

## Factors Affecting Banking Profitability in Indonesia (Studies at Bank BRI, Bank BNI, and BankBTN)

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**Abstract:** *The aim of this research is to know the influence of inflation, BI Rate and Non-Performing Loan (NPL) toward the profitability of BUMN bank studies in Bank Rakyat Indonesia, Bank Negara Indonesia, and Bank Tabungan Negara. Profitability is the company's ability to make a profit. The purpose of a company's profitability analysis is to measure the level of business efficiency achieved by the company concerned. The population in this research is all quarterly financial report of Commercial Banks. While the sample used is the financial statements of the first quarter of 2013 until the fourth quarter of 2016 in Bank Rakyat, Bank Negara Indonesia, and Bank Tabungan Negara. This research used multiple linear regression analysis. The result of this research using F test shows that simultaneously the independent variable of inflation, BI Rate, and NPL have significant effect on profitability. Partially the result using t test obtained that BI Rate and Non Performing Loan (NPL) have significant effect on profitability while inflation has no effect on profitability.*

**Key words:** *inflation, BI Rate, NPL, and Profitability.*

### A. Introduction

Bank is a business entity that collects funds from the public in the form of savings and distributes it to the community in the form of credit and or other forms in order to improve the living standard of many people (Laws of the Republic Indonesia Number 10 Year 1998). From time to time the growth of banking in Indonesia is increasing rapidly, it is proved by the increasing number of banks in Indonesia both national and foreign banks.

Bank is an institution that acts as a financial intermediary between parties who have the funds (surplus units) with the parties that require funds (unit deficit) and as an institution that facilitate the flow of payment traffic. Bank also has the role of implementing monetary policy and achieving stability of financial system, so it needs a sound banking, transparent, and accountable banking

(Booklet Banking Indonesia 2009). Banks in running their business raise funds from the community and redistribute them in various investment alternatives. In connection with this fund raising function, banks are often also called trust agencies.

According to Adyani (2011), bank's financial performance is a description of the bank's financial condition for a certain period, covering both fund raising and distribution aspects. Trust and loyalty the owner of the funds to the bank is a very helpful factor and simplify the bank management to develop a good business strategy. The analysis of the financial statements of a company is basically because it wants to know the level of profitability (profit) and level of risk or level of company health. The analysis of financial statements requires an analyst to do some things including (1) to clearly define the purpose of the analysis, (2) to understand the concepts and principles underlying the report and the financial ratios derived from the financial statements, and (3) to understand the economic and other business conditions generally associated with the company and affect the company's business (Mamduh, 2016: 5).

One of the indicators to see the prospects of a company in the future is to see the growth of profitability. The higher the profitability of a company the more likely the company will grow in the future considering the profits earned can be reinvested for the company's operations. Conversely, if the profitability of the company is low then the opportunity to grow is smaller (Tandelilin, 2010: 372).

Profitability is the company's ability to generate profits at certain levels of sales, assets and capital stock (Mamduh, 2004: 42). Profitability can be defined as the ability of companies to generate profits from a number of policies and decisions which are made and become one of the indicators to see the prospects of a company in the future (Hasan & Rusdayanti, 2014: 14).

This research uses ROA (return on asset) as a measure of profitability. ROA analysis measures the ability of company to generate profits by using the total assets (wealth) owned by the company after adjusted for the costs to fund the asset. The

variation in ROA calculation is by including the cost of funding. ROA can be interpreted as a result of a set of company policies (strategies) and the influence of environmental factors. The analysis focuses on the profitability of the asset, thus not taking into account the ways to fund the asset (Mamduh, 2016: 157).

In a Febrina study entitled "Febrina, Inflation Analysis, BI Rate, and Currency Exchange Rate on Bank Profitability Period 2003-2007" explains that inflation is a condition in which continuous increases in prices (absolute) over a long period of time and followed by the decline of real value (intrinsic) value of a country's currency (Khalwaty, 2000). The high rate of inflation can affect the banking sector; therefore Bank Indonesia needs to set the appropriate interest rate (BI Rate) as the basis or benchmark of commercial and private banks to determine the interest rate to be liquid and profitable. One of the causes of the crisis experienced by Indonesia is the prolonged inflation. Revell (1979) stated there is a relationship between bank profitability and inflation. In addition, most researches of (Bourke 1989, Molyneux & Thornton 1992) saw a positive relationship between inflation or long-term interest rates with profitability and a negative relationship between inflation and bank profitability as suggested by Uche (1996) and Ogowewo & Uche (2006).

The amount of interest rate (BI Rate) to be one factor for banks to determine the interest rate offered to the public. Interest rates affect the desire and interest in the community to invest their funds in the bank through the products offered. The impact of the bank itself, with the increasing amount of funds invested by the community, will increase the ability of banks to distribute funds in the form of credit from which the credit channeled banks will gain profit, thus impacting the amount of income obtained by banks (Almilia and Utomo, 2006).

Non-Performing Loan (NPL) reflects credit risk, the smaller NPL the less credit risk borne by the bank. NPL reflects the financing risk, the higher this ratio indicates the quality of bank financing is getting worse. Financing management is needed by banks considering the financing function is as the largest contributor of income for banks. The financing level of NPL financing contributes to the achievement of bank profit (Suhada, 2009). The Increasing of NPL will result in a loss opportunity to earn income from financing provided that affects earnings and adversely affects ROA.

Ayu Yanita's research (2013) entitled "An Analysis of Inflation Influence, BI Rate, and Gross Domestic Product toward the Return on Asset of Islamic Bank

in Indonesia" explains that simultaneously inflation, BI rate, and GDP have a significant positive effect on Islamic bank ROA in Indonesia, partial inflation and GDP (Gross Domestic Product) have a significant positive effect but the BI rate has a significant negative effect on the ROA of Islamic banks in Indonesia. Further the research from Dwi Jayanthi (2009) entitled "An Analysis of Inflation Influence, BI Rate, and Currency Exchange Rate toward Bank Profitability Period 2003-2007" explains that there is a negative relationship between inflation, exchange rate, and profitability, BI rate has no significant effect on profitability.

Millatina Arimi Research (2012) entitled "An Analysis of Factors Affecting Banking Profitability (Study On Commercial Bank Listed In Indonesia Stock Exchange Year 2007-2010)" explains that Non Performing Loan (NPL) has no significant negative effect on Return On Asset (ROA). Further research Satriyo and Muhammad (2013) entitled "Influence Analysis of Interest Rates, Inflation, CAR, BOPO, NPF Against Islamic Bank Profitability" explains that BI rate, inflation, CAR, and NPF have no effect on profitability.

From the results of above researches, there are differences in the results of research on inflation variables, BI rate and NPL on bank profitability. From those researches the researcher deepens her research related profitability. This study is interesting because bank profitability becomes a benchmark when people want to invest their wealth in the financial institution. In addition, this research is also useful for internal banking as a consideration in managing how to obtain profitability and what factors influence it. For stakeholders this is important because it can increase trust in investing funds in banking.

## **B. Underlying Theory**

### **Inflation against Banking Profitability**

Profitability is the ability of a company to make a profit (Sartono, 2000: 122). Profitability as one of the benchmarks in measuring the amount of profit becomes so important to know whether the company has run its business efficiently. The efficiency of a new company can be known after comparing the profits earned with the assets or capital that generate the profit.

Increased inflation will cause the real value of savings decline because the public will use its wealth to meet the cost of expenses due to rising prices of goods, which will affect the profitability of the bank (Sukirno, 2003 in Sahara, 2013). Fajaret. al.

(2013) states that inflation has a significant effect on bank profitability.

### BI Rate on Banking Profitability

BI rate also affect the profitability of banks. When the BI interest rate rises, it will be followed by a rise in deposit interest rate which directly affects the decline in third party funding sources. This decline in deposits is as a result of the transfer of public funds to conventional banks to obtain higher interest rates. If the third party funding falls, then the profitability of sharia banks will also decrease (Karim, 2006). The result of the research of Juniarti (2013) stated that BI rate has a significant negative effect to banking profitability.

### Non-Performing Loan (NPL) to Banking Profitability

Non-Performing Loan (NPL) is one of the financial ratios that reflect credit risk. NPL is defined as a loan that has difficulty repayment or often called bad credit in the bank (Riyadi, 2006: 161). The result of the research by Millatina Arimi (2012) stated that Non Performing Loan (NPL) has no significant negative effect to the Return On Asset (ROA). Furthermore Setiawan's research results (2010) explain the relationship NPL with profitability that variable NPF significant negative effect on ROA.

## C. Research Method

### Population and Sample

According to Soeratno and Arsyad (2008: 101), population is the total of the object under study. The population in this research is all quarterly financial report of bank BRI, bank BTN and bank BNI year 2013-2016. According to Soeratno and Arsyad (2008: 101), the sample is the part that becomes the real object of the research. Meanwhile, according to Sugiyono (2010: 129), the sample size is feasible in the study is between 30 to 500. The samples in this study are quarterly financial reports during the first quarter of 2013 to third quarter of 2016 that is as many as 36 samples.

### Research Data

The type of the data used in this study is secondary data, where the researcher looks for data published by bank BRI, bank BTN and bank BNI in the form of financial statements as a source of data. In order to obtain some

required data, the writer does research by using documentation method, namely the publication of financial statements owned by the companies that are considered capable of providing data with the significance of issues to be investigated.

### Data Analysis Technique

Data analysis technique used is multiple linear regressions. Multiple linear regressions are a model of relationship between two or more variables that is between dependent variable with independent variable. The models in this research are:

$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e$ , whereas:

$a$  = constant of regression equation

$Y$  = profitability

$X_1$  = inflation-free variable

$X_2$  = BI Rate -free variable

$X_3$  = NPL-free variable

$b_1, b_2, b_3, b_4$  = multiple linear regression coefficient

$e$  = error coefficient

This study explains the relationship between one dependent variable that is profitability (ROA) with some independent variables that are inflation, BI Rate, and NPL.

Before doing regression analysis, the classical assumption test is done first. The test is done on research model in order to be declared free from deviation of classical assumption that is normalitas, multicolinieritas, autokorelasi, and heteroskedastisitas. Based on the classical assumption it can be said that the data of this research meet with the classical assumption.

### Classic Assumptions

#### Normality Test

Normality test aims to test whether in the regression model, dependent variable and independent variable have normal distribution or not. A good regression model has a normal or near-normal distribution of data (Ghozali, 2001: 83).

When viewed from the graph the data histogram is said to be normal if the shape of the curve has a tilt that tends to balance, on the left or right side, and the curve resembles a nearly perfect bell. When viewed with normal probability plots data is said to be normally distributed or close to normal if the image is distributed with dots of data spreading around the diagonal line and

spreading data points in the direction of following the diagonal line.

The residual normality test in this study is using Kolmogorov-Smirnov (K-S) non-parametric statistical test, by making hypothesis as follows:

1. If the probability is greater than 0.05 ( $> 0.05$ )  $H_0$  is accepted, the residual variable is normally distributed.
2. If the probability is less than 0.05 ( $< 0.05$ )  $H_0$  is rejected, the residual variable is not normally distributed.

#### **Multicollinearity Test**

Multicollinearity is a situation where there is correlation of independent variables between one another. The linear relationship between independent variables can occur in the form of perfect and imperfect linear relationships.

The way to detect the presence of multicollinearity is to regress the analysis model and doing test the correlation between independent variables using tolerance values and Variance Inflation Factor (VIF). Tolerance measures the variability of other independent variables. Thus, a low tolerance value is equal to a high VIF value (because  $VIF = 1 / \text{tolerance}$ ) and indicates a high degree of collinearity.

If the tolerance value is greater than 0.1 and the VIF value is less than 10 then there is no multicollinearity in the study. Conversely, if the tolerance value is less than 0.1 and the VIF value is greater than 10 then there is multicollinearity (Ghozali, 2001: 63).

#### **Autocorrelation Test**

The autocorrelation test aims to test whether the linear regression model has a correlation between the confounding errors in period  $t$  with the previous confounding error  $t-1$ . If there is a correlation, then there is an autocorrelation problem. Autocorrelation arises because of sequential observations over time related

to each other. A good regression model is a regression independent of autocorrelation (Ghozali, 2011: 110).

Decision-making whether or not there is autocorrelation using Durbin-Watson statistics table with the following categories (Santoso, 2001: 219)

1. The D-W number below -2 means there is a positive autocorrelation.
2. The D-W number is between -2 to +2, meaning there is no autocorrelation.
3. The D-W number above +2 means there is a negative autocorrelation

#### **Heteroscedasticity Test**

The heteroscedasticity test aims to test whether in the regression model there is a variance inequality of the residual one observation to another observation. If the variance of one residual observation to another observation remains, then it is called Homoscedasticity and if it is different it called Heteroscedasticity. A good regression model is homoscedasticity or does not occur heteroscedasticity (Ghozali, 2001: 77).

Heteroscedasticity test can be seen with Scatterplot image analysis which states multiple linear regression models there is no heteroscedasticity if:

1. The data points spread above and below or around the number 0.
2. Data points do not collect just above or below only.
3. The spread of data points should not form wavy patterns then narrow and widen again.
4. The spread of data points should not be patterned.

#### **Goodness Model Test**

##### **F Test**

This test is conducted to see the effect of independent variables to the dependent variable simultaneously. This test is performed to compare at the level of significance value ( $\alpha = 5\%$ ) at the degree level of 5%. The taking of the

conclusion is to see the value of sig  $\alpha$  (5%), the provisions as follows:

- 1) If the sig value  $< \alpha$  or  $F_{\text{count}} > F_{\text{table}}$  then  $H_0$  is rejected
- 2) If the value of sig  $> \alpha$  or  $F_{\text{count}} < F_{\text{table}}$  then  $H_0$  is accepted

The calculation of F test in this research is used to test the significance relation of inflation, BI rate, and NPL relationship to bank profitability together.

#### Coefficient of Determination ( $R^2$ )

The coefficient of determination ( $R^2$ ) is used to determine the extent to which the accuracy or suitability of the regression line formed in representing the observed data group. The coefficient of determination describes part of the total variation that can be explained by the model. The greater the value of  $R^2$  (close to 1), the accuracy is said to be better. The properties possessed by coefficient of determination are as follow:

- 1) The value of  $R^2$  is always positive because it is the ratio of the sum of squares.
- 2)  $R^2 = 0$ , means there is no relationship between X and Y, or an incorrectly formed regression model to predict Y.
- 3)  $R^2 = 1$ , the regression line formed can predict Y perfectly (Setiawan, 2010: 64-65).

The coefficient of determination test used to know the influence variable of inflation, BI rate and NPL to profitability.

#### Influence Validity Test or t Test

This significance test is performed by using statistical test t. This test is done to see the influence of independent variables to dependent variable partially with degree of validity 5%. The

conclusion is to look at the sig. value compared to  $\alpha$  (5%) with the following conditions:

1. If sig value is  $< \alpha$  or  $t_{\text{count}} > t_{\text{table}}$  then  $H_0$  is rejected
2. If sig value is  $> \alpha$  or  $t_{\text{count}} < t_{\text{table}}$  then  $H_0$  is accepted

### D. Finding And Discussion

#### Descriptive Statistics

Table 1.Deskriptive Statistics

	Mean	Std. Deviation	N
ROA	2.8450	1.23468	36
INLASI	5.4442	1.77945	36
Bi RATE	7.0208	.92461	36
NPL	2.9319	1.00336	36

Table 1 shows the average ROA of 2.85%, Inflation of 5.44%, then the average value of BI rate of 7.02%. While the average value of NPL 2.93% of the criteria is sufficient standard of sound value of Bank Indonesia.

#### Testing and Results Classical Assumptions

The classic assumption test at this stage is done to determine the validity of the data which will be included in a regression model, if the resulting data qualifies in this test then the data is feasible for testing the regression stage. The results of the testing classical assumptions in this study are as follows:

##### 1. Normality Test

Normality test is used to test whether the model specifications used are correct or not. The data is normally distributed when the spreading points are in the vicinity of a straight line. The results of this study can be seen in Figure 1.

Figure 4.1 P.Plot



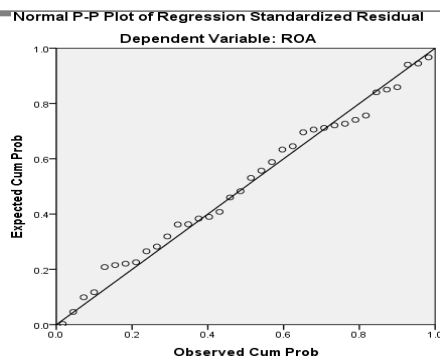


Figure 1 shows a linear relationship between Inflation, Bi rate and NPL variables. It can be known because the distribution of data follows a straight line from the lower left to the upper right, so it can be concluded from the test criteria, the data is said to be normal distribution.

## 2. Multicollinearity Test

Multicollinearity test is needed to test whether the regression model found any correlation between independent variables. A good regression model should not occur correlation between independent variables with the test criteria of VIF (variance inflation factor) coefficient not more than 10 and Tolerance value not less than 0.1, to see the presence or absence of multicollinearity can be known based on the tolerant and VIF values contained in table 2.

**Table 2**  
**Summary of multicollinearity test results**

Collinearity Statistics	
Tolerance	VIF
.371	2.692
.526	1.903
.569	1.758

Table 2 shows that the result of VIF value is less than 10 and the Tolerance value is not less than 0.1 so it can be said to be free of multicollinearity. So it can be concluded that there is no multicollinearity between the inflation variable, Bi rate, and NPL in the regression model.

## 3. Autocorrelation Test

The autocorrelation test is used to test whether in the linear regression model there is a correlation between the intruder errors in the period with the disturbance error in period  $t-1$  (previous). Furthermore, to see whether or not there is an autocorrelation in a model can be known from the value of Durbin Watson, while the results of this study can be seen in the table below:

**Table 3: Summary of autocorrelation test results**

Change Statistics					Durbin-Watson
R Square Change	F Change	df1	df2	Sig. F Change	
.839	55.435	3	32	.000	1.294

Table 3 shows that the value generated by Durbin Watson is 1,294. The value indicates that it is still between -2 to +2, which means there is no autocorrelation. So it can be concluded that there is no autocorrelation of the variable inflation, BI rate and NPL.

## 4. Heteroscedasticity Test

The heteroscedasticity test was used to test whether in the regression model there was a variance inequality in residual one observation to another observation. If the variance residual of one observation to another observation are remains, then it is called homoscedasticity and if different is called heteroscedasticity, a good regression model is homoscedasticity. The results of this study can be seen in figure 2:

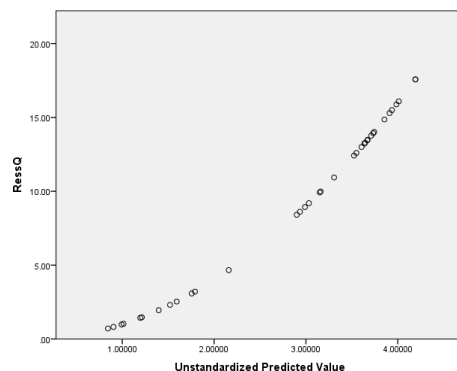
**Figure 2. Result of heteroscedasticity test**

Figure 2 shows the homocedasticity model because the variance of one observed residual to other observation remains, between the inflation variable, Bi rate, and NPL since the data distribution does not form wavy patterns then narrows. So it can be concluded that the multiple linear regression model does not contain heteroscedasticity and is suitable to be used in the model.

### Multiple Regression Analysis

The regression model is used to know the regression equation on Inflation, Bi Rate, NPL to ROA and indirectly to predict how the condition (up and down) individually every independent variable influence the change to ROA variable. Regression model generated in this study are as follow:

**Table 4. The summary of Summary of regression model calculation results**

Model		Unstandardized Coefficients	
		B	Std. Error
1	(Constant)	3.237	.913
	INLASI	-.037	.081
	Bi RATE	.380	.131
	NPL	-.977	.116

a. Dependent Variable: ROA

Based on table 4 can be known the function of multiple linear regression models

of state State-Owned Enterprises (BUMN) banks that can be written as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3$$

$$Y = 3.237 - 0.037X_1 + 0.380X_2 - 0.977X_3$$

The multiple regression coefficients of the equation are  $X_1 = 0.037$ ,  $X_2 = 0.380$ ,  $X_3 = 0.977$ . It means that if each independent variable increases one-unit, then the Inflation variable ( $X_1$ ) influence on the inflation variable will decrease by 0.037, Bi rate ( $X_2$ ) influence on ROA variable will increase by 0.380, and NPL ( $X_3$ ) influence on ROA variable will decrease by 0.977.

### Model goodness test

#### 1. Test F

Test F is a test to determine whether or not there is influence overall independent variables to the dependent variable, while the results of this study can be seen from table 5.

**Table 5. Summary of simultaneous test results (F test) of state-owned enterprises banks**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	44.745	3	14.915	55.435	.000 <sup>b</sup>
	Residual	8.610	32	.269		
	Total	53.355	35			

a. Dependent Variable: ROA

b. Predictors: (Constant), NPL, BI RATE, INLASI

Source: data processed 2017

Based on table 5 above in the F test can be known from the results obtained in column F and also from the result of the sig. column. To know simultaneously the result of influence from every independent variable that is inflation variable, Bi rate, and NPL to dependent variable that is ROA of state bank (BRI, BNI and BTN) obtained the value of  $F_{count}$  equal to 55.435, with  $df_1: 3-1 = 2$  and  $df_2: 36-3 = 33$ , it can be known  $F_{table}$  of 3.28. So from the calculation criteria that  $F_{count} > F_{table}$  is  $55.435 > 3.28$  means  $H_0$  rejected and accept  $H_a$ . Furthermore, based on testing of the probability value or sig. value of the resulting value is

0.000, where the value is less than the value of  $\alpha$  is 5%, then it can be said  $H_0$  rejected and received  $H_a$ . So from the criteria, the hypothesis that there is a significant influence between inflation, Bi rate and NPL to ROA can be said to be accepted which means the inflation variable, Bi rate, Non-Performing Loan (NPL) has a significant influence on Return of Assets (ROA).

## 2. Determination Test of $R^2$

This test is conducted to find out how far the independent variable explain its influence to dependent variable which means how big of influence of inflation variable, Bi rate, and NPL to ROA variable of state own enterprise bank (BRI, BNI and BTN). The results of this test can be seen from the results of table 6.

**Table 6. Summary of Coefficient Results Determination  $R^2$**

Model	R	R Square	Adjusted R Square
1	.916 <sup>a</sup>	.839	.824

a. Predictors: (Constant), NPL, Bi RATE, INLASI

Table 6. shows the result of  $R^2$  which can be seen in column R equal to 0.916 or can be said as 91.6%. It means that the independent variable, the inflation variable, the Bi rate and the NPL has a contribution of 91.6% to the ROA of the state-owned enterprise banks (BRI, BNI and BTN), while the rest of 8.4% is explained by other variables outside the variables used.

## Validity Influence Test

T test is a test to determine whether or not the influence of each independent variable partially or individually to the independent variable. On the other hand it also to know which variable is the most dominant in influencing independent variables. The results of this study can be seen from the results of table 7.

**Table 7. Summary of partial test results (t test) of state own enterprise (BUMN) banks**

t	Sig.
3.546	.001
-.452	.655
2.909	.007
-8.433	.000

Based on table 6 in t test can be seen the results obtained from the column t and also from the result sig. column. To know the result of influence from every independent variable partially that is inflation variable, Bi rate and NPL to dependent variable that are BRI bank's BRI, BNI and BTN are as follow:

## 1. Result of Inflation Calculation on ROA

The result of the inflation calculation variable ( $X_1$ ) the value generated equal to .174. So the result of the calculation,  $t_{count} < t_{table}$  that is  $-0.452 < 2.03693$ , it means  $H_0$  accepted. So the hypothesis that there is a significant influence between inflation on ROA can be said rejected. Based on the test of the probability value that can be known from the result of the sig. value of .655, where the value is greater than the value of  $\alpha$ , that is 5%, then the conclusion  $H_0$  accepted. It means that the inflation variable does not affect the ROA in state own enterprise banks (BRI, BNI and BTN).

## 2. Result of Bi rate calculation to ROA

The calculation result of variable Bi Rate ( $X_2$ ) the value is 2,479. So the result of the calculation was  $t_{count} > t_{table}$  that is  $2.909 > 2.03693$ , it means  $H_0$  rejected. Hence the hypothesis that there is a significant influence between Bi rates on ROA can be said accepted. Based on the test of the probability value or sig. value can be known from the result sig value. .007, where the value is less than the value of  $\alpha$ , that is 5%, then the conclusion  $H_0$  rejected. It means that the variable Bi rate has significant effect on ROA in state-own enterprise banks (BUMN) (BRI, BNI and BTN).



### 3. NPL Calculation Result on ROA

The calculation result of NPL variable ( $X_3$ ) the value generated equal to 8,433. So the result of the calculation was  $t_{count} > t_{table}$  that is  $8.433 > 2.04841$  it means  $H_0$  rejected. Then the hypothesis that there is a significant influence between NPL on ROA can be said accepted. Based on the test of the probability value or sig value can be known from the result of the sig value, where the value is less than the value of  $\alpha$ , that is 5%, and then the conclusion is  $H_0$  rejected. It means that the NPL variable has a significant effect on the ROA in the state-own enterprise banks (BUMN) bank.

## E. DISCUSSION OF RESEARCH RESULTS

### The Influence of Inflation on Return of Assets (ROA) of state own enterprise BUMN bank (BRI, BNI and BTN).

Based on the calculation of the inflation variable ( $X_1$ ) the resulting value is 174. So the result of the calculation  $t_{count} < t_{table}$  is  $-0.452 < 2.03693$ , meaning  $H_0$  accepted. So the hypothesis that there is a significant influence between inflation on ROA can be said to be rejected. Based on the test of the probability value that can be known from the result of the sig. value is .655, where the value is greater than the value of  $\alpha$ , that is 5%, then the conclusion  $H_0$  accepted. This means that the Inflation variable does not affect the ROA in state own enterprise (BUMN) banks (BRI, BNI and BTN).

From the result, the researcher concludes that inflation happened not directly and significantly influence to profitability level of a bank, especially state owned enterprise bank BRI, BNI and BTN). The researcher suspects there are other factors that are more influential on the level of banking profitability.

The impact of the inflation rate can be covered by other variables such as BI rate, non- performing loans and the number of funding and landing customers of a bank so inflation does not affect the profitability of banks in Indonesia, especially state-owned

enterprise banks (BRI, BNI and BTN). The results of this study are reinforced by the results of research Febrina (2009), Edhi and Muhammad (2013) and (Silvia, 2013) which concluded that inflation does not significantly affect the level of profitability.

### The effect of BI rate on Return of Assets (ROA) of state-own enterprise (BUMN) Bank (BRI, BNI and BTN).

Based on the calculation of variable Bi rate ( $X_2$ ) the value generated is 2,479. So the result of the calculation is  $t_{count} > t_{table}$  that is  $2.909 > 2.03693$ , meaning  $H_0$  rejected. So the hypothesis that there is a significant effect between Bi Rate on ROA can be said accepted. Based on the test of the probability value or sig. value can be known from the result of the value of sig .007, where the value is less than the value of  $\alpha$ , that is 5%, then the conclusion  $H_0$  rejected. It means that the BI Rate variables significantly affect the ROA in state-own enterprise banks BRI, BNI and BTN).

From the calculation of the researcher, the researcher concludes that the higher interest rate of Bank Indonesia will have a good impact on the level of bank profitability. The higher the Bank Indonesia set BI rate it will help the banks in obtaining public funds. This has an impact on the level of profitability of banks derived from the benefits of lending and other investment returns. This study supports Lisa's (2014) study results which conclude that interest rate risk significantly affects bank profitability.

### The Influence of Non-Performing Loan (NPL) to Return of Assets (ROA) of BUMN Bank.

Based on the calculation of NPL ( $X_3$ ) variable, the resulting value is 8,433. So the result of the calculation  $t_{count} > t_{table}$  that is  $8.433 > 2.03693$  means  $H_0$  rejected. Then the hypothesis that there is a significant influence between NPL on ROA can be said accepted. Based on the test of the probability value or sig. value can be known from the result of the sig. value of .000, where the value is less than the value of  $\alpha$ , that is 5%, then the conclusion  $H_0$  rejected. It means that the NPL variable

has a significant effect on the ROA in state-owned enterprise banks (BRI, BNI and BTN).

NPL is a financing problem caused by depositors cannot pay bills or financing. So that NPL becomes one of the causes of the difficulty of banks in lending. This indicates that the greater credit disbursed it will increase the risk of problem financing, the more problematic credit will have an impact on the level of bank profitability. This research is supported by research results from Suhartatik and Kusumaningtias (2013).

**The influence of inflation, BI rate, and non-performing loans (NPL) to Return on Assets (ROA) state-owned enterprise bank (BRI, BNI and BTN).**

Based on the test of the probability value or sig value of the resulting value is 0.000, where the value is less than the value of  $\alpha$  is 5%, then it can be said  $H_0$  rejected and received  $H_a$ . So from the criteria, the hypothesis that there is a significant influence between inflation, Bi Rate and NPL on ROA can be said to be accepted which means the inflation variable, Bi Rate, Non-Performing Loan (NPL) has a significant influence on Return of Assets (ROA).

**F. CONCLUSION**

Based on the analysis and discussion, it can be concluded that inflation does not affect the dependent variable profitability (ROA) of state-owned enterprise banks (BRI, BNI, and BTN). BI Rate has a significant effect on the dependent variable profitability (ROA) of state-owned enterprise banks (BRI, BNI and BTN). NPL affects the dependent variable profitability (ROA) of state-owned enterprise banks (BRI, BNI and BTN). while jointly generating the inflation variable, the Bi Rate, Non Performing Loan (NPL) has a significant effect on Return of Assets (ROA).

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