

# The Influence Of Loan To Deposit Ratio (Ldr) And Operational Cost Towards Operational Income (Bopo) Against Return On Assets

(ROA)

*(Empirical Study on Banking Company Listed in Indonesia*

*Exchange Period 2014-2018)*

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**Abstract**---Bank is one of the financial institutions that main activity is to collect funds from the community and then distribute them with the aim to earn a profit. This study aims to empirically the Influence of Loan to Deposit Ratio (LDR) and Operational Cost to Operational Income (BOPO) to Return On Assets (ROA) on Banking Company Listed in Indonesia Stock Exchange Period 2014-2018. This research uses purposive sampling technique. The data used in this study is secondary data from annual financial reports that have been published by banking company listed in Indonesia Stock Exchange. The data were analyzed using descriptive statistic analysis, classic assumption test, multiple regression analysis, determination coefficient analysis ( $R^2$ ), and hypothesis testing using ttest and F-test with 5% significance level. The results of this study indicate that partially Loan to Deposit Ratio (LDR) have a positive influence to Return On Assets (ROA) Operational Cost to Operational Income (BOPO) have a negative influenceto Return On Assets (ROA). While simultaneously, Loan to Deposit Ratio (LDR) and Operational Cost to Operational Income (BOPO) haveinfluenceto Return On Assets (ROA).

**Keywords**---Operational Cost to Operational Income (BOPO), Loan to Deposit Ratio (LDR), Return on Asset (ROA)

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## I. INTRODUCTION

According to the Law of the Republic of Indonesia Number 10 of 1998 concerning Banking, banks can determine business entities that collect funds from the public in the form of deposits and distribution to the public in the form of funds or other forms of funds in order to improve the lives of many people. There are also three groups of banks that need to be managed professionally, namely raising funds (funds), channeling funds (loans) and other service banks (services) (Kasmir, 2016). The main management is the management of fund raising activities, through this fund collection the bank will receive money that is ready to be sold back to the people who need funds (Kasmir, 2016).

The bank is an industry that in its business activities relies on public trust. Banks must be able to show their credibility so that more people will transact at the bank, one of which is through increased profitability. Profitability can be said as one of the most appropriate indicators to measure the performance of a bank. The bank's ability to generate profits can be a benchmark of the bank's performance. The higher the profitability, the better the bank's financial performance.

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Profitability is often used to measure management effectiveness based on the return on loans and investments. Every company certainly wants a high profit or profit to increase bank value. Because it also indirectly shows the prosperity of the bank. Bank performance illustrates how good or bad management manages its assets, seen from the measurement of performance obtained. Financial statements can be used to evaluate the financial position of the past and present from the results of bank operations, with the main objective to provide possible estimates and predictions about future performance. Every bank will always try to maximize its bank performance, where financial performance can be measured by profitability ratios that are important for banks, one of which is Return On Assets (ROA).

Return On Assets (ROA) shows the ability of management to generate income from the manager of the assets owned. In this case ROA is the ratio between profit before tax to total assets. ROA is important for banks because it is used to measure the effectiveness of banks in generating profits by utilizing the assets they have. According to Bank Indonesia regulations, the best standard for ROA in the size of Indonesian banks is a minimum of 1.5%. The greater the ROA 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 (Dendawijaya 2009).

Loan to Deposit Ratio (LDR) and Operating Costs Operating Income (BOPO). Kasmir (2016) means that the loan to deposit ratio is a ratio to measure the composition of the amount of credit given compared to the amount of public funds and own capital used. Meanwhile, according to Frianto Pandian (2012), Loan to Deposit Ratio (LDR) is a ratio that states how far banks have used depositors' money to provide loans to their customers. In other words, the amount of money used to make loans is money from depositors. LDR can be used as a benchmark for banking performance as an intermediary institution, which is an institution that connects excess and poor parties who need funds.

Operational Costs Operating Income (BOPO) is the total between operating costs and total operating income. If Operational Costs Operating Income (BOPO) increases, the better, the ROA will increase and vice versa. In this study shows that the Loan to Deposit Ratio (LDR) in 2015 to 2016 has increased, but Return On Assets (ROA) has decreased, followed in 2017 to 2018 Loan to Deposit Ratio has decreased, but Return On Asset (ROA) has increased. This is contrary to the theory which states that if LDR increases, ROA will also increase. The size of the LDR ratio of a bank will affect the profitability of the bank. The greater the amount of funds channeled to customers in the form of credit, the amount of idle funds decreases and the interest income earned will increase. This will certainly increase the LDR so that bank profitability also increases. (Kasmir, 2016).

Operational Cost Ratio Operational Income (BOPO) in 2015 to 2016 has decreased, but Return On Assets has decreased followed in 2016 to 2017 BOPO has decreased, but Return On Assets has decreased. This is not in accordance with the theory that the higher the Operational Cost of Operating Income, the Return On Assets will decrease, and vice versa.

## **II. LITERATURE REVIEW AND**

### **HYPOTESIS TEST**

#### **Return On Asset (ROA)**

Return On Assets (ROA) is a ratio that is used to measure the ability of bank management in obtaining profitability and managing the overall level of bank business efficiency. According to Bank Indonesia Return On Assets (ROA) is a comparison between profit before tax with the average total assets in a period. This ratio can be used as a measure of

financial health. ROA shows the effectiveness of the company so that it becomes an important part of the company considering the benefits derived from the use of assets can reflect the level of efficiency of a bank (Saudi, 2018). The greater the ROA, the greater the level of profit achieved by the bank so that the bank is less likely to occur in problematic conditions. Within the framework of the bank's health assessment BI will give a maximum score of 100 in the healthy category if the bank has an ROA > 1.5% (Hasibuan, 2011).

This ratio can be formulated as follows:

$$ROA = \frac{\text{Profit Before Tax}}{\text{Total Assets}} \times 100\%$$

### **Loan to Deposit Ratio (LDR)**

LDR as a ratio to measure the composition of the amount of credit given compared to the amount and the community and their own capital. (Kasmir, 2016) Loan to Deposit Ratio (LDR) is a comparison between the entire amount of credit or financing provided by banks with third party funds received by banks. Credit is credit as stipulated in Bank Indonesia regulations concerning the assessment of the quality of commercial bank assets. Whereas third party funds include current accounts, savings and time deposits but do not include interbank deposits. Based on the above understanding, it can be concluded that this ratio illustrates the ability of banks to repay withdrawals by depositors by controlling credit as their liquidity.

This ratio gives an indication of the amount of third party funds channeled in the form of credit. This higher figure illustrates the lack of bank liquidity. Therefore, Bank Indonesia limits the LDR level set forth in Bank Indonesia Regulation Number 15/15 / PBI / 2013 that the LDR safe limit ranges from 78% to 92%. LDR has an important role as an indicator that shows the level of credit expansion undertaken by banks so that LDR can also be used to measure whether or not the bank functions as an international institution. LDR can also be used to assess a bank's management strategy. Conservative bank management usually has a relatively low LDR tendency, whereas aggressive management has a high LDR or exceeds the tolerance limit.

The LDR value can be determined through a formula determined by Bank Indonesia through Bank Indonesia Circular Letter Number 13/30 / DPNP concerning the guidelines for Calculating Financial Ratios, namely:

$$LDR = \frac{\text{Credit}}{\text{Third Party Funds}} \times 100\%$$

### **Operational Costs Operating Income**

Operational Cost Ratio Operational Income (BOPO) if (BOPO) decreases indicating better operating efficiency, ROA will increase and vice versa (Kuncoro and Suhardjono, 2011).

The BOPO ratio shows how much the bank can reduce its operational costs on the other hand, and how much the ability to increase its operating income on the other hand. BOPO has an influence on bank profitability because it shows how much the bank can carry out the efficiency of costs incurred (Dendawijaya, 2009). In Bank Indonesia Circular No. 15/7 / DPNP dated 8 March 2013, the BOPO benchmark for the Commercial Bank Business Group (BUKU) I was set to a maximum of 85%. BOOK II ranges 78% - 80%, BOOK III 70-75% and BOOK IV 60% - 65%. Benchmarks are the average bank BOPO by group. The BOOK is a grouping of banks based on core capital. BOOK I is a bank with core capital of less than 1 trillion, BOOK II is a bank with core capital of 1 trillion to less than 5 trillion, BOOK III is a bank with core capital of 5 trillion to less than 30 trillion, and BOOK IV is a bank with core capital of more than 30 trillion. It can be concluded that the BOPO ratio that must be maintained by commercial banks is no more than 85%.

BI Circular Letter Number 13/30 / DPNP dated December 16, 2011, the BOPO calculation can be obtained as follows:

$$\text{LDR} = \frac{\text{Operating Expenses}}{\text{Operating Income}} \times 100\%$$

### **Hypothesis**

Then the hypothesis to be tested in this study are as follows:

H1: Loan to Deposit Ratio (LDR) influences profitability

H2: Operational Costs Operating Income (BOPO) affects profitability

H3: Loan to Deposit Ratio (LDR) Operational Costs Operating Income (BOPO) affects profitability

## **III. RESEARCH METHODS**

### **Object of research**

The object of this research is the Loan to Deposit Ratio (LDR), Operational Costs, Operating Income (BOPO) and Return On Assets (ROA) at Conventional Banks listed on the Indonesia Stock Exchange for the period 2014-2018.

### **Research methods**

This type of research in this research is explanatory research. Explanatory research is research that aims to obtain answers about "how" and "why" a phenomenon occurs

### **Data and Data Sources**

#### **Types of Data**

The data used in this study is quantitative data. Quantitative data is a type of data that can be measured or calculated directly, in the form of information or explanations stated with numbers or numbers. In this case the quantitative data needed is the Total Loan to Deposit Ratio (LDR), Operational Costs Operating Income (BOPO) and Return On Assets (ROA).

#### **Data Sources**

What is meant by data sources in this study are subjects from which data can be obtained. In this study the authors used secondary data sources. Secondary data sources are data directly collected by researchers as a support from the first source. It can also be said that the data is arranged in the form of documents. In this study, the data taken is the Bank's Annual Financial Report which is listed on the Indonesia Stock Exchange in the 2014-2018 Period.

### **Population**

The population of this study is the Conventional Banks listed on the Indonesia Stock Exchange in the 2014-2018 period, which are 38 companies.

### **Study Penelitian**

The use of sampling techniques with purposive sampling aims to get samples that fit the specified criteria. The criteria used in this study are as follows:

1. Conventional Banking Companies that have been and are still listed on the Indonesia Stock Exchange for the 2014-2018 period in a row.
2. Banking companies that have complete financial statement data related to the variables used in this study.

3. Banking companies on the Indonesia Stock Exchange (IDX) in the 2014-2018 period that used rupiah units.
4. Companies that have a positive ROA value on the Indonesia Stock Exchange (IDX) in the 2014-2018 period.

#### **Method of collecting data**

The method used in this research is descriptive method and verification method.

#### **Operationalization of Research Variables**

1. Independent Variable or Independent Variable (X) The independent variables in this study are Loan to Deposit Ratio (LDR) (X1) and Operational Costs Operating Income (BOPO) (X2) in Conventional Banking Companies listed on the Indonesia Stock Exchange Period 2014-2018

2. Dependent Variable or Bound Variable (Y)

The dependent variable in this study is Profitability (ROA) (Y) in Conventional Banking Companies listed on the Indonesia Stock Exchange Period 2014-2018

#### **Classic assumption test**

The linear regression model can be called a good model if it meets classical assumptions. Therefore, a classic assumption test is needed before conducting a regression analysis. The classic assumption test consists of the following:

- a. Normality test
- b. Multicollinearity test
- c. Autocorrelation Test
- d. Heteroscedasticity test

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

This study uses multiple linear regression analysis, which is to find out together the relationship between Loan to Deposit Ratio (LDR) and Operational Costs Operating Income (BOPO) on Profitability. So that it will be known which variable has a greater effect on profitability.

#### **Analysis of the Coefficient of Determination**

The coefficient of determination ( $R^2$ ) basically aims to measure how far the ability of the model in explaining the variation of the dependent variable. In this case there are two coefficient analyzes conducted, namely the analysis of the coefficient of multiple determination and the analysis of the coefficient of partial determination.

#### **Hypothesis test**

In this study, hypothesis testing is used to test whether there is an influence of Loan to Deposit Ratio (LDR) and Operational Income Operational Costs (BOPO) on Profitability. Hypothesis testing is done by t test for partial influence and f test for simultaneous influence.

## **IV. RESEARCH RESULTS AND DISCUSSION**

### **Research result**

The main data source used in this study is in the form of Financial Statements that are listed on the Indonesia Stock Exchange for the 2014-2018 Period

### **Classic Assumption Test**

#### **Normality Test**

Based on the results of normality testing, it is known that the probability value is greater than the error level of 5% ( $0.081388 > 0.05$ ) which indicates that the data used are normally distributed, thus it can be concluded that the assumption of data normality is met.

#### **Multicollinearity Test**

Based on the multicollinearity test results, it can be seen the value of centered variance inflation factors (VIF) from the LDR variable of 1.095117, the BOPO variable of 1.095117 can be concluded that the regression model that will be formed is free from multicollinearity, because both independent variables have a VIF value of less than 10 .

#### **Autocorrelation Test**

Based on the test results that the value of Durbin Watson obtained amounted to 1.936299. This value will be compared with the dU and 4-dU values in the Durbin Watson table. With a sample size of 65, and  $\alpha = 0.05$ , a dL value of 1.5355 and an upper limit value of dU of 1.6621 in the Durbin Watson table with the number of observations ( $n$ ) = 65, the number of independent variables ( $k$ ) = 2 and significance level of 0.05.

Durbin Watson's value ( $1.936299 > dU = 1.6621 < \text{value } (4 - dU = 2.33379)$ ). The Durbin Watson value is between the dU and 4-dU values ( $1.6621 < 1.9362 < 2.33379$ ), the hypothesis that there is no positive and negative autocorrelation in the regression model cannot be rejected.

#### **Heteroscedasticity Test**

Based on the criteria for the decision making of the glacier test, it is known that the regression model that will be formed has been freed from the symptoms of heteroscedasticity due to prob.chi square ( $X^2$ ) generated by 0.1721 and far greater than 0.05, so the model has fulfilled the assumptions to be tested regression.

### **Multiple Linear Regression Analysis**

The regression equation that explains the Effect of the Application of Loan to Deposit Ratio (LDR) and Operational Costs Operating Income (BOPO) on Profitability based on the regression coefficients in the table is as follows:

$$Y = 6.352403 + 0.014031 \text{ LDR} - 0.070733 \text{ BOPO}$$

The obtained multiple linear regression equation can be explained as follows:

1. If  $\alpha = \text{constant}$  is 6.352403, it means that if the independent variable, Loan to Deposit Ratio and Operational Cost, Operating Income is considered constant (0 value), then the dependent variable, namely the Return On Assets variable will be worth 6.352403.

2. Loan to Deposit Ratio variable positive regression coefficient of 0.014031 explains the magnitude of changes in Return On Assets due to the influence of Loan to Deposit Ratio. A positive sign indicates the direction of the relationship in the same direction. Every time there is an increase in Loan to Deposit Ratio, Return On Assets increases by 0.014031,

assuming the other independent variables are constant (value 0). So companies with large Loan to Deposit Ratios have greater Return On Assets.

3. The variable coefficient of Operational Cost Operational Revenue Operational value is negative of  $-0.070733$  explaining the magnitude of changes in Return On Assets due to the influence of Operational Costs Operating Income. A negative sign indicates the direction of the relationship is inversely proportional (not unidirectional). Every time there is an increase in Operational Costs Operating Income, Return On Assets decrease by  $0.070733$  assuming the other independent variables are constant (value 0). Thus, companies with large operational costs of operating income have smaller return on assets.

### **Analysis of the Coefficient of Determination**

The results obtained indicate the R-squared obtained by  $0.947809$  results show that the variable Loan to Deposit Ratio (X1) and Operational Costs Operating Income (X2) can explain the variable Return on Assets (Y) of  $94.78\%$  and the rest of  $5.22\%$  is explained by other variables outside the research model (Hussain et al., 2019)

### **Partial Determination Coefficient**

Based on the test results the coefficient of determination shows the R-squared obtained by  $0.947809$  results indicate that the variable Loan to Deposit Ratio (X1) and Operational Costs Operating Income (X2) can explain the variable Return on Assets (Y) of  $94.78\%$  and the remainder equal to  $5.22\%$  is explained by other variables outside the research model

### **Partial Testing (t Test)**

Based on the partial test results obtained by tcount for the LDR Implementation variable of  $0.014031$ , and BOPO of  $-0.070733$ . The tcount values are then compared with the t value in the t distribution table. With  $\alpha = 5\%$  and  $df = n-k = 65-2 = 97$ , the ttable value obtained from the t distribution table for testing two parties is  $1.66940$ . From these results it appears that as follows:

1. Based on the results of the t test (partial) on the regression model, the significance value of the Implementation variable was obtained that the value of tcount =  $2.673812$  was smaller than the negative value of the table ( $2.673812 > -1.666940$ ) and the probability value of  $0.0101$  more smaller than the  $\alpha$  value of  $0.05$  so that with a  $95\%$  confidence level it can be decided to reject  $H_0$  and accept  $H_a1$ . So it can be concluded that the Loan to Deposit Ratio partially has a positive effect on Return On Assets.

2. Based on the results of the t test (partial) in the regression model, the significance value of the Implementation variable was obtained that the t-count value of  $8.834226$  was smaller than the negative value of the table ( $-8.834226 < -1.66640$ ) and the probability value of  $0.000$  was smaller than the value of  $\alpha$  is  $0.05$  so with a  $95\%$  confidence level it can be decided to reject  $H_0$  and accept  $H_a1$ .

So it can be concluded that Operational Costs Operating Income partially has a negative effect on Return On Assets.

### **Simultaneous Testing (Test f)**

Based on the results of hypothesis testing (f test), the significance value of the regression model can be obtained simultaneously at  $0,000 < 0.05$  (the real level of significance of the study). Besides that, it can also be seen from the results of the comparison between fcount with the f value in the distribution table f. For  $\alpha = 5\%$ ,  $df_1 = k = 2$ , and  $df = n-k-1 = 65-2-1 = 62$ , a ftable of  $3.090$  is obtained. This means that there is an influence from the Application of Loan to Deposit Ratio

(LDR) (X1) and Biaya Operasional Operasional Income (BOPO) (X2) simultaneously on Profitability (Y). Shows that H03 is rejected and Ha3 is accepted with a Fcount value of 64.85908 which is greater than the Ftable value of 3.15 with a probability value of 0.00 million less than an  $\alpha$  value of 0.05. So it can be concluded Loan to Deposit Ratio and Operational Costs Operating Income simultaneously or jointly affect the Return On Assets

## V. Discussion

### **The Effect of the Application of Loan to Deposit Ratio (LDR) Against Return on Assets.**

Based on this study, the variable Loan to Deposit Ratio in banking companies listed on the Indonesia Stock Exchange in the 2014-2018 period decreased and increased each year. The average value of the Loan to Deposit Ratio in banking companies listed on the Indonesia Stock Exchange in the 2014-2018 period was 84.56%. According to Bank Indonesia Regulation Number 15/15 / PBI / 2013, the LDR safe limit ranges from 78% to 92%. Based on Bank Indonesia regulations, it can be concluded that the 13 banking companies listed on the Indonesia Stock Exchange in the 2014-2018 period had an average Loan to Deposit Ratio of 84.56%, not exceeding Bank Indonesia regulations. LDR safe limits range from 78% to 92 % means it is still in a safe condition.

Based on the results of the t test on the variable Loan to Deposit Ratio of Return On Assets obtained tcount and ttable which shows the tcount value of 2.673812, while the ttable of -1.66640. From these results it can be seen that - count > - table (-1.953657 > -1.66680), it can be concluded that H02 is accepted, meaning that the Loan to Deposit Ratio affects the Return On Assets of conventional banks listed on the Indonesia Stock Exchange in the 2014 period -2018. The results of this study are in line with the theoretical basis which states that if a bank has a high LDR, it will increase costs, both the cost of productive asset reserves and other costs. In other words, the higher the LDR of a bank, reflects the less good bank liquidity. Therefore, Indonesian banks limit the LDR level from 78% to 92%.

The results of tests that have been done partially on the variable Loan to Deposit Ratio can be concluded that the Loan to Deposit Ratio has a positive effect on Return On Assets, meaning that banking companies with high LDR values affect the increase in Return On Assets and vice versa.

### **Effect of Operating Costs Operating Income (BOPO) Against Return on Assets.**

Based on this research, the Operational Cost Operational Income variable at Conventional banks listed on the Indonesia Stock Exchange in the period 2014-2018 experienced fluctuations but tended to decrease. The average value of Operational Costs Operating Income at Conventional banks listed on the Indonesia Stock Exchange in the 2014-2018 period is 84.98%. From the BOPO ratio, it can be seen the efficiency level of a bank's management performance. If the ratio shows an efficiency level above 85% and close to 100% it means that the bank's performance shows a very low level of efficiency (Veithzal, 2013). It can be concluded that 13 conventional bank companies listed on the Indonesia Stock Exchange in the 2014-2018 period had an average Operating Cost of Operating Income below 85% which was 84.98%, meaning that the level of company efficiency was quite good.

Based on the results of the t test on the Operational Cost Variables Operational Income to Return On Assets obtained tcount and ttable which shows the tcount value of -8.834226 while the ttable is -1.66680. From these results it can be seen that - count < -table (-7.340589 < -1.66640) it can be concluded that H1 is accepted, meaning that the Operational Income variable variable has a negative effect on Return On Assets at Conventional Banks listed on the Indonesia Stock Exchange period 2014-2018. The negative effect shows that if Operational Costs Operating Income increases, the Return On Assets



decreases and vice versa. The results of this study are in line with the theoretical basis in the previous chapter which states that the higher percentage of BOPO owned by a bank indicates that the bank is not efficient in carrying out its business activities. A high BOPO percentage value results in low profits earned by a bank (Kuncoro and Suhardjono, 2011).

The results of tests that have been carried out partially on the variable Operational Costs Operational Income can be concluded that Operational Costs Operating Income has a negative effect on Return On Assets, meaning that banking companies with high levels of Operational Costs Operating Income means operating efficiency decreases, then Return On Assets obtained by banks low. This is because the level of efficiency in carrying out its operations affects the income or earnings generated by the bank. In addition, the large BOPO ratio is also due to the high cost of funds raised and the low interest income from investing funds.

### **Effect of Application of Loan to Deposit Ratio (LDR) and Operational Costs Operating Income (BOPO) Against Return on Assets.**

Based on this study, the value of the Loan to Deposit Ratio and Operational Costs Operational Income at Conventional Banks listed on the Indonesia Stock Exchange in the 2014-2018 period tended to increase. The value of the Loan to Deposit Ratio and Operational Costs Operating Income at conventional banks listed on the Indonesia Stock Exchange for the period 2014-2018 is considered quite good because it is in accordance with Bank Indonesia regulations.

Based on the results of the F Test using Eviews 9, the variable Loan to Deposit Ratio and Operational Costs Operating Income to Return On Assets. From the F Test results obtained significance value of the regression model simultaneously equal to 0.0000, other than that it can be seen from the results of the comparison between Fcount and Ftable shows the value of Fcount of 64.85908 while Ftable of 3.15, it can be concluded that together or Simultaneously the independent variable is the Loan to Deposit Ratio variable and Operational Costs Operating Income affects the dependent variable, namely Return On Assets at Conventional Banks listed on the Indonesia Stock Exchange period 2014-2018. While the magnitude of the influence of the variable Loan to Deposit Ratio and Operational Costs Operating Income on Return On Assets amounted to 94.78%.

The results of this study are also in line with the theoretical basis which states that if the greater the amount of funds channeled to customers in the form of credit and operating efficiency increases, the ability to earn profits also increases.

Thus, the high and low Loan to Deposit Ratio and Operational Costs Operating Income has an important role in changing Return on Assets.

## **VI. CONCLUSION**

This study aims to find out how to apply Loan to Deposit Ratio (LDR) and Operational Income Operational Costs (BOPO) both partially and simultaneously on Return On Assets (ROA) in Conventional Banking Companies listed on the Indonesia Stock Exchange Period 2014-2018. Based on the results of research and discussion that has been described conclusions obtained as follows:

1. Loan to Deposit Ratio (LDR) in terms of health assessment, banks are still quite healthy because they have a level of Loan to Deposit Ratio that is not too high and bank LDR on average is still at the upper and lower limit set by Bank Indonesia. This means that the bank is quite active in lending. On average, the level of Loan to Deposit Ratio (LDR) of banking companies in the 2014-2015 period increased and in 2015-2017 it declined and in 2017-2018 it increased. Loan to Deposit Ratio affects profitability (ROA). High or low Loan to Deposit Ratio will bring changes to Return On Assets.
2. Operational Costs Operating Income (BOPO) has a negative effect on profitability (ROA) of Conventional Banking Companies listed on the Indonesia Stock Exchange in the period 2014-2018. Operational Costs Operating Income has an important role in changing the Return On Asset.
3. Loan to Deposit Ratio (LDR) and Operational Costs Operating Income (BOPO) affect the Return On Assets (ROA) of Conventional Banking Companies listed on the Indonesia Stock Exchange for the period 2014-2018. High and low Loan to Deposit Ratio (LDR) and Operational Costs Operating Income (BOPO) has a significant role in the change in Return on Assets (ROA).

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## VII. SUGGESTION

The suggestions that researchers can convey based on the results of research that has been done are as follows:

### 1. For Banking Companies

a. Companies can be expected to pay attention to credit policies, banks in the use of third party funds as a source of lending to the public so that credit risk can be minimized so that the maximum profit can be obtained.

b. The company is expected to be able to manage the use of costs effectively, so as to minimize costs that are not needed in operational activities

### c. For Investors

Investors are advised to invest in Banking Companies that have a low Operating Cost Operating Income (BOPO) ratio, because the lower ratio shows that the better the bank's management performance can make operating expenses more efficient.

### 2. For Further Researchers

1. Replacing / adding other variables outside of this study that if it has an influence on Return On Assets (ROA), such as Net Interest Margins, Non Performing Loans, capital adequacy ratio, and other factors.

2. Adding research subjects such as Islamic banking.

3. Using the latest period and extending the research period so as to provide a broad and up-to-date picture of the level of banking health and financial performance of the bank in making profits

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