary between the party who owns the funds and those who need funds and functions to facilitate payment activities.

The banking industry is regulated by regulations that measure banking performance (Karsinah & Cahya, 2014). The progress of banks in a country can illustrate the progress of the country with a note that the more developed a country is, the greater the role of banks in controlling a country so that banks can be considered as one of the important components in the process of creating a country's economy.

This research has the object of research, namely the Regional Development Bank (BPD), registered with the OJK. The reason for choosing BPD as an object of research is that as a bank that plays a role in the economic development of a region, in 2019, BPD can compete with various types of banks in Indonesia with evidence that there are 9 BPD in the best bank category in 2019 and the period 2016 to 2016. 2019 BPD has 5,622,275 billion rupiahs in 2016, with the highest assets in 2019

amounting to 112,250,729 billion rupiahs, so that BPD is considered to be more advanced and strengthen its reputation in front of the community (Octafilia, et al, 2020).

Whereas in 2020, it was known that Covid-19 was occurring in the world, especially in Indonesia, which caused problems in placing funds in the form of regional cash related to provincial and local governments, in this case, the Secretary-General of the BPD Association stated that regional cash funds for BPD were disrupted due to the need for funds in handling Covid-19 is badly needed in large numbers. In addition, BPD opened service networks in regions that were generally difficult to reach by private banks.

In each region, BPD was not inferior to other commercial banks, with customers not only civil servants but also the general public. According to Sutanto (2015), BPD is a financial institution that plays a role in improving a region's economy by supporting development financing in an area. BPD, as a bank that is a commercial bank like other commercial banks, in terms of implementing its role as an agent of development or an intermediary function in the economy, consciously must do it efficiently to compete with other commercial banks and still be able to contribute maximum returns, especially to shareholders.

Most of the share ownership is only owned by the region concerned, Bank Jateng. Its share ownership is Central Java Province, but several banks share ownership join one region to another. It can be seen from the number of BPD in Indonesia that are 27 banks, while provinces in Indonesia are 34 provinces. As an example of a bank that has joint shares between regions or provinces, namely Bank BJB with ownership by

the Provincial Governments of West Java and Banten.

As stated in Law Number 13 of 1962 concerning the principles of Regional Development Bank provisions that as a regional financial stakeholder, BPD has the authority as a driving force and economic developer of a region to improve the standard of living of the community, providing facilities for financing regional development finances respectively, collect funds and implement and store regional cash in this case as the holder of regional cash and carry out other banking business activities (Lisdayanti, Daniel & Anindita, 2013).

Banks are required to have good performance as intermediary institutions. A bank with good performance will find it easier to gain trust from several customers (agent of trust), aiming to smoothen and support the business activities. The smooth running of activities in banking will be very helpful to increase the value or standards of the company. Performance can be the result achieved by a company to improve the economy to maximize economic welfare (Sukarno & Syaichu, 2006). One way to analyze a bank's performance based on its financial statements is to calculate its financial ratios (Lupa et al, 2016). According to Agustin (2020), performance appraisal requires an analysis of audited financial statements.

Assessment of banking performance cannot be separated from a bank's financial performance, which can be measured using various financial ratios. The financial ratios used as variables to evaluate banking performance in this study include Return on Assets (ROA); Operating Expenses and Operating Income (BOPO); Non-Performing Loan Gross (NPL Gross); Net Interest Margin (NIM); and Loan Deposit Ratio (LDR). Good bank performance is

one of the obligations to play a role in the country's economy.

Creating the best banking performance requires an assessment by looking at and analyzing financial ratios in banking. One of the important financial ratios in banking performance is ROA. According to Murdiati & Purwanto (2014), ROA is related to profit before tax to average business volume. ROA is used to see the effectiveness of a bank in managing its wealth to generate profits (Hermawan & Mafulah, 2014). One of the conventional financial performance measures is ROA (Sudiyatno & Suharmanto, 2011). The comparison between assets and profits is ROA (Safitri, 2013).

Based on the scope of the objectives to be achieved, financial ratios are divided into several, one of which is the ROA as a profitability ratio which is an aspect of evaluating banking performance (Amanah, 2020). ROA describes the company's financial performance related to creating net income and assets. Figure 2 is the ROA data for 27 BPD in the I-IV quarter of 2020. Based on Figure 2, it can be explained that the ROA value at 27 BPD in 2020 varies from the average calculation. There were 24 BPD with ROA in very healthy, two healthy, and one unhealthy.

Banking performance can be assessed from several indicators, one of which is the bank's financial report concerning the bank's financial performance results. According to Subkhan & Citraningrum (2010), in improving a company's performance, an assessment is needed. Ratio finance is part of the financial analysis of the most frequently used and as estimates related to the financial statements to interpret the financial condition and results of a bank's operations. One of the factors in assessing bank

performance is Operational Costs and Operating Income (BOPO), which is related to operating efficiency and refers to the level of expenditure for bank operational needs. A bank's efficiency can be seen through BOPO (Sugiarto, 2012). According to Candra & Yulianto (2015), the smaller the BOPO, the more efficient the operational costs are, and the condition of the bank has very few problems. Figure 3 is data on BOPO 27 BPD Indonesia in the I-IV quarter of 2020.

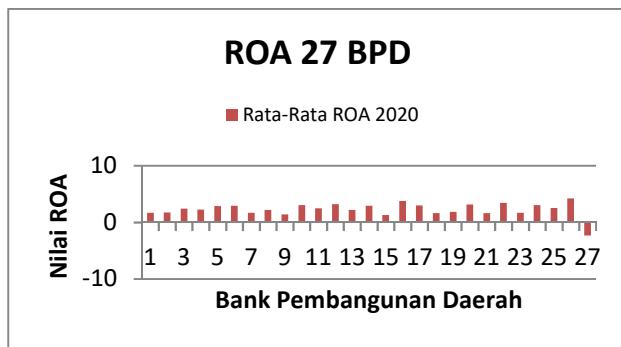


Figure 2. The Average Value of BPD ROA in Indonesia in 2020
 Source: BPD Indonesia Quarterly Report, 2020 (processed data)

Based on Figure 3, it can be explained that from the average calculation, the value of BOPO at 27 BPD in 2020 varies. There are 26 BPD with BOPO value in a very healthy category and one unhealthy. In addition to the BOPO ratio as a component of operating efficiency that can assess bank performance, NPL Gross as credit risk is also an assessment factor.

According to the Dictionary of Bank Indonesia, NPLs are non-performing loans containing clarified credit, doubtful and substandard or even non-performing. According to Amirillah (2014), in a nutshell, credit quality can be measured by the number of non-

performing or non-performing loans. Credit risk is a risk banks encounter related to a large amount of credit given to customers. If the amount of credit extended is greater, the credit risk obtained will also be even greater (Purwoko & Sudiyatno, 2013).

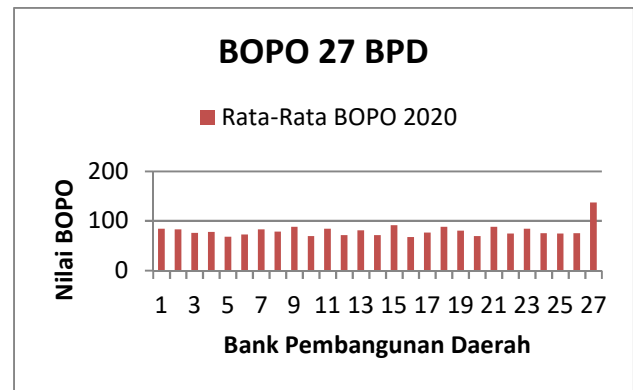


Figure 3. The Average Value of BOPO BPD in Indonesia in 2020
 Source: BPD Indonesia Quarterly Report, 2020 (processed data)

The financial report has two types of NPL, namely NPL Gross and NPL Net, where NPL Gross is more concerned because this type of NPL is a ratio which in its implementation compares the number of loans with a bad, substandard or doubtful status combined with the total credit extended by the related bank. The bank's NPL ratio needs to be known so that the public and BI can think of the right steps to address the bank (Riyadi, Iqbal, & Lauren, 2014). Figure 4 is the gross NPL data for 27 BPD Indonesia in the I-IV quarter of 2020.

Based on Figure 4, it can be explained that the NPL Gross value at 27 BPDs in 2020 varies from the average calculation. 11 BPDs with gross NPL values in the very healthy category, 13 healthy, two quite healthy, and one less healthy. In general, every institution or company requires

maximum performance for results and is supported in the management process.

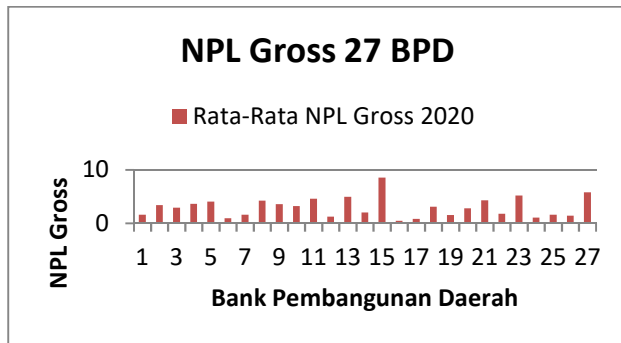


Figure 4. The Average Value of BPD Gross NPL in Indonesia in 2020

Source: BPD Indonesia Quarterly Report, 2020 (processed data)

The factors that support banking performance include seeing it in terms of market risk. As for the Net Interest Margin (NIM) as a measure of market risk, it is none other than one of the ratios needed with the aim of assessing a bank management's ability to manage its productive assets to obtain income related to net interest, in this case, net interest income is obtained based on an opinion interest minus interest expense.

Financial ratio shows the ability of a bank to obtain operating income from funds positioned in the form of credit or loans. According to Mahardian (2008), the higher the NIM value, the more effective the bank is in placing its productive assets in credit. Increasing the NIM value can be achieved by reducing the cost of funds, where this fee is the interest cost paid by the bank to each source of funds at the bank concerned. Figure 5 is the NIM data for 27 BPD Indonesia in the I-IV quarter of 2020

Based on Figure 5, it can be explained that the NIM value at 27 BPD in 2020 varies from the average calculation. 24 BPD with NIM scores in

the very healthy category, two less healthy, and one unhealthy. Another component of several bank performance assessment factors is the Loan to Deposit Ratio (LDR) ratio related to liquidity.

According to Ervani (2010), in meeting maturing obligations, liquidity is required as ownership of sufficient sources of funds. If the company's liquidity increases, the company will have no difficulty completing its obligations and paying them on time. The higher the liquidity, the better the position of a company is in the eyes of creditors.

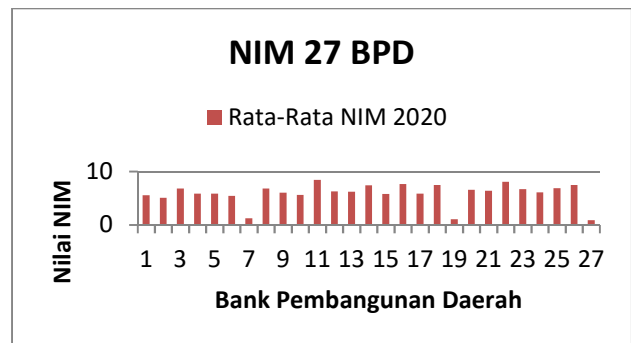


Figure 5. Average NIM BPD Value in Indonesia in 2020

Source: BPD Indonesia Quarterly Report, 2020 (processed data)

LDR is one of the ratios related to liquidity risk, namely the ratio between the total volume of credit extended by banks to customers and the number of funds obtained from various sources. Figure 6 is the LDR data for 27 BPD Indonesia in the I-IV quarter of 2020

Based on Figure 6, it can be explained that the LDR value at 27 BPD in 2020 varies from the average calculation. There were 6 BPD with LDR values in the very healthy category, ten healthy, ten quite healthy, and one less healthy. Based on financial ratio data, it is known that the average value of ROA, BOPO, NPL Gross, NIM, and LDR

at 27 BPD during the Covid-19 pandemic in 2020 is quite varied.

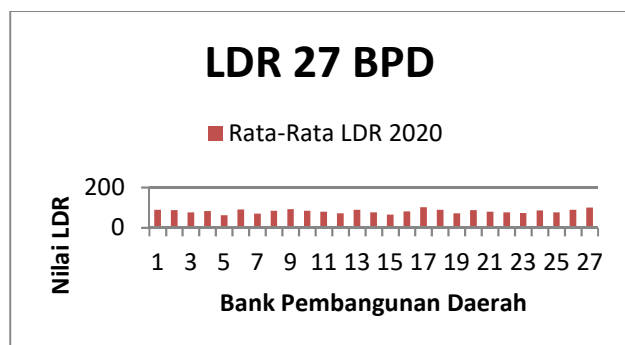


Figure 6. Average LDR BPD Value in Indonesia in 2020

Source: BPD Indonesia Quarterly Report, 2020 (processed data)

Regional cash funds that should have been allocated to BPD were reduced due to the handling of Covid-19. Therefore, the authors want to know and analyze the performance of BPD before and during the Covid-19 pandemic in Indonesia through how big the role of BOPO, NPL Gross, NIM, and LDR financial ratios on ROA as a measure of bank performance..

RESEARCH METHODS

This research was conducted based on a quantitative study using secondary data. The research data were obtained through published quarterly financial reports from each of the 27 Regional Development Banks in Indonesia and other documents from several sources. The data used is the funding panel, which is a combination of data from the data cross (cross-section) and time series data (time-series).

The data in the study came from several sources, namely: ROA, BOPO, NPL Gross , NIM, and LDR data obtained from the official website quarterly publication reports of each of the 27

BPDs. Covid case data in Indonesia was obtained from the JHU CSSE Covid-19.

The formulation of the model used to determine and analyze the performance of Regional Development Banks during the Covid-19 pandemic in Indonesia in 2020 through the BOPO, NPL Gross, NIM, LDR variables against ROA as a measure of banking performance can be written as follow :

$$ROA_{it} = \beta_0 + \beta_1 BOPO_{it} + \beta_2 NPL\ Gross_{it} + \beta_3 NIM_{it} + \beta_4 LDR_{it} + e_{it} \dots\dots\dots(1)$$

Information:

- ROA = Return on Assets
- BOPO = Operating Expenses Operating Income
- NPL Gross = Gross Non Performing Loan
- NIM = Net Interest Margin
- LDR = Loan to Deposit Ratio
- β = Regression Coefficient
- i = 27 BPD Indonesia
- t = Quarter I-IV Year 2020
- e = error

The number of observations in the study consisted of cross data from 27 Indonesian Regional Development Banks and time series data for the first-fourth quarter of 2020. The selection of 2020 as the research year was to determine and analyze the performance of Regional Development Banks during the Covid-19 pandemic in Indonesia.

RESULTS AND DISCUSSION

This research has three approaches, namely Common Effect, Fixed Effect, and Random Effect. Determination of the best approach model is carried out in the stage of

selecting the estimation method using the Chow test, Hausman test, and Lagrange Multiplier test.

After the best model has been found, the next step is to test the classical assumptions in order to produce a parameter estimate value that is in accordance with the actual value so that the parameter value has the characteristics of being unbiased, consistent, and also efficient or BLUE (best, linear, unbiased estimator).

The classical assumption test consists of normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. Next is to perform statistical tests to analyze the suitability of the regression models

obtained. The statistical test consists of the coefficient of determination or R-squared, the F test, and the t test.

There are three panel data estimation models in this study, namely the common effect model, the fixed effect model, and the random effect model. The research that the author is doing is knowing and analyzing the performance of Regional Development Banks during the Covid-19 pandemic in Indonesia in 2020 through the BOPO, NPL Gross, NIM, LDR variables on ROA as a measure of banking performance. Table 1 are the results of the three panel data estimation models that have been carried out :

Table 1. Panel Data Estimation Results for 2020

No	Variable	Model		
		CEM	FEM	REM
1.	Constant	6,907180*** (0,0000)	6,197806*** (0,0000)	6,887892*** (0,0000)
2.	BOPO	-0,069489*** (0,0000)	-0,078372*** (0,0000)	-0,075024*** (0,0000)
3.	NPL Gross	-0,095331*** (0,0005)	-0,033047 (0,5473)	-0,060277* (0,0885)
4.	NIM	0,134676*** (0,0000)	0,320261** (0,0103)	0,133549*** (0,0008)
5.	LDR	0,005438 (0,1745)	0,007204* (0,0742)	0,009919*** (0,0022)
6.	R ₂	0,912687	0,986145	0,804343
7.	Adj R ₂	0,909296	0,980747	0,796745
8.	Std. Error	0,364953	0,168139	0,168085
9.	F-Statistics	269,1645	182,6893	105,8581
10.	Prob (F-Statistics)	0,000000***	0,000000***	0,000000***

Information : * Significant at $\alpha = 10\%$; ** Significant at $\alpha = 5\%$; *** Significant at $\alpha = 1\%$

Source: Output Results for E-Views 9.0, 2021

There are several ways in choosing a model, namely in the first stage, doing the Chow Test, which is choosing the best model between the common effect model and the fixed effect model. The second stage is to conduct the Hausman Test, which is to choose the best

model between the random fixed effect and the fixed effect model. If the best model is not found from the two tests, then it is mandatory to carry out the third stage, namely the LM test, which chooses the best model between the random effect model and the common effect model.

Table 2. Likelihood Ratio Test

Redundant Fixed Effects Tests			
Equation: FEM			
Test cross-section fixed effects			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	15.702306	(26,77)	0.0000
Cross-section Chi-square	198.814964	26	0.0000

Significance $\alpha = 5\%$

Source : Results Output E-Views 9.0, 2021

In table 2. it is known that the value of the cross-section F is 15.702306 with a probability of 0.0000 and is significant for $\alpha = 5\%$. This value explains that H_0 is rejected and H_1 is accepted, so it can be concluded that the best model chosen is the fixed effect model on the grounds that the probability value of cross-section F is $0.0000 < 0.05$.

In table 3. it is known that the random cross-section value is 3.934291 with a probability of 0.4150 and it is not significant to $\alpha = 5\%$. This value explains that H_0 is accepted and H_1 is rejected, so it can be concluded that the best model chosen is the random effect model on the grounds that the random cross-section probability value is $0.4150 > 0.05$.

Table 3. Test Correlated Random Effect-Hausman Test in 2020

Correlated Random Effects - Hausman Test			
Equation: REM			
Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	3.934291	4	0.4150

Significance $\alpha = 5\%$

Source : Results Output E-Views 9.0, 2021

In table 4, it is known that the Breusch Pagan cross-section value is 95.93998 with a p value of 0.0000 and significant for $\alpha = 5\%$. This value explains that H_0 is rejected and H_1 is accepted, so it can be concluded that the best model chosen is the random effect model on the grounds that the p value is $0.0000 < 0.05$. The LM test was carried out on the 2020 data because the two tests carried out did not get the best model yet.

Based on the model selection test that has been carried out, for decision making the best model in estimating the effect of BOPO, NPL Gross, NIM, and LDR on ROA in 2020 uses a random effect model. The best model that has been generated from the 2020 data processing carried out is the random effect model (REM). Based on the estimation results in table 1. it can be determined if the regression model for the best REM model is as follows :

$$ROA_{it} = 6.887892 + -0.075024BOPO_{it} + -0.060277NPL\ Gross_{it} + 0.133549NIM_{it} + 0.009919LDR_{it} + e_{it} \dots \dots \dots (2)$$

Table 4. Lagrange Multiplier Test

Lagrange Multiplier Tests for Random Effects			
Null hypotheses: No effects			
Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided			
(all others) alternatives			
Test Hypothesis	Cross-section	Time	Both
Breusch-Pagan	95.93998 (0.0000)	1.059101 (0.3034)	96.99908 (0.0000)

Significance $\alpha = 5\%$

Source: Results Output E-Views 9.0, 2021

Statistical tests performed is the determination coefficient R^2 , f test, and t test. The results of the 2020 data regression output in table 2 shows the R^2 value of 0.804343 in the random effect model, it means that variations in the dependent variable ROA can be explained by variations in the independent variables, namely the ratio of BOPO, NPL Gross, NIM, LDR together by 80%. While the remaining 20% can be explained by other variables outside the model. Based on the output results in table 2 in 2020 for the random effect

model, it is obtained that F count is 105.8581 using $\alpha = 5\%$.

Calculation of degree of freedom for numerator (dfn) = 4 ($k-1 = 5-1$) and degree of freedom for denominator (dfk) = 103 ($nk = 108-5$), the F table is obtained worth 2.46. This means that F count > F table (105.8581 > 2.46) and the probability (F statistic) is significant at $\alpha = 5\%$. That the BOPO, NPL Gross, NIM, and LDR together have an effect on ROA in 27 Indonesian Regional Development Banks in 2020.

Table 5. Statistical Test Results for 2020

Variable	t Static	Probability	t table	Conclusion
BOPO	-14,29427	0,0000	1,983264	Significant
NPL Gross	-1,719670	0,0885	1,983264	Not Significant
NIM	3,436881	0,0008	1,983264	Significant
LDR	3,135086	0,0022	1,983264	Significant

Signification $\alpha = 5\%$

Source: Output Results for E-Views 9.0, 2021

The test results show that the value of t count > t table (-14.29427 > 1.983264), so it can be concluded that H_0 is rejected and H_1 is accepted. The t-test results state that BOPO has a negative and significant effect on ROA of 27 BPD in Indonesia in 2020. It follows the alternative hypothesis that has been written.

The test results show that the value of t count < t table (-1.719670 < 1.983264), so it can be concluded that H_0 is accepted and H_1 is rejected. The t-test results state that NPL Gross has no effect on ROA of 27 BPD in Indonesia in 2020 because the resulting p-value is not significant, so it is not following the alternative hypothesis that has been written.

The test results show that the value of t count > t table (3.436881 > 1.983264), so it can be concluded that H_0 is rejected and H_1 is

accepted. The t-test results state that NIM has a positive and significant effect on ROA of 27 BPD in Indonesia in 2020. It follows the alternative hypothesis that has been written.

The test results show that the value of t count > t table (3.135086 > 1.983264), so it can be concluded that H_0 is rejected and H_1 is accepted. The t-test results state that the LDR has a positive and significant effect on ROA of 27 BPD in Indonesia in 2020. It follows the alternative hypothesis that has been written.

Based on the data analysis that has been done, it can be explained the influence of several variables in the study explained as follows: Based on the results of the 2020 estimate, it is obtained if the effect of BOPO on ROA is negative and significant at the 5% real level. The coefficient value obtained is -0.075024. This means that

OEOI affects ROA with the conclusion that if BOPO increases by 1%, it will reduce ROA by 0.07%, assuming *ceteris paribus*. Based on the analysis results, H_0 is rejected, and H_1 is accepted.

The study results are in line with Wibowo & Syaichu (2013) that when a high BOPO value decreases the ROA value as a measure of the level of profitability, BOPO has a significant negative effect on ROA. This shows that if the level of bank fees is greater, the profit generated by a bank will be smaller. The high bank operational costs are borne by the income obtained from the allocation of financing and are generally held as dependents of a bank.

If there is an increase in operating costs but not accompanied by an increase in operating income, it will impact a decrease in the level of ROA. Based on the estimation results for 2020, it is obtained that NPL Gross has no effect on ROA at the fundamental level of 5%. The coefficient value obtained is -0.060277. This means that the NPL Gross has not fully influenced the ROA of 27 BPDs in Indonesia. H_0 is accepted, and H_1 is rejected based on the analysis results.

The study results align with Saputra, Arfan, & Saputra Mulia (2018) that NPL Gross does not have a significant effect on ROA because there is high bad credit, which causes banks not to want to channel their credit. After all, banks are required to provide reserves for large amounts of non-performing financing so that banks are more willing. Not in lending. Based on the results of the 2020 estimate, it is obtained if the effect of NIM on ROA is positive and significant. The coefficient value obtained is 0.133549.

If NIM increases by 1%, it will increase ROA by 0.13%, assuming *ceteris paribus*. Based

on the analysis results, H_0 is rejected, and H_1 is accepted. The study results are in line with Pinasti & Mustikawati (2018), that NIM has a positive and significant effect on ROA, where the NIM ratio describes market risk caused by movements in market variables that are detrimental to banks.

In banking terms, NIM is said to be the difference between the number of funding interest costs and the number of loan interest costs so that the large NIM value will affect the profit and loss of the bank and the performance of the bank. The difference between the total interest cost for lending and the number of interest costs paid to depositors creates net interest income.

The greater the NIM ratio, will increase the net interest income and contributed to the bank's earnings, in this case, the ROA ratio. Based on the results of the 2020 estimate, it is obtained if the effect of LDR on ROA is positive and significant. The coefficient value obtained is 0.009919. This means that LDR affects ROA with the conclusion that if LDR increases by 1%, it will increase ROA by 0.01%, assuming *ceteris paribus*. Based on the analysis results, H_0 is rejected, and H_1 is accepted.

The results of the study are in line with Dewi (2017) that LDR has a positive and significant effect on ROA, where the LDR ratio can carry out banking activities by channelling third party funds to credit and shows that the level of bank liquidity has a positive and significant effect on ROA, if the value of the LDR ratio in a high state, it will affect the increase in profits. In contrast, when the value of the LDR ratio tends to be low, the bank has excess liquidity which makes it difficult for banks to earn large amounts of profit.

This also means that banks are required to efficiently channel their funds in the form of lending according to a set limit so that banks can get additional income from the interest charged to depositors as long as there is no bad credit and the spontaneous increase in interest will increase profits in line with the increase ROA.

CONCLUSION

The performance of 27 Indonesian Regional Development Banks as measured by ROA during the Covid-19 pandemic in 2020 is that BOPO has a significant negative effect on ROA. NPL Gross has no effect on ROA. NIM has a significant positive effect on ROA. LDR has a significant positive effect on ROA.

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