

# **The Effect of LDR, Outstanding, and BOPO on Non-Performing Loan (NPL) with ROA as the Intervening Variable in Conventional BPR Depok City Area**

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## **Abstract:**

*The aim of this study is to know the effect of the ratio of LDR, Outstanding, and BOPO on financial performance (NPL) through the intervening variable (ROA). The analysis method used is Multiple Linear Analysis, which previously carried out Descriptive Analysis Test, Classic Assumption Test (Normality Test, Autocorrelation Test, Heteroscedasticity Test, Multicollinearity Test), Path Analysis, and followed by Hypothesis Test, which processed using SPSS Program version 21. The study result shows that LDR and Outstanding do not affect ROA, BOPO affect ROA, LDR does not affect NPL, Outstanding, BOPO and ROA affect NPL, ROA is capable of mediating LDR and Outstanding on NPL, but ROA is not capable of mediating BOPO on NPL of Conventional BPR in Depok City. Simultaneously, all of the independent variables (LDR, Outstanding, BOPO) are affected by the ROA variable as much as 66.2%, and the rest is as much as 33.8% explained by other variables that are not included in this study.*

**Keywords:** *Rural Bank, LDR, Outstanding, BOPO, ROA, NPL, Financial Performance*

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Date of Submission: 06-01-2022

Date of Acceptance: 18-01-2022

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## **I. Introduction**

According to Indonesian Law No. 10 of 1998 changes from Law No. 7 of 1992 concerning Banking, BPR is a bank that carries out business activities conventionally or based on the Sharia Principle, which does not provide services in payment traffic. BPR business includes collecting funds from the public in the form of time deposits, savings, or other similar forms; giving credit; providing coaching and funding based on Sharia Principle under the provisions stipulated by Bank Indonesia; placing the funds in the form of Bank Indonesia Certificate and deposits. The risk level of credit problems in banking is measured by Non-Performing Loan (NPL) ratio. NPL is the key indicator used to measure bankability in covering the debtor's risk of credit return failure. The high NPL can cause banks to provide bigger backup; thus, in the end, the bank's capital is also eroded. In fact, the amount of capital significantly affects the amount of credit expansion. Therefore, NPL becomes one of the causes of obstacles for banks in extending credit (Huda, 2014). A non-performing loan is the main indicator of credit risk, with the increase of ratio value will send a bad message to the bank management because it indicates a high probability of no return of the bank's primary assets (Million, G, Matewos, K., & Sujara, S 2015). According to the data of NPL in Conventional BPR Depok City, West Java for the Quarter I of 2020 to the Quarter II of 2021 produces the average number of 14.20% from 23 BPR. This thing is still relatively high considering that the OJK regulation limits the risk of non-performing credit risk on a net basis (Non-Performing Loan/NPL Net) or non-performing financing ratio on a net basis (Non-Performing/NPF) maximum of 5% total credit or total financing (OJK, 2018).

Another variable also affects NPL, such as the measurement of profitability level or referred to as Return On Asset (ROA) or return on investment. The study stated that there is a negative effect of ROA on NPL (Patni, Suarmi Sri & Darma, 2017). In another study with samples of banks registered in BEI produces a conclusion that there is a negative effect of ROA on NPL (Purwoko, 2013). The banking intermediation function is expected to optimize the LDR ratio and balance consistently. Because the LDR measures the comparison of the credit total given by the bank with funds received by the bank, which represents bankability in repaying the withdrawal of funds by depositors by relying on credit given as the liquidity source. A study by (Dwihandayani, 2017) concluded that LDR has a positive effect on NPL performance. The higher LDR, the higher the NPL bank; this result is in accordance with but opposite with a study by (Mahmudah, 2013) which concluded that LDR has a negative and significant effect on NPL. The credit disbursed will carry out risk consequences that must be borne by the bank related to the increase of NPL and also result in the rise of earning asset backup. Outstanding is the remaining principal loan amount at certain times, excluding interest and fines or penalty fees that must be paid (Hapsari, 2022). The study result that is concluded that Outstanding positively

affects NPL with an explanation that if the value of the outstanding increases, the NPL will increase, and vice versa, if the value of the outstanding decreases, the NPL will decrease (Ridwan, 2019). The level of operational efficiency must be applied to increase profitability. To measure the efficiency level of a company, it uses a BOPO ratio which is calculated from operating costs compared to operating income. The banking industry must evaluate the value during the reporting period; thus, it can reduce operating expenses with the aim of optimizing income. The study by (Patni, Suarmi Sri & Darma, 2017) produces BOPO has a negative and significant effect on Return on Asset where when the BOPO value is high, the level of profitability is low.

## **II. Literature Review**

According to Banking Law No. 10 of 1998, credit is a provision of money or bills that can be equated with it, based on the agreement of loan between banks with other parties, which requires the loaner to pay off the debt after a certain period of time with interest. The type of bank whose main income comes from credit is Rural Banks, BPR legal basis is Law No. 7 of 1992, as amended with Law No. 10 of 1998, BPR is a bank that carries out business activities conventionally or based on Sharia Principle, which in the activities does not provide services in payment traffic. To be able to assess the financing performance of BPR is by analyzing requirements that must be fulfilled on financial ratio standards according to banking law. The study object is rural banks registered in OJK for the City of Depok, West Java, for the period 2020-2021.

Assessment to measure problems credit level is by calculating the ratio of Non-Performing Loan (NPL); this ratio is a form of credit risk. According to (Siamat, 2004) credit risk is a risk caused by customers' failure or incompetence in returning the loan amount received from the bank along with interest according to a predetermined or scheduled time period. The greater the ratio, the worse the bank's performance which causes problems credit level is higher and causes loss, otherwise if the NPL is decreasing, then the bank's profitability level will increase.

According to (Gitman. Lawrence J & Zutter, 2013), the level of Return on Assets (ROA) is the ability of management to produce a profit by utilizing assets. The ROA ratio is a term of returning on assets, explained as the overall measurement on profitability which is calculated by dividing net profit with average assets (Weygandt, Kieso, and Kimmel, 2010).

As a bank that carries out its intermediation function well, they should be careful in managing the public's funds by maintaining the bank's liquidity level because the higher the LDR level, the more illiquid a bank is, which means it is increasingly difficult to meet its short-term obligations, such as a sudden withdrawal by customers of their deposits (Agustina & Wijaya, 2013). According to (Kusumo, 2002), the Loan to Deposit Ratio (LDR) shows bankability in providing funds to debtors with capital owned by the bank as well as funds collected from the public. The provision of LDR according to BI is a maximum of 110%.

Outstanding in the financial statement is displayed on the statement of financial position (balance sheet), which is on the credit post given (assets). Outstanding is defined as a loan ceiling principal balance which has been agreed in the credit agreement and usually will be reduced if regular instalments are made or according to the payment schedule by the debtor (BPR media, 1999). Outstanding is the amount of the remaining principal loan at certain times, excluding interest and fines or penalty fees that must be paid (Hapsari, 2020).

Operating costs on operating income (BOPO) is a comparison between operating expenses and operating income. Operating expenses are calculated based on the sum of the total interest expense and other operating expenses. In contrast, operating income is the sum of the total interest income and other operating incomes. In this ratio assessment, the efficiency level of an entity is assessed; if the BOPO value is low, the efficiency level is getting better. The greater the BOPO, the lower the financial performance of the bank. Vice versa, if the BOPO is low, then it can be concluded that the financial performance of the bank will increase or better (Aman, 2013).

Some previous studies show inconsistency; the results of inconsistency are because some differences in the application of the method, theory, object and data used are different. Or even some variables which can strengthen or weaken indirectly. This study has a difference in using the ROA intervening variable related to the independent variable in affecting NPL. This study has 23 samples of Conventional BPR Depok City, West Java, with a research period of 6 quarters (quarter I of 2020 – quarter II of 2021). Based on the description above, the hypotheses in this study are:

- Ho1 = LDR does not affect ROA
- Ho2 = Outstanding does not affect ROA
- Ho3 = BOPO does not affect ROA
- Ho4 = ROA does not affect NPL
- Ho5 = LDR does not affect NPL
- Ho6 = Outstanding does not affect NPL
- Ho7 = BOPO does not affect NPL

- Ho8 = ROA cannot mediate the effect of LDR on NPL  
 Ho9 = ROA cannot mediate the effect of Outstanding on NPL  
 Ho10 = ROA cannot mediate the effect of BOPO on NPL

### III. Research Method

The objects in this study include the ratio of LDR, Outstanding, BOPO, ROA, and NPL. Variables used are independent variables (LDR, Outstanding, and BOPO), intervening variable (ROA), and dependent variable (NPL). The population of this study is BPR registered in the area of Depok City, West Java, in the year 2020-2021 with a time range of quarter I of 2020 to quarter II of 2021. The sampling method is a purposive sampling from all of the population with certain criteria that can represent, with the following criteria:

1. Conventional BPR registered on OJK ([www.ojk.go.id](http://www.ojk.go.id)) in the area of Depok City, West Java, with a minimum of 2020 until the quarter II of 2021.
2. The bank has submitted quarterly reports routinely under the reporting standards set by OJK.
3. The data submitted to OJK is complete and according to the researcher's needs.

The source data used is secondary data which is in the form of quarterly financial statement data published in 2020 to 2021, which is as much as 28 Conventional BPR in Depok City, West Java, where five banks have been liquidated and one bank whose financial statements are incomplete, thus the total samples that can be analyzed became 22 BPR. Before doing data analysis, descriptive analysis, classic assumption test (normality test, autocorrelation test, multicollinearity test, heteroscedasticity test), partial t-test to test whether independent variable affects the dependent variable, simultaneous f test to test whether independent variable affects the dependent variable, and path analysis test to determine whether the intervening variable is capable of mediating the independent variable on the dependent variable.

### IV. Result and Discussion

Based on the criteria that have been set in the research method, the Conventional BPRs of Depok City that become the samples are:

**Table 1. The Sample of Conventional BPR in Depok City, West Java**

No	BPR	No	BPR
1	Hasa Mitra West Java	12	Bantoru Perintis
2	Muliatama Dananjaya	13	Difobutama
3	Cibitung Permai	14	Dana Lestari
4	Tridharma Depok	15	Arthakelola Cahayatama
5	Panca Danarakyat	16	Laksana Binacimanggis
6	Depo Mitra Mandiri	17	Arthaguna Sejahtera
7	Naribi Perkasa	18	Daya Perdana Nusantara
8	Artha Bersama	19	Tapeuna Dana
9	Karunia	20	Apta Sejahtera
10	Swadana Tridharma	21	Brata Bhakti Sejahtera
11	Sukma Kemang Agung	22	Nusantara Bona Pasogit 19

Source: [www.ojk.go.id](http://www.ojk.go.id)

#### The Result of Descriptive Statistical Test

According to the result of the statistical test, there is a minimum LDR variable of 14,55 and a maximum value of 98,59. The mean value in the LDR variable is 75,7004 and std. deviation value is 15,80167. The minimum value of the Outstanding variable is 1.743.838, and the maximum value is 91.665.274. The mean value of Outstanding value is 28.710.841,3923 and std. deviation value is 20.396.746,16305. The minimum value of the BOPO variable is 74,45, and the maximum value is 250,66. The mean value of the BOPO variable is 101,4841 and std. deviation value is 25,86111. The Return on Assets (ROA) variable has a minimum value of -17,71 and a maximum value of 7,12. The mean value of the ROA variable is 0,7113 and std. deviation value is 3,84992. A Non-Performing Loan (NPL) minimum value is 0,13, and the maximum value is 56,74. The mean value of the NPL variable is 13,8875 and std. deviation value is 13,64853.

#### The Result of the Classic Assumption Test

Classic assumption test is carried out to test the data quality in a study that uses secondary data. Some of the classic assumption tests used are the normality test, heteroscedasticity test, multicollinearity test, and autocorrelation test. In this study, the data are normally distributed, no heteroscedasticity, the research regression model meets the requirements, and there is no autocorrelation.

#### The Result of Coefficient of Determination Test (R<sup>2</sup>)

The following are the results of the R<sup>2</sup> model 1 test, which can be seen in table 2:

**Table 2. The Result of R<sup>2</sup> Model 1 Test**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,818 <sup>a</sup>	,670	,662	,37592

a. Predictors: (Constant), BOPO, LDR, BADE  
 b. Dependent Variable: ROA

According to the coefficient of determination test in the table above, the value of adjusted R<sup>2</sup> substructure model 1 is 0,662. It shows that the amount of the ability to explain the independent variables, which are LDR, Outstanding, BOPO, and ROA on NPL (Y), can be explained by this equation model as much as 46,0% while the rest is 54,0% affected by other factors that are not included in this study.

The following are the results of the R2 model 1 test, which can be seen in table 3:

**Table 3. The Result of R<sup>2</sup> Model 2 Test**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,690 <sup>a</sup>	,477	,460	1,24917

a. Predictors: (Constant), ROA, LDR, BADE, BOPO  
 b. Dependent Variable: NPL

According to the coefficient of determination test in the table above, the value of adjusted R<sup>2</sup> substructure model 2 is 0,460. It shows that the amount of the ability to explain the independent variables, which are LDR, Outstanding, BOPO, and ROA on NPL (Y), can be explained by this equation model as much as 46,0% while the rest is 54,0% affected by other factors that are not included in this study.

**The Result of Regression Testing**

**T Test**

The results of partial multiple linear regression analysis can be seen in table 4 and table 5 as follows:

**Table 4. Model 1 T-Structure Test**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	13,789	1,160		11,891	,000
	LDR	-,005	,012	-,019	-,380	,705
	Outstanding	,342	,371	,048	,922	,359
	BOPO	-,128	,007	-,859	-18,821	,000

a. Dependent variable: Return on Assets

**Table 5. Model 2 T-Structure Test.**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2,178	1,632		-1,334	,185
	LDR	,120	,133	,072	,901	,369
	Outstanding	-2,048	,420	-,394	-4,875	,000
	BOPO	,457	,170	,308	2,688	,008
	ROA	,589	,296	,224	1,988	,049

a. Dependent variable: NPL

1. LDR Variable (H1). The result of the t-test on this variable shows that the significance of p-value = 0,705 > 0,05. So that concludes that the LDR variable does not affect ROA.
2. Outstanding Variable (H2). The result of the t-test on this variable shows that the significance of p-value = 0,359 > 0,05. So that concludes that the Outstanding variable does not affect ROA.
3. BOPO Variable (H3). The result of the t-test on this variable shows that the significance of p-value = 0,000 < 0,05. So that concludes that the BOPO variable affects ROA.
4. LDR Variable (H4). The result of the t-test on this variable shows that the significance of p-value = 0,369 > 0,05. So that concludes that LDR does not affect NPL.

5. Outstanding Variable (H5). The result of the t-test on this variable shows that the significance of p-value =  $0,00 < 0,05$ . So that concludes that the Outstanding Variable affects NPL.
6. BOPO Variable (H6). The result of the t-test on this variable shows that the significance of p-value =  $0,008 < 0,05$ . So that concludes that the BOPO Variable affects NPL.
7. ROA Variable (H7). The result of the t-test on this variable shows that the significance of p-value =  $0,049 < 0,05$ . So that concludes that the ROA variable affects NPL.

**The Result of Path Analysis**

Based on table 4, the results of the regression equation are as follows:

$$ROA = 13.789 - 0,005X_1 + 0,342X_2 - 0,128X_3 + e_1$$

1. Constanta value ( $\alpha$ ) from the regression equation above is 13.789, which means if all of the independent variables (LDR, Outstanding, and BOPO) are in a constant position that has a value of 0 (zero), then the value of the ROA variable is 13.789.
2. The negative LDR regression coefficient is -0,005, which means if the LDR increases by one unit, the ROA will decrease by 0,005 with the assumption that other independent variables are constant.
3. The positive Outstanding regression coefficient is 0,342, which means if the Outstanding increases by one unit, the ROA will increase by 0,342 with the assumption that other independent variables are constant.
4. The negative BOPO regression coefficient is -0,128, which means if the BOPO increases by one unit, then the ROA will decrease by 0,128 with the assumption that other independent variables are constant.

Based on Table 2, the sub-structure values are obtained as follows:

$$\begin{aligned} Z &= Pz_1X_1 + Pz_2X_2 + Pz_3X_3 + e_1 \\ &= -0,019X_1 + 0,048X_2 - 0,859X_3 + 0,581 \end{aligned}$$

The value of  $e_1$  is obtained from:

$$e_1 = \sqrt{(1 - R^2)} = \sqrt{1 - 0,662} = \sqrt{0,338} = 0,581$$

Based on table 5, the results of the regression equation are as follows:

$$NPL = -2,178 + 0,120X_1 - 2,048X_2 + 0,457X_3 + 0,589X_4 + e_2$$

1. Constanta value ( $\alpha$ ) from the regression equation above is -2,178, which means if all of the independent variables (LDR, Outstanding, BOPO, and ROA) are in a constant position that has a value of 0 (zero), then the value of the NPL variable is -2,178.
2. The positive LDR regression coefficient is 0,120, which means if the LDR increases by one unit, the NPL will increase by 0,120 with the assumption that other independent variables are constant.
3. The negative Outstanding regression coefficient is -2,048, which means if the Outstanding increases by one unit, the NPL will decrease by -2,048 with the assumption that other independent variables are constant.
4. The positive BOPO regression coefficient is 0,457, which means if the BOPO increases by one unit, the NPL will increase by 0,457 with the assumption that other independent variables are constant.
5. The positive ROA regression coefficient is 0,589, which means if the ROA increases by one unit, the NPL will increase by 0,589 with the assumption that other independent variables are constant.

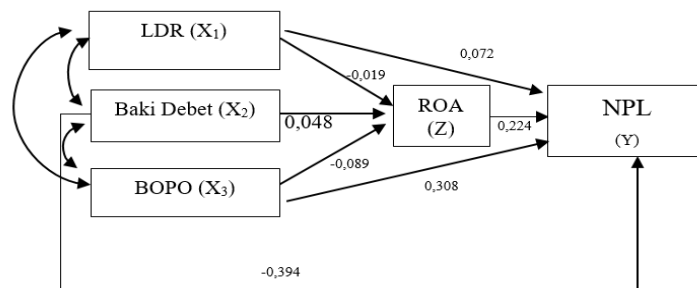
Based on Table 3, the sub-structure values are obtained as follows

$$\begin{aligned} Y &= Py_1X_1 + Py_2X_2 + Py_3X_3 + Py_{ZZ} + e_2 \\ &= 0,072X_1 - 0,394X_2 + 0,308X_3 + 0,224Z + 0,735 \end{aligned}$$

The value of  $e_2$  is obtained from:

$$e_2 = \sqrt{(1 - R^2)} = \sqrt{1 - 0,460} = \sqrt{0,54} = 0,735$$

Based on the tests that have been carried out using SPSS software, the following are the results of the path coefficient analysis:



**Picture 1. The Result of Path Analysis**

The result of path analysis shows that LDR has a direct effect on NPL as much as 0,072 while indirect effect calculated from the indirect coefficient is  $0,019 \times 0,224 = 0,004$ . Therefore, the total effect given by LDR on NPL is  $0,072 + 0,004 = 0,076 > 0,072$  thus the ROA variable is indirectly capable of mediating LDR on NPL. The direct effect of Outstanding on NPL is -0,394 while the indirect effect calculated from the indirect coefficient is  $0,048 \times 0,224 = 0,0107$ . Therefore, the total effect given by Outstanding on NPL is  $-0,394 + 0,0107 + -0,383 > 0,394$  thus the ROA variable is indirectly capable of mediating Outstanding on NPL. The direct effect of BOPO on NPL is 0,308 while the indirect effect is calculated from the indirect coefficient, which is  $0,859 \times 0,224 = -0,1924$ . Therefore, the total effect given by BOPO on NPL is  $0,308 + -0,1924 = 0,1155 < 0,308$  thus the ROA variable is indirectly not capable of mediating BOPO on NPL.

## V. Discussion

### The Effect of LDR on ROA

The result of the analysis shows that LDR does not affect ROA. Several banks consider that the optimization in credit distribution does not give a positive result on profit, besides because of the credit risks received, other factors are more dominant in affecting the profit ratio, there is interest income in other banks, the amount of fee-based on bank services, also other income other than credit distribution. This result is contrary to the explanation that non-performing loans will impact the level of bank capital, affecting banks liquidity and not under the theory of liquidity that the more funds lent, the lower the liquidity but, the higher the bank's profitability. When the LDR value is higher, the liquidity ratio is risky, and vice versa if the LDR is too low, the optimization in credit distribution is less effective, if the distribution of non-performing loans will affect loan interest income and affect the level of bank profits. This study result is in line with studies conducted by (Rindhatmono, 2005), (Anas & Tohari, 2018), and (Liyana & Indrayani, 2020), which found that LDR does not affect ROA. However, this study is not in line with (Mitasari & Djumahir, 2013), (Patni & Darma, 2017), which stated that LDR does not affect ROA also; another study by (Molyneux & Thornton, 1992) that resulting bank liquidity is negatively affecting bank profitability.

### The Effect of Outstanding on ROA

Partially, Outstanding does not affect ROA. Every increase in credit distribution that is not in line with the increase in interest income, other income factors are more dominant in affecting the increase and decrease of banking profit, such as interest income on bank deposits, fee-based income, bank services and other income that are not related to credit distribution. Therefore, the amount of Outstanding does not reflect each debtor's credit status. The increase of Outstanding has risk potential and results in an increase in productive assets income so that it will increase operating costs and impact decreasing profits. This result is contrary to a study by (Ridwan, 2019) who stated that Outstanding significantly and positively affects NPL so that the supporting assumption is in making decisions to improve the condition of the NPL so that the condition of the debit balance is considered. Banks expect the achievement of Outstanding each month to be small because, with a small Outstanding value, there is also a slight chance that the debtor will fall into arrears, thereby reducing asset backup costs and increasing banking profits. Outstanding significantly affects NPL value; if Outstanding increases, then NPL increases, and vice versa; if Outstanding decreases, the NPL decreases (Ridwan, 2019).

### The Effect of BOPO on ROA

The result of the study shows that BOPO affects ROA. The result of BOPO's effect on ROA is negative; therefore, it shows that banking performance (BPR) is really affected by cost efficiency level, specifically bank operating cost. Management must be able to reduce operating costs so that the resulting profit increases. This result is in line with studies by (Purwoko, 2013), (Agustina, 2014), and (Patni & Darma, 2017) which stated that the BOPO variable has a significant negative effect on the ROA variable, also studies by (Mitasari & Djumahir, 2013), (Anas & Tohari, 2018), and (Setiawan, Mulyadi, 2021) which stated that BOPO significantly affects ROA profitability. This result follows a study statement by (Molyneux & Thornton, 1992) that found a positive relationship between efficiency and profitability (ROA), that efficiency can increase profitability, which means if there is a low operating cost, then profitability level will increase. This result is also in line with the basic concept of efficiency theory, where all business activities efficiency will increase profitability, and vice versa. The achievement of operational cost efficiency will support the success of management in fulfilling the shareholders' wishes, and the shareholders will assess the success of the management through the performance achieved; one of them is in managing efficiency and the profitability level.

### The Effect of LDR on NPL

The result of the analysis shows LDR does not affect NPL. This study assumes that optimizing credit originating from public funds (deposits/savings) does not affect the assessment of bad credit; however, this

result says so, it still needs to be considered that one of the bank's functions is intermediation which is effective in managing funds received from the public and distribute it in the form of healthy credit so that it will reduce bad credit (NPL) consistently. This result is supported by studies by (Cahyati, 2018) and (Atiqah, 2015) which stated that LDR does not affect NPL. Still, this result is not in line with studies by (Dwihandayani, 2017), (Mahmudah, 2013), and (Ridwan, 2019) which concluded that LDR significantly affects NPL.

#### **The Effect of Outstanding on NPL**

This result shows Outstanding affects NPL. The increase of credit numbers distributed (Outstanding) to the public will decrease NPL levels in banks, with a note that the credit disbursed is healthy credit. Some management parties try to distribute credit optimally, but on another side must control bad credit (NPL). The amount of Outstanding significantly affects the NPL value; if the Outstanding increases, the NPL tends to increase and vice versa; if the Outstanding decreases, the NPL decreases. Improvements are needed from the Outstanding side to minimize the increase in NPL. This result is in line with studies by (Ridwan, 2019) and (Dwihandayani, 2017) which stated that Outstanding positively and significantly affects NPL.

#### **The Effect of BOPO on NPL**

This result shows BOPO affects NPL. The increase of NPL ratio will affect the allowance for earning assets (credit) and directly will affect banking operating cost so that the BOPO ratio will increase or be referred to as operating cost inefficiency; otherwise, if the bank can reduce bad credit ratio (NPL) then the efficiency level increases. When a bank can maintain the NPL rate, expenses can be reduced to grow profitability. This is in line with a study on Rural and Sharia Bank by (Cahyati, 2018) which concluded that BOPO is significant on NPL also a study by (Atiqah, 2015) which stated that the BOPO variable is positively and significantly affects NPL.

#### **The Effect of ROA on NPL**

This result shows ROA does not affect NPL. When the bad credit ratio is high, where credit instalments are not running smoothly, it will affect the decrease of credit interest receipt so that the profitability level is also decreasing. The high ROA shows that the bank's profit is stable and one of the most significant sources due to the low cost of productive asset backup (low NPL). This result is opposite to the theory that stated NPL negatively affects ROA that the higher NPL, the lower ROA. NPL reflects credit risk, where if the NPL is high, the credit risk borne is higher. Income still can increase when the NPL is high, it is because banks still can receive profitability from sources other than credit interest income, there are interest income on bank deposits, fee-based income, bank services, also other incomes that are not related to credit distribution; therefore, it still give a relatively high effect on ROA value. This result is in line with studies by (Agustina, 2014), (Patni & Darma, 2017), (Didik Purwoko, 2013), and (Mitasari & Djumahir, 2013) which stated that the NPL variable has a significant effect on ROA. However, this study is not in line with studies by (Liyana & Indrayani, 2020), (Anway & Sunaenah, 2016), (Anas & Tohari, 2018), and (Siagian, 2020) which stated that there is no effect between NPL and ROA profitability.

#### **The Effect of LDR on NPL with ROA as the Intervening Variable**

The optimization of Loan to Deposit Ratio (LDR) can affect the level of profitability (ROA) of the entity, which in the end, the increase of LDR on NPL will indirectly affect by Return on Assets (ROA), increasing profitability can strengthen the relationship between the level of Loan to Deposit Ratio (LDR) on the ratio of Non-Performing Loan (NPL). This result indicates that good bank liquidity can control the NPL level if the level of bank profitability is good. So the high level of Return on Assets (ROA) of conventional BPR in Depok City will affect the relationship between Loan to Deposit Ratio and Non-Performing Loan (NPL).

#### **The Effect of Outstanding on NPL with ROA as the Intervening Variable**

The high Return on Assets affects the value of Outstanding on Non-Performing Loan (NPL). This result is consistent with a study conducted by (Ridwan, 2019) which concluded that the amount of Outstanding really affects the value of NPL if Outstanding increase, the Non-Performing Loan increase, and vice versa. Therefore, the results in this study suggest the need to improve the NPL ratio as low as possible by considering the condition of the Outstanding and supported by maintaining the bank's level of profitability.

#### **The Effect of BOPO on NPL with ROA as the Intervening Variable**

Return on Assets (ROA) cannot strengthen the relationship between Operating Cost and Operating Income (BOPO) on a Non-Performing Loan (NPL) ratio. Bank profitability is not capable of strengthening the effect of the bank's ability to control efficiency on non-performing loans or NPL. Although this result stated that the bank efficiency must still be considered because bank performance is significantly affected by the company

operating efficiency, then to increase the performance is needed efficiency cost, specifically bank operating cost. This result stated that the high level of Return on Assets (ROA) of conventional BPR in Depok City is not capable of affecting the relationship between BOPO and NPL. This result indicated that the amount of bank profitability is not capable of strengthening the bank's ability to control efficiency against non-performing loans or NPL. Although this result stated that the bank efficiency must still be considered because bank performance is significantly affected by the company operating efficiency, then to increase the performance is needed efficiency cost, specifically bank operating cost. This result stated that the high level of Return on Assets (ROA) of conventional BPR in Depok City is not capable of affecting the relationship between BOPO and Performing Loan (NPL).

## VI. Conclusion

Based on the result of study and explanation above, then the following conclusions are drawn:

1. LDR does not affect Return on Assets (ROA).
2. Outstanding does not affect Return on Assets (ROA).
3. BOPO negatively affects Return on Assets (ROA).
4. LDR does not affect Non-Performing Loan (NPL).
5. Outstanding negatively affects Non-Performing Loan (NPL).
6. BOPO positively affects Non-Performing Loan (NPL).
7. ROA positively affects Non-Performing Loan (NPL).
8. LDR indirectly affects NPL through ROA.
9. Outstanding indirectly affects NPL through ROA.
10. BOPO is indirectly not capable of affecting NPL through ROA.

## Implication

A financial statement is an essential data in business history, all of the financial information and financial performance are recorded in the financial statement, and thus, it will help in determining policy in the future also as an evaluation material in minimizing the risk of non-performing loans (BPR) also to establish a more advanced strategy in the future. Efforts that can be made by management to improve bank performance (BPR) are by keeping the NPL level as low as possible, increasing operating efficiency, controlling the credit risk, maintaining the condition of Outstanding, and optimizing the healthy credit distribution. Operating costs must be reduced consistently by maximizing existing resources (assets), credit risk also needs to be fixed by improving credit quality through tightening interest rates, appropriate BI checking also a good analysis on a prospective debtor, maintaining the condition of Outstanding also considered by controlling incoming instalments periodically, also efforts to optimize credit distribution to all segments while continuously monitoring the level of liquidity.

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Ismail Marzuki, et. al. "The Effect of LDR, Outstanding, and BOPO on Non-Performing Loan (NPL) with ROA as the Intervening Variable in Conventional BPR Depok City Area." *IOSR Journal of Business and Management (IOSR-JBM)*, 24(01), 2022, pp. 37-45.