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### THE EFFECT OF THIRD-PARTY FUNDS AND LIQUIDITY (LDR) ON BANKING PROFITABILITY (ROA) (CASE STUDY OF BUMN BANKS LISTED ON THE INDONESIA STOCK EXCHANGE FROM 2012 TO 2019)

*Dinda Putri Hasna<sup>1</sup>, Devi Sekar Ariyani<sup>2</sup>, Lia Faridatul Ula<sup>3</sup>, Ria Septiani Putri<sup>4</sup>, Yogo Heru  
Prayitno, S.E., M.Si<sup>5</sup>*

Widyatama University, Indonesia

<sup>1</sup>[dinda.hasna@widyatama.ac.id](mailto:dinda.hasna@widyatama.ac.id), <sup>2</sup>[sekar.ariyani@widyatama.ac.id](mailto:sekar.ariyani@widyatama.ac.id), <sup>3</sup>[lia.ula@widyatama.ac.id](mailto:lia.ula@widyatama.ac.id),  
<sup>4</sup>[ria.septiani@widyatama.ac.id](mailto:ria.septiani@widyatama.ac.id), <sup>5</sup>[yogo.heru@widyatama.co.id](mailto:yogo.heru@widyatama.co.id)

**Dinda Putri Hasna, Devi Sekar Ariyani, Lia Faridatul Ula, Ria Septiani Putri, Yogo Heru Prayitno, S.E. The Effect Of Third-Party Funds And Liquidity (Ldr) On Banking Profitability (Roa) (Case Study Of Bumn Banks Listed On The Indonesia Stock Exchange From 2012 To 2019)-- Palarch's Journal Of Archaeology Of Egypt/Egyptology 17(4), 2914-2927. ISSN 1567-214x**

**Keywords: TPF, LDR, ROA.**

#### **ABSTRACT**

This study aims to provide empirical evidence about the effect of third-party funds and liquidity (LDR) on profitability (ROA) in BUMN-banks. The analytical method used in this study was multiple linear regression with the classic assumption test which included normality, multicollinearity, heteroscedasticity, and autocorrelation test. The results showed that the third-party fund variable partially had no effect on ROA, while the LDR variable partially had a negative effect on ROA; and the third-party fund and LDR affected ROA. Profitability is influenced by TPF and LDR by 66.1%; meanwhile 33.9% is influenced by other variables not examined in this study.

**Keywords: TPF, LDR, ROA.**

#### **INTRODUCTION**

The bank provides services and acts as a loan provider so that money which originates from the community can be accommodated and distributed back to the community. Public trust and confidence in the banks' existence that they offer solution for financial problems as well as possible is all bank's expectation. For this reason, banks always strive to provide services which satisfy the community. Because taking into account the trust which the community requires towards a

bank, the bank will continue to grow, and eventually will also increase the source of third-party funds needed by the bank (Dendawijaya, 2009: 49).

One of the indicators to determine the level of bank's health is liquidity, which is viewed using a loan to deposit ratio (LDR) as an assessment of bank liquidity. High loan to deposit ratio (LDR) indicates greater profit the banks can earn, yet, on the other hand, it also indicates a greater risk, i.e. the non-return of credit funds provided or the occurrence of bad loans. Thus, it will have an impact on profit decline.

According to Bank Indonesia Circular regarding the ranking of the liquidity component, the safe limit of loan to deposit ratio (LDR) is in the range between 78% - 100%. This limit provides an indication that each bank must have a loan to deposit ratio (LDR) ranging from 78% -100% in order to be considered in the healthy category. Meanwhile, the value of loan to deposit ratio (LDR) which is above the safe limit, indicates that the respective bank is in the category of less liquid or unhealthy.

BUMN banks consists of BNI Tbk, Bank Mandiri Tbk, BRI Tbk and BTN Tbk. Profit-oriented activities are indispensable for these banks since in fact, every bank also requires profits in its activities in order to improve its performance. This profit-making activity is influenced by TPF and LDR. The value and change of TPF and LDR from 2012 – 2019 can be seen in the table below:

Table 1.1  
Amount of Third-Party Funds, LDR and ROA of BUMN Banks  
2012-2019

<b>Year</b>	<b>Third-party funds (Billion)</b>	<b>Liquidity LDR (%)</b>	<b>Profitability ROA (%)</b>
2012	Rp.1,201,284	79.84	3.80
2013	Rp.1,363,062	86.70	3.87
2014	Rp.4,114,420	89.42	2.85
2015	Rp.4,413,056	92.11	2.32
2016	Rp.4,836,758	90.70	2.23
2017	Rp.5,289,377	90.04	2.45
2018	Rp.5,630,448	94.78	2.55
2019	Rp.5,998,648	94.43	2.47

Source: (www.ojk.go.id) Indonesian Banking Statistics

by observing the table data above, it shows that the LDR variable has increased annually except those in 2015 and 2017. The value of ROA has fluctuated by 3.87% to 2.85% in 2014 and 3.03% and then decreased again in 2016 and 2019. The movement of third-party funds (TPF) which always increases every year from Rp.1,201,284 billion in a row to Rp.5,998,648 billion in the direction of Return on Assets (ROA) shows a positive indication.

Based on the data in the table above, although it does not look significant, in fact, in the first quarter of 2019, this state-owned banks (BUMN) experienced a slow

increase in profits. Earnings from state-owned enterprises (BUMN), namely PT Bank Rakyat Indonesia (Persero) Tbk or BRI, PT Bank Negara Indonesia (Persero) Tbk or BNI and PT Bank Tabungan Negara (Persero) Tbk or BTN in the first quarter of 2019 tended to slow down compared to with the profit earning in the same period in the previous year.

In terms of net profit, BNI pocketed the highest net profit increase, of 11.5 percent year on year (yoy) from Rp3.66 trillion to Rp4.08 trillion. However, BNI's profit increase was lower than the same period last year of 13.3 percent. Then, BRI ranked the second with a net profit increase of 10.42 percent (yoy) from Rp7.42 trillion to Rp8.20 trillion. Similarly, BRI's profit growth fell from the same period last year of 11.4 percent.

Vice President of Research Artha Sekuritas, Frederik Rasali said this condition occurred due to a decrease in profits in terms of net interest margins and lending which was under liquidity pressure. This situation suppressed the banks' profit growth and eventually, the profitability is all under pressure so that it caused to slow earned profits.

Even though credit was under pressure, those BUMN banks still maintained the number of bad loans or non-performing loans (NPLs) at a safe level. This state-owned banking NPL is still far below the NPL threshold set by the regulator at 5 percent. In terms of third-party funds (TPF), BUMN banks have also managed to collect double digit growth. For instance, BNI recorded a 16.8 percent growth in deposits (yoy), from Rp 492.90 trillion to Rp575.75 trillion. Even so, an Indonesian Center for Reform on Economics (CORE) economist, Piter Abdullah added that the performance of BUMN banks is still in line with expectations and believed BUMN banks can boost their profits this year.

### ***Problems identification***

Based on the description of the research background above, the authors identify the issues which will be discussed in this study as follows:

1. The funds collected by banks has not yet been optimally allocated to generate profits for banks.
2. The imbalance between the funds which have been collected and the loans channeled by banks results in the fund deposition.
3. There is an increase in non-performing loans due to slow economic activity, fall of commodity prices, increased currency volatility and tightened liquidity as a result of the global crisis which has less favorable impact to the quality of customer credit in all segments.

### ***Scope of the research***

In order that the research achieves the study objectives, the scope of present research is limited to deal with the following problems:

1. Bank internal factors subjected to examination are third party funds (TPF), liquidity and profitability (ROA).
2. The research period for observation is set from 2012 to 2019.
3. The object of this study is state-owned commercial banks which operate conventionally listed on the Indonesia Stock Exchange (IDX) during 2012 to 2019.

### ***Problems formulation***

Based on the existing research background, the following problems can be formulated:

1. Does the third-party fund affect SOE banking profitability in Indonesia during the period of 2012 – 2019?
2. Does liquidity affect SOE banking profitability in Indonesia from the period of 2012 – 2019?
3. Do third-party funds and liquidity affect SOE banking profitability in Indonesia from 2012 to 2019?

## **LITERATURE REVIEW**

### ***Bank definition***

A bank is defined as a financial institution whose activities collect funds from the public and channel the funds to those who lack for funds or in need of funds. According to PSAK No.31 (2004: 31.1), banks are institutions which act as financial intermediaries between those who have funds and those who need funds, as well as institutions which facilitate the flow of payments.

### ***Source of bank funds***

According to Kasmir (2017: 50), what is defined as sources of bank funds is the bank's efforts to raise funds to finance its operations. The sources of bank funds are as follows:

Third-party fund (funds sourced from the wider community)

The third-party source of funds is an important source for bank operations and is a measure of the success by which banks can finance the operation by this sources of funds. The third-party source of funds may consist of:

- a. Checking/current accounts  
A checking account is a deposit which can be done at any time by borrowing a check for cash payment for a checking account for the transfer of books. Checks and Giro can be used as a means of payment. Because the nature of the payment can be done at any time, the source of funds from this checking account is classified as short funds which quickly fluctuate from time to time.
- b. Saving accounts  
Savings are approved deposits which can only be done with certain agreed conditions without check or crossed checks or other similar instruments. The

most widely used withdrawal of savings accounts today is with a savings book, cash card or ATM card and debit card.

c. Time deposits

Time deposits are a type of account at bank which can only be made at a certain time, in accordance with the specific maturity date or a period to maturity at the beginning of the fund placement between the depositor and the bank party.

Third-party funds

Among several sources of bank funds, this third-party fund is one of the fund sources which is relatively easy when compared to the others.

The growth of third-party funds (TPF) can determine the amount of credit growth in the following year where the growth can determine the level of a bank's profitability. Funds collected from the public (TPF) turns out to be the largest source of funds, the most relied on by banks (could reach 80% - 90% of all funds managed by banks (Dendawijaya, 2009: 49).

$$TPF = \text{Demand Deposits} + \text{Savings Deposits} + \text{Time Deposits}$$

**Loan to deposit ratio (LDR)**

Loan to deposit ratio (LDR) is a measurement in terms of bank liquidity which shows a comparison between credit and third-party funds (TPF). LDR is a ratio used to measure the level of liquidity, by comparing the disbursed loans with funds collected from the public by which one can determine the bank's ability to pay short-term obligations. According to the Bank Indonesia financial ratio calculation guidelines, the credit is referred to as funds given to third parties (excluding credit given to other banks).

According to Kasmir (2017: 319), LDR (loan to deposit ratio) is a ratio used to measure the composition of the amount of credit given compared to the amount of funds from the public (TPF) used. The maximum LDR according to government regulations is 110%. The higher this ratio indicates the bank is more unhealthy, while the lower LDR ratio indicates the bank is sounder. This ratio can be formulated as follows:

$LDR = \frac{\text{Total credit}}{\text{Total third-Party Funds}} \times 100\%$
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**Profitability**

According to SE BI No.6/23/DPNP/2004, the Formula for ROA are:

$$ROA = \frac{EAT}{TA} \times 100\%$$

Assessment criteria based on ROA component ranking can be seen in Table 2.4. The assessment results can be used as an evaluation of the current management performance, whether they have worked effectively or not. Failure or success can

be used as a reference for future earnings planning, as well as the possibility to replace the new management, especially after the old management fails (Kasmir, 2014: 196).

### ***Framework***

Banks have three main functions, i.e. collecting funds, channeling funds, and providing services to the community. The bank's activity of collecting funds from the public is called third-party funds (TPF); thus, banks have increased capital in order to expedite the activities of other banks, i.e. channeling funds to the community. The bank's activity in channeling funds to the public to fulfil credit means that the bank also makes the company healthier (more liquid) as indicated by the loan to deposit ratio (LDR).

The independent variables in this study are TPF and LDR which affect profitability (ROA). Hence, it can be concluded with the following paradigms:

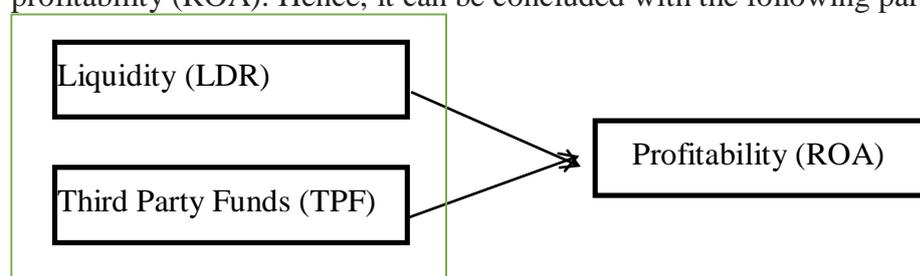


Figure 2.1 Theoretical framework

### ***Hypothesis***

Based on the problem statements discussed above, there are several hypotheses proposed are:

H1: Fund from Third-party affects the profitability of BUMN banks in Indonesia during the period of 2012 to 2019;

H2: Liquidity affects SOE banking profitability in Indonesia for the period of 2012–2019;

H3: Fund from Third-party and liquidity affect SOE banking profitability in Indonesia for the period of 2012 – 2019

## **RESEARCH METHODS**

### ***Types of the research***

The method used in this research is quantitative methods. According to Sugiyono (2018: 8) quantitative research methods can be defined as a research technique based on the philosophy of positivism which is used to examine populations or specific samples, in which research instruments are used in data collection, and quantitative/statistical data analysis is used with the aim of testing established hypotheses.

In this study the quantitative method aims to examine the effect of variable X1, third-party funds (TPF) and X2, liquidity (LDR) on the variable Y, profitability (ROA) in banks.

***Venue and time of the research***

Research sites

The author conducted indirect research by accessing the corporates’ annual financial statement data through the Indonesia Stock Exchange website, [www.idx.co.id](http://www.idx.co.id) and the banks’ own official website. The object of research used in this study is state-owned banking in Indonesia during the period of 2012 – 2019.

Research period

The study was conducted since April 2020 until it reached completion. This research period uses the annual financial statements officially issued by BUMN banks.

***Data and data sources***

Population and research samples

Population

In this study, the population comprises of four state-owned Indonesian General Banks in for the year period of 2012 to 2019. It is because 2019 is the year close to the time the study is carried out. As such, it is expected that this study results can provide the latest information about the studied variables as well as a comparison.

Table 4. 1 List of Research Populations

No	BUMN Banks	Stock Name
1.	Bank Negara Indonesia	BBNI
2.	Bank Rakyat Indonesia	BBRI
3.	Bank Tabungan Negara	BBTN
4.	Bank Mandiri	BMRI

Source: ([www.idx.co.id](http://www.idx.co.id), the data has been reprocessed)

Samples

Out of the population, a certain number of samples are taken. In this study, the method of nonprobability and saturated sampling technique was used. By this method, the samples do not have equal opportunity for each element or member of the population to be selected (Sugiyono, 2018: 84).

***Data analysis technique***

In a research, data analysis is a step which can determine the accuracy of research results. The data analysis aims to be able to answer the research problems. After the data analysis, the results can be interpreted to be used as material for conclusions and recommendations for interested parties.

For the purpose of data analysis, descriptive statistics, classic assumption tests, multiple linear regression analysis, hypothesis testing, and the coefficient of determination test were used.

**Multiple linear regression analysis**

In this reasearch, multiple regression analysis is performed to determine the effect of financial distress and growth opportunities on accounting conservatism.

The regression equation used is:

$$Y = a + b_1 X_1 + b_2 X_2 + e$$

Where:

- Y = Return on assets
- X1 = Funds Form Third-party
- X2 = Debt to deposit ratio
- a = Y value if X = 0 (constant)
- b = Regression number or coefficient of regression
- e = Standard error of estimated regression

**Hypotheses testing**

Hypotheses testing, whether they are either accepted or rejected, is performed using t test and F-test.

T-test (partial test)

According to Ghazali (2018: 98), t-test is used to determine the partial influence of the independent variables used in this study individually in explaining the dependent variable. This t-test is done by comparing t-statistics (t-values generated from the regression process) and t-values obtained from the table. The steps hypothesis testing can be described as follows:

4. Determine the hypothesis statement

The hypothesis testing can be described as follows:

5. Fund From Third-party

HO1: Variable Fund From Third-party have no influence on return on assets;

Ha1: Variable Fund From Third-party have an influence on return on assets.

6. Loan to deposit ratio

HO2: Variable loan to deposit ratio has no influence on return on assets;

Ha2: Variable loan to deposit ratio has an influence on return on assets.

7. Determination of significant level

To be able to determine whether there is an influence, the value of t-count is compared with that of t-table. To find out the table as the threshold of acceptance and rejection, the degree of freedom in research is determined by the formula  $(dk) = n-k-1$ . Then to determine the value of t-count according to Sugiyono (2018: 184), we can use the formula as follows:

$$t = \frac{r \sqrt{n-2}}{1-r^2}$$

Where:

r = partial correlation  
k = Number of independent variables  
n = Number of samples

Simultaneous test (F-test)

$$F_h = \frac{R^2 k}{(1 - R^2)(n - k - 1)}$$

Source: Sugiyono (2018: 192)

Where:

R = Multiple correlation coefficient  
K = Number of independent variables  
N = Number of samples

### ***Test the coefficient of determination (statistic test R<sup>2</sup>)***

According to (Sugiyono 2018: 252) the coefficient of determination is the square of the correlation value (R<sup>2</sup>). This analysis is used to determine the effect of the independent variable on the dependent variable expressed in percentage. The formula is as follows:

$$KD = R^2 \times 100\%$$

Where:

KD = determination coefficient  
R<sup>2</sup> = correlation coefficient squared

## **RESULTS AND DISCUSSIONS**

Prior to multiple linear regression analysis, a regression model must pass a series of classical assumption tests. The purpose of the classical assumption test is that the results of the multiple regression analysis are normally distributed, and there are no indication of autocorrelation, there is no multicollinearity, and there is no heteroscedasticity according to the criteria of BLUE (best linear unbiased estimate). The results of the study conclude that all assumptions are satisfied so that multiple linear regression analysis can be interpreted.

### ***Multiple linear regression analysis***

The general equation multiple linear regression is as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e$$

Table Multiple Linear Regression Test

### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	9.862	1.530		6.446	.000
	X1_DPK	1.003E-9	.000	.224	1.786	.085
	X2_LDR	-.081	.015	-.676	-5.396	.000

a. Dependent Variable: Y\_ROA

Source: SPSS Output 25

Then the multiple linear regression equation can be arranged :

$$Y = 9,862 + (1,003) X1 + (- 0,081) X2 + e$$

Result from the equation, the following statements can be explain:

1. Constant value (a) of 9,862 which means positive constant value. This means that if the third-party fund (TPF) (X1), loan to deposit ratio (LDR) (X2) value is 0,000 then the return on assets (ROA) (Y) of 9.862, which means the growth of ROA of 986.2%.
2. The value of third-party funds (TPF) (X1) has a coefficient of 1.003. It shows that the relationship between TPF and ROA is unidirectional. If there is an increase in TPF by 1%, it will increase ROA, and vice versa. If there is a decrease in TPF by 1%, it will reduce ROA.
3. The value of the loan to deposit ratio (LDR) (X2) has a coefficient of -0.081 which means the value is negative. This shows the opposite relationship between LDR and ROA. If LDR increases by 1%, ROA will decrease, and vice versa. If there is a decrease in LDR by 1%, ROA will increase.

### ***Hypothesis testing***

Partial test (t)

The first step:

H<sub>0</sub>1:  $\beta = 0$ : Third-party funds (TPF) (X1) has no effect on return on assets (Y)

Ha1:  $\beta \neq 0$ : Third-party funds (TPF) (X1) affect return on assets (Y)

H<sub>0</sub>2:  $\beta = 0$ : Loan to deposit ratio (LDR) (X2) has no effect on return on assets (Y)

Ha2:  $\beta \neq 0$ : Loan to deposit ratio (LDR) (X2) effect on return on assets (Y)

The decisions are made as follows:

1. H<sub>0</sub> is accepted if t-count < t-table (k; db; 0.05)
2. H<sub>0</sub> is rejected if t-count  $\geq$  t-table (k; db; 0.05)

Second step:

Based on the value of return on assets obtained from the results of data processing, which is:

1. If profit > 0.05, H0 is accepted.
2. If profit < 0.05 then H0 is rejected.

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	9.862	1.530		6.446	.000
	X1_DPK	1.003E-9	.000	.224	1.786	.085
	X2_LDR	-.081	.015	-.676	-5.396	.000

a. Dependent Variable: Y\_ROA

Partial Test (t)

Source: SPSS Output 25

Based on Figure 5.12, it can be concluded that the test results are as follows:

**Third-party funds (TPF)**

Based on the table, the value of t-count obtained is 1.786. Then, it is compared with t-table (df (nk) 32-2 = 30,  $\alpha = 0.05$ ) of 1.697. It means that t-count > t-table with a significance level of 0.085 which means the value is greater than  $\alpha = 0.05$ . The regression values are positive 1.003. Thus, it can be concluded that H1 is rejected, meaning that TPF (X1) has partially no effect on return on assets (ROA).

**Loan to deposit ratio (LDR)**

Based on the table, t-count obtained is -5,396. Then, it is compared with t-table (df (nk) 32-2 = 30,  $\alpha = 0.05$ ) equal to -1,697. It means that -t-test < t-table at a significance level of 0,000 which means the value is less than  $\alpha = 0.05$ . By the negative regression value which is -0.081, it can be terminated that H2 is accepted, meaning that the LDR (X2) variable partially has a negative influence on return on assets (ROA).

**Simultaneous test (F)**

The relationships of variables are described as follows:

Ho:  $\beta = 0$ : third-party funds (X1) and loan to deposit ratio (X2) simultaneously have no effect on return on assets.

H1:  $\beta \neq 0$ : third-party funds (X1) and loan to deposit ratio (X2) simultaneously affect return on assets.

The decision rules in this research are:

1. H0 is accepted if F count < F table (k; db; 0.05);
2. H0 is rejected if F count  $\geq$  F table (k; db; 0.05).

Based on the value of return on assets obtained from the results of data processing, namely:

1. If profit > 0.05, H0 is accepted;
2. If profit <0.05 then H0 is rejected.

The probability value of the F test can be seen in the analysis results in the ANOVA Table, column of sig or significance.

Table Simultaneous Test (F)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26.716	2	13.358	28.294	.000 <sup>b</sup>
	Residual	13.691	29	.472		
	Total	40.407	31			

a. Dependent Variable: Y\_ROA

b. Predictors: (Constant), X2\_LDR, X1\_DPK

Source: SPSS Output 25

Based on Table 5.13 above, it shows that the value of F count is 28.294 then compared with F table (df regression, residual 29) of 3.33. Thus, the value of F count > F table, then H0 is rejected. It also can be seen from the comparison of the probability with a significance level where the probability of 0,000 is less than the significance of 0.05 which means that H0 is rejected. So, it can be concluded that third-party funds (TPF) and loan to deposit ratio (LDR) simultaneously and significantly influence return on assets (ROA).

***Determination coefficient test***

The value of R2 can be seen in the following table.

Table **Determination Coefficient Test**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.813 <sup>a</sup>	.661	.638	.68710

a. Predictors: (Constant), X2\_LDR, X1\_DPK

b. Dependent Variable: Y\_ROA

**Source: SPSS Output 25**

Based on the test results in the table above, it can be seen that R2 value is 0.661. To calculate the coefficient of determination, the following formula is used:

$$\begin{aligned}
 KD &= R^2 \times 100\% \\
 &= (0,813)^2 \times 100\% \\
 &= 66,1\%
 \end{aligned}$$

From these calculations, it shows that TPF (X1) and LDR (X2) contribute by 66.1% to profitability (Y).

### ***Discussions of the results***

Effects of third-party funds (TPF) for return on assets (ROA)

Based on the t test (partial) in the regression model for third-party funds (TPF) which is 1.003, the comparison of the probability with a significance level where the probability of 0.085 is greater than the significance level of 0.05 means that third-party funds have no partial effect on profitability.

Effect of loan to deposit ratio (LDR) for return on assets (ROA)

Based on the t test (partial) in the regression model for loan to deposit ratio (LDR) which is -0.081, the comparison of the probability with a significance level where the probability of 0,000 is less than the 0.05 significance level, means that the loan to deposit ratio is partially negative towards profitability. The higher LDR will have an impact on the low profitability because many bank assets which exist in the community in the form of credit, or other bank services such as safe deposit boxes, bank cards, collections, clearing, banks must also offset the increase in LDR. It is because the higher LDR will lead the banks to the category 'unhealthy'.

Loan to deposit ratio (LDR) is stated to be influential because the likelihood of high loan risk return. It causes little bank profitability because the bank calculates the probability by taking the percentage difference value. If there is no return, the banking income will be small.

Effects of third-party Funds and loan to deposit ratio (LDR) on return on assets (ROA)

Based on the results of simultaneous testing (F test), it shows that the value of F count is 28.294 while the value of F table is 3.33; thus, the value of F count > F table; then, H<sub>0</sub> is rejected. It can also be seen from the comparison of the probability with a significance level where the probability of 0,000 is less than the significance of 0.05 which means that H<sub>0</sub> is rejected.

### **CONCLUSIONS**

This study was conducted to determine the effect of third-party funds (TPF) and liquidity (LDR) on the Profitability (ROA) of BUMN Banks (state-owned banks listed on the Indonesia Stock Exchange for the period of 2012 – 2019). Based on the research results which have been explained previously, all hypotheses proposed are accepted. Here are some conclusions of the study:

1. Third-party funds (TPF) partially do not affect ROA of BUMN banks listed on the Indonesia Stock Exchange for the period of 2012 - 2019.
2. Loan to deposit ratio (LDR) (X2) partially and negatively affects the return on assets (ROA) of BUMN banks listed on the Indonesia Stock Exchange for the period of 2012 - 2019.
3. Third-party funds (TPF) and loan to deposit ratio (LDR) affect the return on assets (ROA) of BUMN banks listed on the Indonesia Stock Exchange for the

period of 2012 - 2019. Profitability is affected by TPF and LDR by 66.1 % and 33.9% are influenced by other variables not examined in this study.

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