

**CHAPTER V**  
**DATA ANALYSIS**

**A. Test Quality of Data (Classic Assumption for Data Panel)**

**1. Multicolnearity Test**

This test need to do because linier regression use more than one independent variable and if independent variable only one we don't need to do multicolnearity test again. Base on the result of this test in this research we found the result on table below.

**Table 5.1**  
**The Result from Multicolnearity Test**

	<b>_KULON PROGO</b>	<b>_BANTUL</b>	<b>_GUNUNG KIDUL</b>	<b>_SLEMAN</b>	<b>_YOGYA KARTACITY</b>
<b>_KULON PROGO</b>	1.000000	-0.349753	0.022612	-0.590395	-0.217076
<b>_BANTUL</b>	-0.349753	1.000000	-0.254799	0.726015	0.241958
<b>_GUNUNGKIDUL</b>	0.022612	-0.254799	1.000000	-0.299030	-0.395280
<b>_SLEMAN</b>	-0.590395	0.726015	-0.299030	1.000000	0.681118
<b>_YOGYA KARTACITY</b>	-0.217076	0.241958	-0.395280	0.681118	1.000000

Source : Data Processed by Eviews, Learn more in appendix

The conclusion as can be seen from table 5.1 above, if the result from correlation matrix (multicolnearity test) is less than 0.9 it means data free from any symptoms of multicolnearity. As can be seen from the table there is no one result highest than 0.9 it means all of data can be assumed free from multicolnearity.

## 2. Heteroscedasticity Test

Hetero's symptoms usually happen in cross section data of the time series. From this test we will know the condition about the data that used in this research. The detection result will explain in the table below.

**Table 5.2**  
**Heteroscedasticity Test**

<b>Variable</b>	<b>Prob.</b>
C	0.6412
LN_EX?	0.4709
LN_HART?	0.9593
LN_EMP?	0.7091
LN_GRDP?	0.8300

*Source: Data Processed by Eviews 7, Learn more in Appendix*

The conclusion as can be seen from table 5.2 above, Data will free from any hetero's symptom if the regression result highest than 5% or same with 0.5. According to the table above, the time start from 2010 – 2016. The result of Probability value higher than 0.05 (Prob.Value > 0.05) it means all data free from any kinds of Hetero's symptom.

## **B. Analysis Model of Data Panel**

This research use data panel model for regression estimation method and all would regress use three approaches, are Common Effect Model (CEM) with Ordinary Least Square (OLS) approach or little quadrate technique, Fixed Effect Model (FEM) which often mention as technique Least Square Dummy Variable (LSDV), and Random Effect Model (REM) which is usually mention as Error Component Model (ECM) or Generalized Least Square (GLS) technique. Literally, the researcher will try to compare both Fixed Effect Model (FEM) and Random Effect Model (REM) to know what is the best or appropriate model from three models as the one of regression tool that can be used in this research base on the result of probability value and R-square that show from the regression result.

The goal of this regression is to know the effect of each independent variables such as Export, Hotel And Restaurant Tax, Employment and Gross Region Domestic Product to the dependent variable which use Local Original Revenue in D. I. Yogyakarta Province include five regency/city start from 2010 – 2016 ( during seven years). This regression use Eviews 7 as the detection's tool.

The selection model which use all analysis test which exist in data panel will explain by the tabel below :

**Table 5.3**  
**Estimation Result Toward The Effect of Export, Hotel And Restaurant Tax, Employment and Gross Region Domestic Product On The Local Original Revenue in D. I. Yogyakarta Province**

Dependent variable: Local Original Revenue	MODEL		
	Common Effect	Fixed Effect	Random Effect
<b>Constanta</b>	-41.61507	-36.07990	-41.61508
Standard Error	17.22155	12.20864	11.52947
Probability	0.0220	0.0066	0.0011
<b>LN_EX (Export)</b>	1.061433	0.330328	1.061433
Standard Error	0.446699	0.101980	0.299056
Probability	0.0241	0.0033	0.0013
<b>LN_HART (Hotel and Restaurant Tax)</b>	-0.048801	0.352083	-0.048801
Standard Error	0.448930	0.176986	0.300550
Probability	0.9142	0.0573	0.8721
<b>LN_EMP (Employement)</b>	11.66830	3.436579	11.66830
Standard Error	1.685212	1.175457	1.128215
Probability	0.0000	0.0071	0.0000
<b>LN_GRDP (Gross Region Domestic Product)</b>	-6.242964	0.071523	-6.242964
Standard Error	1.648648	0.179823	1.103736
Probability	0.0007	0.6941	0.0000
<b>R2 ( R-Squared)</b>	0.730354	0.997377	0.730354
<b>F-Statistic</b>	20.31427	1235.837	20.31427
<b>Probability (F-Statistic)</b>	0.000000	0.000000	0.000000
<b>Durbin Watson Stat</b>	0.614341	1.5617777	0.614341

*Source: Data Proccesed by Eviews 7. Learn more in appendix*

From the table above we will try to detect what is the best test that suitable to analyze this estimation. There are three steps are:

- 1.Common Effect Model
2. Fixed Effect Model

### 3. Random Effect Model

To make easy in estimation test and the test can be detect directly. To choose the suitable one used to process data panel, Actually there are three tests to do the chosen model are : Lagrange Multiplier, Chow and Hausman test. But in this research, chosen model will use both Hausman test and Chow test.

The data that used in this research to regress already made become simple one to make easy in the regression and it use Log or LN model and the real data will be attached in the appendix.

#### 1. Hausman Test Result

Hausman test need to do to know what is the best estimation method between Random Effect Model and Fixed Effect Model.

H0 : Random Effect

H1 : Fixed Effect

If the probability of Chi-Square higher than Alpha 5% it will be better to use random effect, so the estimation result will be explain by the table below :

**Table 5.4**  
**Hausman Test**

<b>Correlated Random Effect - Hausman Test</b>			
<b>Pool : PANEL</b>			
<b>Test cross-section random effect</b>			
<b>Test Summary</b>	<b>Chi-Sq.</b>	<b>Chi-Sq. D.f</b>	<b>Prob.</b>
<b>Cross-section random</b>	40.933988	4	0.0000

Source : Data Processed by Eviews 7. Learn more in Appendix

From the table above, we know that the Probability value is small than 0,005 it means the condition of  $H_0$  is rejected. So, because of that the Probability value = 0.0000, it means the Confidence Level is 95% so the conclusion from this Hausman Test, the data that had by this model suitable to use **Fixed Effect Model**.

## 2. Chow Test Result

In Chow test data panel will estimated use fixed effect specification to what is better mode that can be use between fixed effect or common effect.

$H_0$  : Common Effect

$H_1$  : Fixed Effect

If the amount of probability Chi-Square less than alpha 5% it means  $H_0$  is rejected, so the best estimation way is fixed effect. Than the estimation result will explain by the table below :

**Table 5.5**  
**Chow Test Result**

<b>Redundant Fixed Effect Test</b>			
<b>Pool : PANEL</b>			
<b>Test cross-section fixed effects</b>			
<b>Effect Test</b>	<b>Statistic</b>	<b>d.f.</b>	<b>Prob.</b>
<b>Cross-section F</b>	10.233497	4,26	0.0000
<b>Cross-section Chi-square</b>	33.096362	4	0.0000

*Source: Data Processed by Eviews 7. Learn more in Appendix*

From the data Processed above which is use Eviews 7 as the tool, then the Probability Value of Cross-Section and Chi-Square that found is

around 0.0000. The Probability Value is less than 0.05 ( $0.0000 < 0.05$ ) it means  $H_0$  is rejected. The conclusion is with the confidence level 95% **Fixed Effect Model** better to used in this research.

Beside that, the provement also can do by the manual calculation which one this test will compare the result from F calculate with F table using the hyphoteses:

$H_0$  : Common Effect Model or Pooled OLS

$H_1$  : Fixed Effect Model

$H_0$  : Rejected if Probability Value smaller than a

$H_0$  : Accepted if Probability Value higher than a

The value of a that used is 5% or same with 0.05

**a. Determine F Calculate:**

**Use Formula :**

$$F = \frac{\frac{(SSE_1 - SSE_2)}{(n - 1)}}{\frac{SSE_2}{(nt - n - k)}}$$

**Where :** SSE1 = Sum Squared Resid Common Effect = **270.3906**

SSE2 = Sum Squared Resid Fixed Effect = **109.0526**

n = The amount of Regency/City = **5**

nt = The amount of Regency/City x Time Series = **5x7 =35**

k = The amount of Independent Variable = **4**

$$\begin{aligned}
 \mathbf{F\ Calculate} &= \frac{(270.3906 - 109.0526) / (5 - 1)}{109.0526 / (35 - 5 - 4)} \\
 &= \mathbf{9.61643296271}
 \end{aligned}$$

**b. Determine F Table :**

$$\mathbf{F - table} = \{ \alpha : \mathbf{df (n-1, nt - n - k)} \}$$

**Where :**  $\alpha$  = Significant Level which use  $\alpha = 5\%$

$$\begin{aligned}
 \mathbf{F - table} &= 5\% ; (5 - 1, 35 - 5 - 4) \\
 &= 5\% ; (4, 26) \\
 &= \mathbf{2,74}
 \end{aligned}$$

**Parameter Test :**

- If F-Table > F-Calculate it means H0 is accepted and H1 is rejected
- If F-Table < F-Calculate it means H0 is rejected and H1 is accepted

The Conclusion from the calculation above, The result of F-Calculate is **22,1735389** while F-table from the numerator 4 and denominator 26 in  $\alpha = 5\%$  is **2,74**. From the hypotheses above we know that H0 is rejected because F-Calculate > F-Table ( $9.61643296271 > 2,74$ ), So the model that will used in this research is **Fixed Effect Model**

The Regression and Calculation test that suitable with this research is use Fixed Effect Model. This research with data operation which perform using software Eviews 7 and have function to do test model of data panel, and also include statistic test and hypotheses test. The explanation below is one of regression result which processed by Eviews 7.



The Equation =  $PAD_{it} = \alpha + \beta_1 EX_{it} + \beta_3 HART_{it} + \beta_2 EMP_{it} + \beta_4 GRDP_{it} + \varepsilon$

$$PAD_{it} = (-36.07990) + 0.330328 LN\_EX_{it} + 0.352083 LN\_HART_{it} + 3.436579 LN\_EMP_{it} + 0.071523 LN\_GRDP_{it} + \varepsilon$$

### C. Regression Result of Data Panel Model

After doing statistic test to determine the model which can chosen in this research, so the conclusion of estimation model that used in this reeseach is fixed effect model. This approach model in data panel only combine between time series and cross section data. This model not attention to the dimensions of time also individual so can assume that the behavior of data in all regency and city is the same in various period. The table below show the data estimation result with the amount of observation around five regency/city during 2010-2016 (7 years).

**Table 5.6**

#### **The Conclusion Of Regression Result from Fixed Effect Model (2010 – 2016)**

Variable	Coefficient	Std.Error	T.Statistic	Prob
Constant Value	-36.07990	12.20864	-2.955276	0.0066
LN_EX(Export)	0.330328	0.101980	3.239142	0.0033
LN_HART (Hotel And Restauran Tax)	0.352083	0.176986	1.989329	0.0573
LN_EMP (Employement)	3.436579	1.175457	2.923611	0.0071
LN_GRDP(Gross Region Domestic Product)	0.071523	0.179823	0.397740	0.6941
R <sup>2</sup> (R-Squared)	0.997377			
Probability (F-Statistic)	0.000000			

Source : Data Processed. Learn more in Appendix

From the estimation result above, can made the data analysis model to the factors which are give effect and influence in the regency/city in D. I. Yogyakarta Province and all can be summed up with the equation below :

$$\text{LN\_PAD}_{it} = \beta_0 + \beta_1 \cdot \text{LN\_EX}_{it} + \beta_2 \cdot \text{LN\_HART}_{it} + \beta_3 \cdot \text{LN\_EMP}_{it} + \beta_4 \cdot \text{LN\_GRDP}_{it} + \varepsilon$$

Information :

LN\_PAD : Local Original Revenue

$\beta_0$  : Contant

LN\_EX : Export

LN\_HART: Hotel And Restaurant Tax

LN\_EMP : Employment

LN\_GRDP: Gross Regional Domestic Product

i : Regency/City

t : Period of time

$\varepsilon$  : Error Term

From the equation above can found the regression result such as :

$$\text{LN\_PAD} = -36.07990 + 0.330328 \text{ LN\_EX} + 0.352083 \text{ LN\_HART} + 3.436579 \text{ LN\_EMP} + 0.071523 \text{ LN\_GRDP} + \varepsilon$$

$\beta_0$  = The value -36.07990 can be interpreted if all of independent variable (Export, Hotel And Restaurant Tax, Employmentand GRDP) considered constant or not having any changes so the amount of Local Original Revenue (PAD) -36.07990%.

$\beta_1$  = The value 0.330328 can be interpreted if the amount of Export increase 1%, so the amount of PAD increase around 0.330328% with the assumption PAD is constant.

$\beta_2$  = The value 0.352083 can be interpreted if the amount of Hotel and Restaurant Tax increase 1%, so the amount of PAD will increase around 0.352083% with the assumption of PAD is constant.

$\beta_3$  = The value 3.436579 can be interpreted if the amount of Employment increase 1% it will increase the amount of PAD around 3.436579% with the assumption of PAD is constant.

$\beta_4$  = The value 0.071523 can be interpreted if the amount of GRDP increase 1% it will increase the amount of PAD around 0.071523% with the assumption of PAD is constant.

**Table 5.7**  
**Regional Effect**

<b>Regional/City</b>	<b>Regional Effect</b>	<b>Independent Variable</b>	<b>Coefficient Regression</b>
Kulonprogo	5.377723	Export	0.330328
Bantul	1.158080	Hotel and Restaurant Tax	0.352083
Gunungkidul	1.442584	Employement	3.436579
Sleman	1.255746	GRDP	0.071523
Yogyakarta City	-9.234134	C	-36.07990

*Source: Data Processed by Eviews 7 for data panel estimation*

As can be seen from the table above which show the estimation result on the local original revenue between all regency/city in D. I. Yogyakarta. All can be interpreted such as :

- a.  $LN\_PAD_{(Kulonprogo)} = 5.377723$  (regional effect)  $-36.07990 +$   
 $0.330328*LN\_EX_{kulonprogo} + 0.352083*LN\_HART_{kulonprogo} +$   
 $3.436579*LN\_EMP_{kulonprogo} + 0.071523*LN\_GRDP_{kulonprogo}$
- b.  $LN\_PAD_{Bantul} = 1.158080$  (regional effect)  $-36.07990 +$   
 $0.330328*LN\_EX_{Bantul} + 0.352083*LN\_HART_{Bantul} +$   
 $3.436579*LN\_EMP_{Bantul} + 0.071523*LN\_PDRB_{Bantul}$
- c.  $LN\_PAD_{Gunungkidul} = 1.442584$ (regional effect)  $-36.07990 +$   
 $0.330328*LN\_EX_{Gunungkidul} + 0.352083*LN\_HART_{Gunungkidul} +$   
 $3.436579LN\_EMP_{Gunungkidul} + 0.071523*LN\_PDRB_{Gunungkidul}$
- d.  $LN\_PAD_{Sleman} = 1.255746$  (regional effect)  $-36.07990 +$   
 $0.330328*LN\_EX_{Sleman} + 0.352083*LN\_HART_{Sleman} +$   
 $3.436579*LN\_EMP_{Sleman} + 0.071523*LN\_PDRB_{Sleman}$

Base on the regional effect, can be seen each regency and city in D. I. Yogyakarta which have constant value fixed effect model is different. This condition can be interpreted each regency and city have different in the change of amount local original revenue if independent variable issued from the model.

- 1) Kulonprogo regency show the coefficient value is 5.377723 where the value of c is -36.07990. It means, if the amount of export, hotel and restaurant tax, employment and GRDP issued from the model will make the amount of local original revenue growth 5.377723%.
- 2) Bantul regency show the amount coefficient value is 1.158080 where the value of c is -36.07990. Because of that, if the amount of export, hotel and

restaurant tax, employment and GRDP issued from the model will make the amount of local original revenue growth 1.158080%.

- 3) Gunungkidul regency has coefficient value around 1.442584 where the value of  $c$  is -36.07990. It means, if the amount of export, hotel and restaurant tax, employment and GRDP issued from the model will make the amount of local original revenue growth 1.442584%.
- 4) Sleman regency has coefficient value 1.255746 where the value of  $c$  is -36.07990. Because of that, if the amount of export, hotel and restaurant tax, employment and GRDP issued from the model will make the amount of local original revenue growth 1.255746%.
- 5) Yogyakarta city has coefficient value -9.234134 where the value of  $c$  is -36.07990. Because of that, if the amount of export, hotel and restaurant tax, employment and GRDP issued from the model will make the amount of local original revenue growth -9.234134%.

As can be seen from the estimation model above, there are cross-section's effect which are different in each regency and city which exist in D. I. Yogyakarta Province on the amount of local original revenue over there. Kulonprogo, Bantul, Gunungkidul, and Sleman regency have cross-section (regional effect) value are positive which can be seen from the amount of coefficient regression and only Yogyakarta City has negative effect.

From the regression result which already attached above, so the conclusion from the result of statistic test, are:

1. Coefficient Regression from Probability ( F Statistic)

Base on the result which explained from Fixed Effect Model, known the value of F calculate around 0,000000, it means the amount of sig is  $0,000000 < 0,05$ . In another word the variable of Export (EX), Hotel And Restaurant Tax (HART), Employment (EMP) and Gross Region Domestic Product (GRDP) directly have significant effect and influence on the Local Original Revenue (PAD) in D. I. Yogyakarta Province including four regency and one city which are exist over there.

2. Determination Coefficient of Goodness of Fit Test ( $R^2$ )

Base on the result that explained from Fixed Effect Model (FEM), the result of  $R^2$  is 0.997377 which can assumption become 99% variety of variable fit to dependent and independent variable in this reserch such as Export, Tourism Sector, General Allocation Fund and Gross Region Domestic Product. Beside that, the rest around 0.1 or 1% will be explain by another variable outside variables which is used in this research.

3. Parcial Regression (T-Test) and Result Analyses

**Table 5.8**

**Statistic Test from Fixed Effect**

Independent Variable	Coefficient Regression	T-Statistic	Probability	Standard-Prob
Export	0.330328	3.239142	0.0033	5%
Hotel and Restaurant Tax	0.352083	1.989329	0.0573	5%

Employment	3.436579	2.923611	0.0071	5%
GRDP	0.071523	0.397740	0.6941	5%

*Source: Data Processed by Eviews 7 for data panel estimation*

As can be seen from the table above, to know the effect of independent variable (Export, Hotel And Restaurant Tax, Employment and GRDP) on the Local Original Revenue (PAD), so need to do statistic test are :

a. The effect of export on the local original revenue

The analysis result which can be seen from the table above, show the export variable has t-statistic around 3.239142 and has probability value around 0.0033 with the confident level 5% so the export variable individually effect significantly on the local original revenue (PAD) in D. I. Yogyakarta Province. Export variable has coefficient regression around 0.330328 show that export variable influence positively to the PAD in D. I. Yogyakarta Province. It means if export variable incerase 1% it will increase the amount of PAD around 0.330328%.

b. The effect of hotel and restaurant tax on the local original revenue

Base on the analysis result, hotel and restaurant tax variable have t-statistic around 1.989329 and have probabily value 0.0573 with confident level 5%. So hotel and restaurant tax variable individually effect significantly on the local original revenue (PAD) in D. I. Yogyakarta Province. Hotel and restaurant tax variable have coefficient regression around 0.352083 which have influence positively to the PAD in all regency/city which exist in DIY.

It means, if the amount of hotel and restaurant tax variable increase 1% it will increase the amount of PAD around 0.352083%.

c. The effect of employment on the local original revenue

Base on the result analysis which is show the amount of t-statistic around 6.923933 and has probability value 0.0071 which is less than 5% it means, employment variable significantly effect on the local original revenue (PAD). Employment variable has coefficient regression around 3.436579 which has mean if the amount of employment increase 1% it will increase the amount of PAD around 3.436579%.

d. The effect of GRDP on the local original revenue

According to the analysis result which show the amount of t-statistic around 0.397740 and has probability value 0.6941 which higher than 5%. It means, GRDP variable insignificant effect on the local original revenue (PAD). But the variable will significant if confident level higher than 60% equivalent with the probibility value around 0.6941. GRDP variable has coefficient regression 0.071523 which has means GRDP still give positive influence on the PAD and if there increasing 1% from GRDP variable it will increase the amount of PAD around 0.071523%.

#### **A. Analysis Result**

Base on the regression result with use Fixed Effect Model (FEM) which already choosen as the method that use in this research and it already



explain before. So, in this analysis result try to explain the result of experiment which relate between Export, Hotel And Restaurant Tax, Employment and Gross Regional Domestic Product to the Local Original Revenue in D. I. Yogyakarta Province and all can be interpreted such as :

1. The Effect of Export on the Local Original Revenue

Export variable has significant and positive effect on Local Original Revenue (PAD). It means, if the amount of export which accepted by some regencies/city in D. I. Yogyakarta Province is significant in the maximum point 0.05 or equivalent of 5% in confidence level around 95% because the probability value 0.0033 which is less than 0.05, it means the variable is significant and give positive effect on the Local Original Revenue in D. I. Yogyakarta Province. Base on the value of coefficient regression which show in the point 0.330328 has meaning if the amount of export increase 1% it will increase the amount of PAD around 0.330328%, *ceteris paribus*. The positive relation here can be interpreted, if variable which exist in the right side model (independent variable) increased/decreased, so the variable which exist in the left side will follow in the same direction to increase/decrease.

The condition of economy will be better if the amount of export higher than import, it will shows the economic in that area have good in power. Export become one of economic condition which can give positive influence to the development of economic in country or regional area. Than if the amount of export which come from goods and services in that area of

Regencies and city absolutely it will increase the amount of regional income or Local Original Revenue in that area it self.

There are some benefits which is can be the reason why each regency and city must perform export, such as export can fulfill the society needs, increase regional income, increase economic society, improve the development of industry, earn goods and services which is can not found in own region, also expanding markets and adding profit, (Martono 2014).

While, the negative influence which caused of export is causing scarcity of goods in that area. Without good management export will make scarcity because of the consumption increase and the quantity of good not enough to fulfill all of society's needs.

## 2. The Effect of Hotel and Restaurant Tax on the Local Original Revenue

Hotel and restaurant tax have significant and positive effect on the Local Original Revenue (PAD). It means, if the amount of hotel and restaurant tax (HART) which accepted by some regencies/city in Province of D. I. Yogyakarta has significant effect in point 0.05 or equivalent of 5% and the amount of confident level is 95% because the amount of probability value is 0.0573 and automatically give sifignificant effect on PAD. Beside that, the amount of coefficient regression of HART is 0.352083 which has meaning if the amount of HART increase 1% it will increase the amount of PAD around 0.352083%. Than, positive effect which appear from HART as independent variable in the right side will followed by increasing the amount of PAD in the left side which is become dependent variable.

According to the regression result hotel and restaurant tax has positive effect on the Local original revenue in D. I. Yogyakarta Province. In reality, D. I. Yogyakarta Province receive income from tourism sector which comes from entertain and attraction taxes, object retributions, license retributions and retribution on the use of local Government owned asset and all become the source of Local original revenue which is can increase the amount economic growth in D. I. Yogyakarta Province.

Wisnu Budi Irianto as the head of DPDPK office in Yogyakarta, stated that,” 90 percent of obedient taxpayers are large business taxpayers like five-star hotels and big frenchise restaurants in Yogyakarta City, 10 percent of which are usually small stalls and there are exactly 490 taxpayers hotels and restaurants of a total of 700 hotels and restaurants that are orderly paying taxes. If all of hotel and restaurant doing taxpayers it will better to increase the regional income.

### 3. The Effect of Employment on the Local Original Revenue

Employment variable has significant effect on Local Original Revenue (PAD) because the amount of Probability value is 0.0033 which less than 0.05 or equivalent of 5% in the confident level around 95%. Employment variable will give positive effect to increase the amount of regional income, it can be seen from the amount of coefficient regression from employment variable 3.436579. From the result can be interpreted if the amount of employment increase 1% it will increase the amount of local original revenue around 3.436579%. Beside that, employment

variable in D. I. Yogyakarta Province will give positive influence and effect on the growth of PAD it self. The positive relation can be interpreted if the amount of employment which as independent variable increased/decreased it will followed by dependent variable or PAD.

Because of the result show the positive effect, so the government must provide any kinds of programme which can empower all employment such as giving training in skill, improve all employment sector to increase the quality, improve awareness and participation's society to increase the enthusiastic from society in the work. If all category can be done, it will give positive effect in the economic continuously.

Djojohadikusumo (1991) that "Economic development is an effort to increase income per capita and increase productivity per capita by adding capital equipment and adding skills".

Increased income per capita means, generally increase the welfare of the community. Meanwhile, economic development will occur if there is an increase in income per capita of population. Income Per capita is used to measure the welfare of a region.

According to Todaro (2000) population growth and labor force growth (AK) is traditionally regarded as one of the positive factors that spur economic growth. A larger number of workers means increasing production levels, while greater population growth means greater domestic market size. Yet it is still questionable whether the true rate of rapid

population growth will actually have a positive or negative impact on its economic development.

#### 4. The Effect of Gross Regional Domestic Product to the Local Original Revenue

Gross Regional Domestic Product (GRDP) variable has insignificant effect on the Local Original Revenue (PAD) value because the amount of probability value is higher than 0.05 or equivalent of 5% in the confident level around 95%. As can be seen from the result the amount probability value is 0.6941 show insignificant value to the Local Original Revenue as the dependent variable. According to the amount coefficient regression 0.071523 which has meanig if the amount of GRDP increase 1% it will increase 0.071523% at the point significant level 0.6941. Because if the amount of significant level higher than 0.05 it will not give any effect and influence on the local original revenue in all regency/city which exist in D.I. Yogyakarta Province.

Another macroeconomic indicator derived from GRDP is the rate of economic growth. The dynamics of DIY's economic growth over the past five years have been overshadowed by national economic conditions that have not shown a positive trend. By 2015 the achievement of DIY growth is at its lowest point, at 4.9 percent, compared to four years earlier which is still above 5 percent. In the midst of the economic

downturn, several categories of business fields are still able to grow impressively above 7 percent, namely: financial services, other services, corporate services, education services, and health services and social activities, (Bapedda DIY 2016).

The region which has high intensity in economic activity absolutely has relationship with Gross Region Domestic Product (GRDP) it happens because GRDP become the important indicator to know the economic condition in one of the region including regencies and city.

The argument from Santosa and Rahayu (2005) The relationship between Local original revenue and GRDP is in functional relationship, it happens because GRDP include one of function from Local Original Revenue. If the amount of GRDP increase it will increase the regional income to finance the development programme in the area. Then it will improve the government's services to the society which is expected to increase the productivity and economic activities to create welfare between government and society.