

ECONOMIC GROWTH AND POVERTY IN EASTERN INDONESIA

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ABSTRACT

This study aims to determine the effect of economic growth, both directly and indirectly on poverty in Eastern Indonesia. This study uses Simultaneous Equation Model (SEM) to regression the causal relationship between economic growth and poverty by using secondary data and data panels in 2008 to 2017. The findings of the research study show that: (1) economic growth experiences an increase or decrease in the push for economic inputs, both directly and indirectly, significantly negative / positive effect on poverty; (2) poverty has decreased or increased depending on economic indicators both directly and indirectly significantly influencing positive / negative.

Keywords: economic growth and poverty in Eastern Indonesia.

INTRODUCTION

Poverty is a complex and multidimensional problem because it is closely related to various aspects of life both social, economic, cultural, and other aspects. Poverty is a development priority to be addressed. Basically various prevention efforts have been carried out with various kinds of poverty reduction strategies. However, the problem of poverty still remains wrapped up in the community in a circle of poverty that does not end.

Amartya Sen's (1999) in the view of research says, that the welfare of individuals, we must consider not only what they achieve for themselves (achievement of well-being) in other words, their actual functions, but also what they are free to achieve. We must judge this freedom in terms of what is open to them, including their values for others. The main ability category is welfare freedom, which reflects functions that can be obtained by someone.

According to Sen's view, that poverty can occur due to deprivation of capability, namely the freedom to achieve something in one's life. Judging from the causes, poverty can be divided into two, namely natural poverty and structural poverty. Natural poverty occurs because of scarcity of natural resources so that community productivity is low, while structural poverty occurs because the allocation of existing resources is not evenly divided.

High and sustainable economic growth requires investment, funds to finance investments come from domestic savings (Nurcholis, 2006). However, due to limited financial resources, the government first made public investments in the form of providing

Social Overhead Capital (SOC) in the form of roads, bridges, electricity, telecommunications, irrigation, education and so on to encourage economic growth.

The phenomenon of poverty and economic growth occurring in Indonesia, especially specifically experienced by regions in Eastern Indonesia, is what phenomena and strategic issues in reducing the level of poverty in Eastern Indonesia. Problems with economic growth and poverty that occur and are faced in the Eastern Region of Indonesia, are caused by the lack of infrastructure development in the regions, causing investment and exports to grow slowly so that they influence the engine of unstable economic growth resulting in higher poverty rates.

Based on research data that the authors observe that the problem of economic growth directly or indirectly can reduce poverty must be through a variable labor absorption and reducing income inequality will affect poverty.

LITERATURE REVIEW

Economic Growth

For decades policy makers believe that economic growth is a panacea for reducing poverty. Strategies that are directed at encouraging economic growth are also immediately considered as the right strategy to reduce poverty. What is the empirical fact? If traced far back, at least in the past four decades, there have been a number of papers that examine the relationship between economic growth and poverty reduction. Questions that often lead to debate include (Lopez, 2004), that economic growth is able to reduce poverty, and whether economic growth can provide broad benefits to all groups in society, including the poor is there a positive correlation between economic growth and improvement in people's living standards, is there a trade-off between a strategy that is pro-growth and pro-poor, whether pro-growth policies can also be expected to be the best policy for poverty reduction and so on.

The main link between openness and economic growth, employment and poverty reduction is the role of trade and investment in a nation. This is because openness relates to economic growth through production and comparative advantage (Babula & Andersen 2008; Carbaugh 2004).

The growth and poverty literature was reinvigorated by Dollar & Kraay (2002). They examine whether the incomes of the poorest quintile rise proportionately with average incomes. Using a dynamic panel approach and studying ninety-two countries over forty years, they find that growth is good for the poor. The covariates used in their study were several institutional and policy variables including financial development.

Kraay (2006) contributes to the literature by examining the relationship of economic growth on the headcount rate, the poverty gap, the poverty gap squared and the Watts index.^{5;6} His results show that all four measures of poverty are negatively and significantly correlated with annual growth rates. Kraay finds that between 69-97% of the variation in changes of poverty are from the average growth component, assuming poverty reduction may occur due to (i) higher rates of average economic growth, (ii) a high sensitivity of poverty to economic growth and (iii) the poverty reducing distributional component of economic growth.

Poverty

In the view of anthropologists poverty is attached the values such as self-respect, security, vulnerability, independence, political rights, identity, decision making freedom, justice and social exclusion (Masika et al. 1997). On the other hand, economic definition of poverty can be more quantified. These measures of poverty include income and consumption along with other social indicators such as nutrition, literacy, infant mortality and life expectancy. Traditionally, in developed and under developed countries income and consumption have been used as measure of poverty to facilitate agencies and governments for identification of deprived people in the society (Udaya R. Wagle 2006:74). Therefore, poverty is not only in the perspective of traditional view that is the lack of income but also exclusion of people who are living in poverty from vulnerable conditions, customs and patterns. In this respect, modern definition of poverty illustrates that poverty is multidimensional and there is no single definition to represent it.

According to the World Bank, "Poverty is hunger. Poverty is lack of shelter. Poverty is being sick and not being able to see a doctor. Poverty is not having access to school and not knowing how to read. Poverty is not having a job, is fear for the future, living one day at a time. Poverty is losing a child to illness brought about by unclean water. Poverty is powerlessness, lack of representation and freedom". (World Bank: 2009)

In 1990, the World Bank defined poverty as the inability to meet minimum living standards. Then in 2004, the World Bank reiterated the definition of poverty in more detail, namely "Poverty is hunger. Poverty is the absence of a place to live. Poverty is sick and unable to see a doctor. Poverty is not having access to school and not knowing how to read. Poverty is not having a job and worrying about life in the future. Poverty is the loss of children because of diseases caused by unclean water. Poverty is powerlessness, lack of representation and freedom".

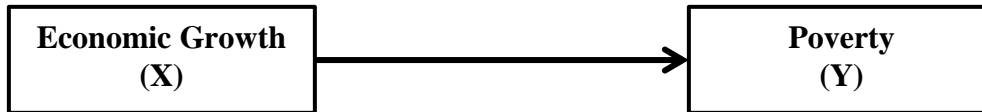
Not much different from the definition of the World Bank, UNDP also defines poverty as a condition of income shortages and economic difficulties. However, poverty is also seen as a situation where lack of access to education, health or clean drinking water, or to influence political processes and other factors that are important to humans. In other words, the UNDP views poverty as a multidimensional problem which is not only limited to a lack of income and economic resources.

METHODOLOGY

This research was conducted in the provinces in Eastern Indonesia consisting of twelve provinces, namely: West Nusa Tenggara, East Nusa Tenggara, North Sulawesi, Central Sulawesi, South Sulawesi, Southeast Sulawesi, Gorontalo, West Sulawesi, Maluku, North Maluku, Papua, and West Papua.

The data used in this study are secondary data (panel data) collected from each province, including data that supports analysis of economic growth and poverty in Eastern Indonesia. Data analysis is based on data collected from twelve provinces as a secondary data analysis, and is widely used for social and economic research.

Regarding the use of panel data in this study, there are at least three analytical techniques that can be used, namely the OLS Method, the Fixed Effect Method, and the Random Effect Method (Gujarati, 2012). This study uses a panel data regression model that is a model that is feasible to use in estimating the model if various tests, model selection and formation are carried out. The conceptual framework in this study is shown in the picture below.



Picture 1. The conceptual framework

RESULTS AND DISCUSSION

The results of this study were conducted to see the relationship between exogenous variables (economic growth) and endogenous variables in this case endogenous intervening variables (poverty). The data used in this study are secondary data in the form of data based on time series from 2008 to 2017 and data based on provinces (cross section), namely twelve provinces in eastern Indonesia, so this study uses a data panel (pooled the data) which is a combination of time series data and cross section data.

Descriptive statistical methods in this study are presented to provide information about the characteristics of the research variables which include minimum, maximum, mean, and standard deviation values. To measure the central value of a data distribution is used the measurement of the mean (mean), while to measure the difference in the value of the data studied with the average value used standard deviation.

Based on the results of data processing, it can be seen that there are variations in data on economic growth and poverty in twelve provinces in Eastern Indonesia in the period 2008 to 2017, and the standard deviation value of each variable is lower than the mean value seen in Table 1.

Table 1 Descriptive Statistics

Variable	Minimum	Maximum	Average	Standard Deviaton
Economic growth	0.110000	28.47000	7.327053	4.279858
Poverty	0.810000	37.53000	12.58884	10.01106

Source: Data processed in 2018

Economic Growth

In the economic growth variable the minimum value is 0.110 and the maximum value is 28.470. This means that from the 95 observation data the lowest economic growth value is 0.110 percent while the highest is 28.470 percent. The average economic growth is 7.3271 with a standard deviation of 4.2799. The standard deviation value is smaller than the average value which indicates the variable economic growth is normally distributed.

Poverty

In the poverty variable the minimum value is 0.810 and the maximum value is 37.530. This means that from the 95 observation data the lowest value of poverty is 0.810 percent while the highest is 37.530 percent. The average poverty is 12.5888 with a standard deviation of 10.0111. The standard deviation value is smaller than the average value which indicates the poverty variable is normally distributed.

Description of Research Results

Research using software Eviews 9 has three models used in panel data regression analysis, namely: common effect model, fixed effect model, and random effect model. After selecting the model, then continued the Classical Assumption test including: Multicollinearity test, Heteroscedasticity test, Autocorrelation test and Normality test to measure the reliability of the research data, and the Statistical Critical Test (F Test and t test) to see the effect indicated by the research variable.

Next to test the individual partial regression coefficients of each independent variable will be tested with the following criteria: The hypothesis used is:

$H_0 = \beta_1 > 0$: there are positive effects of exogenous variables on endogenous variables. $H_1 = \beta_1 < 0$: there are negative effects of exogenous variables on endogenous variables.

Decision criteria are:

1. t count < t table and probability > 0.05: H_0 is accepted. This means that exogenous variables individually do not significantly affect endogenous variables.
2. t count > t table and probability < 0.05: H_0 is rejected. This means that the exogenous variables individually affect the endogenous variables significantly.

Based on the results of data processing, the t value calculated for the variable economic growth (X) on poverty (Y), is: the value of t count variable economic growth (X) $0.305305 < t \text{ table } 1.96$, and the probability value is $0.7608 > 0.05$, then H1 is rejected. That is, economic growth (X) does not have a significant effect on poverty (Y).

Based on the results of data analysis, the estimated equation of the study is that the regression coefficient of economic growth variable is -0.017505 , which means that if the value of the variable economic growth increases by 1 percent will reduce poverty by 0.017505 percent.

On the estimation results of the Y function equation with the influence of different cross sections in each province in Eastern Indonesia towards poverty, where the province that has the most cross section influence is Papua Barat province with a constant value of 64,19592, while the province has a cross section effect the smallest is the Sulawesi Utara province with a constant value of 34.57852.

Analysis and Implications of Economic Growth in Poverty

The direct effect of economic growth on poverty shows a negative and not significant at 5 percent ($p = 0.004$). This is in accordance with the hypothesis because of negative and insignificant influences. It is hypothesized that the effect of economic growth on poverty is the same as the results of the analysis showing that economic growth has a negative and not significant effect on poverty. This means that the higher economic growth in each province in Eastern Indonesia does not affect poverty, on the contrary the lower economic growth in each province in Eastern Indonesia does not affect poverty.

Lopez's (2004) study, correcting growth growth is able to reduce poverty, whether growth can provide broad benefits to all groups in society, including the poor is there a positive correlation between growth and improvement in people's standard of living, is there a trade-off between pro strategy growth (pro-growth) and pro-poor (pro-poor), whether pro-growth policies can also be expected to be the best policy for poverty reduction and so on.

The implication of the results of this study is that with increasing economic growth it will reduce poverty and vice versa. This is due to the fact that the higher economic growth creates more employment and has a positive impact on poverty in Eastern Indonesia.

DISCUSSION

Economic Growth in Eastern Indonesia

Economic growth in the Indonesian East Region during the 2008-2017 observation period experienced fluctuations, but in general the trend of economic growth tended to increase. The average economic growth is 5.33% per year. The high increase in economic growth occurred in 2009, reaching 4.92% or from a value of 6.01% to 4.55%. This increase was caused more by an increase in economic growth that occurred in most regions in Eastern Indonesia. This shows that the role of economic activity in Eastern Indonesia contributes quite significantly to the formation of Indonesia's Gross Domestic Product (GDP) when compared to the Western Region of Indonesia.

Poverty in Eastern Indonesia

Poverty is a nation's problem that urges and requires handling steps and approaches that are systematic, integrated and comprehensive, in order to reduce the burden and fulfill the basic rights of citizens properly through inclusive, equitable and sustainable development to realize a dignified life. The gap between regions in Indonesia (between provinces, between islands and between regions) is not only seen from the value of economic growth but also community welfare or poverty in each region. Based on data released by the Central Bureau of Statistics, the percentage of poor people in Indonesia during the observation period tends to decline. This condition is inversely proportional to the trend of economic growth which tends to increase. The reduction in the percentage of poor people in most regions has an cumulative impact on the percentage of poor people nationally.

The percentage of poor people (population below the Poverty Line) in Eastern Indonesia in the 2008-2017 period averaged 18.65%. The 2008-2013 period the percentage of poor people in Eastern Indonesia tends to increase. In 2008 the percentage of poor people was 37.08% (48.9 million people) and in 2013 it was 16.66% (34.15 million people). The 2014-2017 period the percentage of poor people in the Eastern Region of Indonesia tended to decrease, which were 6.62% (16.62 million people) and 17.92% (39.30 million people) respectively. Factors that caused the increase in poverty in 2009 were partly due to the increase in prices of basic needs and general inflation by 17.95 percent in February 2009 to March 2013.

Economic Growth and Poverty by Province in Eastern Indonesia

Indonesia is a country that has a very wide area. Differences in demographic conditions, content of natural resources, smooth mobility of goods and services, concentration of regional economic activities and allocation of development funds between regions are factors that trigger differences in economic growth and development between regions in Indonesia. Economic growth according to provinces in Indonesia during the observation period of 2001-2011 was quite diverse. There are several provinces that have economic growth that are very high or above the national economic growth rate but there are also some provinces that have low economic growth compared to the surrounding area or with the national average.

During the observation period, there were 8.84% or as many as 12 provinces which had an average economic growth above the national average (5.33%). Six provinces that have high economic growth averages or are above the national economic growth rate,

namely; (1) West Papua Province has an average economic growth of 23.39%. The high average economic growth in West Papua province is caused by high economic growth in the past two years, in 2010 West Papua province had very high economic growth which reached 10.85% and in 2011 amounted to 27.08%. (2) Papua Province has an average economic growth of 25.17%. This province has a relatively stable economic growth each year which ranges from 6.85% to 9.98%. (3) Maluku Province has an average 5.90% economic growth. The province also has a relatively unstable economic growth every year. The highest economic growth occurred in 2012 which was 7.81% while the lowest economic growth occurred in 2008 which was 4.23%. (4) East Nusa Tenggara Province has an average economic growth of 5.11%. Economic growth in this province tends to be unstable, only in 2012 had a very high economic growth of 5.63%, whereas in other years during the observation period, economic growth ranged from 6.22% to 7.71%. (5) Gorontalo Province. (6) West Nusa Tenggara Province has an average economic growth of 6.36%, economic growth in this province tends to be unstable. In 2015 it had a very high economic growth of 21.76%.

CONCLUSION

Based on the discussion above, conclusions can be drawn:

1. To encourage the engine of economic growth to experience an increase, namely, the investment and export climate supported by the development of adequate infrastructure will create employment and can reduce income inequality in the Eastern Region of Indonesia.
2. The poverty level has decreased or increased depending on economic indicators that encourage economic growth, but high low economic growth does not necessarily directly reduce poverty but through indicators of employment absorption and income inequality indirectly.

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