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# The Effect of LDR, Capital Structure, Operational Cost Operating Income and NPL on ROA in the Banking Companies Listed in IDX in 2014-2018 Period

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#### **Article Info**

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#### **ABSTRACT**

In creating and maintaining sound banking, it is necessary for banking institutions to get effective guidance and supervision from the government, especially the Central Bank of Indonesia. To determine and analyze the effect of Loan to Deposit Ratio (LDR), Capital Structure, Operational Costs Operating Income and Non-Performing Loan (NPL) on Return on Assets (ROA) in Banking Companies listed on the Indonesia Stock Exchange Period 2014-2018. The current study is quantitative with explanatory design. The population of the study consists of 45 banking companies listed on the Indonesia Stock Exchange in the period of 2014-2018 and the study sample consists of 21 banking companies listed on the Indonesia Stock Exchange within the same time period. The findings show that the LDR, Capital Structure, Operational Costs Operating Income, and NPL simultaneously have a positive and significant effect on ROA. LDR and Capital Structure partially do not affect the ROA. Operational Costs Operating Income and NPL partially negatively affect the ROA of Banking Companies listed on the Indonesia Stock Exchange in 2014-2018.

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#### INTRODUCTION

At this point in time, the banking world is growing rapidly. A lot of competition must be faced in the banking industry and banking is the sector that has the most important role in the country's economy, especially in raising funds and funds to the public. Banking has the main function as a financial intermediary between the parties that have funds (surplus funds) with those who need funds (deficit funds).

In the midst of the industry slowdown, banking health is still well maintained, "explained Irwan in Jakarta, Wednesday (13/1/2016). Irwan highlighted the Loan to Deposit Ratio or the ratio of

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credit to third party funds of the banking industry which tends In November 2015, the regulator noted that the Loan to Deposit Ratio of the banking industry was at 90.48 percent, indicating a high enough number with a future record in accordance with the business plan. The acceleration of credit growth depends on how the funding strategy can run well. (Setiawan, 2016).

In creating and maintaining sound banking, it is necessary that banking institution should always obtain some guidance, especially from Bank Indonesia. Basically, bank health is a reflection of the condition of the bank today and in the future. A healthy bank is a bank that increases profitability that continues to increase. This also relates to the efficiency and ability of banks to carry out operational activities, with the efficiency of costs, the profits derived by banks will be even greater (Sudarmawanti & Pramono, 2017, p. 2). The main activity of banking is related to the level of profit gained.

Bank Indonesia is more concerned with valuing return on assets because Bank Indonesia prioritizes the profitability of a bank as measured by assets whose funds are mostly derived from public savings funds so return on assets is more representative in measuring the level of profitability of banks. The greater the return on assets of a bank, the greater the level of profit achieved by the bank and the better the bank's position in terms of asset use.

Loan to Deposit Ratio reflects the main activities of a bank which can be interpreted as the level of lending also influences the value of Return on Assets, where the ratio measures the ratio of the amount of credit given by banks to funds received by banks (Defri, 2012, p. 3).

On the one hand, the use of a banking capital structure that is far greater than its equity will be unprofitable because it will increase banking risk, but on the other hand, banks with little debt or no debt will make it difficult for banks to develop because of their own limited capital. The greater the capital structure provided by investors, the greater the expected return on assets that investors want. This level of return on assets affects the cost of banking capital. However, the banking capital structure is mostly derived from the customer funds it collects. On the other hand, the use of a banking capital structure that is far greater than its equity will be unprofitable because it will increase banking risk, but on the other hand, banks with small or no debt will make it difficult for banks to develop due to limited own capital. The greater the capital structure provided by investors, the greater the expected return on assets that investors want. This level of return on assets affects the cost of banking capital.

Capital structure is a form of describing the financial proportion of a company between owned capital sourced from long-term debt and own capital which is a source of financing for a company. The use of a certain amount of debt in normal economic conditions will be able to increase profitability (Swastika & Isharijadi, 2017, p. 490).

Banking operations are inseparable from operating expenses and operating income. Thus, the ratio of operating costs to operating income is a comparison between operating costs and operating income in measuring the level of efficiency and the ability of banks to carry out their operations. Considering that the principal activities of banks are acting as intermediaries, namely collecting and distributing public funds, the costs and operating income of banks are dominated by interest costs and interest yields. The operational costs of operating income are intended to measure the

ability to operate income to cover operational costs. The more efficient the bank is in carrying out its business activities, the more profit the bank can achieve. In measuring operational efficiency, operational costs of operating income are ratios, one of which affects return on assets. Any increase in operational costs will result in reduced profit before tax which will ultimately reduce the profit or return on the bank's assets concerned.

According to Bank Indonesia Regulation Number 6/10 / PBI / 2004 dated April 12, 2004, concerning the Bank's soundness rating system in general, the higher the NPL value (above 5%), the bank is not healthy. High NPLs result in lower profits received by banks. Decrease in Profit causes dividends distributed also to decrease so that the growth of bank stock returns will decline, in other words, the greater the NPL of a bank, it will reduce the bank's Profitability (Rahmat, Arfan & Musnadi, 2014, p. 87).

#### **Concept and Theory**

#### Loan to Deposit Ratio

According to Kasmir (2014, p. 363), Loan to Deposit Ratio (LDR) is a ratio to measure the composition of the amount of credit given compared to the number of public funds and own capital used. According to Ikatan Bankir Indonesia (2016, pp. 73-74), the assessment of quantitative and qualitative approaches to liquidity factors, among others, is carried out through an assessment of the following components:

- 1. Liquid assets of less than one month compared to liquid liabilities of less than one month.
- 2. Mismatch maturity ratio in one-month period.
- 3. Loan to Deposit Ratio (LDR) and Loan to Funding Ratio (LFR).
- 4. Cash flow projections for the next three months.
- 5. Dependence on interbank funds and core depositors.
- 6. Assets and Liabilities Management (ALMA) policies and management.
- 7. The ability of banks to gain access to financial markets, capital markets or other sources of funding.
- 8. Stability of third-party funds.

According to the Indonesian Ikatan Bankir Indonesia (2016, p. 180), LDR as follows:

Loan to Deposit Ratio = 
$$\frac{\text{Loan}}{\text{Third Party Funds}} \times 100\%$$

#### Capital Structure

According to Rodoni and Ali (2014, p. 129), capital structure is a proportion in determining the fulfillment of corporate spending needs, where funds are obtained using a combination of source guide that comes from long-term funds consisting of two main sources, namely those from within and outside the company. According to Fahmi (2012, pp. 186-187), several factors affect the capital structure of a company, namely:

- 1. The form or characteristics of the business being run.
- 2. The scope of business operations activities carried out.
- 3. Management characteristics applied in the business organization.
- 4. Characteristics, policies, and wishes of the owner.
- 5. Micro and macroeconomy conditions prevailing in the country and abroad also influence corporate decision making.

According to Sitanggang (2013, p. 72) states, the capital structure formula:

DER = <u>Total Liabilities</u> Total Equity

#### Operational Costs Operating Income

According to the Ikatan Bankir Indonesia (2016, p. 179), BOPO is a comparison between total operating expenses and total operating income. According to Wind (2014, p. 136-137), the burden can be affected by:

- 1. Direct costs are costs that are closely related to products or services provided to consumers, for example, the cost of goods sold.
- 2. Indirect expenses are divided into two categories, those that are recognized as expenses based on systematic and rational allocation, for example, depreciation expenses and those that are charged immediately for example costs to settle a lawsuit.

According to the Ikatan Bankir Indonesia (2016, p. 179), operating costs are calculated based on the sum of total interest expenses and total other operating expenses.

$$BOPO = \frac{Interest\ Expense}{Interest\ Income} \times 100\%$$

#### Non-Performing Loan

According to Latumaerissa (2014, p. 164), Non-Performing Loans (NPL) is one indicator of the soundness of commercial banks. Because the high NPL shows the inability of commercial banks in the assessment process until the disbursement of credit to debtors. According to Umam (2016, pp. 207-208), problem loans can arise other than due to the reasons of the creditors, some problem loans arise because of things that happen to the debtor, including:

- 1. The decline in the business conditions of the company's business due to the deterioration in general economic conditions and/or the business sectors in which they operate.
- 2. The existence of mismanagement in the management of the company's business ventures, or due to lack of experience in the field of business they handle.
- 3. Family problems, for example, divorce, death, prolonged illness or a waste of funds by one or several members of the debtor's family.
- 4. Debt or failure in their other line of business or company.
- 5. Serious financial liquidity difficulties.
- 6. The emergence of events outside the debtor's power, for example, war and natural disasters.
- 7. The debtor's bad character (which from the beginning had planned to not return the credit).

According to Kasmir (2014, p. 228), Credit risk ratio is a ratio used to measure the risk of loans disbursed by comparing bad loans with the number of loans extended. This ratio can be formulated as follows:

Non-Performing Loan (NPL) = 
$$\frac{\text{Non Perfoming Loan}}{\text{Total Loans}} \times 100\%$$

#### Return on Assets

According to Jumingan (2014, p. 165), there are many factors that affect changes in net income. These factors are as follows:

1. Up and down the number of units sold and the selling price per unit

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- 2. The ups and downs of the cost of goods sold. This change in the cost of goods sold is influenced by the number of units bought or produced or sold and the purchase price per unit or cost of goods per unit.
- 3. The fluctuation of business costs is influenced by the number of units sold, variations in the number of units sold, variations in price levels and operating efficiency of the company.
- 4. The ups and downs of the postal income or non-operational costs are influenced by variations in the number of units sold, variations in price levels and changes in policy in giving or receiving discounts.
- 5. The rise and fall of corporate tax which is influenced by the size of the profits earned or high or low tax rates.
- 6. There are changes in the accounting method.

According to Harmono (2014, p. 119) the value of the return on assets can be calculated with this formula:

Return on assets = 
$$\frac{Income Before Tax Expense}{Total assets} \times 100\%$$

#### The Effect of Loan to Deposit Ratio on Return on Assets

According to Darmawi (2014, pp. 71-72) in maintaining this liquidity, it must also be linked to the interests of profitability. Saving too much cash will result in reduced profits. According to Muhamad (2014, p. 158), too much maintenance of liquidity will result in bank profitability being low. Conversely, if a bank adopts aggressive liquidity management, it tends to be close to liquidity shortage risk, but has the opportunity to obtain high profits. According to Kasmir (2013, p. 242), if the number of loans increases, in practice it will be able to increase company profits. Likewise, if the bank is unable to extend credit, the bank will suffer losses due to the burden of funds for depositing funds that must be paid. According to Pandia (2012, p. 173) the greater the funds that can be collected by banks, the greater the credit that can be given and the greater the possibility of earning income.

#### The Effect of Capital Structure on Return on Assets

According to Kamaludin and Indriani (2012, p. 326) companies that have a low capital structure due to high profitability which has large retained earnings as well, so there is a tendency for companies to prefer using retained earnings before using debt as investment financing. According to Sartono (2012, p. 248) the company has large retained earnings, the company will be happy to use retained earnings before using debt. According to Riyanto (2016, p. 297) companies that have stable earnings will always be able to meet their financial obligations as a result of using foreign capital.

#### The Effect of Operating Costs Operating Income on Return on Assets

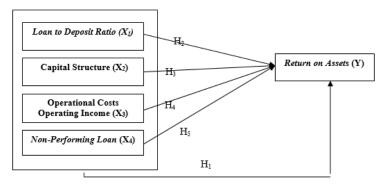
According to Pandia (2012, p. 72), "The smaller operational costs to operating income means the more efficient operational costs incurred by the bank concerned so that the possibility of a bank in a problematic condition is smaller and an increase in profits. "According to Jusuf (2014, p. 33), "if the company can reduce operating costs, the company will be able to increase net profit. If there is a waste of operational costs it will result in decreased profits." According to Fitriana (2014, p. 44), "if the amount of income is greater than the number of operational costs, then get a profit. Conversely, the amount of income is smaller than the amount of operating costs, then business suffers losses.

#### The Effect of Non-Performing Loans on Return on Assets

According to Fahmi (2015, p. 157) if the NPL (Non-Performing Loan) is high, so the profit or profit is reduced. According to Abdullah & Tantri (2014, p. 180), bad debts that occur are high, so the bank needs to make a rescue so that it will not cause losses. According to Wira (2015, p. 103) the greater the NPL, the worse the performance or the lower profit of the bank. The high NPL also has the opportunity to erode bank profits, because bad loans will be recorded as losses.

#### **Conceptual Framework**

Based on the preexisting description, the conceptual framework can be described as follow:



Picture 1: Conceptual Framework Processed Data, 2019 [source]

Based on the conceptual framework, the research hypotheses are as follows:

H<sub>1</sub>: Loan to Deposit Ratio, Capital Structure, Operational Costs Operating Income and Non-Performing Loans affect the Return on Assets in Banking Companies listed on the Indonesia Stock Exchange in the 2014-2018 Period.

H<sub>2</sub>: Loan to Deposit Ratio affects the Return on Assets of Banking Companies listed on the Indonesia Stock Exchange in the 2014-2018 Period.

H<sub>3</sub>: Capital Structure influences Return on Assets in Banking Companies listed on the Indonesia Stock Exchange in the 2014-2018 Period.

H<sub>4</sub>: Operating Costs Operating Income affects the Return on Assets of Banking Companies listed on the Indonesia Stock Exchange in the 2014-2018 Period.

H<sub>5</sub>: Non-Performing Loan affects the Return on Assets of Banking Companies listed on the Indonesia Stock Exchange in the 2014-2018 Period.

#### **METHODS**

The researcher conducted research on Banking Companies listed on the Indonesia Stock Exchange in the 2014-2018 period by browsing the financial statements through the site www.idx.co.id. This research was conducted in March 2019 until August 2019. The sample was chosen using a purposive sampling technique specified carefully by the researcher based on certain criteria. This research uses a quantitative research approach. The populations in this study were 45 banking companies listed on the Indonesia Stock Exchange in the 2014-2018 period. The sample of this research is 105 financial reports from 21 banking companies listed on the Indonesia Stock Exchange in the 2014-2018 period.

The research method used is purposive sampling. Purposive sampling is a sampling technique

where the researcher determines sampling by determining specific characteristics that are appropriate to the purpose of the study so that it is expected to answer the research problem. Banking companies listed on the Indonesia Stock Exchange that publish financial statements, making a profit and no bad debt banking in a row from the 2014-2018 period.

Before the regression model obtained is used to test the hypothesis, the model is first tested classic assumptions. The classical assumption tests include normality test, autocorrelation test, heteroscedasticity test, and multicollinearity test. This data analysis model uses multiple regression analysis.

#### RESULTS AND DISCUSSION

Multiple linear regression analysis is used to predict changes (ups and downs) of the dependent variable explained/linked by two or more independent variables as a predictor factor being manipulated and to determine whether there is an influence between the independent variables on the dependent variable.

	N	Minimum	Maximum	Mean	Std. Deviation
LDR	105	42.12	146.38	87.3455	14.39656
DER	105	1.59	14.75	6.5577	2.46547
ВОРО	105	14.41	80.08	47.1770	13.73821
NPL	105	.07	4.87	1.5461	1.02549
ROA	105	.11	3.97	1.7159	1.00126
Valid N (listwise)	105				

Table 1: Descriptive Statistic
Processed Data (2019) [source]

- 1. Variable Loan to Deposit Ratio has a total sample of 105, with a minimum value of 42.12; maximum value of 146.38; the average value of the total LDR sample data is 87.3455 and has a standard deviation (deviation) of 14.39656.
- 2. The Capital Structure variable has a sample size of 105, with a minimum value of 1.59; maximum value of 14.75; the average value of the total DER sample data is 6.5577 and has a standard deviation (deviation) of 12.46547.
- 3. Variable Operational Costs Operating Income has a total sample of 105, with a minimum value of 14.41; maximum value of 80.08; the average value of the total BOPO sample data is 47.1770 and the standard deviation (deviation) is 13.73821.
- 4. The Non-Performing Loan variable has a total sample of 105, with a minimum value of 0.07; maximum value of 4.87; the average value of the total NPL sample data is 1.5487 and the standard deviation (deviation) is 1.02549.
- 5. The Return on Assets variable has a total sample of 105, with a minimum value of 0.11; a maximum value of 3.97; the average value of the total ROA sample data is 1.7159 and the standard deviation (deviation) is 1.00126.

#### **Classic assumption test**

#### Normality test

Kolmogorov-Smirnov statistical analysis Test to detect normality, the Kolmogorov-Smirnov (K-S) non-parametric statistical test can be used. The basis for decision making is if the probability

is greater than 0.05, the distribution is normal and if the probability is less than 0.05, the distribution is not normal. The results of the normality test using the Kolmogorov Smirnov test statistic:

		Unstandardized Residual
N	•	105
Normal Parameters <sup>a,,b</sup>	Mean	.0000000
	Std. Deviation	.67952441
Most Extreme Differences	Absolute	.083
	Positive	.052
	Negative	083
Kolmogorov-Smirnov Z	•	.848
Asymp. Sig. (2-tailed)		.468

Table 2: One-Sample Kolmogorov-Smirnov Test Processed Data (2019) [source]

- a. Test distribution is Normal
- b. Calculated from data

Based on the normality test using the Kolmogorov-Smirnov statistics on table 2 above, it can be seen that the variable Loan to Deposit Ratio, Capital Structure, Operational Costs Operating Income, Non-Performing Loans and Return on Assets have 0.468> 0.05 have already met the normal distribution requirements.

#### **Multicollinearity Test**

Multicollinearity test is used to detect the presence or absence of multicollinearity in the regression model can be seen from the value of tolerance and variance inflation factor. The method of decision making is VIF value <10 and tolerance value> 0.10, then multicollinearity free regression. VIF is one compared to tolerance.

Coefficients <sup>a</sup>							
		Collinearity Statistics					
Model		Tolerance	VIF				
1	LDR	.875	1.142				
	DER	.661	1.514				
	BOPO	.617	1.622				
	NPL	.973	1.028				

Table 3: Multicollinearity Test Results Processed Data (2019) [source] a. Dependent Variable: ROA

Based on Table 3 above, it is known that the VIF value for the variable Loan to Deposit Ratio, Capital Structure, Operating Costs Operating Income, Non-Performing Loans is less than 10 (VIF <10) so that it is free from the assumption of multicollinearity. While the tolerance of Loan to

Deposit Ratio, Capital Structure, Operational Costs, Operating Income, Non-Performing Loans is greater than 10 so that it can be stated that there is no multicollinearity problem with other independent variables.

	Coefficients <sup>a</sup>							
	Unstandardized Coefficients		Standardized Coefficients					
	Model	В	Std. Error	Beta	t	Sig.		
1	(Constant)	4.259	.583		7.310	.000		
	LDR	.001	.005	.009	.124	.902		
	DER	.052	.034	.128	1.533	.128		
	ВОРО	056	.006	772	-8.927	.000		
	NPL	185	.067	189	-2.753	.007		

Table 4: The Results of Multiple Linear Regression Analysis

Processed Data (2019) [source] a. Dependent Variable: ROA

Based on table 4 above, the regression formula is obtained as follows: ROA = 4,259 + 0,001 LDR + 0,052 DER - 0,056 BOPO - 0,185 NPL

- 1. A value of 4.259 units states that if the variable Loan to Deposit Ratio, Capital Structure, Operational Costs Operating Income and Non-Performing Loans are zero then Return on Assets is 4.259 units.
- 2. The coefficient of regression for the Loan to Deposit Ratio variable is 0.001 meaning that if other independent variables are of a fixed value and the Loan to Deposit Ratio has increased by 1%, the Return on Assets will increase by 0.001. Positive coefficient means that there is a positive relationship between Loan to Deposit Ratio with Return on Assets, the higher the Loan to Deposit Ratio, the higher the Return on Assets.
- 3. The coefficient of regression of the capital structure variable is 0.052, meaning that if other independent variables have a fixed value and the capital structure has increased 1%, the Return on Assets will increase by 0.052. Positive coefficient means that there is a positive relationship between the capital structure with Return on Assets, the higher the capital structure, the higher the Return on Assets.
- 4. Regression coefficient Variable Operational Costs Operating Income of -0,056 means that if other independent variables are fixed in value and Operational Costs Operating Income has increased 1% then Return on Assets will decrease by 0.056. The negative coefficient means that there is a negative relationship between Operational Costs Operating Income and Return on Assets, the higher the Operational Costs Operating Income, the lower the Return on Assets.
- 5. Non-Performing Loan regression coefficient of -0.185 means that if other independent variables have a fixed value and Non-Performing Loans have increased by 1% then Return on Assets will decrease by 0.185. The negative coefficient means that there is a negative relationship between Non-Performing Loans and Return on Assets, the higher the Non-Performing Loans, the lower the Return on Assets.

Model Summary <sup>b</sup>						
Model R R Square Adjusted R Square Std. Error of the Estima						
1	.734ª	.539	.521	.69298		

Table 5: Coefficient of determination

Processed Data (2019) [source]

a. Predictors: (Constant), NPL, BOPO, LDR, DER

b. Dependent Variable: ROA

Based on Table 5 above, the adjusted R Square coefficient of determination (R2) is used to measure how far the ability of the model to explain the variation of the dependent variable is 0.521. This shows that 52.1% Return on Assets is influenced by the variable Loan to Deposit Ratio, Capital Structure, Operating Costs Operating Income and Non-Performing Loans while the remaining 47.9% is influenced by other variables not examined in this study like other variables such as Net Interest Margin, Capital Adequacy Ratio (CAR) and cash turnover.

	$ANOVA^b$							
	Model Sum of Squares df Mean Square F Sig.							
1	Regression	56.239	4	14.060	29.278	.000a		
	Residual	48.022	100	.480				
	Total	104.262	104					

Table 6: F Test Results

Processed Data (2019) [source]

a. Predictors: (Constant), NPL, BOPO, LDR, DER

b. Dependent Variable: ROA

From Table 6 above, it is known that the Fcount value is 29,278 with a significant level of 0,000. df1 = 4, and df2 = (105-5 = 100) then the value of F table is 2.46. Therefore Fcount > Ftable, the criterion is Ha to be accepted so that it can be stated that the Loan to Deposit Ratio, Capital Structure, Operational Costs, Operating Income and Non-Performing Loans simultaneously have a significant and significant effect on Return on Assets in Banking Companies listed on the Indonesia Stock Exchange in the Period 2014-2018.

		Unstandardize	d Coefficients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	4.259	.583		7.310	.000
	LDR	.001	.005	.009	.124	.902
	DER	.052	.034	.128	1.533	.128
	ВОРО	056	.006	772	-8.927	.000
	NPL	185	.067	189	-2.753	.007

Table 7: t-Test Results

Processed Data (2019) [source] a. Dependent Variable: ROA

The partial statistical test results are as follows:

- 1. The tount for the Loan to Deposit Ratio variable is 0.124 with a significant level of 0.902. With the degree of freedom (df) of 105, nk = 105-5 = 100, for the two-way hypothesis the column of significance is 5%: 2 = 0.025, then the table is 1.983 Because the value of tount <ttable or 0.124 <1.983 then the criterion is H0 accepted and Ha rejected so that the Loan to Deposit Ratio partially has no effect and is insignificant to Return on Assets in Banking Companies listed on the Indonesia Stock Exchange Period 2014-2018.
- 2. Toount for capital structure variable is 1.533 with a significant level of 0.128. With the degree of freedom (df) of 105, nk = 105-5 = 100, for the two-way hypothesis the column of significance is 5%: 2 = 0.025, then the table is 1.983 Because the value of toount <ttable or 1.533 <1.983 then the criterion is H0 accepted and Ha rejected so that the capital structure partially has no effect and is not significant to Return on Assets in Banking Companies listed on the Indonesia Stock Exchange in the 2014-2018 Period.
- 3. The calculated value for the variable Operational Costs Operating Income is -8,927 with a significant level of 0,000. With degrees of freedom (df) of 105, nk = 105-5 = 100, for the two-way hypothesis the column of significance is 5%: 2 = 0.025, then the table is 1.983 Because the value of -test <-table or -8.927 <-1.983 then the criterion is H0 is rejected and Ha is accepted so that Operational Costs Operational Income is partially influential and significant to Return on Assets in Banking Companies listed on the Indonesia Stock Exchange in the 2014-2018 Period.
- 4. The toount for the Non-Performing Loan variable is -2.753 with a significant level of 0.007. With free degrees (df) of 105, nk = 105-5 = 100, for the two-way hypothesis the column of significance is 5%: 2 = 0.025, then the table is 1.983 Because the value of -test <-table or -2.753 <-1.983 then the criterion is H0 is rejected and Ha is accepted so that the Non-Performing Loan partially influences and significantly affects the Return on Assets in Banking Companies listed on the Indonesia Stock Exchange Period 2014-2018.

#### The Effect of Loan to Deposit Ratio on Return on Assets

The research result is Loan to Deposit Ratio partially has no effect on Return on Assets in Banking Companies listed on the Indonesia Stock Exchange in the 2014-2018 Period. The research result is consistent with Darmawi's theory (2014, pp. 71-72) An important but difficult job in liquidity planning is to always maintain a cash reserve position (money position). Previously, it must first be resolved in the interest of profitability. Saving too much money will result in reduced profits. Because of that, just try to save enough cash.

The results support the research of Dewi, Sinarwati, and Darmawan (2014), which states that LDR partially has no significant effect on ROA. The research result contradicts the research of Defri (2012) which states that LDR has a positive and not significant effect partially on profitability (ROA). The difference in research results could be due to the different research year periods where Defri's (2012) research year was the 2008-2010 period.

LDR partially has no effect on ROA due to the high operational costs borne by the bank, so that although the funds received by banks are quite high, banks must also use these funds to finance their operational activities, that cause the bank's ability to reduce make a profit.

#### The Effect of Capital Structure on Return on Assets

The research result is capital structure partially does not affect the Return on Assets of Banking Companies listed on the Indonesia Stock Exchange in the 2014-2018 period. The research result is in accordance with the theories of Kamaludin and Indriani (2012, p. 326), the profitability of the company in the previous year as an important basis for determining the capital structure of the coming year. Companies with high profitability will have large retained earnings as well, so there is a tendency for companies to prefer using retained earnings before using debt as investment financing. With limited capital, it will not have much effect on ROA.

The results support Ananda's research (2016), which states that DER partially has no significant effect on ROA. The research result contradicts the research of Tamba, Tommy and Rate (2017) which states that DER has a negative direction that is not partially significant towards profitability (ROA). The difference in research results can be due to the different research year periods where the research year of Tamba, Tommy, and Rate (2017) is the 2013-2015 period. Where there are also differences in sampling that is high capitalization, which means that the banking companies studied are companies whose size is already large, causing differences in research results.

Banking companies show a composition of debt that is greater than the composition of their own capital. The debt composition is mostly obtained from the general public, can be seen in the savings account of the customer in the liability account. Public funds are the largest source of funds owned by banks; this is in accordance with the function of banks as a place to lead funds from parties who have excess funds in the community. Therefore, in this bad condition, even though the composition of the debt is greater than its own capital, it does not affect the profitability of banks due to the banking company, a large loan interest will not affect the interest expense that must be paid so that it does not affect the profitability of the bank anyway.

#### The Effect of Operating Costs Operating Income on Return on Assets

The research result is Operational Costs Operating Income partially influences Return on Assets in Banking Companies listed on the Indonesia Stock Exchange in the 2014-2018 Period. The research result is in accordance with Jusuf's theory (2014, p. 33), which states that if a company can reduce operating costs, the company will be able to increase net profit. Vice versa, if there is a waste of costs will result in decreased profits.

The research result supports the research of Lubis, Isynuwardhaana, and Dillak (2017) which states that BOPO partially has a negative and significant effect on ROA. The research result contradicts Eng (2013) regarding the Effect of BOPO on ROA with the result that BOPO has no effect on ROA. The difference in research results can be due to the different research year periods where Eng (2013) research year is the 2007-2011 period.

Operational Costs Operational Income partially has a negative and significant effect on Return on Assets due to the level of bank efficiency in carrying out its operational activities, affecting the level of income generated by the bank.

#### The Influence of Non-Performing Loan on Return on Assets

The research result is the Non-Performing Loans partially affect the Return on Assets in Banking Companies listed on the Indonesia Stock Exchange in the 2014-2018 Period. The research result

is in accordance with Fahmi's theory (2015, p. 157) if the NPL is in a high position, so the profit is reduced. The results of this study support the research of Lubis, Isynuwardhaana, and Dillak (2017) which states, NPL has a significant negative effect on ROA. The results of this study contradict the research of Negara and Sujana (2014) which stated that NPL had no effect on profitability (ROA). The difference in research results can be due to the different research year periods where the research year of the State and Sujana (2014) is the period 2010-2012.

NPL partially affects the ROA because credit risk generated by banking companies is still said to be stable enough so that it does not interfere too much with the ROA value of the company, this will also not greatly affect investor interest in investing in the banking industry. An increase in non-performing loans will reduce the level of profitability of banks, which when not anticipated will reduce bank resources, thereby disrupting the process of lending to the public.

#### **CONCLUSION**

Based on the results of the study, several conclusions can be drawn as follows: LDR, Capital Structure, Operational Costs Operating Income, and NPL simultaneously have a positive and significant effect on ROA OF Banking Companies listed on IDX 2014-2018. LDR and capital structure partially don't affect ROA of Banking Companies listed on the IDX in 2014-2018. Operational Costs Operating Income and NPL partially negatively affect ROA of Banking Companies listed on the IDX in 2014-2018.

#### **Implication**

Based on the above conclusions, the research implications can be stated as follows:

- The high LDR can't increase profits by using ROA. The results will be fixed or it can be inversely proportional as the likelihood of occurring the same has increased but will not be the same.
- 2. The use of capital structure, especially debt that is not right so that the capital structure has reached its maximum point, the addition of debt in the capital structure will not increase the company's ROA. The use of debt in the capital structure must pay attention to the benefits obtained with the risks that will be borne by the company because the use of debt that exceeds the optimal point of the company's capital structure will not affect the company's ROA.
- 3. The amount of BOPO needs to be considered where banks continue to maintain the size of BOPO by minimizing bank operational costs. Banks that are efficient in operations are able to produce high ROA so banks need to take appropriate policies in minimizing costs that do not need to be spent by the company.
- 4. NPL needs to be considered by applying credit analysis appropriately so that the likelihood of credit can be minimized so that a low NPL will increase ROA.

#### Suggestion

Based on the above conclusions, the suggestions can be stated as follows:

1. Banking companies should pay more attention to the factors that influence ROA so that company profits can increase by increasing revenue and minimizing operating expenses such as the cost of office equipment, official cars and reducing overtime costs.

- 2. We recommend that companies improve their LDR and ROA by promoting banking products such as offering banking products through prize programs, *arisan* programs so that the current account savings account (CASA) position and third-party funds.
- 3. It is better if the capital structure of banking companies can be improved by selling shares to the capital market through the primary market (IPO) and the secondary market.
- 4. It is better for banking companies to reduce expenses and increase operational income so that ROA increases by minimizing the issuance of operational costs, especially overtime wages are urgent (work that cannot be postponed) and office equipment costs.
- 5. It is better for banking companies to reduce NPL so that ROA increases by the way banks must be careful in extending credit to the public such as the provision of working capital loans, non-building loans, and homeownership loans to minimize the risk of bad credit

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