# Analysis the Poverty Level in Jambi Province, Indonesia

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Abstracts: This research has purposed: 1) Revealing and analyze those impact from original local government revenue towards the poverty level in Jambi Province; 2) Discovered and analyze those impact from economic growth towards poverty level in Jambi Province; 3) Determined and analyze those simultaneously impact from original local government revenue and economic growth towards the poverty level in Jambi Province. These research analysis techniques used was multiple linear regression analysis by compared to the result of data panel analysis. According to the results from partial and simultaneous tests it said that original local government revenue and economic growth variables both individually or simultaneously have a significant affect towards the poverty level in Jambi Province. These panel data analysis results found if the Human development index, Economic growth and Educational level in Jambi has a significant affect towards the poverty level in Jambi Province.

**Keywords:** Original local government revenue, Economic growth, Human development index, Educational level, Poverty level.

## 1. INTRODUCTION

These poverty issue cannot be separated from the ability of the population to meet their basic needs. The results from previous research was illustrated that there are several variables that have an impact towards the poverty which obtained from the microeconomic and macroeconomic variables. One thing that is common to this research is both central and local governments are the parties which have an authority to retain the microeconomic and macroeconomic through the role of government, including the local governments in preventing the poverty by anticipating the market failures in the economy which seems very important. And the role through fiscal policy which has targeted in solving the development problems (poverty, unemployment, income distribution). The APBD which includes local government revenues and spending that can be used as a reflection of the policies which taken by the government. And those Government policy in every purchase of goods and services for the implementation of program would reflects on the number of costs that will be incurred by the government in order to maintaining the food price stability and increasing the number of jobs which highly important.

The increase in Local Government Revenue which considered as capital, in accumulation will cause more positive externalities and would lift the economic growth. On the other hand, the fiscal decentralization provides greater authority for Local management, but certainly, it would raises new problems. Each region has different capabilities in funding their operational activities from the respective regions, causing the imbalances between the regions (Harianto & Adi, 2007). The main source of financing for government administration and Local development, for both provinces, districts and come from Local independence originating from Original Local Government Reveue (ROR). In its realization, Kuncoro (2010) found that ROR was only able to finance the Local government spending with maximum of 20%. To overcome this imbalance, the central government transfers the Balancing Fund for each region consisted of the Revenue Sharing Fund (RSF) the General Allocation Fund (GAF) and the Special Allocation Fund (SAF).



Figure 1. The Graphic of Economic Growth Rate and Poverty Level at Jambi Province.

Source: Central Statistics Agency (2018).

Figure 1. shows that the economic growth has a tendency to continue to increase and conversely does with the poverty which tends to continue to declined. The poverty rate which continues to decline is an indication that the economic growth which occured in Jambi Province was inclusive.

| Year    | Economic Development | Poverty Level | Original Regional Local Gov. Revenue Growth |
|---------|----------------------|---------------|---|
| 2013    | 7,07                 | 8,4           | 0,27  |
| 2014    | 7,76                 | 7,9           | 28,39                                       |
| 2015    | 4,21                 | 8,28          | -3,12                                       |
| 2016    | 4,37                 | 8,41          | -0,62                                       |
| 2017    | 4,64                 | 8,19          | 28,11                                       |
| 2018    | 4,77                 | 7,92          | 4,83  |
| Average | 5,47                 | 8,36          | 9,64  |

Table 1. Data on Economic Growth, Poverty Level and Growth in Local-Owned Revenue in Jambi Province 2013-2018 (%).

**Source:** Central Statistics Agency of Jambi Province (2018).

According to the data from the table 1, it could be seen that from 2013 to 2018 the average economic growth grew by 5.47 percent. This economic growth would be followed by a poverty rate which increased every year during 2013 to 2018. The average poverty rate from 2013 to 2015 was 8.63 percent. Supposedly, when economic growth increased it will affect to decreased of the poverty level.

In 2016 there had an increased in economic growth but it was followed by an increase in the poverty rate by 8.41 percent. This illustrated that the theory had opposites to the reality which occurred in Jambi Province. That moment, when the economic growth increased in 2016 and it was followed by an increase in the poverty rate. it could be a hints that the economic growth which happened in Jambi Province was included as bad catagory therefore when that economic growth increases, it would not able to reduce the poverty level in Jambi Province.

#### 1.1. The Concept of Poverty

The definition of poverty according to the UNDP (2009) is a situation where a person or household experiences difficulty in fulfilling basic needs, while the surrounds environment did not provide the opportunities to improve sustainable welfare or to escape from this vulnerability.

Poverty is an absolute, someone absoluty classified as poor if its earnings results were below the poverty line and not sufficient to fulfill their basic needs. In widely sense, the poverty is an integrated concept which has five dimensions, namely: 1) poverty (proper), 2) powerlessness, 3) vulnerability to emergency situations (state of emergency), 4) dependence (dependence) and 5) alienation (isolation) both geographically and sociologically.

The measurement of poverty in Indonesia could be done by the BPS (Central Statistics Agency) criteria. CPM determines the poverty criteria using the basic needs methods (basic needs). According to the basic needs methods, there are 3 poverty indicators namely could be used such as (1) Headcount Index (2) poverty depth index (Poverty Gap Index). (3) Poverty Severity Index . The headcount index used to measure the absolute needs which consists of two components, namely the food poverty line and the non-food poverty line . The BPS poverty line as standard in calculating the Headcount index is determined based on the minimum spending limit for food consumption which equivalent to 2,100 calories per day and non-food consumption.

Poverty is not only related to the level of income but also from the social, environment and even empowerment aspects and also the level of participation, poverty should not be recognize as low income, but also need to be considered as an incapacity. Poverty could be decisive and dominant factor which affecting humanitarian issues such as underdevelopment, ignorance, neglect, crime, violence, human trafficking, illiteracy, dropouts, street children, child labor. Thus, poverty could not only be seen from one side of low income but should be consider from many interrelated aspects so thats make it multidimensional.

Poverty could be sized up in two dimensions of financial or wealth and non-financial factors. Poverty in the financial or wealth dimension could not only be measured through the low of income received because low income is usually temporary, but it need to be measured by the ownership of assets such as land for small farmers and through access to public services. Meanwhile based on non-financial factors which is marked by despair or helplessness that could also triggered by how low-income of households. The local government need to put poverty issue into one of the crucial problems that should be done by giving an attention to overcome this matter. The approach which considered as quite appropriate in reducing the poverty is to build up an economic activity in the regions that would be marked by the region's ability to establish the economic growth.

#### 1.2. Factors which Causing the Poverty

Todaro (2006) stated that the high and low levels of poverty in a country depends on two main factors, namely: 1) incomes level on average nation wide and 2) the narrowness of the gap in income distribution. Ravallion & Datt (1996) in Taufik (2010) suggests that the poverty has positive side to (urban and rural) the economic growth in the non-agricultural sector, namely its ability to attract workers from the rural poor agricultural economy to the urban poor informal sector. Kartasasmita (1996) in Taufik (2010), these are 4 factors which causing the poverty, such as: a) Low levels of education, causing limited self-development b) Low levels of health, low levels of wellness and low levels of nutrition that lead to the low of physical endurance, minds and initiatives, Thus it has an resulted in reducing the productivity, c) Limited employment opportunities, as long as employment or business activities still survive, it could be the hope to break the cycle of poverty which that can still be done d) Conditions of isolation, Conditions of remote or in isolated population will tends to have less business run.

Education plays a major role in forming the ability in advancing country to absorb modern technology and develop the capacities for sustainable growth and development. The poor living conditions of health and education which also could be seen as a component of growth and development which is vital as input aggregate functions. It has dual role as an input and output which makes health and education are very important in economic growth (Todaro, 2006). Todaro stated that aswell in his population-poverty (cycle theory of population poverty)which urged that the rate of population which growth rapidly will encourage the emergence of a wide range of economic, social and psychological, that prevent to get a better life.

#### 1.3. The Concept of Economic Growth

According to Badrudin (2012) the economic growth is a process of changing the whole economic structure of society as a process in transformation over the time which is marked by changes in the basis of economic activity

as well as in the framework of the economic structure of those community. Hamzah (2009) stated that economic growth is the development of an activities in the economy which causes goods and services produced in society to increase and so do with the welfare of society which is increased. The Economic growth could also be defined as an increase in Gross Domestic Product (GDP) or Gross National Product (GNP) regardless of whether the increase is greater or less than the population growth rate or whether changes in economic structure has occurs or not (Arsyad, 2010).

#### 1.4. The Concept of Original Local Government Revenue

Based on Situngkir & Manurung (2009) the Original Local Government Revenue is Local revenue which sources comes from the original Local economic. Based on Law No. 28/2009 regarding Local Taxes and Levies. Its as part of a mandatory contribution to the regions which owned by individuals or entities that are enforceable under the law, by not getting the rewards directly and used for the purposes of the area - the amount of prosperity of the people. The Levies as part of its were included in Local levies as payment for services or the granting of certain permits specifically provided and/or given by local governments for the benefit of individuals or entities.

The low of the Original Revenue of an area could be cause by several things, such as: 1) A large source of income which excavated in a disrict area but outside the authority from its local government concerned to collect it, 2)The Local Owned Enterprises (BUMD) in generally could not be said as reliable source of income, 3) Lack in public awareness of paying taxes and levies, 4) Lack of ability from local government in exploring the Original sources Revenue, 5) The low level of living and economy of the community and its ineffectiveness of Original Revenue management due to inability to apply the Local revenue administration manual. The obstacles faced are organization, facilities and infrastructure, licensing and bookkeeping reports.

In Indonesia, regions which entitled to collect taxes are divided into first-level regions and second-level regions which capable to finance and promote the regions, such as a policy that could be adopted and obliges to each person to pay taxes according to their obligations. An invite area where else hotel and restaurant tax.

Local Tax Level I (province)were include: 1) The motor vehicle tax and vehicle above the air 2) The duty of Vehicle and water vehicle 3) Motorized Vehicle Fuel Tax 4) Tax on extraction and utilization of ground water and surface water.

Tax-level region (district) consist of: taxes, restaurants taxes, entertainment taxes, advertisement taxes, street lighting taxes, collection minerals taxes (group C criteria) and parking.

Local Other Income, according to statutory regulations, legal Local other income includes: 1) gathered from the sale of Local assets which are not separated. 2) current accounts 3) interest income 4) profits from the difference between the exchange rate value against foreign currencies and commissions or other forms as a result of sales and/or procurement of goods and/services by the regions. Others original Local government revenues are other local revenue which received by the government. Those things are from other items belonging to the Local government.

The correlation between variables, as an conceptually which coverage by the original local government revenue manner will lead to the increased in economic growth on the region (Tambunan, 2006). The increase of its economic growth should have an impact towards the Local economy (Saragih, 2003). Therefore, the regions will not be success if they do not have an significant economic growth despite an increasing in income from the original revenue. Sidik (2002) in Ariany (2010) emphasized that the success of increasing the original revenue could not only be measured by the amount received, but also by its role in regulating the publics economy so it would be more developed, which in turn it could lift the welfare of the people in that region.

Harianto & Adi (2007) stated that original Local income is one of the sources of Local financing, if local revenue increases, the funds owned by the local government will be higher and the level of Local independence will

increase, so that local governments will take the initiative to explore the potentials of regions and it surely increase the economic growth.

# 1.5. The Correlations between Original Local Government Revenue and Poverty

Sobkoviak et al (2012) who found that the source of Local revenue in the form of balancing funds had an affect towards Local spending as a whole. The increase in original revenue is one of the sources of Local funding to improve the quality of public services. Good quality of public services will reflect the performance of a local government to increase the value of its and will have an impact on increasing the prosperity on the population and in the near future hopefully it will decrease the poverty.

# 1.6. The Correlations between Balancing Funds and Economic Growth

According to Legrenzi and Milas (2002) there has a very close correlations between the balance funds from the central government and Local government spending, this could be seen by the empirical evidence which took in the long term the transfer of balance funds from the central government has an affect on Local spending. Based on Law No. 33 of 2004 regarding Financial Balancing between the Central Government and Local Governments, "Balancing Funds are funds sourced from APBN (State Budget) which are allocated to Regions to financed Local needs in the context of implementing Decentralization". The Balancing Fund aims to reduce the fiscal gap between central and Local governments.

# 1.7. The Correlation between Economic Growth and Poverty Level

Tambunan (2011) stated that economic growth without being accompanied by additional employment opportunities will result in inequality in the distribution of an extra income (ceteris paribus), which in turn will create a condition for economic growth and increased the poverty. Growth and poverty have a very strong correlation, because in the early stages of the development process the poverty rate tends to increase and at the end of the development stage the number of poor people would gradually decreases (Tambunan, 2011).

## **1.8. Previous Research**

Manek & Badrudin (2016) in their journal entitled "The Affect of Local Own Income and Balancing Funds on Economic Growth and Poverty in the East Nusa Tenggara Province" was conclude that local revenue has a significant positive affect on economic growth, local revenue has a negative and significant impact on poverty. Tahar & Zakhiya (2011) in their journal which havs titled of "The Influence of Original Local Income and General Allocation Funds on Local Independence and Local Economic Growth" was concluded that local revenue has a positive and significant affect on Local economic growth.

Paat (2016) the results from his research concluded that Original Local Revenue has a negative affect on economic growth but just did not significant. its amount only was 3.9 percent Hamzah (2007). These interpreted stated that Original Revenue and General Allocations Funds have a direct affect on the level of 0.01 in economic growth, economic growth is a direct affect towards level on poverty and unemployment Original Revenue and General Allocation Funds have a significant indirect affect towards poverty and unemployment.

Furthermore, Anwar (2016) stated that Original Local Government Revenue did not affect on Economic Growth (PDRB). So as its simultaneously, the General Allocation Funds, the Special Allocation Fund and Original Local Government revenue have an affect on Economic Growth (PDRB) and Poverty.

#### **3. RESEARCH METHODS**

To provide an overview relate to affect which caused from Original Local Government Revenue and Economic Growth on Poverty Levels in Jambi Province, the data used in this research were all data from the Province of Jambi's for 15 years, start from 2004 to 2018. This research used secondary data which collected entirely by BPS.

The analysis method used in this research was descriptive analysis method, qualitative and also quantitative. Qualitative descriptive analysis used to explained those phenomena related to the problem under the research. Meanwhile, quantitative analysis used to analyze quantitative information (data which could be measured, tested, and informed in form of equations, tables, and etc.).

To answer the purposed of this research which namely to revealed those impact from Original Local Government Revenue and Economic Growth on the Poverty Level in Jambi Province during 2004-2018. Then the authors used multiple regression models and it used these following formula.

 $Y = \beta 0 + \beta 1 X 1 + \beta 2 X 2 + e$  (1)

Note:

Y = Poverty Level in Jambi Province

- X1 = Original Local Income of Jambi Province
- X2 = Economic Growth of Jambi Province
- $\beta 0 = Constant$
- $\beta$ 1,  $\beta$ 2 = Regression Coefficient
- e = Disturbance variable

The data analysis technique that used was Simple Regression Analysis and Multiple Regression through SPSS version 20.0. This analysis were expected to be used to discovered how and why the influence happened between dependent variable and independent variable. According to Sugiyono 2012, multiple regression analysis used by researchers, if the researcher intends to predict how the state (fluctuation) of the dependent variable (criterion) if two or more independent variables as predictor factors are manipulated (up and down in value).

According to Gujarati (2006) the regression analysis was concerned with the research of the dependent variable to another dependent variables on one or more other variables, explanatory variables, to estimate and predicted the average value (mean) or average (population) dependent variable, in terms of known or fixed values. According to Gujarati (2006), the regression analysis aimed to find out the affect of changes in X value on changes in Y values. In other words, the value of variable X could be predict by the value of variable Y.

#### 3.1. Operational Variables

The economic growth is an advance in GDP at constant prices in Jambi Province (in percentage units). The level of poverty is the percentage of poor people in Jambi Province. Original Local Government Revenue is the value of revenue that received by Jambi Provincial government which according to the applied laws and regulations derived from local taxes, Local levies, Local Government Enterprise revenues and other valid revenues which estimated in million Rupiah per fiscal year.

# 4. RESULT AND DISCUSSION

# 4.1. The development Of Local Own Revenue in Jambi Province

Original local revenue is a source of local revenue that extracted in the region which used as basic capital of the local government in financing the local development in an efforts to reduce the dependence from the central government funds. Original local revenue comes from a) Local tax; b) Local retribution; c) The results from separated local assets; and d) Other legitimate of local revenue.

| Year | Original Local Government Revenue |                              |  |  |  |  |
|------|-----------------------------------|------------------------------|--|--|--|--|
| leai | Realization (IDR) Growth (%)      | Realization (IDR) Growth (%) |  |  |  |  |
| 2004 | 287,638,000,000                   | -                            |  |  |  |  |
| 2005 | 344,881,000,000                   | 19.90                        |  |  |  |  |
| 2006 | 385,052,000,000                   | 11.65                        |  |  |  |  |
| 2007 | 449,998,000,000                   | 16.87                        |  |  |  |  |
| 2008 | 626,525,000,000                   | 39.23                        |  |  |  |  |
| 2009 | 526,442,077,651                   | -15.97                       |  |  |  |  |
| 2010 | 686,629,362,314                   | 30.43                        |  |  |  |  |
| 2011 | 984,232,579,913                   | 43.34                        |  |  |  |  |
| 2012 | 995,202,289,116                   | 1.11                         |  |  |  |  |
| 2013 | 997,893,262,073                   | 0.27                         |  |  |  |  |
| 2014 | 1,281,239,472,808                 | 28.39                        |  |  |  |  |
| 2015 | 1,241,223,028,012                 | -3.12                        |  |  |  |  |
| 2016 | 1,233,514,664,110                 | -0.62                        |  |  |  |  |
| 2017 | 1,580,304,867,342                 | 28.11                        |  |  |  |  |
| 2018 | 1,656,569,597,282                 | 4.83                         |  |  |  |  |

Table 2. The Realization and Growth of the Local Own Revenue in Jambi Province.

If it quoted from the Table 2., it could be seen that the highest increased in Original local Revenue was occured in 2011 by 43.4 percent compared to the previous year. This increased caused of an increase in several sources of Local revenue

## 4.2. The Advancement of Economic Growth in Jambi Province

Economic growth is an indicator used to assess the economic performance of a country. These following table could explained the economic growth which occured in Jambi Province start from 2004 to 2018

| Year | Economic Growth (%) |
|------|---------------------|
| 2004 | 5.38                |
| 2005 | 5.57                |
| 2006 | 5.89                |
| 2007 | 6.82                |
| 2009 | 6.39                |
| 2010 | 7.31                |
| 2011 | 7.30                |
| 2012 | 6.50                |
| 2013 | 6.89                |
| 2014 | 7.73                |
| 2015 | 4.25                |
| 2016 | 4.34                |

| Table  | 3.   | The   | Advancement | of | Economic |
|--------|------|-------|-------------|----|----------|
| Growth | in . | Jambi | Province.   |    |          |

| Average | 6.06 |
|---------|------|
| 2018    | 4.84 |
| 2017    | 4.64 |

According to the Table 3., it could be seen that the economic growth of Jambi Province during 2004-2018 has fluctuated for each year. The average economic growth in Jambi Province over the past 15 years was 6.07 percent. The highest economic growth was recorded in 2014, amounted to 7.73 percent. The high economic growth in 2014 occurred due to the significant increase in GRDP towards food and drink accommodation provision sector, from 6.4 percent to 18.73 percent. Meanwhile, the lowest economic growth was recorded in 2015, namely 4.25 percent. The low economic growth in 2015 was due to the declined in the production which mostly from all GRDP sectors. The declined in production was due to falling household consumption and the household consumption was only able to grow for 4.96 percent.

# 4.3. Poverty Level

Poverty is a less of welfare. Being poor still have to experienced a lack of food, clothing and shelter, risk of disease without treatment, low education and illiteracy. The poor are vulnerable to adverse things which are beyond the community's control. The following table would illustrated the poverty rate in Jambi Province from 2004 to 2018.

| Year     | Economic growth (%) |
|----------|---------------------|
| 2004     | 12.45               |
| 2005     | 11.88               |
| 2006     | 11.37               |
| 2007     | 10.27               |
| 2008     | 9.28                |
| 2009     | 8.55                |
| 2010     | 8.40                |
| 2011     | 7.90                |
| 2012     | 7.63                |
| 2013     | 8.28                |
| 2014     | 8.39                |
| 2015     | 8.86                |
| 2016     | 8.41                |
| 2017     | 8.19                |
| 2018     | 7.92                |
| Averages | 9.19                |

**Table 4.** The level of Poverty in Jambi Province.

According to the Table 4, it could be seen that the average poverty rate in Jambi Province during 2004-2018 was 9.19 percent, meaning that the poverty rate in Jambi Province was around 9.19 percent per year. According to its development, the poverty rate in Jambi Province during 2004-2018 has fluctuated. The highest poverty rate was recorded in 2004 at 12.45 percent. Meanwhile, the lowest poverty rate was recorded in 2012, namely on 7.63 percent. The low level of poverty in that year was due to the decreasing in unemployment rate, namely only 7.01 percent. The Jambi Provincial Government should be able to reduce the poverty rate every year by implementing the policies related to poverty reduction.

# 4.4. The Effect of Original Local Government Revenue and Economic Growth towards the Levels of Poverty in Jambi Province

The description of the multiple linear regression results according to the analysis with the SPSS 20 on Windows program, multiple regression results are obtained as summarized in these following table:

|              | Unstand | dardized Coefficients | Standardized Coefficients |        |       |
|--------------|---------|-----------------------|---------------------------|--------|-------|
| Model        | В       | Std. Error            | Beta                      | t      | Sig.  |
| 1 (Constant) | 14.966  | 1.219                 |                           | 12.274 | 0.000 |
| OLR          | -0.003  | 0.000                 | -0.889                    | -6.149 | 0.000 |
| EG           | -0.499  | 0.163                 | -0.442                    | -3.059 | 0.010 |

Table 5. The Results of Multiple Regression Test.

According to the table above, the multiple regression equation that could be obtained as follows:

Manpower = 14,966-2,976E-12-0,499+e (2)

The regression equation has these following meaning such as: If the Original Local Government Revenue variable and Economic Growth do not change, then the poverty rate variable will increase by 14.966 percent. If the original revenue variable has increased by 1 billion-rupiah, then the economic growth is considered constant or unchanged, it was because the reduction in the poverty rate of -0.003 percent. If the economic growth has increased by one percent, while local revenue would considered constant or unchanged, then it would reduce the poverty rate by 0.499 percents.

## 4.5. Simultaneous Hypothesis Test (F-Test)

The F test was carried out to discovered the simultaneously affect from the independent variable on the dependent variable or often called as linear regression equation. To perform the F-test it could be seen through ANOVA table below:

| ANOVA |            |                |    |             |        |                    |
|-------|------------|----------------|----|-------------|--------|--------------------|
| Model |            | Sum of Squares | Df | Mean Square | F      | Sig.               |
| 1     | Regression | 24.484         | 2  | 12.242      | 19.912 | 0.000 <sup>b</sup> |
|       | Residual   | 7.378          | 12 | 0.615       |        |                    |
|       | Total      | 31.861         | 14 |             |        |                    |

Table 6. The F-Test Statistical Results.

Note: a. Dependent Variable: Manpower.

b. Predictors: (Constant), EG, ROR.

From the ANOVA table, it is obtained that the F sig value = 0.000 < 0.05, meaning that the independent variables of local revenue and economic growth simultaneously affect the dependent variable towards the level of poverty.

## 4.6. Partial Hypothesis Test (T-Test)

The t-test is conducted to find out whether the independent variable partially affects the dependent variable significantly or not. If the level of significant was below 5%, means partially the independent variables affect the dependent variable.

|              | Unstandardized Coefficients |            | Standardized Coefficients |        |       |
|--------------|-----------------------------|------------|---------------------------|--------|-------|
| Model        | В                           | Std. Error | Beta                      | t      | Sig.  |
| 1 (Constant) | 14.966                      | 1.219      |                           | 12.274 | 0.000 |
| OLR          | -0.003                      | 0.000      | -0.889                    | -6.149 | 0.000 |
| EG           | -0.499                      | 0.163      | -0.442                    | -3.059 | 0.010 |

Table 7. The Results of Statistical T-Test.

#### 4.7. The Original Local Government Revenue Variable

According to the test results, it is obtained that the t-value for the local revenue was -6.149 with a level of confidence ( $\alpha$  = 5%) df = (10) the t table value was 1.8124 < t-table (6.149> 1.8124), meaning that Ho was rejected and Ha was accepted, it could be explained that local income has a significant affect on the levels of poverty in Jambi Province. Thus the hypothesis stated that the affect of local revenue on poverty levels in Jambi Province was proven to be correct.

#### 4.8. Economic Growth Variable

According to the test results, it was obtained that the t-value for economic growth variable was -3.059 with confidence level ( $\alpha = 5\%$ ) df = (10) and the t -table value was 1.8124. From this calculation, it can be seen that the t value was greater than t. table (3.059 > 1.8124), meaning that Ho was rejected and Ha was accepted, it means that economic growth has a significant affect on the level of poverty in Jambi Province. Thus the hypothesis which stated that the affect of economic growth on poverty levels in Jambi Province was proven to be correct.

#### 4.9. Coefficient of Determination (R<sup>2</sup>)

The analysis from the coefficient of determination used to see if the large number of independent variables could affect the dependent variable which expressed as in percentage. A good model is a model that could minimizes residuals, meaning that the variation of the independent variable could explain the dependent variable with an  $\alpha$  above 0.75 (Gujarati, 2006) as could be shown in these following table:

|              | Table 6. R <sup>-</sup> Square Test Results. |          |                   |                                |  |  |  |  |
|--------------|--|----------|-------------------|--------------------------------|--|--|--|--|
| Model        | R  | R Square | Adjusted R Square | Std. The error of the Estimate |  |  |  |  |
| 1            | ,877ª  | ,768     | ,730              | ,78409                         |  |  |  |  |
| Note: a. Pre | ote: a. Predictors: (Constant), EG, ROR.     |          |                   |                                |  |  |  |  |

Table 8. R<sup>2</sup> Square Test Results

#### 4.10. The Affect from Original Local Government towards the Levels of Poverty

According to the regression results, it is known that local own income has a significant affect on the poverty level, with a coefficient value of -0.003, meaning if the local revenue variable has increased by one billion IDR, then economic growth is considered to be constant or unchanged, it will cause a decrease in the poverty rate around - 0.003 percent. These research results were according to the proposed hypothesis, it could be said that the research hypothesis was accepted. The results from this research were in line with the research from Chandra et al. (2010) which showed that local revenue had an affect on poverty in Central Java during 2003-2010. Local original income is one measure of wealthy for each region. The higher the income, the higher the purchased power on the population and this increased on purchase power would lift the publics welfare (Sukirno, 2006).

#### 4.11. The Affect from Economic Growth towards the Level of Poverty

Based on these regression results, it is known that economic growth has a significant affect towards the poverty level with coefficient value of -0.449, meaning that if the economic growth variable has increased by one percent then the Local revenue is considered to be constant or unchanged, it would affect to a decrease in the poverty rate by 0.449 percent. This certainly supports the Hamzah's research (2007) which showed that the economic growth has a negative and significant affect towards poverty levels.

As an comparison, these analysis was carried out through the factors which influence the poverty rate in one of Districts in Jambi Province by the use of panel data method during period of 2014-2018. The independent variables consist of economic growth, human development index, unemployment rate and education level in districts / cities. It was analyzed through the Fixed Effect Model (FEM) method, and the results of data processed has obtained the regression efficiency values for each variable:

Poverty level = 34.48357 - 0.166290 (HDI) - 0.691030 (EG) -0.045726 (OUE) - 0.129450 (EL) + µ

The economic growth variable in this research shows a negative coefficient number and significantly affect the economic growth variable, human development index and the education level, while the open unemployment rate has a negative but insignificant coefficient number.

| -                             |             | (                 | ,                  |          |  |  |
|-------------------------------|-------------|-------------------|--------------------|----------|--|--|
| Variable                      | Coefficient | Std. Error        | t-Statistic        | Prob.    |  |  |
| С                             | 34.48357    | 1.087136          | 31.71965           | 0.0000   |  |  |
| HDI                           | -0.166290   | 0.018434          | -9.021049          | 0.0000   |  |  |
| EG                            | -0.691030   | 0.033469          | -20.64691          | 0.0000   |  |  |
| OUE                           | -0.045726   | 0.031402          | -1.456127          | 0.1455   |  |  |
| EL                            | -0.129450   | 0.010127          | -12.78256          | 0.0000   |  |  |
| Cross-section fixed (dummy va | ariables)   |                   |                    | <u>.</u> |  |  |
| Root MSE                      | 2.309342    | R-squared         |                    | 0.393177 |  |  |
| Mean dependent var            | 8.247091    | Adjusted R-squ    | ared               | 0.381311 |  |  |
| S.D. dependent var            | 2.965030    | S.E. of regressi  | S.E. of regression |          |  |  |
| Akaike info criterion         | 4.550811    | Sum squared re    | Sum squared resid  |          |  |  |
| Schwarz criterion             | 4.668122    | Log likelihood    | Log likelihood     |          |  |  |
| Hannan-Quinn criter.          | 4.592989    | F-statistic       |                    | 33.13365 |  |  |
| Durbin-Watson stat            | 0.747383    | Prob(F-statistic) | )                  | 0.000000 |  |  |

| Table 9. Ti | he Regres | sesion Res | ult (Fixed | Efect | Model) |
|-------------|-----------|------------|------------|-------|--------|
|-------------|-----------|------------|------------|-------|--------|

Human Development Index variable has a negative and significant coefficient towards the poverty level in of districts/cities at Jambi Province. This indicates that if there has an increase in the human development index figure by 1%, it would reduce the poverty level in districts/cities of Jambi Province by 0.166290% with constant assumption of variables outside the Human Development Index.

The economic growth variable has a negative and significant coefficient towards poverty in districts/cities at Jambi Province. This illustrated that if there has an increase in economic growth of 1%, it would reduce the poverty level in districts/cities at Jambi Province by 0.691030% with constant assumption of variables outside the economic growth.

The open unemployment rate variable has a negative and insignificant result towards the poverty level in districts/cities at Jambi Province. This illustrated if there has an increase in unemployment by 1%, it would reduced the poverty level in districts/cities at Jambi Province by 0.045726 % with constant assumption of the variables outside the economic growth.

The education level variable has a negative and significant coefficient results towards poverty in the districts/cities at Jambi Province.

This illustrated that if there has an increase in the level of education by 1%, it would reduce the poverty level in districts/cities at Jambi Province by 0.129450% with constant assumption of variables outside the economic growth. Based on these result, for each 1 % increased in the level of education it will reduced the poverty rate by 12.95% in Jambi province.

# 5. CONCLUSION

From those results which mentioned above and sort of discussion which stated in the previous chapter, the following conclusions that could be drawn as follows: Local Original Income and Economic Growth in Jambi Province was continued fluctuated every each year during 2004 - 2018. The poverty rate in Jambi Province during that time has an average poverty rate around 9.19 percent per year. According to the results from partial and simultaneous tests, the local revenue and economic growth both individually or simultaneously have an affect towards the poverty levels and in Jambi Province. When we look at the panel data processed of human

development index, economic growth and educational level it could be seen that those had a significant affect towards the poverty level.

According to the results of the research and those conclusions above, the following suggestions that could be conveyed as in these following statements: increasing original local government revenue needs to be done on each year if we want to reduce the poverty level in Jambi Province. To increase the original local government revenue, general policies that could be carried out were include on increasing local tax revenue but it should be done appropriately so the tax itself will not become burdensome and inhibits to the growth of small industries in Jambi Province, then it also could be done by optimizing local private levies, increasing the contribution of local government enterprise (with optimizing the its management ) increasing the government and private cooperation and so on.

This policy could be pursued by sharpening the real potential of revenue sources and improving the quality of public services in an accountable manner and also through optimizing the utilization of assets to contribute in enchancement of original local revenue. Thus, if the original local revenue of Jambi Province could be increases, the allocation of government spending would be even greater. Economic growth could also reduce the poverty level in Jambi Province. The contribution of economic growth in Jambi Province which now still contributed by the agriculture, forestry and fisheries sectors. Therefore, one of the policies that could be conducted by the Jambi provincial government to reduce poverty is by revitalizing agriculture and providing basic terms and conditions in order to facilitating the agricultural development.

Jambi should be able to continuosly arise the opportunity to increased the income per capita, but need to remain concerned to encourage the local society accesibility and not ignore the environmental sustainability. As an implication of the research results, Jambi needs a type of education which is ready to work, especially for those existing labor market.

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