

Factors Affecting Regional Disparities in Indonesia 1985-2015

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Doctoral Program at Economics and Business Faculty, Jambi University- Indonesia

Syaparudin Junaidi Amri Amir

Economics and Business Faculty, Jambi University-Indonesia

Abstract

Indonesia's economic development is intended to increase the country's people welfare, but its disconnection to equality principle causes regional disparities. This research aims to reveal the factors which influence regional disparities and to analyze the impact of economic growth, investment, unemployment, allocation of government fund and economic crisis on regional disparities in Indonesia. Using quantitative and qualitative methods and data from 1985 to 2015, it concludes that from the year 1985 to 2015, regional disparities in Indonesia are high which is indicated by the Williamson Index. Based on the result of the research, it is concluded that from several analyzed variables, it is only variable of government fund allocation which have negative impact on regional disparities in Indonesia during 1985-2015. The other four variables; economic growth, investment, unemployment and dummy have are negative. Therefore in the future government of Indonesia should pay more attention to the implementation of allocating government fund for regional government in order to be able to create a good quality of economic growth. The Government of Indonesia should also implement equality in term of creating job opportunity, investment privilege so that those efforts are expected to lessen disparities among regions in Indonesian.

Keywords: regional disparity, economic growth, allocation of government fund, investment, agglomeration.

1. Introduction

Economic development is basically a sequence of activities being conducted continuously to implement equality of development. Economic development cannot certainly part from economic growth, as economic growth is intended to drive economic growth, and on the other hand, economic growth paves the process of economic development.

An economic disparity between regions is a global phenomenon in the developing countries including Indonesia. Economic disparity has even become the main topic in determining economic development policies for years. This happened as there is a tendency constructed to increase economic growth, but in fact it worsened economic disparity among regions in a country. Indonesia has also been undergoing development disparity. This relates to the strategy of development which is still based on economic growth aspect since the Last Order. The goal of development is only aimed at reaching high economic growth with putting less attention on equality of economic development all over Indonesia.

In line with the implantation of regional autonomy, so economic growth and development is not merely integrated in Java Island, but it spreads over out-Java. Out-Java Provinces also have better economic growth and development which is indicated by their per-capita Gross regional domestic product (GRDP).

According to Delis et al (2008) who observed regional disparities in Indonesia during 1990-2008. In the early period of research, the disparity was really high which was shown by Williamson index coefficient 1 in 1985 till 1987. But year by year, the figure was getting lower, although it was still high around 0,80. In the period of 1980 to 1990, the trend of development disparities tended to be low. But since 2004, it became higher, even it reached 0,81 in 2015. This research is aimed at examining factors affecting development disparities in 1985-2015.

2. Review Of Literature

Theoretically, the problem of inter-regional development disparities was appeared by Douglas C. North in his analysis on Neo-Classical growth theory. In the theory, it was stated a prediction on relationship between national economic development of a country and inter-regional development disparities.

According to such hypothesis, in the early phase of a country's development process, inter-regional development disparities tend to increase. When the process of development continues to progress, so eventually, inter-regional development disparities would be decreased. According to such hypothesis, it could be concluded that inter-regional development disparities in the developing countries tend to be higher and inter-regional development disparities in the developed countries would be lower.

In the early process of development in the developing countries, opportunities and chances of development would be well utilized by regions whose better development. While under-developed regions were not able to utilize such opportunities and chances as the regions have limited infrastructures and low quality of human

resources. These conditions were not only caused by economic factors, but also by socio-culture factors, so inter-regional development disparities tend to increase as economic growth tend to increase due to faster economic growth in the regions having better condition. While in under-developed regions did not show any economic progress.

A different condition takes place in the developed countries in where they already have better infrastructure, qualified human resources. The hypothesis of Neo-classic theory then was examined by Jeffrey G. Williamson in 1966. He conducted research on inter-regional development disparities in the developed and the developing countries by *time series* and *cross – section data*. This means that a process of development in a country could not automatically reduce inter-regional development disparities, but in the early it did not take place. Empirical facts then showed that the increasing of development disparities occur in the developing countries was not caused by government's and the society's behaviors, but it is by natural condition in every country.

The measurement of inter-regional development disparities was firstly conducted with Williamson Index which was used in a study of Jeffrey G. Williamson in 1966. Although this index still has several weaknesses, but the index is commonly used in measuring inter-regional development disparities by using Gross regional domestic product (GRDP) as a base data. This index compares inter-regional development and not inter-group income distribution. Statistically, the formula of Williamson index can be shown as follows:

$$V_w = \frac{1}{n} \sum_{i=1}^n \ln \left(\frac{y_i}{\bar{y}} \right)^2 \left(\frac{f_i}{n} \right) \quad 0 < V_w < 1$$

Where :

y_i = GRDP per capita region i

\bar{y} = average GRDP per capita of all regions.

f_i = Population number of region i

n = Population number of all regions.

w is used as the formula is weighted, so the index can be compared to have a look between a country and the original region. While the meaning of the index is that : when V_w close to 1 means it is very lame and when V_w close to zero it means it is very equally.

Another Index which is also commonly used in measuring inter-regional disparities is *Theil Index* as used by Akita and Alisyahbana (2002) in their studies in Indonesia. Data needed to measure this index is the same as needed by Williamson Index ; per capita GRDP and number of population. The formula of Theil Index (T_d) as follows:

$$T_d = \sum_{i=1}^n \sum_{j=1}^n \left\{ \frac{y_{ij}}{Y} \right\} \log \left[\frac{\left\{ \frac{y_{ij}}{Y} \right\}}{\left\{ \frac{n_{ij}}{N} \right\}} \right]$$

Where : y_{ij} = GRDP per capita of Regency i in province j

Y = GRDP per capita of province j

n = Population number of Regency i in province j

N = Population number of Regency.

According to Sjafrizal (2012), there are some main factors causing inter-regional disparities such as :

- a. Different ownership of natural resources
- b. Different demographic condition
- c. Less goods and services mobility's
- d. Concentration of regional economic activities
- e. Allocation of development fund among regions.

Studies conducted in China by Ulrich (2004) using panel data which examined disparities among provinces in China. According to him, the effect of inequalities on industry growth is regarded to influencing technical efficiency and technology. Result of research showed that there was a significant positive influence on inter-provinces disparities in term of provincial industry growth with the causality of growth inequality. The relationship of inequality with the growth was not linier but the effect of inequality change was more significant than the growth of inequality itself.

Studies on disparities was also done by Nandy (2005) with the title "*Regional Disparities in India: An Empirical Analysis of Convergence Hypothesis*" using *Relative income index*. The result revealed that there was different per capita income trend among provinces in India and there was no concentration of per capita income among provinces in India. Growth Analysis revealed there was an increasing trend of disparities among provinces by using basic assumption of neo classical growth theory. The studies recommended reducing regional disparities.

Vanderpnye-Orgle (2002) after citing a number of studies on the growing regional disparities in Ghana, discussed the growing trends in spatial inequalities and polarization in Ghana during the period of stabilization and structural adjustment programs – late 1980s to late 1990s. This study concludes that regional inequality increased during the first stages of reform period, followed by a short period of decline before resuming its increasing trend for the rest of the period to 1999.

Rodriguez-Pose and Ezcurra (2010), this study analyzed the relationship between decentralization and

regional disparities in developed countries and developing country. The results prove that the developed countries do not affect the evolution of political decentralization inequality between regions, while fiscal decentralization contributes to reducing regional disparities. In contrast, in developing countries fiscal decentralization sparked significant rise in regional disparity. The increase in inequality cannot be compensated by the positive effects of political decentralization of the political inter-regional disparities in this country. Most of these countries, the state is less than the capacity of redistribution in rich countries, so that decentralization has the potential to have an impact on increasing inequality between regions.

Wei and Kim (2002) showed that the increasing regional inequality is widely considered to be the reason for the existing regional problems in China and an obstacle to its stability and development. It is the conclusion of their study of inter-county inequality in Jiangsu province of China for the period of 1950-1995.

Noorbakhsh (2003) analyzed regional disparities amongst major states in India to find out if they are on a convergence or further divergence course. The analysis is extended to the evolution of disparities amongst the states with respect to a larger set of socio-economic indicators especially HDI. A number of regional composite indices are constructed from the selected indicators and tested for their validity.

Hiroshi (2013) in his research conducted a CGE analysis of the influence of economic policy on regional disparities in Indonesia using SAM data for five regions. The simulation produced several results. First, when productivity in the agricultural sector rises, agricultural labor must shift to other industries. Therefore, a nationwide increase in agricultural productivity will not affect national income, although there will be a regional effect. Second, rising demand prompts an increase in income, domestic demand, and foreign demand. Moreover, influencing can also be hung down to other region on a regional level. Third, although the effect of governmental transfers is small, they do reduce regional disparities. This research shows that a policy of expanding domestic demand is the most important in resolving regional disparities. Raising productivity requires changes in industrial structure, and raising foreign demand depends on foreign economic conditions. For government transfers to be effective, large-scale transfers are needed at least and the policy depending on transfers may not be desirable. Although expanding domestic demand incurs lower relative costs, it may not be the best policy because it presents financing problems. Therefore, further analysis is required. In addition, this model ignores inter-regional population shifts; future research needs to analyze its effect on per capita income.

The study of disparities has studies has been conducted variously regarded Indonesia regions. In Resosudarmo and Viddyattama (2006), it was found that disparities is still severe and the were also evidence that the disparities were between regions and within regions (Akira and Alisyahbana; 2002). In addition, studies of other countries show that industrial types (Fan, 2003), and main economy sector and political order (Shankar and Shah; 2003), effects the level of disparities between and within countries.

Williamson had driven several experts to conduct studies on regional disparities in Indonesia. Hendra Esmara (1975) used *Williamson Index* as a measurement of regional disparities. In order to enhance the analysis, disparity index calculation was differentiated between GRDP with and without oil and gas. This study was then continued by Uppal, J.S and Budiono Sri Handoko (1986) by using the same way but longer series data. In this study, the conclusion is that regional disparities in Indonesia was higher than it was in the developed countries. Even, among the developing countries, regional development disparities in Indonesia looked much higher. This fact was in line with Neo-classical hypothesis as describer earlier.

3. Research Method

3.1. Kind and Data source

Data used in this research are secondary, consisting data of economic growth, investment, williamson index, unemployment rate, fund from central government, which come from Indonesian Statistic Bureau, Indonesia investment Board.

3.2. Analysis Method

To Analyze factors affecting regional inequality in Indonesia during 1985-2015 multiple regression is used (Intriligtor, 1996). Besides descriptive analysis by using table and graph was also used.

$$IW = \beta_0 + \beta_1 Eg + \beta_2 Inv + \beta_3 GF + \beta_4 Unem + \beta D$$

Where :

- IW : Williamson index
- Inv : Investment
- Eg : Economic growth
- Gf : Government Fund
- Unem : Unemployment rate
- D : Dummy

4. Result and Discussion

Indonesia is a populous country of 17,500 islands accessible only by air and sea. Regional resources and economic development differ dramatically and resolving regional disparities is the key to Indonesia's economic growth. Economic growth, during the New Order, had a very significant progress. It made Indonesia was called as "Asian Tiger". In 1990 Indonesia's economic growth was 7,24 percent. But after economic crisis in the mid-1997, Indonesia's economy was heavily shocked. In 1998 Indonesia's economic growth was minus until 13,13 per cent. It was a very unstable condition both in economy and politic which was indicated that many industrial companies could not be able to operate. Such condition had driven to mass unemployment in Indonesia.

After the crisis, Indonesia's economy eventually has progressed. The economic growth got better, so do other economic indicators. Better economic condition is not followed by regional disparities. Therefore Indonesia has launched many policies to cope with the problem. One of those policies is the policy of regional autonomy. Regional autonomy is intended to dig economic potentials in each region, so that the region is expected able to increase their economy. But in fact, as the effect of regional autonomy, a region tends to think of their areas. A rich region is getting richer as a region could utilize natural resources they have. On the other hand, the poor regions have difficulty to increase their regional economy. As the result, regional disparities appear in Indonesia.

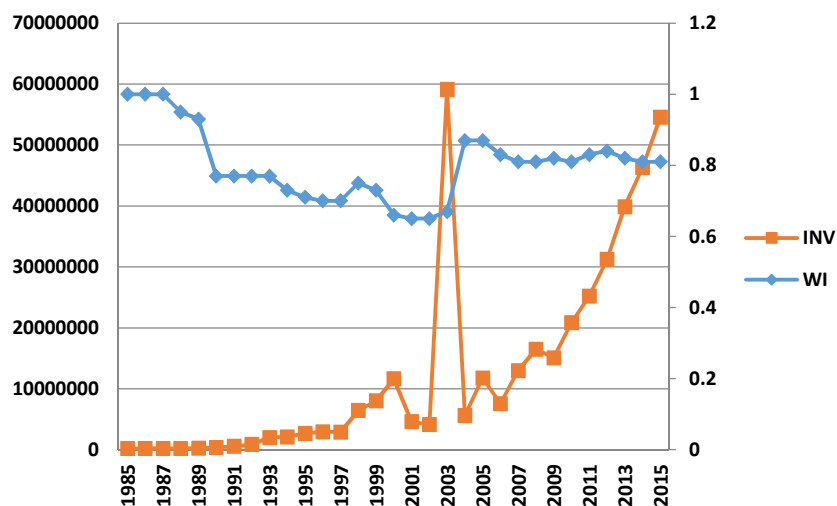
Economic growth of a region also influences its regional revenues, and in turn, it would affect economic development process and people's welfare. The figure of the revenue is used to finance regional government's activities including development process. However, the plans do not usually run as expected. Some areas could quickly have the progress, while the others could not run.

In line with the implantation of regional autonomy, so economic growth and development is not merely integrated in Java Island, but it spreads over out-Java. Out-Java Provinces also have better economic growth and development which is indicated by their per capita Gross regional domestic product (GRDP) and concentration of Investment in Indonesia which happened more in Java and Sumatera. It all certainly affects regional disparities in Indonesia.

On the below diagram, it is shown the investment rate and Williamson index during the period of research;

Diagram 1

Regional disparities and Investment 1985-2015



Following financial crisis in 1997, Indonesian politics shifts from stable centralize regime to constantly under attack from many sectors of societies, which pushes democratic reform (Seymour, 2002). The movement causes violent and peaked with the end of the "New Order" regime. The "Reform" regime starts with region autonomy through the Law No 22/1999 concerning decentralization, granting regional autonomy and Law No 25/1999 concerning fiscal administration between center and regional governments.

Decentralization is formed in three levels, provincial, municipality/regency, and village. Municipality and regency are at the same government administration level, a level below the provincial government. According to the decentralization Law No 22/1999, decentralization at the provincial level is in the de-concentration and devolution form, and, municipality/regency and village works in the devolution form. Decentralization includes several sensitive sectors as central government's responsibility. Such sensitive sectors are foreign policies, national security and defense, national finance, law, religion, macro economy policies and macro politic policy. Regions are permitted to all local government function such as transportation, health, local economics, and other local region specific sectors (Nurcholis, 2005). The law also stated that regions could form cooperation with

other organization in a foreign country, both public and private owned. These opportunities should to be utilized by region governments to develop their local through domestic and international cooperation agreements.

Decentralization government leaders are elected through political election, at the provincial level the administrator is a governor and at the municipal/regency level is mayor/head of regency. The provincial government, besides administrate its own provincial government office, it also coordinates the central government's agencies within the province such as field administration office of education, religion, and port administration. The municipal/regency government are responsible to decide political decision such as government laws, regulations, and responsible in implementation. The functional office is an autonomous and under the municipal/regency government. There are two main concerns for the decentralization implementation, the political and fiscal issue. The political issue relates with the citizen confidence that the decentralization will give improve the social and economic level of the nation, meanwhile the fiscal issue relates with the heavily dependence of local government to central government's fund transfers. For the political problem, government has revised the Law 22/99 and introduced direct election, both local executive and legislative. It is assume that direct election will create more accountable and responsive local government.

In addition, it is also expected to form a more reliable parliament. From the fiscal issue, it should be noted that there are two main inter-government transfer, the general purpose grant (DAU) that gives the full autonomy to local governments in spending and managing the grant and the special purpose grant (DAK) the local government will own the projects or programs but they will be under the monitoring and evaluation from respective central ministries and central ministries will still have the decision on the types of programs or projects to be financed. The current issue is that DAU is the main source for the local revenue. Comparison between annual growth rate of local own revenue during 1994-1996 period and 2001-2002 period indicated that prior decentralization growth (20%) is much higher than decentralization growth (5%). This should not be viewed as the incompetent local government to raise tax, but other consideration should also be taken account. The reason is that, local tax such as income and company tax might hurt the local economy activities. Beside that, Law 25/1999 and Law 34/2000 does not give significant local taxing power because Indonesian decentralization was formed as expenditure-led decentralization financed by transfer and the central government limited the local governments tax power. Since the execution of Law 25/1999, Indonesia has been a highly decentralized country only in three years (Table 1). It is shown that in 2002, the local development values are as much as the expenditure value that the central government budget for national development (Brodjonegoro, 2003)

Hereunder diagram, it is shown the configuration of regional disparities and allocation of government fund in Indonesia during the period of research:

**Regional disparities and Allocation of government fund
 Pembangunan
 1985-2015**

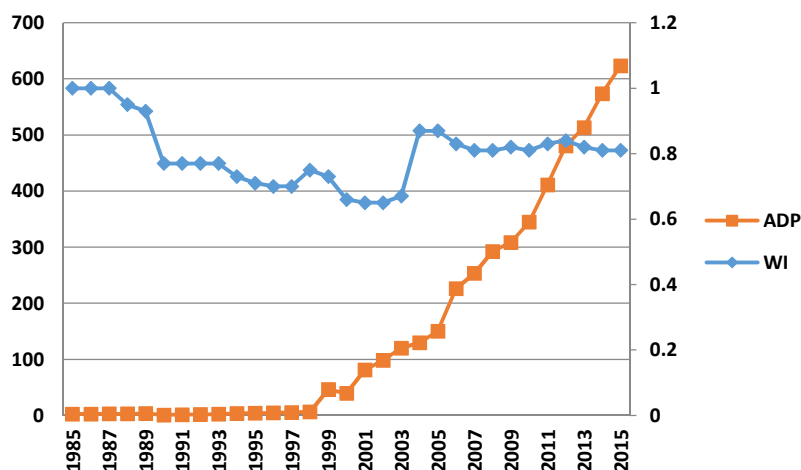


Figure 2

At the below diagram, it can clearly be seen the figure of regional disparities and unemployment in Indonesia during the period of research:

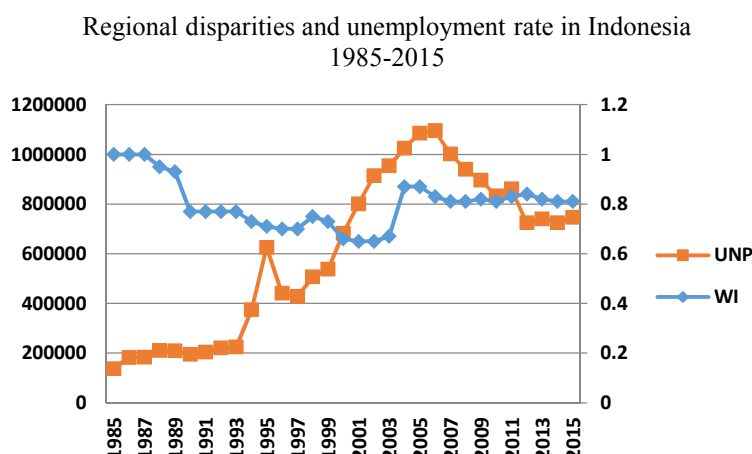


Figure 3.

MODEL

In term of analyzing factors affecting regional disparities in Indonesia, there are five variables (economic growth, investment, Government funds, unemployment and dummy) which was examined by multiple regression model with the result as follows:

$$\begin{aligned}
 IW_t = & 0.9476 - 0.004814 Eg_t - 2.76E-09 INV_t + 0.000386 Gf_t - 2.18E-07 UNEM - 0.106 D \\
 & 0.059 \quad 0.0060 \quad 1.79e-09 \quad 0.00016 \quad 7.23E-08 \quad 0.0713 \\
 & (16.0548) \quad (-0.7929) \quad (-1.5408) \quad (2.3239)^* \quad (-3.0206)^* \quad (-1,14891)
 \end{aligned}$$

$$R^2 = 0.29 \quad F\text{-stat} = 2.86 \quad dW\text{-stat} = 0.497$$

Note : * = Signifikan pada 10%

4.1. The Economic Growth.

Based on the model, it can be described that the effect of economic growth on regional disparities was negative, not significant, which means that the higher economic growth is, the lower regional disparity would be. High concentration of economic activities in certain region would certainly affect development disparities among regions as economic growth would tend to increase faster in the region which has bigger economic concentration. Such condition would drive regional development by the availability of job opportunities and society's income. On the contrary, when low concentration of economic activities in certain region, it would also drive unemployment and low rate of society's income.

Such concentration can be firstly, caused by the availability of natural resources in certain regions like oil and gas, coal and other minerals. Besides having fertile land also affects disparities. *Secondly*, ownership of transportation facilities is also influential on the concentration of economic regional disparities. Thirdly, Geographical condition such as population also influences such concentration as economic concentration tends to be concentrated in where better quality of human resources is available.

4.2. Investment.

The effect of investment on regional disparities is negative and not significant. Private investment is greatly determined by market power. It attracted private investment as it was caused by location benefit owned by a region. Location benefit is determined by transportation costs of both raw materials and production spent by entrepreneurs, wage rate differences, market concentration, business competition and land rent. Agglomeration which appeared as concentration of economic activities in certain region is also a part of location benefit. Therefore investment tends to be much more concentrated in cities than in rural ones and such condition have caused cities areas grow faster than rural ones.

Generally, empirical studies has shown that the width of economic disparities among regions in Indonesia mostly caused by more than 80% of manufacture industries are located in Java, around 12 -13% in Sumatera, and the rest less than 10% (between 7-8%) in other areas. The added value of economic contribution to the areas is nearly similar with percentage of the industry spreading. Outside-java regions usually export premier goods to Java and import secondary products from java. The import values of outside-java regions are much bigger than their exports values. Such condition make their terms of trade are deficit compared to it in java. These disparities are getting bigger when the price of premier goods lower compared to secondary ones.

Then, production activates in economic sectors greatly depend on inputs from Java, but on the contrary, Java does not. This caused the multiplier effects received by Java's economy is greater than it in others. In

another words, spillover effect of economic in Java is much greater than it on outside Java. According to Myrdal, the over big leap of economic growth among regions would cause a losing effect (*backwash effects*) dominate a beneficial effect (*spread effects*) in regional growth; it will drive an unbalances in economy. The economic actors having power in normal market will tend to increase not decrease, and it will cause regional disparities. (Arsyard, 1999).

A factor which is regarded to be able to cut a vicious circle in development disparities is investment.. Data of investment realization both foreign and domestic investment shows that investment distribution is really lame. Java and Sumatera dominated investment realization during 1983-2003; more unbalanced in 2004, and decreased in 2012. There was a change of distribution especially in private investment in 2012 (in Kalimantan and Sulawesi), in renewable mining sector. But the added value of the activities was not able yet to generate local economic capacity in both areas.

Table 1.
 Distribution of Foreign and Domestic Investment in Indonesia (%)

| Regions | 1983-2003 | | 2004 | | 2012 | |
|-------------------|-----------|------|------|------|------|------|
| | FI | DI | FI | DI | FI | DI |
| Sumatera | 21,4 | 20,9 | 20,4 | 9,0 | 15,2 | 15,5 |
| Jawa | 61,6 | 51,9 | 68,3 | 55,5 | 55,6 | 57,2 |
| Kalimantan | 5,5 | 11,4 | 8,3 | 30,1 | 13,1 | 18,2 |
| Sulawesi | 3,4 | 7,4 | 0,5 | 0,6 | 6,1 | 5,3 |
| Bali-Nusatenggara | 3,1 | 2,5 | 2,4 | 1,4 | 4,6 | 3,4 |
| Maluku-Papua | 4,9 | 5,8 | 0,1 | 3,2 | 5,4 | 0,5 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |

Source: Indonesia National Investments Board (2013)

Regional disparities are certainly taken into consideration by policy makers. The policy of regional autonomy in early 2000, followed by fiscal decentralization was a momentum expected to minimize disparities. In 2011, President Susilo Bambang Yudhoyono launched a road map 2011-2025 to widen economic development in Indonesia, which was expected to accelerate regional disparities.

4.3. Government Fund.

The effect of government fund on regional disparities is positive and significant. It is undeniable that investment is really a determinant factor in a regional economic growth. Therefore a region whose bigger investment both from government or private one, tends to have faster economic growth. In turn it would drive regional development process by providing better and bigger job opportunities and higher per capita income. Contrary condition would happen in a region whose lower investment

Allocation of government investment is mainly determined by the system of regional government being used. When regional government uses centralistic system, so allocation of government fund tends to be allocated at central government, so development disparities would tend to be high. On the other hand, when the system used is autonomy or federal, so government fund would be more allocated to the regions, so regional disparities tend to be lower.

Allocation of development budgeting as an instrument to reduce economic disparities seems to be paid more attention in the future. The strategy should be able to push and accelerate national economic growth as well as an instrument to reduce regional disparities. (Majidi, 1997). Accumulation process and mobilization of economic sources such as capital, skilled manpower, and natural resources are the trigger of economic growth in a region. Heterogeneity and various characteristics of region would cause regional disparities and among economic sector in a region. Based on such condition, Ardani (1992) augmented that regional disparities is a logical consequences of a development process and a phase of the change in development itself.

Government of Indonesia has put a great attention on regional disparities. The issue has become an important part of the long-term development planning 2005-2025. Empirical facts and several studies have shown regional disparities in Indonesia which became bigger in 1995 until present time compared to last period in 2005 (Akita and Kawamura, 2002; Shankar and Shah, 2003; Firdaus and Yusop, 2009; Kuntjoro, 2013). With the bigger authority of regional government during the period of autonomy era and fiscal decentralization, the disparities became more significant between development plan in central level and its implementation in regional level, especially in regencies and cities.

Development disparities among regions in Indonesia was the worst if compared to some developing and developed countries. Lucas (2007), had even given a note that Indonesia is *outlier*, as it had CVI regional income which was more than 1 for period of 2004-2008. After being recounted by the similar period and source of data (BPS), it was derived CV regional income which was lower for Indonesia namely 0,97; but it was the

highest compared to another countries including Thailand and China which were known as countries having high inequality distribution of development among their territories. When the calculation was pulled back by using data 1980-2011, the highest rate of CV for Indonesia 0,93 was derived. In 2011, per capita GRDP ratio of among provinces in Java was still more than 300 per cent in Sulawesi, Nusa Tenggara and Maluku.

Neoclassicism (Todaro, 2003) predicted that eventually regional disparities would be missing by itself. Such prediction comes from thinking that less developed regions have lower capital ratio toward manpower. This would make productivity marginal compared to investment in every unit of higher capital in less developed regions. As the consequences, catch-up process would happen from the less developed regions to developed ones. Some theories such as cumulative causation, new economic geography have different and situational prediction. Neoclassicism is regarded not to put attention on physical and social hindrances from production mobility as well as efficiency resulting from agglomeration. so what happen is poor regions become poorer, and riches become richer. Firdaus and Yusop (2009) studied how eastern part of Indonesia could chase the economic progress of western part of Indonesia. It was found that the catch-up process took place during the process of economic development with industrialization, but the progress was so slow, only 0,29 per cent. It means that it needed time around 200 years for eastern part of Indonesia in order to be able to chase western part of Indonesia if it works naturally.

4.4. Unemployment Rate

The effect of unemployment rate on regional disparities is negative and significant. Estimation result shows negative coefficient 2.18E-07 and significant at $\alpha = 10\%$. Unemployment increased year by year has become a problem for development in a region. When it happened, it would cause such region less developed compared to the others, eventually disparities would increase. High unemployment rate means providing more time for people not to work and stimulate some more social problems. It would in turn, be the main hindrances to development process.

4.5. Dummy

At the time of Crisis, disparities were lower than in not crisis. Based on the result of calculation using Williamson index, at the beginning of 1985 Williamson index of Indonesia was 1 until 1987, and continuously decrease to be 0,70 in 1990. As the impact of economic crisis which hit Indonesia in 1997, Williamson index of Indonesia in 1998 was 0.75. It means that there was a bigger disparity in Indonesia. As also the impact of economic crisis, GRDP of all provinces in Indonesia slowed down, so did population's income, while numbers of population increased.

After the crisis, Williamson coefficient got better; 0,66 in 2000. The smaller Williamson coefficient shows the better condition of Indonesia's macro economy which is signed by the increasing of provincial economic growth in Indonesia. In 2000, in line with the implementation of regional autonomy and fiscal decentralization policy, Williamson index showed stable figure until 2003. In 2004 Williamson index became higher 0,8180 until 2015. In line with that, a study by Mahardiki dkk (2013) Williamson index in Indonesia's provinces during the period of research 2006 – 2011 increased. It could be seen from GRDP of provinces in Indonesia which have relatively high disparities.

A development disparity is a general aspect happening in economic activities in a region. As described before, it happens as the different ownership of natural resources, geographical condition. Therefore according to Hypothesis of Neoclassicism, at the early stage of developing a country, the disparity would be increased until it reached the peak. Afterward the disparity would eventually decrease. Based on this hypothesis, it can be concluded that in the developing countries, generally the disparity tends to be higher, while in the developed country, it tends to be lower, or it could be described by Reserve U-shape Curve.

This hypothesis was examined by Jeffrey G. Williamson in 1996 by conducting research on regional disparities among developing and developed countries using time series and cross-section data. Result of the research showed that the hypothesis which was theoretically formulated was truly proven empirically. This means that the process of development in a country could not automatically decrease regional disparities among regions, what actually happen at the early stage is on the contrary.

Empirical fact shows that there is an increase in regional disparities in the developing countries, and it is not a fault of society or government, but it happens naturally. Even, the US, when starting to develop in the eighteenth century, also had a sharp development disparity. This condition then triggered a civil war between southern states which were relatively less developed with northern states which were more developed. The same condition occurred in Indonesia when there were rebellion of PRRI-Permesta in South Sumatera in 1957, *Gerakan Aceh Merdeka* (GAM) dan *Organisasi Papua Merdeka* (OPM).

5. Summary and Suggestion

Based on the result of the research, it is concluded that from several analyzed variables, it is only variable of

government fund allocation which have negative impact on regional disparities in Indonesia during 1985-2015. The other four variables; economic growth, investment, unemployment and dummy have are negative. Therefore in the future government of Indonesia should pay more attention to the implementation of allocating government fund for regional government in order to be able to create a good quality of economic growth. The Government of Indonesia should also implement equality in term of creating job opportunity, investment privilege so that those efforts are expected to lessen disparities among regions in Indonesia.

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