

# The Effect of Industrial Agglomeration and Fiscal Decentralization on Income Disparity of Inter-Regional in Lampung Province

*by* I Wayan Suparta

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# The Effect of Industrial Agglomeration and Fiscal Decentralization on Income Disparity of Inter-Regional in Lampung Province

<sup>1</sup>I Wayan Suparta, <sup>2</sup>Ambya Ambya, <sup>3</sup>Andala Rama Putra Barusman, <sup>4</sup>Kamaruzzaman Muhammad

<sup>1</sup>Faculty of Economics and Business, University of Lampung, Indonesia

<sup>2</sup>Department of Economic and Development Studies, Faculty of Economic and Business  
University of Lampung, Indonesia

<sup>3</sup>University of Bandar Lampung, Indonesia

<sup>4</sup>Faculty of Accountancy, Universiti Teknologi MARA, Malaysia

## Article Info

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## Abstract:

**The purpose of this study:** This research discuss to determine the effect of industrial agglomeration and fiscal decentralization on income disparities between regions (ten districts/cities) in Lampung Province.

**Methodology:** The time span observed in the data research collect from 2001 to 2015. The analytical tool used to answer the purpose of this research with Multiple Linear Regression.

**Main Findings:** The results indicate that the regression coefficient on the Agglomeration variable (AGLO) is -0.0039, for the Regional Original Income variable (PAD) of 0.0051 and for the Balance Funding (DAPER) variable of -0.0021. All of these coefficients have a significant and significant effect at the 5% level. Based on the results of testing the regression coefficient there was no violation of classical linear assumptions. Thus this regression coefficient has met the requirements that have been standardized in econometric theory. In , this case, coefficient fulfills the criteria of the Best Linear Unbiased Estimator (BLUE).

## Article History

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**Keywords:** income disparity, fiscal decentralization, Industrial agglomeration, and multiple linear regression.

## 1. INTRODUCTION

Disparities income and differences in development outcomes in various regions it can be caused by the differences in conditions that owned by each region, including geographical position, potential resources both natural resources and human resources, infrastructure, economic structure and so on. Rapid economic growth that is not balanced with equity will cause disparity in income between regions the wider (Sasana, Hadi, 2009). Income disparity between regions is a structural problem for the Indonesian economy. Government interference is still needed in the structural problems of the economy, one of which is the policy of regional autonomy or decentralization fiscal. This policy is

expected to reduce income inequality between regions in Indonesia (Nazara 2007).

Regional Original Income (PAD) is a benchmark in the implementation of regional autonomy because local revenue is the main source of income and financing for regional governments. The increase in PAD is expected to increase regional financial capacity to finance regional government shopping. In addition, the transfer of funds to the regional government called the balancing fund, is regional funding sourced from the APBN consisting of the General Allocation Fund (DAU), Special Allocation Funds (DAK), and Revenue Sharing Funds (DBH). These funds must be utilized optimally and directed according to regional needs.

Developing the regional economy is generally done in two patterns, namely a pattern of centralized (agglomeration) or spread (diffusion). Economic development with patterns of agglomeration has several advantages, namely localization economies and urbanization economies (McCann, 2003). Strong economic agglomeration can accelerate economic growth but can lead to disparity in income between regions while weak economic agglomeration is weak the effect on economic growth.

Alto R Siagian (2010) the results of his research state that economic agglomeration has a positive effect on income disparity between regions in West Java Province. SuphannadaLimpononda (2012), the results of his research showed that agglomeration in rich provinces in Thailand led to increased income inequality between regions because increasing GDP was also followed by an increase in the number of poor people. Karen Helene Midelfart (2004), that agglomeration in Norway does not cause income disparity but that causes income disparity is the level of education and skills of workers.

Dilinger (1994) 's study of the implementation of decentralization in several countries found that the trigger for the policy of fiscal decentralization was the desire of the public to obtain better public services. Mardiasmo (2004) decentralization can produce two benefits: First; encourage increased participation, initiative e intention, and creativity people in development and encourage equitable development results throughout the region. Second; improve the allocation of productive resources through the provision of the role of decision public maker to the lower level of government most who have the most complete information.

Gil, Pascud, and Rapun (2002) state that fiscal decentralization can contribute to reducing disparities between regions. Local governments can manage information and regional resources more efficiently. However, on the other hand, according to Sacchi and Salotti (2011) stated otherwise, that decentralization contributes to increasing regional disparities. According to Prud'homme (1995), the

richer regions will have larger tax bases, and will, therefore, be able to collect more taxes and able to provide good public services.

Following the phenomenon that occurred nationally, the implementation of decentralization in Lampung Province was also marked by an increase in balancing funds from year to year. The balance funds received by the Lampung provincial government increased from Rp 1.831 trillion in 2001 to Rp. 8,818 trillion in 2014. This number increased significantly. The sources of Regional Government Revenue (PAD) derived from taxes, retribution and profits from regional companies must be optimized. The funding of the Lampung Provincial Government comes from 40% of the PAD, the 47% Balancing Fund, and the other PAD that are legitimate 10%, (<http://www.djpk.kenkenku.go.id>). It is mean that the province of Lampung showed its readiness to implement the decentralization fiscal. After fiscal decentralization was implemented 2001- 2014, that the average Lampung province's economy increased 5.40%, although the value is still below the national economic growth rate of 5.42% (<http://bps.go.id>)

Based on this background, a number of questions were born such as the following. In the World Bank report (2009), that regional economic development can be more effective by developing economic agglomeration. The Lampung Provincial Government continues to seek economic development by encouraging new industries. Does economic agglomeration (industry) affect income disparity between regions in Lampung Province?

The central government is to increase regional financial capacity by increasing the allocation of funds to each region in the form of block grants in the form of balancing funds to reduce inequality between regions (Sjafrizal, 2008). Does balance fund, which consists of the General Allocation Fund, Specific Allocation Funds and Revenue Sharing Funds affect income disparity between regions in Lampung Province?

According to Prudhomme that a richer area's tax base will have a larger, and therefore be able to collect taxes more and provide better public services.

Does Regional Original Income affect Income Disparity between regions in Lampung Province?

Based on the background and the three questions above, then the objectives research are:

To analyze the effect of economic agglomeration on income disparities between regions in Lampung Province.

To analyze the effect of a Balancing Fund consisting of General Allocation Funds, Special Allocation Funds, and Revenue Sharing Funds towards income disparities between regions in Lampung Province.

To analyze the effect of Regional Original Income on Income Disparities between regions in Lampung Province.

## 2. LITERATURE REVIEW

### 2.1 Agglomeration

Regional economic development with agglomeration patterns has several advantages, namely localization economies and urbanization economies (McCann, 2003). The benefits of agglomeration can arise if there is a close relationship between economic activities that exist at these concentrations both in the form of linkages with inputs ( Backward Linkages ) and the linkages with an output ( Forward Linkages ). With this linkage, there will be various forms of external benefits for entrepreneurs in the form lowering in production costs, transportation costs of raw materials and production products as well as savings in the use of shared facilities because the costs can be shared. In general, Isard (1960)reference is missing in Sjafrizal (2012) states that the benefits of agglomeration are three main elements, namely: (1) Large-Scale Economies, (2) Localization Benefits (Localization Economies) and (3) Urbanization Benefits ( Urbanization Economies).

### 2.2 Inequality (disparity) Inter-Regional

The difference in progress between regions means that it is not the same as its ability to grow which is analogous to the gap so that what arises is inequality.

#### 2.2.1 Theory of Inequality (Disparity)

The following will explain two regional inequality theories, namely Trickle Down Effect and Polarization Effect; and Backwash-Spread Effect.

a) Down Effect Trickle and Polarization Effect  
Hirschman, Albert O. (1970) in his article entitled Interregional and International Transmission of Economic Growth distinguishes regions in a country into rich and poor regions. If the differences between the two regions are narrowing down, it means a trickle down effect. Whereas the difference between the two regions widens means that there is an adverse impact, or polarization effect occurs.

#### b) Spread Effect and Backwash Effect

Myrdal explained that the growth of a region will affect the surrounding area through backward effects and spread effects. Backwash effect ) occurs when economic growth in an area (eg region A) results in the transfer of resources (labor, capital, etc.) from the surrounding area (eg, region B). so region A (which was originally a more developed area than area B), will be more advanced and region B will be increasingly left behind. Spread effects occur when economic growth in an area (eg region A) results in the growth of the surrounding area (eg, region B), which produces raw materials for industrial use that are growing in these centers, and centers that have goods industries - consumption items will increase. Furthermore, Myrdal concluded that regional inequality is caused by spread effects and the backwash effect.

#### 2.2.2 Measurement of Inequality (Disparity)

There are several approaches that can be used to measure regional inequality. The criteria used in this study are: Williamson Index

The Williamson Index (Sjafrizal, 2012) measures the dispersion of the level of regional per capita income relative to the national income average. The Williamson Index (VW) coefficient is between 0 and 1. If VW is worth 0 it means there is no income inequality and if VW is worth 1 it means that there is a perfect income gap between regions. The formula for the Williamson Index is

$$VW = \frac{\sqrt{\sum(Y_i - Y)^2 \cdot f_i / n}}{Y}$$

Information:

- $Y_i$  = RGDP per capita in Regency / city  $i$   
 $Y$  = Provincial average RGDP per capita  
 $f_i$  = Population in Regency / City  
 $n$  = Provincial Population

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### 2.3 Fiscal Decentralization

The definition of decentralization in Law Number 33 of 2004 concerning Financial Balance between the Central Government and Regional Government is the submission of the authority of the Central Government to the Regional Government to regulate and manage government affairs in the system of the Unitary Republic of Indonesia (NKRI). Simanjuntak (2001) and Yusuf SulfaranoBarusman, M. (2018) argues that there are several reasons for implementing a decentralized government system, namely: Decentralization is part of the strategy of every institution that wishes not to die in global competition. It is a strategy to be competitive. Likewise, for a country, the decentralization makes it divided into small integrated parts.

Yilmaz, (2000), there are three advantages that can be achieved from the implementation of fiscal decentralization, among others:

Efficiency and allocation of economic resources

Competition between local governments

Financial Balance between Central and Regional Governments

To measure fiscal decentralization in a region, there are two general variables that are often used, namely regional expenditure and revenue. The source of regional revenue consists of PAD and Balancing Funds sourced from the APBN consisting of DAU, DAK, DBH. The application of fiscal decentralization requires competition between local governments in allocating economic resources to improve the welfare of the community.

### 2.4 Research Hypothesis

Agglomeration is basically a major force of a growth center. The reason is that he can provide external

benefits in the form of decreasing costs and increasing market opportunities for other entrepreneurs operating at the location of the growth center. Strong agglomeration can encourage economic growth when he can create forward linkages ( forward linkages ) and backward linkages ( backward linkages ) in carrying out economic activities (Sjafrizal, 2012).

Fiscal decentralization is a logical consequence of the implementation of regional autonomy policies. (Waluyo, Joko. 2007). In allocating learning, the local government has a policy for determining the amount of expenditure and sector what will be developed. Fiscal decentralization in its implementation has a positive or negative influence on regional income disparities. According to Kyriacou, Gallo, and Sagales (2013) that fiscal decentralization can contribute to reducing disparities between regions. Whereas Sacchi and Salotti (2011) stated otherwise, that decentralization contributed to the increasing disparity between regions.

Convergence of economic activities (Agomeration) and the application of fiscal decentralization are strategies in implementing development, but the fruits of development are often not as sweet as expected fruit of development. The hypothesis in this study are:

Allegedly economic agglomeration (industry) has a positive effect on income disparity between regions in Lampung Province

Allegedly Regional Original Income (PAD) has a negative effect on Income Disparity in Lampung Province.

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Balance Fund presumably consisting of General Allocation Fund, special Allocation Fund, and DBH negatively affect Disparities in Lampung Province.

## 3. METHODOLOGY

### 3.1 Types and Data Sources

The data used in this study are secondary data. Type data is a time series of data on income inequality between regions, industrial agglomeration and fiscal decentralization of data that occurs in Lampung

Province. The range of this study is from 2001 to 2015. This data is sourced from the Directorate General of Financial Balance (DGT K), the Central Statistics Agency (BPS) and journals relating to the title of this research and internet information media. In addition, reading books are also used as references that can support this research.

### 3.2 Variable and Size

Variables that are used consist of dependent and independent variables. Write the name of the independent variable and dependent variable

Table 1. Variable Names, Sizes and Data Sources

Variable Name and Notations	Size	Data source
Industrial Agglomeration (AGLO)	Index Number	BPS, data is calculated
Fiscal Decentralization (RDAPER)	Percentage	Ministry of Finance's
Regional Original Income (RPAD)	Percentage	DJPJK
Inequality of Inter-Regional Revenues (VW)	Index Number	Ministry of Finance's
	Size expected to written in numbers	DJPJK BPS, data is calculated

### 3.3 Analysis Model

Hirschmann-Herfindahl Index (IHH).

Measuring the strength of industrial agglomeration can be used to measure IHH. IHH is defined as follows:

$$AG_i = \sum_{r=1}^m (S_{ir} - X_r)^2 \quad (\text{DS Priyarsono, 2011})$$

AG is the Hirschmann-Herfindahl index number,  $S_{ir}$  is the ratio of district/city sector value to  $i$  in region  $r$ ,  $X_r$  is the ratio of total value added to the industrial sector in region  $r$ .

Inequality Analysis Model (disparity) between regions

Income inequality between districts / cities that occur in Lampung can be analyzed using regional Inequality indexes called Williamson inequality indexes. (IW) :

$$IW = \frac{\sqrt{\sum(Y_i - Y)^2 f_i / n}}{Y}$$

information

$Y_i$  = RGDP per capita in Regency / city  $i$ ,  $Y$  = RGDP per capita Province average,  $f_i$  = Population in Regency / city,  $n$  = Population of Province

The results of calculations using the Williamson index method above if the index value = 1, then the maximum inequality occurs, if the index value is 0.7 - 1 then there is a high inequality, if the index value is 0.4 - 0.6 then moderate inequality occurs and if index value < 0.3 hence low inequality occurs.

### 3. The Degree of Fiscal Decentralization Ratio

The Degree of Fiscal Decentralization is the ability of local governments to increase local revenue to finance development. With the size of regional financial capabilities as follows:

- 0.00 - 10.00 Very less
- 10.01 - 20.00 Less
- 20.01 - 30.00 Enough
- 30.01 - 40.00 Is being
- 40.01 - 50.00 Well
- More than 50.00 Very good

For the measurement of fiscal decentralization in Lampung Province, it can be analyzed using the revenue approach, seen from PAD and, DAPER. Where it is formulated as follows:

$$D_{Ft} \text{ PAD} = \frac{\text{PAD}_t}{\text{TPD}_t} \times 100 \%$$

Where :

$D_{Ft}$ , PAD = Degree of fiscal decentralization in Lampung Province, in year  $t$

$P$  = Total Revenue of Lampung Province, in year  $t$

$\text{TPD}_{I,t}$  = Lampung Prov Balance Fund, in year  $t$

$$D_{Ft} \text{ DAPER} = \frac{\text{DAPER}_t}{\text{TPD}_t} \times 100 \%$$

$D_{F,t}$  DAPER = Dana Perimbangan Prov Lampung, pada tahun  $t$

### 3.4 Data Analysis Procedure

#### 3.4.1 Analysis of Regression Models

The model used in this study is a multiple linear regression model. The relationship between research variables can be seen in the following equation:

$$Vw_t = \alpha + \beta_1 AGLO_t + \beta_2 PAD_t + \beta_3 DAPER_t + \mu_t \quad (\text{Widarjono, 2013})$$

Where :

Vw = Inequality P endapatan,

PAD = Original Regional Opinion Ratio

DAPER = Balance Fund Ratio ,

AGLO = Industrial Agglomeration

$\alpha$  = Constant ,

$\beta_1 - \beta_3$  = Regression Coefficient

$\mu$  = Variable g of a budget ,

t = Year

#### 3.4.2. Classical Assumption Deviation Test

- Normality test
- Multicollinearity Test
- Autocorrelation Test
- Heteroscedasticity Test

#### 3.4.3. Test of Regression Analysis Statistics

- Test The coefficient of determination (R<sup>2</sup>) by using the Test-F (testSignificance Together )
- t-test (Individual Significance Test)

The results section is missing. In this section include what you found, calculated, discovered and observed or give the title Result and discussion

## 4. DISCUSSION

### 4.1 Multiple Linear Regression Analysis

Research data processing using the program package Eviews 8. the Regression equation can be arranged as follows:

$$VW = 0.4149 - 0.0397 AGLO + 0.0051 PAD - 0.0021 DAPER \quad (4.1)$$

$$(3,6808) \quad (-2,1554) \quad (3,2680) \quad (-1,8758)$$

R squared = 0.7278,

F = 9.8517 Prob (F statistic) = 0.0018

Durbin Watson stat = 2.0063

() = value of t count statistic

The regression results as presented in equation (4.1) can be seen that the variable coefficient of Industrial Agglomeration is -0.0397 with the value of t calculated at - 1,8758 smaller than t table value of 1,771 and p-Value of 0,05. The PAD variable coefficient is 0.0051, with t count of 3.2680 greater than the value of t table as big as 1.771 and P-Value 0.007 while the coefficient of the DAPER variable is -0.0021, with t count of -1.8758 smaller than t table value is 1.771 or the probability value is 0.08.

The coefficient variable of industrial agglomeration as measured by industrial concentration in Lampung has a negative and significant effect on income inequality in Lampung Province. Industrial Agglomeration Coefficient in Lampung Province is - 0.0397 with t count of - 2.1554 which is smaller than t table of 1.771 or with p-Value of 0.05. This coefficient indicates that in Lampung Province there was no concentration in the processing industry because these industries were allegedly not benefiting significantly from the industrial agglomeration. In other words, the spread of processing industries in regencies/cities in Lampung Province is still relatively even, so there is no statistical concentration of development in the manufacturing sector so that it does not trigger inequality in per capita income in Lampung Province.

Furthermore, from the estimation results presented in the equation (4.1) that the PAD variable has a positive influence on income inequality P provincial between regions in Lampung. The value of the PAD coefficient is 0.0051 meaning that if the local revenue Lampung provinces increase by 1% ceteris paribus, the level of inequality in Lampung province rose 0.0051%. The results of this study are in line with Amanda's research (2015) were in the period

1993-2002 Regional Original Income (PAD) had a positive and significant effect on regional inequality between districts/cities in Aceh province. This situation can occur because, with the enactment of the regional autonomy law, the regional government is given the opportunity to explore sources of income to finance its expenditure. The richer regions will certainly be able to collect large PADs so that they can finance greater expenses in carrying out regional development. However, this study is inversely proportional to Nurhuda's research (2013) which found that PAD had a negative effect on development inequality in the East Java Province. However, PAD increasingly large and evenly will lead to higher economic growth in Provincial Lampung.

Coefficient grants (DAPER) is negative influence of 0.0021 means that if the balance fund (DAPER) rises by 1% ceteris paribus then the level of income inequality in Lampung Province decreases by 0.0021%. The results of this study found that DAPER, which was launched by the government of the Republic of Indonesia to Lampung Province, was statistically able to reduce the gap in per capita income between districts/cities in Lampung Province. This finding is in line with the Saifunnizar (2013) study, where balancing funds have a negative and significant influence on development inequality in Aceh. This means to transfer funds that they give by the central government, statistically has been able to reduce inequality income the districts/cities in Aceh provinces.

#### 4.2 Classical Assumption Deviation Test

##### Normality test

Base the JB(Jarque-Bera) statistic test, the histogram shows that the statistical value of 0.2638 while the value of Chi Squares with  $\alpha$ : 5% and df : 3 for 7, 815 it can be stated that the residual is normal distribution or fail to reject the null hypothesis because the value of the Jarque-Bera < Chi Square Table. In other words, the data is normally

distributed by seeing a probability of 0.8674 (86.74%) that is greater than  $\alpha$  of 5%.

##### Heteroscedasticity Test

In the assessment of the presence or absence of heteroscedasticity using White Heteroscedasticity testing methods. The guideline of using the white model is rejecting the hypothesis that there is a problem with heteroscedasticity in the empirical model that is being estimated. Testing for heteroscedasticity is done by comparing the value of Obs \* R squared White test with value table. If the probability value of Obs \* R squared is greater than  $\alpha = 0.05$  then it means there is no heteroscedasticity, and vice versa. Hacyl testing using White heteroscedasticity Test, his result is that probability value Obs \* R squared of 0.4128 (41.28%) is greater than  $\alpha = 5%$ , which means there are no deviation classical assumptions on the part of heteroscedasticity.

##### Multicollinearity Test

Multicollinearity is a condition where there is a linear relationship or there is a correlation between independent variables. In this study to test the presence or absence of multicollinearity can be seen in the following table :

Table 2. Free Inter Variable Multicollinearity Test Results

Equation Name	Dependent variable	Independent variable	R <sup>2</sup>
A	VW	AGLO,	0.7287
B	AGLO	DAPER, PAD	0.1449
C	DAPER	DAPER, PAD	0.1647
D	PAD	AGLO, PAD	0.0482
		AGLO, DAPER	

Source: Results of data processing.

Table no. should be given under the title no. For example, if you are giving a table in the third part that is methodology in this paper, table no. should be 3.1, 3.2 respectively

In Table 2 shows that the value of determination coefficient (R<sup>2</sup>) of the equation B, C and D are



smaller than A. This equation indicates that the data of the variables used in this study are free of problems multicolinieritas

**Autocorrelation Test**

To test the Autocorrelation problem, in this study the Durbin Watson Test was used. The regression output shows that the DW-stat value is 2.0063. This value is between  $d u = 1,750$  and  $4 - d u = 2,250$ . This indicates that the model does not have an autocorrelation problem. Summary table should be given before interpretation

**4.3 Hypothesis testing**

**Coefficient of Determination**

The determination coefficient is used to measure the ability of a model in explaining variations in the dependent variables because of variations in the independent variables. Coefficient values are between zero and one and are indicated by the value R 2. Based results of this study, that the determinant coefficient (R 2) is equal to 0. 7287 or 72.87 %. This shows that 72.78 % Disparitiesincome in Lampung Province is influenced by the fiscal decentralization variable with a proxy Original Regional Revenue, and Balancing Funds and industrial Agglomeration. While the remaining 27.13 % is explained by other variables.

F-test (Test Significance Together )

K F statistic test conducted to test the simultaneous regression coefficient of an independent variable (independent variable) is the ratio of local revenue and the ratio of the balance funds as well as industrial agglomeration against income disparity Provincial Lampung. The hypothesis is:

H 0 :  $\beta 1 = \beta 2 = \beta 3 = 0$

H a :  $\beta 1 \neq \beta 2 \neq \beta 3 \neq 0$

Test criteria

H 0 is accepted if  $F \text{ count} < F \text{ table}$

H a is accepted if  $F \text{ count} > F \text{ table}$ , with  $\alpha$ : 5%

Based on the results of data processing, the calculated F value is 9.8517 and the F probability of statistics is 0.0018. The table F value is 5.22. Because  $F \text{ count} ( 9.8517 ) > F \text{ table} ( 5.22 )$ . Thus Ha accepted and jointly variable ratio of revenue (Rpad) Ratios and Balance Fund (RDAPER) and variable Agglomeration Industry (Aglo) is real or significantly influence the Disparity in Income(Vw) at a rate to believe 95%.

t-test (Significant Individual)

The significant test of the individual intends to see the significance of the effect of individual independent variables on the dependent variable. The parameters used are an independent variable is said to significantly affect the variable dependent if the value of t is greater than t table or can be known from the value probability t statistic are smaller than the value of alpha ( $\alpha$ ) of 5% or 10%.

Table 3. Test for Significance t ( $\alpha = 0.05$ )

Variable	t-statistics	t-table	Conclusion
AGLO	-2,1554	-1,782	Significant (H 0 is rejected)
PAD	3.2680	1,782	Significant (H 0 is rejected)
DAPER	- 1,8758	-1.7 82	Significant (H 0 is rejected)

Source: Output Results Eviews 8 please clarify what is the difference between t statistics and t table. Also, how can h0 be accepted or rejected while you made the H1 hypothesis?

From Table 3, can interpretation that individually each independent variable significantly affecting Disparity Revenue (Vw) as the dependent variable. This significance can be proven from the value of

the t-statistic independent variable PAD > t-table. However, the t value statistical independent variables such as AGLO and DAPER smaller than t table.

**4.4. Interpretation of Analysis Results**

From the regression model (4.1) as above, can see that the independent variables consist of Agglomeration Industry, Local Revenue Ratio

(Rpad) and Ratios Balance Fund (RDAPER), which empiric independent variables significantly influence the dependent variable, This can be proved by the coefficient of determination ( $R^2$ ) which reaches 0.7287. Interpretasi of the value of  $R^2$  is that the implementation of fiscal decentralization and industrial agglomeration in Provincial significantly affect the income disparity Lampung in Lampung province amounted to 72.87% and amounting to 27.13% influenced by other factors outside variables in research (Gujarati, 2004).

Effects of Industrial Agglomeration (AGLO) on Income Disparities.

Estimation results from the regression show that the Industrial Agglomeration has an effect on the Income Disparity in Lampung Province negatively and significantly with the regression coefficient - 0.0397. There is a significance level of 5%, the value of t count is greater than the value of t table, thus the null hypothesis is rejected. This is not in line with the hypothesis that Industrial Agglomeration has a positive effect on income Disparity. This indicates that the processing industry occurs in small groups of districts/cities in Lampung Province. In other words, the processing industry in Lampung is indicated not to have a relatively significant advantage over the industrial agglomeration.

The results of this study are in line with the results of research by Karen Helene Midelfart (2004), that agglomeration in Norway does not cause income disparity but what causes income disparity is the level of education and skills of workers. While Alto R Siagian (2010) the results of his research state that economic agglomeration has a positive effect on income disparity between regions in West Java Province. Suphannada Limpononda (2012), the results of his research showed that agglomeration in rich provinces in Thailand led to increased income inequality between regions because increasing GDP was also followed by increasing the number of poor people.

Effect of Regional Original Income (PAD) on Income Disparities.

The estimation Results show that the influence of local revenue to the Income Disparity is positive and significant regression coefficient 0.0051 at a rate of 5% or significance null hypothesis is rejected. It is not consistent with the theory, which hypothesized that the Regional Income Disparity negative effect on revenue. Thus, the greater and equal distribution of local revenue (PAD) will reduce the level of income disparity in Lampung Province.

This finding is consistent with Amanda study (2015) which in the period from 1993 to 2002 revenue (PAD) significant positive effect on a regional imbalance between districts/cities in Aceh province. And according to Prud'homme (1995) that richer regions will have larger tax bases, and therefore will be able to collect more taxes. With tax income more substantial then these areas will be able to give right of public services more than other areas poorer. Ha l This resulted in businesses and households more like to be in these areas resulting in a tax base that was there to be larger than before. Under these conditions, regional income disparities will occur.

The Effect of Balancing Funds on Income Disparities

For grants (D A P E R), the estimation results indicate that DAPER has a negative effect of - 0.021 meaning that if grants (D A P E R ) rose by 1% ceteris paribus, the level of inequality income in the province of Lampung decreased by midnight 21 %. According to MacKinnon (1995) and Qian and Weingast (1997) explain decentralization as a tool of commitment and state that regional inequality is related to the efficiency of public services. M they are directing attention to the impact of policies that are incentives from decentralization at the local government level. With a decentralized budget policy covering all the financing of underprivileged regions through the distribution of resources from the central government may relatively weaken the budget and disrupt regional incentives to get out of

poor areas. So that decentralization actually allows reducing inequality between regions.

It is also in line with research conducted by Zasriati (2011), analyzing the effect of equalization funds allocated to regional economic disparities Provincial Jambi. By using the typology analysis Klassen and index Williamson he stated that the equalization fund a significant negative effect on regional economic disparities Provincial Jambi. From the regression results, it can be concluded that the allocation of funds transfers from the center to the regions can reduce the level of income disparity between regions in Lampung Province. With fiscal transfers from the central government to local governments, weak regions will increase their fiscal strength so they are able to cover the funding gap in their regions.

## 5. CONCLUSION

Based on the results of the analysis and hypothesis testing, some conclusions can be drawn as follows:

1. For variable agglomeration of industry in Provincial Lampung, have a negative effect on the disparity of income in Provincial Lampung and Air significant influence (real) on a 95 percent confidence level. This indicates that this industrial agglomeration statistically does not trigger an increase in income disparity between districts/cities in Lampung Province in the span of time. Industrial agglomerations in Lampung tend to cluster in small groups in each district/city in Lampung. This agglomeration pattern indicates is believed that the industries did not gain significant profits by concentrating on one or several districts/cities in Lampung Province.
2. The estimation results show that the Regional Original Income variable in Lampung Province has a positive influence on income disparity in Lampung province and its effect is significant (real) at the 95% confidence level.
3. For variable Equalization Fund in the province of Lampung, have a negative effect on the disparity of income in Provincial Lampung and provide significant influence (real) on a 95 percent

confidence level. This indicates that the allocation of transfer funds from the center to the regions was able to reduce the level of income disparity between regions in Lampung Province. With the fiscal transfer from the central government to the regional government, the regions with weak fiscal powers are a Suggestion /Implication.

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