

CHAPTER IV

RESEARCH FINDINGS

A. General Overview of Research Object

Yogyakarta Province is located in south-central Java Island bordered by the Indian Ocean in the south and Central Java Province in the other sections. Boundaries with the Province of Central Java include:

- Wonogiri district in the southeastern part
- Klaten district in the northeast
- Magelang District in northwest
- Purworejo regency in the west



Figure 4.1
Administrative Map of Central Java

Astronomically, Special Region of Yogyakarta lies between 70 33 'LS - 8 12' latitude and 110 00 'E - 110 50' east longitude. Components physiographic constituting Yogyakarta province consists of four (4) units of physiographic namely Unit South Mountain (Plateau Karst) with altitude

ranging between 150-700 meters, Unit Merapi Volcano with altitude ranging between 80-2911 meters, Unit Plains low that stretches between the Southern Alps and Kulonprogo Mountains at a height of 0-80 meters, and Kulonprogo Mountains with an altitude of up to 572 meters.

Tabel 4.1.
Yogyakarta Special Region consists of 4 districts and 1 city. Its capital is Yogyakarta. Here is a list of countries and cities in Yogyakarta, along with the district capital.

No	Central government	Districts	The urban / rural	Regent / Mayor	Density (/ km ²)	Total population
1.	<u>Bantul</u> districts	<u>Bantul</u>	<u>17</u>	<u>-/75</u>	506,86	911.503
2.	<u>Gunungkidu</u> districts	<u>Wonosari</u>	<u>18</u>	<u>-/144</u>	1.485,36	748.119
3.	<u>KulonProgo</u> districts	<u>Wates</u>	<u>12</u>	<u>1/87</u>	586,27	470.520
4.	<u>Sleman</u> districts	<u>Sleman</u>	<u>17</u>	<u>-/86</u>	574,82	1.093.110
5.	<u>Yogyakarta</u> city	-	<u>14</u>	<u>45/-</u>	32,50	636.660

Investments in DIY implemented through increased promotion and investment cooperation as well as the investment climate improvement programs, and actual investments. The achievement of total investment in 2010 reached Rp 4580972827244.00 with details of domestic investment of Rp 1884925869797.00, and FDI by 2696046957447.00. DIY business unit in 2010 there were about 78 122 units with employment of 292 625 people, and the investment value of Rp. 878,063,496,000.00. Varian DIY mainstay export products include processed leather products, textiles, and wood. Apparel

textiles and wooden furniture is a product that has the highest export value. But in general the export to foreign countries is dominated by products that are produced with artistic, creative and high labor intensive (labor intensive). The construction program to develop cooperatives and SMEs in the province, one of which is to empower micro, and small and medium synergized with the program policies of the central government. One effort is the development of SMEs through the groups (centers) because these efforts are more effective and efficient, in addition to centers will involve micro, and small. In 2010 as many as 1,926 active cooperatives registered cooperatives and SMEs registered 13 998 business units. The number of SMEs supported by the RB to help the public in developing a business.

Banking development in Indonesia is marked by the increasing number of rural banks (BPR). Development of Rural Bank in Yogyakarta especially of Conventional Rural Bank during the last twenty years is growing rapidly. Mentioned in data from Bank Indonesia in 1987-1988, the number of Conventional Rural Bank operating in DIY was only 11 banks. However, since 1994 the number of Conventional RB in DIY increased to 51 banks and the beginning of 2013 the number of RB Conventional recorded in Bank Indonesia was 54 banks and up to date in 2015 were 63 Rural Banks . The rapid banking business in DIY had urged them to always maintain its financial performance so as not to cause problems in its operational activities. It is necessary to study the factors affecting ROA of Rural Bank Conventional in Yogyakarta as the implementation of the measurement of

bank performance in managing and using its assets to generate profit by taking a sample of the overall Conventional BPR in Bantul, Gunung kidul, Kulon progo , Sleman and Yogyakarta.

This study analyzes the effect of CAR, LDR, BOPO, NPL to Profitability f BPR in regencies in Yogyakarta which covers Bantul, Gunung kidul, Kulon progo, Sleman, and Yogyakarta during 2012-2015. Tool analysis used in this study is by the panel data analysis model of *Fixed Effect* and completed through computer statistics program, namely Eviews7.0. Furthermore, the results of the processing of the data presented in this chapter are considered the best estimate of the results because it can meet the criteria of economic theory, statistics and econometrics. The result of this estimation is expected to answer the hypothesis proposed in this study which is based on panel data regression model consisting of two approaches, that is the *Fixed Effect* model and *Random Effect* models.

B. Data Quality Test

Test of the data quality this study is using classic assumption test. Classical assumptions used in this research are Heteroscedasticity and Multicollinearity.

1. Heteroscedasticity Test

Heteroscedasticity gives the sense that there is a difference in a model of residual variance on observation. In good models there should not be any Heteroscedasticity. In the Heteroscedasticity test, problems that arise derived from variations in cross section that is used. In fact, in a

cross-sectional that includes heterogeneous units, Heteroscedasticity may be a custom (rules) of the exclusion (Gujarati, 2006).

Heteroscedasticity test aims to test whether in the regression model occurred inequality residual variance from one observation to another observation. A good regression model is that homoscedasticity or absent of heteroscedasticity. Heteroscedasticity symptoms are more common in cross section (Ghozali, 2005: 28).

Based on the Park Test, the probability value of all the independent variables are not significant at the level of 5 percent. This situation shows that the presence of the same variant or occurrence of homoscedasticity between the values of the independent variables with the residuals of each variable itself ($\text{Var}U_i = \sigma_u^2$). Here is the output of Heteroscedasticity test results using the Park Test:

Table 4.2.
Heteroscedasticity Test with Park Test

Variabel	Probabilitas
C	0.6478
X1?	0.1193
X2?	0.1220
X3?	0.4730
X4?	0.9594

Source: Modified Data, 2016 (appendix 2)

Information:

C = ROA (Return Of Assets)

X1 = CAR

X2 = LDR

X2 = BOPO

X3 = NPL

From the above table, it can be concluded that all the data used as independent variables are free from Heteroscedasticity as known on the outcome of the probability that all independent variables used in this case is the CAR, LDR, BOPO, and NPL greater than 5%, $\alpha = 0:05$.

2. Multicollinearity Test

In a test of classic assumption deviation, to approach multicollinearity is applied with an approach over R^2 value and significance of the variables used. The elaboration is by analyzing the data used by every variable and resulted of the existing data. The data used include data time series and cross section. However multicollinearity occurs usually on time series data (time series) on the used variables. Rule of Thumb also said that if the high R^2 obtained while there is a majority or all of partially insignificant variables, multicollinearity then allegedly occurred on that model (Gujarati, 2006).

There are several ways to overcome multicollinearity in the model. One is to look at the correlation coefficient output resulted from the computer. If there is a correlation coefficient greater than 0.9 then the multicollinearity symptoms occurs (Basuki, 2014)

Table 4.3.
Test Multicollinearity (Correlation Matrix)

	BANTU L	GUNUNG KIDUL	KULON PROGO	SLEMAN	YOGYAKARTA
BANTUL	1	0.2934	-0.1527	0.5000	-0.1771
GUNUNGKIDUL	0.2934	1	-0.0646	0.1396	-0.1155
KULONPROGO	-0.1527	-0.0646	1	0.0391	0.5445
SLEMAN	0.5000	0.1396	0.03910	1	-0.2016
YOGYAKARTA	-0.1771	-0.1155	0.5445	-0.2016	1

Source: Modified data, 2016 (Appendix 3)

Based on Table 5.2, testing method partial correlation between above districts shows there are no multicollinearity problems in the model. That' is due to the value of the correlation matrix (matrix correlation) is less than 0.9.

C. Selection Model

In the estimation method regression model using panel data can be performed through three approaches, among others Common Effect Model by using the approach of Ordinary Least Square (OLS) or the technique of least squares, Fixed Effect Model that often called the technique of Least Squares Dummy Variable (LSDV) and Random Effect model is also called the Error Component Model (ECM) or technique Generalized Least Squares (GLS).

Testing can be done in the first time to choose a model that will be used in managing data panel that is Chow Test, which is a test to determine the model of Fixed Effect or Common Effect most appropriately used in estimating panel data. The results of the statistical test are as follows:

1. Chow test

In testing Chow Test, panel data is estimated using fixed effects specification. This test aims to determine whether to use a fixed effect models or common effect.

H0: Common Effect

H1: Fixed Effect

If the result of chi-square probability is less than 5% alpha then H_0 is rejected, so the model uses a fixed effect. The results of the estimation using fixed effects specifications are as follows:

Table 4.4.
Chow Test (Test Likelihood)

Effects Test	Statistic	d.f.	Prob.
Cross-section F	20.737426	(4,176)	0.0000
Cross-section Chi-square	71.437724	4	0.0000

Source: Data processing results panel using the program Eviews 7 (Appendix 4).

According to the above Chow Test table, both probability values of *Cross Section F* and *Chi Square* is 0.0000 lesser than Alpha 0.05 to reject the null hypothesis. According to the Chow test, the best model used is fixed effect. Based on the results of the chow test, then the data test continues to Hausman Test.

2. Hausman test

Hausman test is aimed to find out whether the Random Effect Model (REM) is better than Fixed Effect Model (FEM).

H_0 : Random effect

H_1 : Fixed effect

If the probability of Chi-square is bigger than alpha of 5%, then model is preferably using Random Effect. The results of estimation using random effects specifications are as follow:

Table4.5.
Hausmant Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob
Cross-section random	82.949705	4	0.0000

Source: Data processing results panel using the program Eviews 7 (Appendix 5).

According to the table, the probability values is 0.0000 smaller than Alpha 0.05 to accept the hypothesis one. So, based on Hausman test, the best model used is the model by using the Fixed Method Effect.

B. Analysis of Panel Data Model

Selection of this model is using the best analytical test and more fully described in the following table.

Table 4.6.
Results Estimates CAR, LDR, BOPO, NPL on profitability (ROA) to RB's in five districts in Yogyakarta.

	Model	
	Fixed Effect	Random Effect
Konstanta	8.831815	3.828169
Standar error	1.039752	0.714299
T-Statistic	8.494155	5.359335
Probabilitas	0.0000	0.0000
CAR	0.053865	0.090049
Standar error	0.016427	0.011909
T-Statistic	2.428481	7.561165
Probabilitas	0.0162	0.0000
LDR	0.008610	0.000264
Standar error	0.005542	0.005396
T-Statistic	1.553739	0.048976
Probabilitas	0.1220	0.9610
BOPO	-0.090044	-0.027051
Standar error	0.010643	0.004871
T-Statistic	-8.460719	-5.553133
Probabilitas	0.0000	0.0000
NPL	-0.183952	-0.178135
Standar error	0.038347	0.022888
T-Statistic	-4.797087	-7.782838
Probabilitas	0.0000	0.0000
R²	0.533232	0.313243
F-Statistik	25.13267	20.52532
Prob (F-Stat)	0.000000	0.000000
Durbin-Watson Stat	0.738369	0.492332

Note: *** = Significant 1%, ** = Significant 5%, * = Significant 10

Source: Data processing results panel using the program Eviews 7.

Based on the test model specifications that have been made from both the analysis; by using a Likelihood test and Hausman test, both suggested a

different model. When tested by test Chow Test (Likelihood Test) model suggested to use Fixed Effect and when tested using the Hausman test model suggested to use fixed effect models.

In terms of probability and its R-square as well as comparison of the best election, then the regression model used in estimating Effect of CAR, LDR, BOPO to ROA in the district in Yogyakarta, is the Fixed Effects Model. Fixed Effect Model was chosen because it has a probability of each independent variable on the Fixed Effect model which is more significant than the Random Effect Model or Common Effect Model. Reasons for the selection of fixed models can also be seen from the coefficient of determination, how free variables would affect the dependent variable. The coefficient of determination (R-square) owned from the results of fixed model estimation by 0.53 which is bigger than the second other estimation models.

E. Estimation Results of Panel Regression Model

After conducting statistical tests to determine which model will be chosen in the study, it was concluded that the Fixed Effect model is to be used in this study; the approach of panel data model that simply combines the data time series and cross section. In this model, it is not indicated of dimension of time as well as individuals so it is assumed that the behavior of municipality / district data is identical in different periods. The following table shows the results of the estimation of data with the number of observations is of 5 districts during the period 2012-2015 (4years).

Table 4.7.
Fixed Effect Model Estimation Results

DependenVariabel : ROA	Model
	Fixed Effect
Konstanta	8.831815
Standar error	1.039752
T-Statistic	8.494155
Probabilitas	0.0000
CAR	0.053865
Standar error	0.016427
T-Statistic	2.428481
Probabilitas	0.0162
LDR	0.008610
Standar error	0.005542
T-Statistic	1.553739
Probabilitas	0.1220
BOPO	-0.090044
Standar error	0.010643
T-Statistic	-8.460719
Probabilitas	0.0000
NPL	-0.183952
Standar error	0.038347
T-Statistic	-4.797087
Probabilitas	0.0000
R²	0.533232
F-Statistik	25.13267
Prob (F-Stat)	0.000000
Durbin-Watson Stat	0.738369

Note: *** = Significant 1%, ** = Significant 5%, * = Significant 10%
Source: Data processed, 2016 (Appendix 6)

From the estimation above, it can be made model of panel data analysis of the factors affecting the profitability of the BPR in regency in Yogyakarta, which concluded with the following equation:

$$ROA = \beta_0 + \beta_1 * LOGX1 + \beta_2 * LOGX2 + \beta_3 * LOGX3 + \epsilon_t$$

Explanation:

$$Y_{it} = ROA$$

$$\beta_0 = \text{Konstanta}$$

$$\beta_{123} = \text{Koefisienvariabel 1,2,3,4}$$

$$X1 = \text{CAR}$$

X2 = LDR

X3 =BOPO

X4 = NPL

i = Regency / City

t = Time Period all t

ε = Error Term

The results of the above estimation, panel data model can be made on the profitability of the Rural Bank between districts in Yogyakarta, which is interpreted as follows:

ROA_BANTUL =
 $0.655931113465 + 8.83181542971 + 0.0538647596137 * CAR_BANTUL +$
 $0.00861018337406 * LDR_BANTUL - 0.0900444924775 * BOPO_BANTUL -$
 $0.183951893521 * NPL_BANTUL$

ROA_GUNUNGKIDUL =
 $-1.10232071481 + 8.83181542971 +$
 $0.0538647596137 * CAR_GUNUNGKIDUL +$
 $0.00861018337406 * LDR_GUNUNGKIDUL -$
 $0.0900444924775 * BOPO_GUNUNGKIDUL -$
 $0.183951893521 * NPL_GUNUNGKIDUL$

ROA_KULONPROGO =
 $-0.0241394724757 + 8.83181542971 +$
 $0.0538647596137 * CAR_KULONPROGO +$
 $0.00861018337406 * LDR_KULONPROGO -$
 $0.0900444924775 * BOPO_KULONPROGO -$
 $0.183951893521 * NPL_KULONPROGO$

ROA_SLEMAN =
 $0.726956732052 + 8.83181542971 + 0.0538647596137 * CAR_SLEMAN +$
 $0.00861018337406 * LDR_SLEMAN - 0.0900444924775 * BOPO_SLEMAN -$
 $0.183951893521 * NPL_SLEMAN$

ROA_YOGYAKARTA =
 $-0.256427658234 + 8.83181542971 +$
 $0.0538647596137 * CAR_YOGYAKARTA +$

0.00861018337406*LDR_YOGYAKARTA -
0.0900444924775*BOPO_YOGYAKARTA -
0.183951893521*NPL_YOGYAKARTA

Information:

Y = ROA (profitability)

X1 = CAR

X2 = LDR

X2 = BOPO

X3 = NPL

1. Bantul shows the coefficient value of 0.6559 where the value c at 8.8318. Thus, when the Car, LDR, ROA, NPLs were excluded from the model, then the profitability (ROA) grew by 0.6559%.
2. Gunung kidul shows the coefficient value of -1.1023 in which the value of c at 8.8318. Thus, when the Car, LDR, ROA, NPLs were excluded from the model, then the profitability (ROA) grew by -1.1023%.
3. Kulon progo shows the coefficient value of -0.0241 in which the value of c at 8.8318. Thus, when the Car, LDR, ROA, NPLs were excluded from the model, then the profitability (ROA) grew by -1.1023%.
4. Sleman shows the coefficient value of 0.7269 where the value c at 8.8318. Thus, when the Car, LDR, ROA, NPLs were excluded from the model, then the profitability (ROA) grew by 0.7269%.

5. Yogyakarta indicates the coefficient value of -0.2564 in which the value of c at 8.8318. Thus, when the Car, LDR, ROA, NPLs were excluded from the model, then the profitability (ROA) grew by -0.2564%.

In the model estimation above, it appears that the effect of variable cross-section that is different in every county and city in DIY on the financial performance Conventional BPR. District of Bantul, Kulon progo and Sleman has the effect to the cross-section which is positive, which has a coefficient equal to 0,462 respectively; 0.337; and 0.398. Meanwhile, Gunung kidul regency and Yogyakarta have the effect of negative cross-section, which is -0.646 and -0.550. Moreover, with the addition of the effects of time in the analysis model also gives a different effect in each month of BPR financial performance in DIY. If the views of the independent variable, only the variable Loan to Deposit Ratio was not significant Conventional BPR on the financial performance in DIY. While other variables, ie Non Performing Loan, Capital Adequacy Ratio and ROA of each significant to the financial performance (return on assets) Conventional BPR in DIY. The increase in the ratio of non-performing loans (non-performing loans) of 1% would lower the return on assets ratio amounted to 0.123%. So also with variable BOPO rise of 1% would lower the return on assets ratio amounted to 0.152%. While variable rate capital adequacy ratio (Capital Adequacy Ratio), while increasing the ratio of 1% would raise Return on Assets ratio amounted to 0.047%. Value of determination (R-Squared) in the estimation amounted to 0.841, which means that the endogenous variable variation can be explained

by the independent variables in the equation of 84.1% and the remaining 15.9% is explained by other factors outside the equation. If seen visit of the F-test, the overall effect caused by the independent variable (free) to the dependent variable (dependent) is good.

1. Statistic Test (T Test)

Table 4.8.
Statistic test

Variabel	t-statistik	Koefisien Regresi	Prob	Standar Prob
CAR	2.428481	0.053865	0.0162	5%
LDR	1.553739	0.008610	0.1220	5%
BOPO	-8.460719	-0.090044	0.0000	5%
NPL	-4.797087	-0.183952	0.0000	5%

Source: Results of data processed in 2016

To determine whether the independent variables (CAR, LDR,BOPO and NPL) have a relationship to ROA, it is necessary to test using statistical tests which include:

a. CAR influence on ROA

The analysis showed that the variables CAR own counted equal to 2.428481 and has a probability of 0.0162 <0.05 then a CAR variable individually has positive effect relationship significantly to the profitability of the BPR in Yogyakarta entirely. Variable CAR has a regression coefficient of 0.053865 showed that CAR has positive influence on ROA at RB in the districts. This means that if CAR rose 1 percent, it would influence towards ROA as of 0.053865 %. Results of previous studies conducted Agus Suyono (2005) and Bambang Sudiyatno and Teak

Suroso (2010) CAR positive and significant impact on ROA. Results were the same as has been suggested by Sabir et al (2012). The amount of capital a bank will obviously affect the number of productive assets, so that the bank's asset utilization will also increase. With increasing asset utilization bank, then the bank would be easier to manage so as to increase the profit of the bank. Additionally, pharmaceuticals bank capital will also improve the resilience of banks and the current economic crises may also increase the confidence of the people against the banks themselves.

b. LDR influence on ROA

Based on the results of the analysis indicate that the variable ROA has counts equal to 1.553739 and has a probability of 0.1220 > 0.05 percent. Then the BOPO variable individually has positive effect relationship not significantly to the profitability of the BPR in five districts in Yogyakarta. Variable BOPO has a regression coefficient of 0.008610 shows that BOPO has a positive effect on profitability (ROA). This means that if LDR decreased by 1 percent it not affect the ROA to percent.

c. BOPO influence on ROA

Based on the results of the analysis indicate that the variable ROA has counts equal to -8.460719 and has a probability of 0.0000 < 0.05 percent. Then the BOPO variable individually has positive effect relationship significantly to the profitability of the BPR in five districts in Yogyakarta. Variable BOPO has a regression coefficient of -0.090044. shows that BOPO has a negative effect on profitability (ROA). This means

that if BOPO decreased by 1 percent it would affect the ROA - 0.090044persen.

d. NPL influence on profitability (ROA)

Based on the results of the analysis showed that the counts for - 4.797087 and has a probability value of $0.0000 < 0.05$. That means, NPL has a significant effect on the ROA. Variable NPL has a regression coefficient of -0.183952, which means if there is a 1 percent reduction in the NPL variable, it will then affect the ROA -0.183952percent.

2. Simultaneous Test (F-statistic)

F test is used to determine the significance of independent variables on the dependent variable overall based on the results of analysis using Eviews 7.0 software, the value of F probability of 0.00000 to the provisions of alpha 5 percent. So we can conclude that all independent variables together significantly influence the dependent variable. The CAR, ROA and NPL variable is jointly significant towards profitability of Rural Banks in 5 districts of Yogyakarta

3. R-Squared

R-Square value or the coefficient of determination is useful to measure the ability of the model to describe the set of dependent variables. Coefficient value determination is represented as a number between 0 and 1. The small value of coefficient determination means the ability of independent variables on the dependent variable variation is very limited, while a value close to 1 mean these independent variables that provide

almost all the information needed to predict the dependent variable. From the results of the data obtained using the Fixed Effect Model R-squared value of 0.533232, meaning of 0.533232 or 53.3% of independent variables (CAR, ROA and NPL) affect the ROA and the remaining 47.7% influenced by independent variables apart from this study.

F. Theory Test (Economic Interpretation)

Based on research results or estimation model above, it can be made of analysis and discussion of the effect of independent variables (CAR, LDR, BOPO and NPL) to profitability BPR in the districts in the Yogyakarta region consisting of Bantul, Gunung kidul, Kulon progo, Sleman and Yogyakarta as interpreted as follows:

1. CAR influence on profitability (ROA)

Based on the research results, X1 (CAR) showed a positive and statistically significant at the five percent level of confidence for the District in Yogyakarta. CAR variable has a positive coefficient which means that the variable CAR and ROA has a positive relationship. CAR has a coefficient value of 0.053865, which means if there is an increase of 1% CAR value, then affects the level of ROA amounted to 0.053865%, A positive and significant relationship is also shown between CAR and ROA which can be observed from the value of profitability of 0.0162. This positive relationship is meant that when variables at the right side of model

(independent variable) are increasing or decreasing, then variables on the left side of model will align in the same direction.

High CAR shows that banks have high capital adequacy. With high capital banks can be free to put their funds into a profitable investment so that it is able to increase customer confidence because of the possibility of the bank earns high profits and the possibility of the bank liquidated is also small. If capital is adequate, it is expected that losses can absorb and the bank's business activities will not experience such significant turbulence. CAR positively influencing on ROA also increased. The results are consistent with research conducted by Poncho (2008) and Setiawan (2009) that the bigger the CAR then higher increase of ROA will follow.

2. LDR influence on profitability (ROA)

Loan to Deposit Ratio (LDR) is not significant positive effect on the financial performance of the bank (ROA). The results of this study are not consistent with the concept and logic operations of the bank, where the increase in funds lent to customers will improve bank performance (ROA). The results are consistent with research conducted by Werdaningtyas (2002) and Yuliani (2007). On contrast, Suyono(2005) and Merkusiwati (2007), who found that the Loan to Deposit Ratio (LDR) is positive and significant impact on the performance of banks ROA. Efforts to be made by management to improve the bank's performance ROA is to improve the quality of credit or loans to customers through a credit customer ratings tighter for NPL pressing, so as to reduce or avoid credit problems.

3. BOPO influence on profitability (ROA)

BOPO showed a negative and significant sign statistically at the five percent confidence level for BPR. Variable BOPO have negative coefficient mark that means that the variable ROA and BOPO have a negative relation. BOPO has a coefficient value of -0.090044, -0.090044 which means if BOPO decreases by 1%, then it will affect the level of -0.090044% ROA.

A negative and significant relation is also shown between BOPO and ROA that implies from profitability value of 0.0000. This negative relation means that variables on the right (independent variables) have increment / decrease, variables on the left will follow in the same direction.

Statistical test results obtained from the t-statistic value of -8.460719 and significant value of $0.0000 < 0.05$. Negative values indicated BOPO is accordant with the theory underlying the smaller BOPO is will indicate the more efficient bank is in carrying out its business activities. Based on above estimation, it can be seen that the ratio of ROA has a negative and significant impact on financial performance (Return On Assets) in Conventional BPR in DIY.

The results of this study may strengthen some of the results of previous studies, such as studies conducted by Sukarno and Syaichu (2006), Akhtaretc (unpublished) and Mahardian (2008) which stated that

the level of bank efficiency is reflected from the ratio of BOPO negatively and significantly influence towards ration of ROA.

The negative influence between BOPO ratio and ROA shows that if banks are increasingly efficient in conducting its operational activities (BOPO ratio is low) then obviously it can improve its financial performance (ROA ratio will rise). Conversely, financial performance (Return On Assets) of banks would be lower if the bank is inefficient in running operations (BOPO ratio is high). This condition can occur as a result of the operational costs of banks that are too big that cannot be suppressed by operating income so as to reduce the profitability of the operations of the bank itself.

The operating efficiency of a company (in this case is BPR) is a very important and crucial factor for the survival of the company. In accordance with its function as an intermediary party, the efficiency of operations of the bank will lead to increment of bank's profits. The level of bank efficiency in running operational, affects the level of income attained by the bank. Any increase in the operational costs of banks that are not followed by an increase in operational income will result in less profit before tax, which in turn will lower ROA. This is also supported by Dewi (2010) and Yuliani (2007) which stated in their research that the more efficient operational of bank's performance is, the greater bank will benefit.

4. NPL Influence on Profitability (ROA)

NPL showed a negative and statistically significant at the five percent level of confidence for the districts in Yogyakarta province. NPL variable has a marked-negative coefficient, which means that between NPL and ROA variables have negative correlation. NPL has a coefficient value of -0.183952-, -0.1839520.159209, which means that in case of decrement of 1% will affect ROA to -0.183952%. Negative and significant relation is also shown between NPL and ROA that can be seen from the profitability of 0.0000.

If the NPL increases, it means an increase in non-performing loans due to bottlenecks in the repayment. The occurrence of non-performing loans will affect the decrease of company profit, so NPL has a parallel direction (negative) towards profitability, a test relevant to the research found by Mabvure et al. (2012) that NPL is partially affecting negative towards profitability.