

UDC 322

## THE INCLUSIVENESS OF ECONOMIC GROWTH IN BALI: A POVERTY EQUIVALENT GROWTH RATE APPROACH

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### ABSTRACT

The aims of this research are to analyze the inclusiveness of economic growth in Bali to reducing the poverty rate, unemployment, and inequality. Nowadays, the development is not merely aiming for growth but it is more inclusive. The importance of measuring the inclusiveness level of a region and encouraging the development to achieve Sustainable Development Goal's (SDG's) as global agenda in 2030. The study of theories and concepts used include the theory of economic growth, sustainable development goals, and inclusive economic growth. The type of data used in this study are quantitative and qualitative data. The data source used in this study is secondary data. The data used in this study was collected using documentation techniques from relevant agencies such as The Provincial Statistic of Bali. The data were analyzed by using analysis of Poverty Equivalent Growth Rate (PEGR). The results of the PEGR analysis that economic growth in Bali has been able to be inclusive in terms of poverty and employment, but has not been inclusive in terms of inequality. The government needs to focus on encourage economic movements to create a multiplier effect and decreasing the inequality level. The government needs solve the problem of inclusiveness of economic growth in Bali to reduce the poverty level, inequality, and unemployment. This research is expected to be an input for the government in the form of policy advice in preparing regional development plans and policies.

### KEY WORDS

Inclusiveness, economic growth, poverty, sustainable development goal's, inequality.

An Economic development is one of the government programs in order to increase the community welfare in a region in the long term followed by institutional governance reform. Arsyad (2010:12) states that the development of the economy has the relation and influence to the process between the factors that produce economic development and these are seen and analyze in regional and national scopes. Additionally, Todaro added a definition of development as a multidimensional process that involves immense changes in the structure of society, attitudes shown by certain communities, institutions in the national scope, and economic growth acceleration, achieving the reduction of inequality, and absolute poverty elimination (Todaro, 1995). The indication of economic development can be seen by analyzing the process of economic growth. Initiating the appropriate policies in the economic growth is found significant in order to increase the economic growth itself and living standards. According to Arsyad (2010:10), economic development is a process that maximize the improvement in the institutional system therefore the increase in the real per capita income of a country's population, in the long run, can be achieved. Economic growth is an indicator for development which is illustrated by an increase in output or national income. One of the goals of long-term development in the field of economic growth is the creation of economic stability in agriculture and industry (Aditya, 2010). Its goal is the welfare improvement of the community and this will lead to the increasing growth of economy in the community, and this is in line with the realization of the people's welfare improvement that could be achieved. The investment will be able to encourage regional economic growth and can lead to a multiplier effect on the economic sector and other sectors. Miranti (2014) argued that some policies in regional autonomy are made as suggestions for increasing long-term economic growth.

Purnomo and Istiqomah in 2008 defined regional economic development as the implementation conducted by measuring the ability of Human Resources (HR), social conditions, economic levels, and applicable regulations focusing on the national development planning in an area (Purnomo & Istiqomah, 2008). In Indonesia using decentralization or regional autonomy after the reform era. The main objective of regional economic development is to improve a better life for the community and equal employment opportunities (Dinc, 2002). Development often focuses on economic growth by ignoring social development or investment in human resources. Economic growth followed by public policy can play a major role in reducing poverty and inequality and the policies of the government have an equally important position on economic policies (Prasetyantoko, et al, 2012).

The rapid development of tourism as the leading sector in Bali has not guaranteed the development in Bali to run well. This can be seen from the data of The Bali Province of Central Bureau of Statistics that the economic growth of Bali Province can grow well but the problems of poverty, unemployment and inequality have not been able to be resolved. Bali Province has seventeen business fields, listed as follows: 1) Agriculture, Forestry and Fisheries, 2) Mining and Excavation, 3) Manufacturing Industry, 4) Electricity and Gas Procurement, 5) Water Supply, Waste Management and Waste Recycling, 6) Construction, 7) Wholesale and Retail, Car Repair, 8) Transportation and Warehousing, 9) Provision of Accommodation and Food Beverages, 10) Information and Communication, 11) Financial and Insurance to support the economic growth, Services, 12) Real Estate, 13) Company Services, 14) Government Administration, Defense and Guarantees, 15) Education Services, 16) Health Services and Social Activities, 17) Other Services. Inclusive development is needed to be able to realize inclusive economic growth. This has resulted to the widespread growth of different sectors or proper labor incentives. Moreover, the concept of this development is closely related to pro-poor growth. The other good value of implementing this concept is automatically help reduce the inequality or disparity between groups (Dyah Hapsari, 2014).

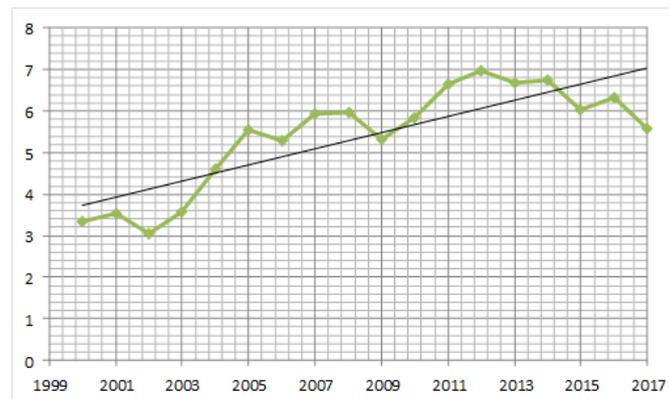


Figure 1 – The rate of economic growth of Bali 2000-2017 (Source: BPS Bali Province, 2018 (data processed by using Ms. Excel)

Bali's economic growth is demonstrated in figure 1 that Bali's economic growth fluctuated in the year 2000 - 2017. The lowest decline of economic growth in Bali was found in 2002, which was 3.04%. This was happening due to the outturn of the Bali I bombing incident in 2001. However, the economic growth in Bali then continued getting stronger the following years until 2012 reaching 6.96%. A downturn then happened in 2013 that it went down by 6.69%. Meanwhile, in 2014 it grew by 6.73%. In 2015, the statistics showed another downturn of 6.03% while in 2016 experienced a rebound to reach 6.32%. By the end of the observation year of 2017, the economic growth in Bali province fell back at the estimated percentage at 5.59%. Bali's economic growth from year to year is still not stable so that there will be a rapid economic shock due to economic instability.

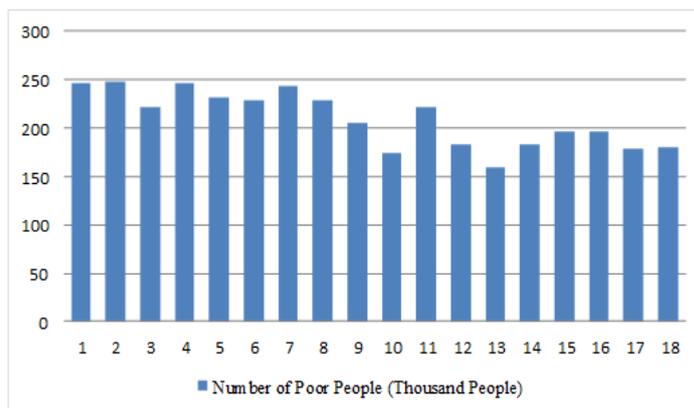


Figure 2 – The Number of Poor People in Bali Province in 2000-2017 (Source: BPS Bali Province, 2018 (data processed by using Ms. Excel))

Based on the bar chart in Figure 2, the rate of open unemployment in Bali in 2003 was found at the percentage of 7.59% and it went down in 2006 by 6.04%. In conclusion to this trend, the high peak rate of open unemployment in Bali was as a result of the Bali bombing II and there were a number of employees that were laid off by the companies in Bali had gone to bankruptcy due to the economic conditions during this time. In conclusion, there had been a fluctuation in the unemployment rate in Bali from 2000 to 2017. After a recurring time from Bali Bombing II, there was a slightly continual decline of the unemployment rate starting in 2007 by 3.6%. By the end of the observation year of 2017, Since 2007 there has been a steady decline in the open unemployment rate in Bali Province until 2017 the open unemployment rate was 1.48%. This is a good impact on economic growth which can reduce unemployment. This is a good impact of economic growth which can reduce unemployment. Although unemployment is not too high, it still needs to be considered so that the unemployment rate does not increase again. Dankumo added that people's income downturn is majorly affected by the output cuts and this is caused by the well-being loss of unemployment (Dankumo, et al, 2019).

In addition, to see the impact that the poverty of economic growth brings and the unemployment rate in Bali Province, to measure and provide an initial picture of the economic growth in Bali is inclusive or not, it is necessary to see how the correlation between economic growth and the level of inequality in Bali Province is demonstrated through the percentage of gini ratio from 2000-2017. If every year the observations show that economic growth and the gini ratio have a positive correlation, it means that economic growth is identified as not inclusive and if the correlation between the two is negative, then economic growth is inclusive.

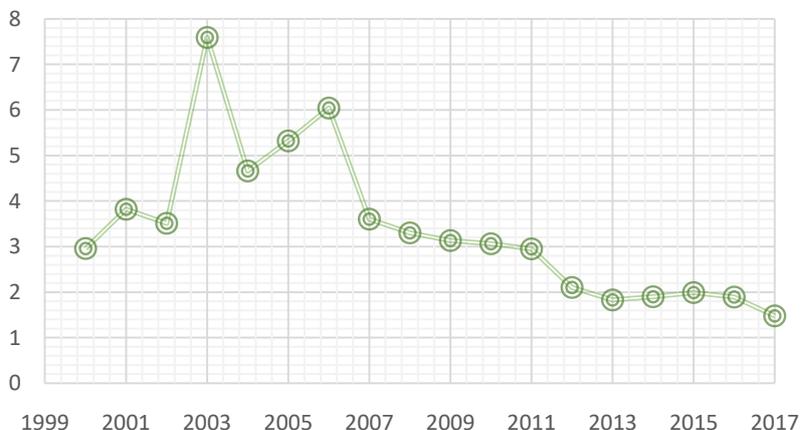


Figure 3 – The Number of Unemployment in Bali Province in 2000-2017 (Source: BPS Bali Province, 2018 (data processed by using Ms. Excel))

Differences in economic growth between regions have resulted in inequality or disparity (Pradnyadewi, 2015). Inequality of income distribution will cause disparities between regions. Distribution disparities between regions can be caused by several factors, such as geographical differences, differences in human resources, productivity factors, and regional development strategies (Ali, et al, 2013). The disparity between regions will be increasingly different due to geographical differences as well as inequality between urban areas and rural areas (Breau and Saillant, 2016).

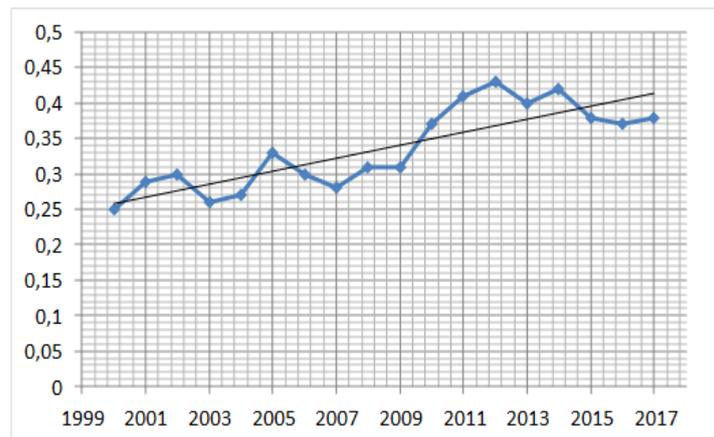


Figure 4 – Gini Ratio Coefficient of Bali Province in 2000-2017 (Source: BPS Bali Province, 2018 (data processed by using Ms. Excel)

In Figure 4 above, the Gini ratio from 2000 to 2017 steadily fluctuated. The upturn in inequality level reaching 0.4 in 2011, which was 0.41, and in 2012 that was 0.4. In these years, the percentage level was nearing 0.5. During these periods, this was the highest number that was close to 1. This indicated that the economic condition was great because the rate of economic growth went up to 6%, but it turned out that the high rate of economic growth did not guarantee equal distribution of income to the entire population of Bali. On average from the increase in economic growth from year to year based on years of observation it turns out that economic growth has not been able to influence to reduce inequality, this is evidenced from the economic growth rate in 2000-2017 which tends to increase also followed by an increase in the Gini ratio. In 2017 the Gini ratio of Bali Province was 0.38, this imbalance was no longer considered low inequality but began to move up the position as a medium. Gini ratio as an index of income inequality shows how resources are distributed to the public (Fitrawaty, et al, 2018)

The complexity of the policies is the main problem that is currently occurring and this can be fixed by performing good regional development planning and the inclusive development concept. The result of this effort is to attain development that is able to inclusively support regional economic growth. Regional development supported by local government policies will certainly result in quality development. The regional potential is well managed to grow the economy to create employment and increase regional income. In short, the poverty reduction can only be achieved by decreasing the unemployment rate therefore the inclusiveness of economic growth can also be reached. In addition, research on inclusive economic growth has never been realized and published, so this research is important to be implemented as a planning effort. regional development of Bali Province to realize inclusive economic growth as one of the goals of Sustainable Development Goal's which is a global agenda. It is very important to The Government of Bali to know about that condition to make regulations and economy can run well. Based on The Nawacita Programme promoted by the Government of Indonesia to increase the level of inclusiveness in the Province level as national goals, then through this research, the authors will analyze thoroughly about these phenomena especially in Bali Province.

Sukirno (2011: 9) states the definition of economic growth that is the overtime development of economic activities and causes change to real national income. However, the development of economic activities will not occur if a country closes itself from foreign trade. Boediono added that this growth refers to the long-term process to increase output per capita (Boediono, 2012: 1). There are three aspects being focused on, namely process, output per capita, and long term and this is observable from two sides, namely the total output and the population. The formulation of per capita output is the total output divided by the population. Theory of economic growth developed by Adam Smith and Samuelson. Adam Smith stated that Gross Domestic Product (GDP) or Gross National Product (GNP) and population growth are two main aspects that can be used as a measurement to result in total output growth. Adam Smith also added that the fast or slow process of output growth is determined by the capital stock (Tarigan, 2012: 65). Samuelson in 1995 introduced the theory of fast-track growth. Each country has to consider the commodities or sectors that acquire great potential and quickly are able to be developed by the stakeholders, both because of natural potential and because the sector has comparative advantages to develop. The take is to provide greater added value and to produce in a relatively short time. Moreover, the volume of contribution to the economy is quite large as well (Tarigan, 2012: 54).

Gross Regional Domestic Product (GRDP) is the amount of added value generated by all business units in a region at a certain time period commonly known as GRDP according to the business field. Presentation of GRDP differentiated into the current prices and constant prices of GDRP. GRDP at current prices shows the goods and services that have added value produced by an area and calculated based on current prices. While GRDP at constant prices is defined as the goods and services that have added value produced by an area and calculated based on the price of the base year. A domestic concept is used in process of the calculation of GRDP. The result of the calculation will indicate the added value generated by various sectors that carry out their business activities in a particular area. This is also calculated as the result of the added value generated by the region regardless of the production factor ownership.

The problem of poverty that occurs in a country will cause a decrease in the welfare level of the community. Welfare is one main goal to promote the general welfare of Indonesia's development listed in the Preamble of the 1945 Constitution. One of the benchmarks in Indonesia's welfare is reflected in poverty so that poverty reduction can increase the welfare of an area (Nazara, 2006). According to Andre Bayo Ala (in Arsyad, 2010: 237) poverty has many aspects, because human needs vary. The indication of poverty can be seen from its condition that the individual's annual income in an area does not meet the minimum expenditure standards required by individuals to be able to live well in the area. The target of national development is to reduce poverty. The major concern of social policy development is the community that is poor (Alcock, 2012). The main problem faced by developing countries is poverty (Vincent, 2009). Therefore, poverty reduction efforts should be carried out thoroughly (Nasir et al. 2008). A household is said to be a poor household if its income is below the poverty line. While non-poor households are those whose income is above the poverty line (Krishna et al. 2007).

According to BPS Indonesia, unemployment is defined as a population that does not work while in the process of job finding or it is also defined as the people who are preparing for a new business as well as the employees are listed as a staff at a certain workplace but have not started work. Paramita and Suresmiathi (2015) argued unemployment arises because of the low level of growth in demand for labor in the modern industrial sector and the rapid rate of growth of the supply of urban labor originating from villages. A high unemployment rate can cause a decline in the level of prosperity and prosperity in society. The problem of unemployment is very complex to be discussed and is an important issue because it can be linked to several indicators. Economic indicators that affect the unemployment rate include the country's economic growth, inflation rate, and the prevailing wage rate. If the economic growth of a country has increased, it is expected that it will affect the decrease in the number of unemployed. If the wage rate rises, the number of

unemployment will as well be declining. it will impact the decrease in the number of unemployed as well. In spite, the high rate of inflation will affect the high unemployment number.(Sukirno, 2010: 121).

Income inequality can occur between individuals, sectors, and regions. Income inequality in each region is due to differences in the composition of the population, available resources, and characteristics of each region (Amrillah, 2013). Income inequality illustrates differences in income between communities and regions that are lagging. Regional disparities have become a major focus in policy and government and community interests, especially Indonesia, which is a country with a pluralistic society where geographical conditions affect economic activity in an area (Irawan, 2015). Inequality of income distribution will cause disparities between regions. This cannot be avoided because of the trickle-down effect of national output on the majority of the population which did not occur perfectly. National output results are only enjoyed by a handful of minority groups with certain objectives (Musfidar, 2012). Williamson explained that the growing gap/inequality between regions was caused by: 1) The existence of labor migration between regions was selective and in general the migrants were more educated, had high enough skills, and were still productive, 2) The existence of capital migration between regions, the existence of agglomeration processes in other regions that result in the occurrence of capital flows to regions that are already advance, 3) The development of public facilities in more dense and potential areas results in greater inequality between regions, 4) Lack of interrelationship between regions can cause delays in the process of the spread effects of the development process which have an impact on the increasing gap/inequality (Jhingan, 2010: 70). Simon Kusnetz, who pioneered the analysis of historical growth patterns in developed countries, stated that in the early stages of economic growth, income distribution tended to get worse, but in the next step, there will be an upturn of the income distribution. This observation is widely known as the concept of "U-inverted" curves because longitudinal changes (time-series) in the distribution of income will decrease at the next development stage along with the increase in GNP per capita.

Essentially, high economic growth is not only a means of achieving prosperity but more than that, this high number of growth in the economy is one successful indicator of national development. Besides the high economic growth, the success of a country's development is also determined by the ability of the country to reduce unemployment and poverty, including the ability to reduce disparities between groups. Recently, some experts also include elements of sustainability or sustainability and environmental insight in assessing the success of a development (Yanti and Arsani, 2016). Growth with the ongoing gap in a country can lead to social and political conflict and encourage criminal acts by groups of people who feel their right to life is deprived. This fact shows that growth alone is not enough to allow all the society segments to be benefitted from the economic growth (Azwar, 2016). The concept of inclusiveness then emerged as the main policy to continue to be encouraged and include the needs of the poor and vulnerable communities to become poor.

According to Habito, inclusive growth is defined as GDP growth that has a major impact to reduce poverty. Habito also explained that the significant factors in economic growth are mentioned as the economic structure and sectoral composition. These factors are needed to be maintained in order to achieve inclusive growth of the economy. In short, the researcher believed that the stronger growth in the structure of agriculture, the greater the acceleration of reduction in poverty. It is reasonable to press the agricultural sector considering that the role of the agricultural sector is very wide, specifically focusing on the labor absorption in an effort to achieve countries' development. Besides, Habito views the investment as very important if conducted in public facilities such as health, education, and housing that this type of investment can help to achieve inclusive growth.

Research conducted by H. Hill, M.E. Khan, and Zhuang (2012) who examined "Diagnosing the Indonesian Economy: Toward Inclusive and Green Growth" showed that the Indonesian economy was facing a big challenge. This challenge relates to efforts to change the pattern of economic growth that is heavily dependent on abundant natural resources and cheap labor wages, becoming a more inclusive and environmentally friendly, and sustainable

pattern of economic growth. Inclusive economic growth can be realized if the government can maximize the existing economic potential with the right development planning strategy. According to Azwar (2016) in his research on inclusive economic growth shows that the Gini Index of Indonesia which continues to increase relatively signifies a gap in income growth and distribution, especially in Eastern Indonesia. This study uses the Social Mobility Curve Model approach by Anand et al. (2013), PEGR Model by Klasen (2010), and Data Panel Regression (Fixed Effect Model) to measure and analyze the phenomenon of inclusiveness of economic growth; and the factors that influence it. The results of the study prove that in total, growth in the Province of South Sulawesi has not been perfectly inclusive with indications that economic growth has not favored the poor as a pro-poor growth. According to a study by the DIY Provincial Statistics Agency (2016), to achieve inclusive economic growth, a number of efforts needed to rise the economic sector's performance. Therefore this can maximize the existence of opportunities for employment and poverty. The method of measuring development's exclusivity is conducted by calculating the Inclusive Growth Index (IGI). DIY Province has an inclusive development index of "satisfying" but will be boosted to "very satisfying" by maximizing the performance of the superior economic sectors of the Special Province of Yogyakarta.

## **METHODS OF RESEARCH**

The methodology of this study uses explanatory research and relies on quantitative data or findings that were completed by using statistical procedures or other ways of quantification (Sugiyono, 2013). This research was conducted by using a descriptive paradigm. In this study, the researcher will identify the economic growth inclusiveness in Bali during the observation period from 2010 to 2017. This analysis is conducted in order to achieve the 2030 SDG's global agenda. This study took place in Bali Province, Indonesia. It specifically covered the areas around Bali because the contribution of the economic sector to GRDP in Bali Province tends to fluctuate, and the inclusive development in Bali has not been acquired in regards to the aspects of poverty, inequality, and unemployment. Moreover, the need for efforts to identify the inclusive economic growth that is inclusive and superior sectors identification in Bali Province could also be found using these three indicators.

The objects in this study are 1) Contribution to GRDP that is attained from the economic sector in the Province of Bali According to Business Fields on the Constant Prices basis for the Basic Year of 2010 during the period 2010-2017 to measure the shift in the economic structure of the Bali Province, 2) the economic sector contribution to GRDP in Bali Province according to the business field regarding the constant price in 2010 and Indonesia's GDP in 2010 according to the constant business field prices during the period 2010-2017 to analyze potential or superior sectors in Bali Province, 3) Per capita Income, Number of Poor Population, Gini Coefficient, Number of People Working and Total Workforce during the period 2010-2017 to measure the level of inclusiveness of Bali Province.

The researcher utilizes a quantitative and qualitative type of data in this study. Quantitative data can be defined as the numerical data or qualitative data that is assumed (Sugiyono, 2013: 13). Quantitative data in this study are information about Gross Domestic Products and Gross Regional Domestic Product of Bali Province, Per capita Income, Number of Poor Population in Bali Province, Coefficient of Gini Ratio of Bali Province, Number of People Working and Number of Labor Force in Bali Province. While the qualitative data is explained in detail about the data in the study. The secondary data source in this study used as the data source. Secondary data is data in the form of documents or records that have been collected and processed by relevant parties so that they can be used for the benefit of data analysis (Sugiyono, 2013: 129). Secondary data used in this study were obtained from the results of the publication of data that had been collected by relevant agencies such as the Indonesian Central Statistics Agency and the BPS of Bali Province.

The data used in this study was collected using documentation techniques. Documentation techniques are data collection techniques by retrieving data from various documentation or publications from relevant agencies. Data collection in this study was

conducted by observing, recording, and studying the description of the documents contained in the relevant agencies such as the Central Bureau of Statistics. The data analysis technique used to analyze is Poverty Equivalent Growth Rate (PEGR) by using regression equation and calculate by Stata MP 14.1.

The coefficients of inclusive growth in reducing poverty are specified as follows:

$$IGp = (Epg / Ep) \hat{G}g \quad (1)$$

Note of the notations above:

IGp: The coefficient of inclusive growth in reducing poverty;

Ep: The elasticity of poverty towards the average income;

Epg: The elasticity of poverty towards economic growth;

$\hat{G}g$ : Economic Growth.

IGp demonstrates inclusiveness of growth in order to decline the number of poverty, so that in short, the value of IGp is bigger than  $\hat{G}g$  or  $IGp > \hat{G}g$ .

The value of Ep (The elasticity of poverty towards average income is obtained through simple linear regression where: Y = Average income; X = The number of poor citizen.

Thus, the regression equation is:

$$Y = \alpha + EpX + \varepsilon \quad (2)$$

The value of Epg (The elasticity of poverty compare to the economic growth) is obtained through simple linear regression where: Y = Economic Growth; X = The number of poor citizens.

Thus, the regression equation is:

$$Y = \alpha + EpgX + \varepsilon \quad (3)$$

The coefficient of inclusive growth to reduce inequality is shown in the equation below:

$$IGin = (Ein.g / Ein) \hat{G}g \quad (4)$$

Note of the notations above:

IGin: The coefficient of inclusive growth in reducing inequality;

Ein: The elasticity of inequality towards average income;

Ein.g: The elasticity of inequality towards economic growth;

$\hat{G}g$ : Economic Growth.

IGin demonstrates growth inclusiveness in order to reduce inequality. It is shortly measured using the value equation of  $IGin > \hat{G}g$ .

The value of Ein (The inequality elasticity of the average income is obtained through simple linear regression where: Y = Average Income; X = Gini Ratio.

Thus, the regression equation is:

$$Y = \alpha + EinX + \varepsilon \quad (5)$$

The value of Ein.g (Elasticity of inequality towards economic growth) is obtained through simple linear regression where: Y = Economic Growth; X = Gini Ratio.

Thus, the regression equation is:

$$Y = \alpha + Ein.gX + \varepsilon \quad (6)$$

The coefficient of inclusive growth in increasing employment is analyzed as follows:

$$IGem = (Eem.g / Eem) \hat{G}eg \quad (7)$$

Note of the notations above:

IGem: The inclusive growth coefficient in absorbing labor;

Eem.: The labor absorbance elasticity;

Eem.g: The labor absorbance elasticity towards economic growth;

$\hat{G}eg$ : Economic growth.

IGem shows inclusive growth to absorb labor therefore the growth is inclusive. The value should be identified as  $IGem > \hat{G}eg$ .

The value of Eem (Labor Absorption Elasticity) is obtained through simple linear regression where: Y = The Number of Workforces; X = The Number of Working Population.

Thus, the regression equation is:

$$Y = \alpha + EemX + \varepsilon \quad (8)$$

The value of Eem.g (Elasticity of Manpower Absorption Against Economic Growth) is obtained through simple linear regression where: Y = Economic Growth; X = The Number of Working Population.

Thus, the regression equation is:

$$Y = \alpha + Eem.gX + \varepsilon \quad (9)$$

## RESULTS AND DISCUSSION

The economic situation of a region can also be seen through the development of the GDRP per capita of the region's population. This per capita GDRP is presented because it is directly related to the welfare of community members in the Bali Province. Table 1 shows the GDRP of Per capita in Bali Province and Indonesian Per capita GDP in 2010-2017 which illustrate economic conditions in Bali Province and Indonesia. Per capita GDRP of Bali Province from 2010 to 2017 keeps increasing every year.

The GDRP per capita of Bali Province in 2010 was amounted to Rp 23.992,63 and continuously increasing in 2017 up to Rp 50.714,92. The GDRP per capita that increases is in line with the individual welfare increase. This is derived from increasing economic activity. Nationally, the GDP number in Indonesia has been continuously increasing in years. From 2010 to 2017, there was a significant peak GDP per capita in Indonesia as it was amounted as Rp 28.778,20 in 2010 and reaching Rp 53.614,30 in 2017. This can be concluded that an increasing number of national economy leads to an increase in per capita income.

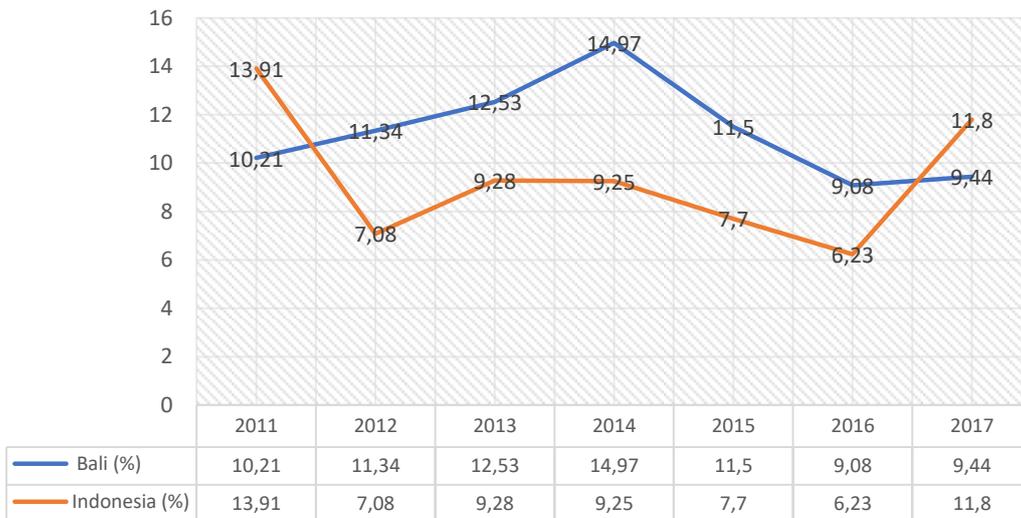


Figure 5 – The Growth of Per Capita GDRP of Bali Province and Indonesian Per Capita GDP on Constant Price 2010 of 2010-2017 (in percent) Source: BPS of Bali Province (2018), BPS of Indonesia (2018) (data processed by using Ms. Excel).

The percentage of GDRP growth in Bali Province tends to increase from 2010 to 2014, while in 2015 it decreased and in 2017 it increased again by 9,44 percent from 2016 growth of 9,08 percent. Indonesia's per capita GDP growth fluctuated, which increased in 2011 by 13,91 percent and experienced a significant decline in 2012 reaching 7,08 percent and again experienced an increase in 2013 of 9,28 percent and 9,25 percent in 2014. The decline in per capita GDP growth in 2015 and 2016 was 7,7 percent and 6,23 percent respectively, while in 2017 it experienced a significant increase which reached 11,80 percent. Fluctuations in per capita income are influenced by many economic factors, so efforts to maintain economic stability are also very important to maintain the stability of GDRP growth and per capita GDP.

### The Effect of Economic Growth on Poverty in Bali Province of 2010-2017

The researcher defines inclusivity as an overall economic development condition that occurs at all society levels. Economic development that is inclusive can be reflected in the practices of inclusive economic growth. In this case, poverty, inequality, and unemployment are the problems that are believed to be sustainably overcome by increasing economic growth. To measure inclusiveness, PEGR is used to analyze the data. The calculation is done by measuring the significant influence of economic growth on poverty reduction, inequality, and employment. The sample of inclusiveness calculations, that is economic growth in reducing poverty (IGp) can be seen as follows:

Table 1 – The Result of Inclusivity Analysis of Economic Growth on Poverty in Bali Province, 2010-2017

Year	Epg	Ep	IGp	IGp (%)	Gg (%)
2010	0.0138	126.3052	0.06369809	6.30	5.83
2011	0.0138	126.3052	0.0727666	7.20	6.66
2012	0.0138	126.3052	0.076044375	7.60	6.96
2013	0.0138	126.3052	0.073094378	7.30	6.69
2014	0.0138	126.3052	0.073531414	7.30	6.73
2015	0.0138	126.3052	0.065883273	6.50	6.03
2016	0.0138	126.3052	0.069051789	6.90	6.32
2017	0.0138	126.3052	0.06107587	6.10	5.59

Source: Author's computation using Stata MP 14.

In table 1, the IG<sub>p</sub> value can be defined as an inclusive growth value that has a significant role to reduce poverty. Based on the data above, the number of poverty in Bali declined during the observation year of 2010 - 2017 that is indicated by the increasing percentage of economic growth. The data provided by the Bali's Statistics Cental Bearue, in 2010, there was found 5,83 percent of the economic growth and 221.600 poor people, while in 2011, the economy growth in Bali was increasing from 5.832 to 6,66 percent and there was a light decline of the number of poor people from 221.600 to 183,100. In the following year, an increase of economic growth was again found of 6,96 percent in 2012 with a number of poor people of 158.950. This indicates that an increase in the economy will increase the decline in poverty because data on economic growth show that in Bali Province from 2010 to 2012 (sample data) continued to increase and was followed by a decrease in poverty in that year.

Data Description: In 2010, economic growth was 5,83 percent, average income (per capita) was Rp. 23.992.630,00 and the number of poor people in 2010 was 221.600 people.

$$IG_p \text{ Calculation: } IG_p = \left( \frac{126,3052}{0,0138} \right) 583 \text{ (the results converts from percent) } = 6,30 \text{ percent (rounded)}$$

Data Intepretation: IGp value of 6,30 percent is greater than the Gg value of 5,83 so that it can be said that economic growth in 2010 has been inclusive of reducing poverty in that particular year in Bali Province.

Table 2 – The results of Inclusivity Analysis of Economic Growth Against Inequality in Bali Province, 2010-2017

Year	Ein	Ein.g	IGin	IGin (%)	Gg (%)
2010	0.00000201	0.5876182	0.001994203	0.20	5.83
2011	0.00000201	0.5876182	0.002278112	0.23	6.66
2012	0.00000201	0.5876182	0.00238073	0.24	6.96
2013	0.00000201	0.5876182	0.002288374	0.23	6.69
2014	0.00000201	0.5876182	0.002302056	0.23	6.73
2015	0.00000201	0.5876182	0.002062615	0.21	6.03
2016	0.00000201	0.5876182	0.002161812	0.22	6.32
2017	0.00000201	0.5876182	0.001912109	0.19	5.59

Source: Author's computation using Stata MP 14.

In order to reduce poverty, Gini ratio indicates the number of inequality in income distribution that can only be reduced by achieving economic growth. According to the data in Table 3, during the observation year of 2010-2017 inequality in Bali Province has not been able to be reduced by economic growth. It resulted in a number of  $IG_{in}$  values that acquire smaller value each year than  $G_g$ . Additionally, based on the data provided by the Statistics Central Bearue of Bali, Gini ratio increase is directly affected by economic growth increase. Based on the data above, there was a slight incline that continuously happened every year during the observation year of 2010-2017. For instance, from 2010 to 2012, the percentage of economic growth changed from 5,83 percent to 6,96 percent and this increasing percentage also occurred in the Gini ratio of 0,37 in 2010 and 0,43 in 2012. This trend was then continued to increase in the following years during the observation year as provided in Table 2 above.

Data Description: In 2010, the economic growth was 5,83 percent, the average income (per capita) was Rp. 23.992.630,00 and the 2010 gini ratio was 0,37.

$$IG_{in} \text{ Calculation: } IG_{in} = \left( \frac{0.5876182}{0.00000201} \right) 583 \text{ (the results converts from percent) } = 0,20 \text{ percent (rounded)}$$

Data Interpretation:  $IG_{in}$  value is 0,20 percent smaller than  $G_g$  value which is 5,83 so that it can be said that economic growth in 2010 has not been inclusive of reducing inequality in that particular year in Bali Province.

Table 3 - The Result of Inclusivity Analysis of Economic Growth on Employment in Bali Province, 2010-2017

Year	Eem.g	Eem	IGem	IGem (%)	Gg(%)
2010	160800.4	17.67105	0.064068386	6.41	5.83
2011	160800.4	17.67105	0.073189615	7.32	6.66
2012	160800.4	17.67105	0.076486444	7.65	6.96
2013	160800.4	17.67105	0.073519298	7.35	6.69
2014	160800.4	17.67105	0.073958875	7.40	6.73
2015	160800.4	17.67105	0.066266273	6.63	6.03
2016	160800.4	17.67105	0.069453208	6.95	6.32
2017	160800.4	17.67105	0.061430923	6.14	5.59

Source: Author's computation using Stata MP 14.

Employment absorption is classified as the other indicator of inclusiveness besides poverty and inequality that can be seen by analyzing the open unemployment rate in Bali. As seen in Table 3, the data shows that the reduction of the existing open unemployment rate is significantly completed by achieving the increase in economic growth in Bali. According to the measurement of both aspects, it was found that  $IG_{em}$  number is always greater each year than the value of  $G_g$ . The percentage of the growth of the economy in 2010 was 5,83 percent with a percentage as big as 3,06 percent representing an open unemployment rate. However, in 2011 an increasing percentage of economic growth was found as 6,66 percent with an open unemployment rate of 2,95 percent. The increase in economic growth was also

discovered in the following year of the observation year 2012. There was an increase of up to 6,96 percent of the economic growth in Bali and followed by a reduction of open unemployment to 2,1 percent. The researcher believed that a decline in the number of open unemployment is significant influenced by the occurrence of economic growth.

Data Description: In 2010, the economic growth was 5,83 percent, the average income (per capita) was Rp. 23.992.630,00, the number of people working was 2.177.358 people and the workforce number was 2.246.149 people.

IG<sub>em</sub> Calculation:  $IG_{em} = \left(\frac{160800.4}{17.67105}\right) 583$  (the results converts from percent) = 6,41 percent (rounded)

Data Interpretation: IG<sub>em</sub> value is 6,41 percent greater than the G<sub>g</sub> value of 5,83 so that it can be said that economic growth in 2010 has reduced the open unemployment rate in that year in Bali Province.

According to the data summary analysis, it is found that during the observation period of research, the economic growth has been impacting the reduction level of poverty (IG<sub>p</sub>) and employment (IG<sub>em</sub>). However, over this period, the inequality of income distribution is found unable to be reduced. In short, it can be stated that the coefficient level of inequality (IG<sub>in</sub>) in Bali is lower than the economic growth.

### Implications of Research Results

This research is expected to be an input for the government in the form of policy advice to the Provincial Government of Bali in preparing regional development plans and policies. In Theoretical implications as information or reference material for other parties/researchers who have an interest in similar research or further research on related topics and additional reference in implementing regional economic development theory.

## CONCLUSION

The results of PEGR show that the value of IG<sub>p</sub> indicates the inclusive growth value in order to reduce the level of poverty in a certain community. During the observation period from 2010 to 2017, it leads to a conclusion that economic growth has been giving a significant impact in decreasing the poverty level in Bali Province. This result is also supported by the official data provided by the BPS of Bali Province that in 2010, the economic growth of the communities in Bali area was 5,83 percent with a specific number of 221.600 people that live in poverty, meanwhile the percentage of the economic growth in Bali in 2011 was 6,66 percent and there were 183,100 poor people found in different areas in Bali. A decreasing percentage of the economic growth in Bali in 2012 was shown as 6,96 percent with 158.950 poor people. This indicates that an increase in the economy will increase the decline in poverty. The value of IG<sub>in</sub> results in a smaller value than G<sub>g</sub> emerging each year. According to the official data provided by the Statistics Central Bureau of Bali Province, it was shown that the increase in economic growth is in line with the gini ratio in Bali. Therefore, it is significant to consider the increase in economic growth due to its competency to maintain the existing open unemployment rate. This can be analyzed from the IG<sub>em</sub> value which frequently shows a greater number each year than the value of G<sub>g</sub>. The economic growth rate in 2010 was 5,83 percent with an open unemployment rate of 3,06 percent. However, in 2011, there was an increase in the economic growth to 6,66 percent, and the open unemployment rate was found as 2,95 percent.

The analysis during the observation year from 2010 to 2017 was conducted using the inclusiveness analysis and it shows that the inclusiveness in poverty and employment influences the growth of the economy in Bali. The increasing economic growth in Bali every year leads to a decreasing number of poor people. In line with this, the open unemployment can be as well reduced. However, inclusive of inequality is still unable to be achieved even by considering the growth of the economy in Bali. It is shown by measuring the coefficient value inequality that is smaller than the value of economic growth in Bali Province. The

increase in the inequality is supposedly followed by the increasing economic growth in Bali. From 2010 to 2017 the Government has succeeded in reducing the rate of poverty and open unemployment but has not been able to reduce the number of inequality. The government's program in the year of observation was more focused on reducing poverty in remote villages in Bali and more employment in the tourism sector. While the rate of inequality is still high and has reached a moderate inequality of 0,43.

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