Income Disparity in Gerbangkertosusila Area of East Java Indonesia

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ABSTRACT

Based on the contribution of each of the cities in the region Gerbangkertosusila shows a striking difference between one and the other regions. Poverty and unequal income per capita differences also lead to the inequality in Gerbangketosusila. If in the gross inequality Gerbangkertosusila happen then it will affect the economy in the province of East Java in general and the northern part of East Java in particular. By knowing the causes through analysis of the potential sectors of the city in the region to gross domestic product Gerbangkertosusila East Java province, then the potential sectors will be able to support the economic development in East Java. This study aimed to analyze the potential sectors and inequality in Gerbangkertosusila, attributable to the observation of programs and government policies promoting economic development in the province of East Java Williamson Index. In Gerbangkertosusila has some potential sector that can support economic development along with the reduction of income inequality that occurred, manufacturing, mining, and agriculture. Of the existing sectors have the potential to be developed through a development priority programs along with policy direction to boost the economy in the northern part of the province of East Java Gerbangkertosusila the region.

Keywords: Income Disparity, Regional Development, Gross Domestic Regional Product
JEL Classifications: E01, R11

1. INTRODUCTION

The potential of the region is relatively different from the potential of the other regions. It is caused by differences in the characteristics of physical resources and non-physical. The diversity of potential and characteristics of these resources caused the uneven development between regions and between sectors. Inequality between regions have implications on the level of social welfare among regions. Therefore, regional development should be carried out in an integrated, harmonious and balanced and directed to development that takes place in each area in accordance with the capacity and potential of the region.

According Kuncoro and Sutarno (2004. p. 127) development within countries is not always evenly distributed spatially. The gap between regions is often a serious problem. Some regions achieve rapid growth, while other regions experienced slower growth. These areas do not experience the same progression caused by a lack of resources possessed, the tendency of the

role of capital (investors) choose urban areas or areas that have facilities like transportation infrastructure, electricity grids, telecommunication networks, banking, insurance and labor, in addition to the existence of inequality redistribution of revenue sharing from the central government to local governments. The issue of regional economic development at this time would have to look at the economic conditions that occurred in the provincial and national level. Sukirno (2008) says, a condition different areas will have implications on the mode of economic development should be consideration of the economic potential of an area. Due to differences in the characteristics and the economic growth rate of each city/country, provincial and national effect in the rate of economic growth in certain areas.

According to Myrdal (in Arsyad, 1999. p. 129), differences in the level of economic development between regions overload will caused an adverse effect (backwash effects), dominated the beneficial effects (spread effects) on the growth of the region, in this case resulting in an imbalance. Actors who have the

power in the market would normally tend to increase rather than decrease, resulting in inequality between regions is increasing. Heterogeneity and diverse characteristics of a region also caused the tendency to inequality between regions and between sectors of the economy of a region.

Indonesia's per capita income figures showed 9.35%. The number turned out to be almost the same as the per capita income in East Java by a margin of 0.22%, which showed that per capita income in East Java province accounted for 9.13% of the national per capita income (per capita income at constant prices 2000: BPS 2010), of total revenue shows the strength of the economy which has a high specific indicators as supporting the economy. An amount that is of high value to the economic development of East Java Province, which gradually increased, so this increase will add to the high growth of the national economy.

The conditions that occurred in East Java province, although the number of high local income and the number of poor people at the provincial level decreased, but the decline does not occur evenly and balanced. Inequality levels of poverty in some areas also can cause imbalance affecting population distribution imbalance in the region. In this case a per capita income that is generated can be correlated with the amount of poverty levels there.

Based on Central Bureau of Statistics (2011) poverty in East Java uneven, cities/districts with the highest poverty percentage amount Bangkalan district with a total of about 27% and the amount of income per capita of about 9 million. While the city/county with the least amount of poverty percentage is Batu town which is about 5% and the number of per capita income of about 17 million. This proves that the level of poverty and income per capita in East Java is uneven, and as a result of the inequality, the inequality increasingly conspicuous. When viewed from several cities/counties including Gresik, Bangkalan, Mojokerto, Surabaya, Sidoarjo, and Lamongan abbreviated "Gerbangkertosusila" can be seen that the magnitude of poverty and per capita income gains very visible much difference. Bangkalan, Lamongan, Mojokerto and has a poverty rate percentage is large enough, while Gresik, Sidoarjo and Surabaya city has a poverty rate with a small percentage, and is supported by the number of high per capita incomes. If correlated with the number of donations each - each region to increase the gross domestic product (GDP) of East Java, the magnitude of inequality in East Java is strongly influenced by the imbalance that occurs in a particular area, and in this case the region Gerbangkertosusila has a big role for the increasing inequality in East Java Province. Based on the phenomenon that occurs then the purpose of this research is; analyzing income disparity that occur between cities/districts in Gerbangkertosusila.

2. LITERATURE REVIEW

2.1. Growth Theory and Regional Economic Development
Adam Smith (in Boediono, 1999. p. 27) states two major aspects of economic growth, growth of output (GDP) growth in total population. Smith saw the production system of a country consists

of three main elements, namely:
1. Natural resources available (land)
2. Human resources (number of people)
3. Stock of existing capital good (Suryana, 2000).

Fast track growth theory synergized, introduced by Samuelson (in Tarigan, 2007). Each country/region needs to look at the sector/commodity what it has great potential and can be developed quickly, both because of the potential natural and because the sector has a competitive advantage to be developed. Todaro (2000) says, this means that with the same capital requirements that the sector can provide greater added value, can produce in a relatively short time and volume contribution to the economy is also quite large. To be assured market, Subroto (2013) said, the product must be able to penetrate and compete in foreign markets. The development of the sector will encourage other sectors helped develop so that the overall economy will grow. Synergize sectors are making sectors are interrelated and mutually supportive. Thus, the growth of the sector which encourage the growth of other sectors, and *viz.* combining fast-track policy and synergize with other related sectors will be able to make the economy grow faster.

2.2. Regional Inequality
Development gaps can be measured by the index of inequality Williamson and Entropy Theil index. Both indexes have essentially explain whether the distribution of the GDP per capita evenly or not. Soejoto and Subroto (2015) was recorded as one of the early researchers in the research gap or inequality. In the study of inequality in different countries, he concluded that the average income per capita in the early development of the country is still low and also lower levels of inequality. When the average income rises, the gap also increased, then the average income rises higher, then the gap will fall back. Williamson (in Kuncoro, 2006) explains the concept of inverted U Kuznets curve occurs when per capita income increases, there will be an increase in inequality region, and survive within a certain period and then declined. Formula Williamson index (WI) using GDP per capita and population, which earned value between 0 and 1 (0 < WI < 1). If the mean value approaching one provides an indicator of major regional inequality and vice versa if the index value obtained is close to zero, the indicated small regional disparity.

2.3. Review Studies
2.3.1. Capital income and income inequality: Evidence from urban China (Wei, 2011)
In this study resulted in their concerns about the level of deployment of capital income in China, because the ratio of income inequality increased from year to year despite disparity under point 1. The level and dispersion of capital income is higher in the east than in the central and western regions. National income has unevenness, it is caused by differences in investment income. From this study, the wage income is still a factor domonan of inequality in urban China.

2.3.2. Inequality, trust, and sustainability (Kemp-Benedict, 2011)
Analysis of inequality in income negative relationship with the level of social trust. If there is a relationship between income,

income distribution with a confidence level, then there will be great results and make a difference, which is visible only social trust.

3. RESEARCH METHODS

The location of this research conducted in the area where the Gerbangkertosusila the city/county mentioned in it, namely: Gresik, Bangkalan, Mojokerto district, the city of Surabaya, Sidoarjo, and Lamongan. The data in this study were obtained from the Central Statistics Agency (BPS) of East Java Province 2009-2011. Quantitative analysis where existing analysis is an analysis of regional economic development by using various calculation that WI; to measure income inequality region.

According to Syafrizal (in Kuncoro, 2004. p. 133) Inequality Index Williamson is the analysis used as an index of regional inequality (regional inequality) with the following formula:

$$IW = \sqrt{\frac{\sum_{i=1}^{n}(Y_i - Y)^2 f_{i/n}}{Y}}$$

Information:
Y_i = The GDP per capita in the city/county,
Y = The GDP per capita average Gerbangkertosusila,
f_i = The number of residents in the city/county,
n = Number of populations in Gerbangkertosusila.
WI ranges between $0 < WI < 1$, which is getting close to zero means small inequality or more evenly. Whereas if one then approached Angaka inequality higher area under investigation.

4. RESULT AND DISCUSSION

The size of GDRP per capita inequality between cities/counties provide an overview of conditions and development in the region Gerbangkertosusila. To give a better describe of the condition and the development of regional development in the region, will be discussed equalization GDP per capita between cities/districts were analyzed using WI. Figures WI smaller or close to zero (0) indicates that the lesser inequality or in other words more evenly, and when further away from zero that is closer to the number one (1), then it indicates a widening inequality.

Based on an analysis using WI showing that picture numbers per capita GDRP inequality between cities/counties in the region during 2009-2011 Gerbangkertosusila average of 0.22. These numbers represent the average value of the imbalance that was because it is still well below the 0.5 inequality. Of the average value of the annually not increased, as in the following Table 1.

Based on Table 1, we can see the intensity of the WI, which implies that the unevenness of the average GDP per capita between cities/counties in Gerbangkertosusila compared to cities/districts indicate the existence of inequality. Areas that have WI below the average index Gerbangkertosusila include Gresik, Mojokerto and Sidoarjo regency, namely that the average level of GDP per capita of these

Table 1: WI city/regency in Gerbangkertosusila region years 2009-2011

Cities/Countries	WI			WI average
	2009	2010	2011	
Gresik	0.08	0.06	0.04	0.06
Bangkalan	0.25	0.25	0.24	0.25
Mojokerto	0.19	0.18	0.17	0.18
Surabaya	0.45	0.52	0.59	0.52
Sidoarjo	0.09	0.08	0.05	0.07
Lamongan	0.26	0.26	0.25	0.26
WI average	0.22	0.22	0.22	0.22

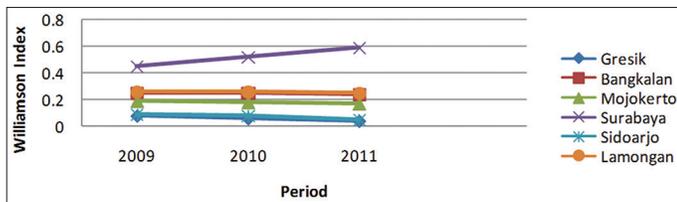Source: Processed Researcher, 2013. WI: Williamson Index

areas amount is relatively evenly when compared with other areas that are located within Gerbangkertosusila. But for the value of WI between cities/counties are low does not mean that the welfare of the people in the area are better compared to other regions (WI is higher than the average Gerbangkertosusila). WI only describes the distribution of the GDP per capita among cities/counties in Gerbangkertosusila without explaining how large the GDP per capita that is distributed to the GDP of East Java Province.

WI value difference shown by Table 1, the cities/districts in Gerbangkertosusila have value inequality varied from 2009 to 2011, namely Gresik with an average value of 0.06 WI. If we look, impaired WI Gresik from years 2009 to 2011, Bangkalan that has an average value of 0.25 WI is above the average value of WI Gerbangkertosusila, Mojokerto district with an average value of WI by 0.18, Surabaya, who has an average value of WI highest Gerbangkertosusila i.e. 0.52 and they are above average WI Gerbangkertosusila, so that the gap between the city of Surabaya with other areas in the vicinity is immense because it has the WI >0.5, then Sidoarjo which has an average value of 0.07 WI and nearly equal to Gresik, which means the gap between Gresik and Sidoarjo district with the city/other districts in the region Gerbangkertosusila so low that occurs equalization of the GDP per capita of each region, the latter is a Lamongan which has an average value of 0.26 WI is above average as well as the WI Gerabangkertosusila Bangkalan and Surabaya, which is distributed to the GDP of East Java Province. The results of the research of Yusuf (2013) in North Sumatra province which has a very different result with this research. In the research of Joseph in the period 2004-2008 resulted in WI value is low, and means that the inequality between districts in the province of North Sumatra low and still the distribution of development each year during the period of observation.

Of the three cities/districts that have an IQ above average WI Gerabangkertosusila cause large discrepancies in the area of the Regional Unit Development in East Java Province. For example, the difference between the value of WI Surabaya with one of the areas that have a low value WI namely Gresik regency, far away differences arising from the two areas, it can be affected by the economic characteristics of each. Inequality between cities/districts in Gerbangkertosusila looks markedly. Figure 1 illustrates the inequality city/county in Gerbangkertosusila in 2009-2011.

From the Figure 1 it is clear that the value of WI city of Surabaya has increased dramatically from years 2009 to 2011, while the city/

Figure 1: Disparities between city/regency in Gerbangkertosusila years 2009-2011

Source: Processed Researcher, 2013

other districts on average experienced a decline in value of WI. Total value of gross inequality that makes the city of Surabaya has not been able to set the state of the economy in the region, due to a large number of sectors of the base and the contribution to the GDP of East Java that great anyway, so reversed if we look at the problem of income inequality. It can affect the structure of the economy in surrounding for Surabaya city as the center of growth in the region Gerbangkertosusila.

It showed a fairly large disparities between cities/counties in Gerbangkertosusila. In addition to differences in the distribution of income cities/regencies in East Java Gerbangkertosusila to the GDP, means inequality based on analysis of WI on city/county in Gerbangkertosusila in 2009-2011 also notes that despite Gerbangkertosusila area in which there are several areas that are important to increase economy of East Java Province, but some areas are in the northern part of East Java experienced a variety of experiences to the economy, including the imbalance of opinion between the city/county in Gerbangkertosusila.

Of the average number of years of 2009-2011 score of 0.22, there are a variety of sectors capable of being expanded to reduce inequality in the region, of course, based on sectors that exist in each city/county in the region Gerbangkertosusila. Gresik with inequality value of 0.06, based on GDRP have a sector basis and also competitive are manufacturing, Bangkalan with inequality value of 0.25, have a basic sector of agriculture and construction, but with competitiveness, namely the construction sector and the agricultural sector can also be a priority of the economic development of the districts of Bangkalan because the area is extensive and productive for the development of the agrarian sector, Mojokerto regency with the balance value of 0.18, has two potential sectors, namely agriculture and processing industry.

Subroto (2013) says, in the Surabaya city with a large discrepancies value is 0.52, five sectors have a base and the competitiveness that is the services sector that are categorized as non-sector basis, in Sidoarjo has a value of 0.07 inequality, does not have the basic sector competitiveness, but there is a sector that could be developed based on the state of the economy in Sidoarjo, namely the manufacturing sector, the latter is a Lamongan has the inequality value of 0.26, there is a basic sector of agriculture, but the competitiveness of sectors have five sectors and one of them namely the processing industry sector.

From the above explanation, there is one sector that has not appeared to be developed, based on GDRP namely the mining and quarrying sector. But their geographical location in the region Gerbangkertosusila, it is not possible if the mining and quarrying sector also can be included in the potential sectors in the region Gerbangkertosusila, because there are some cities/counties that have the characteristics of the region as a contributor to the mines, namely Gresik and Lamongan.

In the Final Report of the Local Government Performance Evaluation of East Java province in 2011, disparities in economic development was due to several factors such as the dependence of the area in the city of Surabaya and surrounding areas caused by the concentration of economic activities in the area of Surabaya. East Java province has a network of roads in the north and the south, but the infrastructure and facilities in the southern region are not adequate. Traffic movement of goods and people in the northern region faster than the southern region. The artery of the road infrastructure in developing regions. Soejoto and Subroto (2015) said the road network plays an important role to ensure the smooth movement of goods between the production department to the marketing department as well as mobility between centers of settlements.

When viewed from GDRP with their sectoral several advantages of each city/county in Gerbangkertosusila region, there are three sectors that have the potential to be developed in order to reduce inequality in the region Gerbangkertosusila are manufacturing, mining and quarrying, agriculture. According Subroto (2015) with three potential sectors are expected to be developed based on the utilization of which of the programs that exist in the development plans and policies that have been established by the East Java provincial government that aims to stabilize economy condition in East Java in general and East Java northern namely Gerbangkertosusila region in particular.

5. CONCLUSION

Income inequality between cities/counties in the region Gerbangkertosusila WI average value of 0.22 from 2009 to 2011. With the value of the highest WI Surabaya city average of 0.52 and a low of value WI Gresik district average of 0.06.

Of inequality between cities/districts in Gerbangkertosusila, necessary efforts to reduce inequality by managing the production of all three sectors of the existing potential, with the aim to increase GDRP. So in the end the economic problems namely income inequality that exist in the region Gerbangkertosusila in particular and East Java Province in general can be completed. Necessary economic policy which focuses on developing the economic potential of each region and the development of economic infrastructure in the region distributed across regions Gerbangkertasusila.

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