



THE EFFECT OF ECONOMIC GROWTH ON THE NUMBER OF POOR POPULATIONS

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Abstract

Poverty has become an interesting discussion and study for many people. Basically, research on poverty highlights on how the problem roots and solutions that can be used to minimize poverty. The purpose of this study was to determine the effect of economic growth on the number of poor people in the province of South Sulawesi. This study uses a quantitative research approach using data collection techniques through documentation. The population in this study is time series data related to economic growth and the number of poor people in South Sulawesi Province from 2000-2013. This research used regression analysis and hypothesis testing. The results of this study showed that there is a significant effect of economic growth on the number of poor people in South Sulawesi Province.

Keywords: economic growth, the number of poor populations

INTRODUCTION

Today, poverty has become a trending topic in various parts of the world. Poverty is a scourge that the government cannot just cut off, even government programs to reduce poverty are considered not to directly touch and reduce poverty significantly. Apart from that, poverty is one of caused that reduce all aspects of life. The inability of the community to meet their needs is a inhibiting factor of the growth and development of a country's economy.

Poverty is usually defined as the extent to which an individual is below the minimum standard of living acceptable to society or their community. Some experts indicate the dimensions of poverty with various versions. Poverty can be a description of material deficiencies, lack of social needs, income, access to certain sources and others. Various theories have been developed as an effort to understand more the aspects that determine the occurrence of poverty. The diversity of theories that have been developed illustrates the existence of different perspectives among poverty observers.

Poverty is a global social problem. This means that poverty is a problem faced and concerned by many people in the world, although it could be at different levels. No country in the universe is immune from poverty. All countries in the world agree that poverty is a humanitarian problem that hinders prosperity and civilization. All human beings on this earth agree that poverty must be overcome and can be overcome.

Poverty in the essence refers to a situation of misery and powerlessness experienced by a person, both as a result of their inability to make ends meet and as a result of the inability of the state or society to provide social protection to its citizens. Poverty is caused by many factors. It is rare to find poverty that is only caused by a single factor. A poor person or family is caused by several factors that are interrelated to each other, such as having a disability, low education, not having the capital or skills to

do business, not having job opportunities, being laid off, not having social security (pension, health, death), or living in remote locations with limited natural resources and infrastructure.

Referring to South Sulawesi province, which is a province that is more dominant in Eastern Indonesia in development and said to be advanced in various fields, it does not deny that poverty does not exist in this region. This province in 2013 was ranked second in the eastern region of Indonesia for the largest number of poor people after West Papua province, even though we know its economic growth is arguably the fastest for the eastern region of Indonesia.

Table 1

Number of poor people, percentage of poor people, and economic growth 2000-2013 in South Sulawesi Province

Year	Number of poor people (000)	Percentage of poor people (%)
2000	1.198,00	15,44
2001	1.296,3	16,50
2002	1.308,3	14,71
2003	1.058,5	14,56
2004	1.000,6	13,56
2005	1.000,5	13,35
2006	1.112,0	14,57
2007	1.083,4	14,11
2008	1.031,7	13,34
2009	963,6	12,31
2010	913,4	11,6
2011	916,4	11,4
2012	805,92	9,82
2013	787,67	9,54

Source: BPS South Sulawesi Province

The theoretical basis of the correlation between economic growth and inequality in income distribution is no different from the case of per capita income growth and poverty rates. Following Kuznet's hypothesis, in the early stages of the development process, the poverty rate tends to increase, and as the final stage of development approaches, the number of poor people gradually decreases. Even though it is known, many other factors apart from economic growth also affect the level of poverty in a region or country, such as the workforce's educational background.

In the late 1900s, the term pro-poor growth became popular, when economists began to analyze policy that could achieve faster poverty reduction through economic growth and income distribution. Pro-poor growth is generally defined as economic growth that results in a significant reduction in poverty. Two approaches emerged in an effort to provide analytical and operational relevance to the concept.

The first approach focuses on the belief that the poor people certainly benefit from economic growth, even though it is disproportionate. This means that economic growth is pro-poor if accompanied by a reduction in inequality; or in other words, the share of income from the poor increases along with

economic growth. This approach is also called a relative definition of pro-poor growth, although intuitively appealing, this approach is limited, especially when applied within an operational context. In this definition of pro-poverty growth can reduce inequality. However, if focusing too intense on inequality, a policy package could result in sub-optimal outcomes for the two groups of households (RT): poor and non-poor RT or the poverty reduction rate could be smaller. (Word Bank: 2005).

The second approach focuses on accelerating the income growth rate of the poor through faster economic growth and by increasing opportunities for the poor to participate in growth, which results in increasing the rate of poverty reduction. Empirical evidence suggests that economic growth is the main driver of pro-poor growth, but it could change in inequality. Thus, accelerating the pace of pro-poor growth requires not only greater growth but also efforts to enlarge the capacities of poor people to take advantage of the opportunities created by economic growth.

The relation between economic growth or increased output and poverty produces a basic mindset, namely the *trickle down* effect of economic growth in the form of increased employment opportunities or reduced unemployment and increased the income of poor people. Assuming that there are necessary mechanisms to facilitate the trickle down of the economic growth benefit for the poor, economic growth can be an effective tool for poverty reduction.

METHOD

Research variable

The variables in this study are:

1. The dependent variable is the number of poor people in South Sulawesi (Y).
2. The independent variable is South Sulawesi's economic growth (X)

Research design

This research was conducted based on literature studies and field studies. Literature study is intended to obtain data sourced from literature review in accordance with study purpose, while field research is carried out to obtain primary data sourced from the Central Bureau of Statistics.

Operational Definition and Variable Measurement

Operational definition of research variables, as follows:

1. The number of poor people is the number of people who are unable to meet the minimum standards according to BPS, within 14 years from 2000-2013 expressed per person.
2. Economic growth is the development of activities in the economy which causes the increase of goods and services produced and the prosperity of society to increase within a period of 14 years from 2000-2013 expressed per person.

Population and Sample

The population in this study is secondary data included in the category of quantitative time series published by the Central Bureau of Statistics (BPS) of South Sulawesi Province. The data includes the number of poor people and economic growth over the last 14 years (2000-2013). Thus, in this study no sampling was carried out because the population is also the research sample.

Data collection technique

The type of data used in this research is secondary data. The secondary data used preserved in the form of evidence, records, or historical reports that have been compiled in archives (documentary data), namely the number of poor people and economic growth in South Sulawesi Province. Secondary data is a source of research data obtained by researchers indirectly through intermediary media (obtained and recorded by other parties). The source of the data in this study was taken from the office of the Central Bureau of Statistics of South Sulawesi Province.

Data analysis technique

Normality test

The normality test aims to test whether in the regression model, the dependent variable, independent variable, or both have a normal distribution. A good regression model is having a normal data distribution or statistical data on the diagonal axis gain a normal distribution chart (Gozali, 2001).

Autocorrelation Test

The autocorrelation test aims to test whether the linear regression model has a correlation between the confounding errors in period t and the interfering errors in the $t-1$ (previous) period. Autocorrelation arises because successive observations over time are related to one another (Ghozali, 2009). In this study the autocorrelation test used the Durbin Watson test (Wahid Sulaiman: 2004) with the following criteria:

1. $1.65 < DW < 2.35$, then there is no autocorrelation
2. $1.21 < DW < 1.65$ or $2.35 < DW < 2.79$ so it cannot be concluded
3. $DW < 1.21$ or $DW > 2.79$, then autocorrelation occurs

Heteroscedasticity Test

The heteroscedasticity test aims to test whether the regression model has the same variance from the residuals of one observation to another. If the variance shows a fixed pattern, it can be stated that there is no heteroscedasticity. To detect whether there is heteroscedasticity can be done using a Scatterplot graph. A good regression model is one that has homoscedasticity or does not have heteroscedasticity (Ghozali, 2005).

Multicollinearity Test

Basically multicollinearity is the existence of a perfect (near perfect) linear relationship between some or all of the independent variables (Kuncoro, 2001). In this study, to detect the presence or absence of multicollinearity in the regression model, a correlation matrix of independent variables was used, and to look at the tolerance value and Variance Inflation Factor (VIF) with SPSS program.

T test

The t test is intended to test whether the independent variable partially has a significant effect on the dependent variable. It is said to be significant if the t-count is greater than the t-table, in other words: if the t-count is greater than the t-table, the independent variable has a significant effect on the dependent variable. Conversely, if t-count is smaller than t-table, the independent variable partially does not have a significant effect on the dependent variable.

Linear Regression Analysis

Regression analysis is used to determine how much influence the independent variable, namely economic growth, has on the number of poor people in South Sulawesi Province. In this study the regression analysis used is as follows:

$$Y = a + b X$$

Information:

Y : The number of poor people

a : Constant

b : Coefficient for variable

X : Economic growth

RESULTS AND DISCUSSION

Normality test

Table 2. Data Normality test results

	Kolmogorov Smirnov ^a		
	Statistic	df	Sig.
Economic Growth	.177	14	.200*
The number of poor	.088	14	.200*

Source: SPSS Inc Data Processing Statistics 18

Based on the table above, it shows that the significance coefficient number using the Kolmogorov-Smirnov test for the two variables x and y is greater than alpha or 0.05. Thus it is concluded that the data comes from a normally distributed population.

Autocorrelation Test

Table 3. Autocorrelation Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimated	Durbin Watson
1	.816 ^a	.666	.275	.70723	3.104

Source: SPSS Inc Data Processing Statistics 18

From the table of autocorrelation test results, the value of the Watson turbine is 3.104. At 5% alpha with $n=14$ and $k=(k-1) = 8-1=7$ for $dL=0.286$ and dU value = 2.848. Because the value of Durbin Watson lies between $4-dU$ and $4-dL$ with a statistical value of $4-dU < 4-dL$, namely $4-284 < 3.104 < 4-0.286=1.152 < 3.104 < 3.714$, it cannot be concluded or there is no autocorrelation problem, but it can still be continued for hypothesis testing.

Heteroscedasticity Test

Table 4. Proof of Heteroscedasticity Test

			X	Ares
Spearman's rho	X	Correlation Coefficient	1.000	.024
		Sig. (2-tailed)	.	.935
		14	14	14
	Ares	Correlation Coefficient	.024	1.000
		Sig. (2-tailed)	.935	.
		14	14	14

Source: Results of Data Processing SPSS Inc. PASW Statistics 18

Based on the table above, it shows that the probability value of the relationship between the observed data and the absolute residual value for each variable is far above the established significance level of 5%. Therefore, H_0 which states that there is no relationship between the independent variables and their absolute residuals is accepted. The results of testing this hypothesis can be concluded that the data obtained did not have heteroscedasticity.

Multicollinearity Test

Table 5. Multicollinearity Test Results

Model		Collinearity Statistics	
		Tolerance	VIF
1	(constant)		
	Economic Growth	.133	7.527
	The number of poor	.391	2.559

Source: SPSS Inc Data Processing Statistics 18

Based on the multicollinearity test output using VIF, it shows that the VIF coefficient for the independent variable is < 10 . Thus it can be stated that there is no relationship between the independent variables or multicollinearity does not occur.

T test

Table 6. Test Results t

Model		t	Sig.
1	(constant)	2.870	.028
	Economic Growth	-1.494	.035
	The number of poor	-.120	-.909

Source: SPSS Inc Data Processing Statistics 18

Based on the table above, it can be seen from the significance value that is equal to 0.035 with a level of $\alpha = 5\%$. If the economic growth significance is $< \alpha$ or $0.035 < 0.05$, it can be concluded that economic growth has a significant effect on the number of poor people in South Sulawesi Province.

Linear Regression Analysis

Table 7. Simple Linear Regression Test Results

Model		Unstandardized Coefficients	
		B	Std. Error
1	(constant)	45.250	15.766
	Economic Growth	-3.901	2.611
	The number of poor	-.574	4.795

Source: SPSS Inc Data Processing Statistics 18

Based on the coefficient values of the independent variables, a simple linear equation is obtained as follows:

$$Y = 42.250 - 3.901X$$

From the equation above it can be concluded:

1. $\alpha = 45.250$, meaning that without the influence of the variables studied, namely economic growth and the number of poor people in South Sulawesi is 45.25%. The interpretation of the results of the regression is that the number of poor people (Y) is 45.250 assuming the independent variable is considered constant.
2. $\beta_1 = -3.901$. The value of the regression coefficient of economic growth is -3.901. This shows that for every 1% economic growth, it will be followed by a decrease in the number of poor people by 3,901 people and vice versa for every 1% decrease in economic growth it will be followed by an increase in the number of poor people by 3,901 assuming other variables are held constant.

Discussion

The results of testing the economic growth hypothesis variable were found to have a significant influence on the number of poor people, under every increase in economic growth will reduce the number of poor people. This is in accordance with the results of research conducted by Arya Widiastuti (2010). The relationship between economic growth and the poor people number is in accordance with expectations of a trickle down effect, in which economic growth is believed to be able to overcome

development problems, including the problem of poverty. Economic growth shows an increase in output nationally, output will increase if the production's supporting factors also experience an increase both in quality and quantity. One of the production factors needed to increase output is labor. An increase in production means an increase in productivity, an increase in productivity means that labor income also increases. Increased income will increase the purchasing power of labor so that they are able to meet their needs.

From the demand side, South Sulawesi Province's economic growth is driven by the continued high consumption spending, both household consumption and government consumption. Meanwhile, trading activities, both exports and imports, played a less significant role as the production and selling prices of several commodities emerged as a result of the impact of the global financial crisis.

Based on economic growth data, it can be seen that economic growth in South Sulawesi Province changes every year. After the economic crisis that hit in 1998, the economic performance of South Sulawesi Province continued to improve. The role of the agricultural sector in the economy of South Sulawesi Province is still quite large even though it continues to decline until it experiences a deficit. This high role is supported by the food crops sub-sector. This shows that most of the South Sulawesi population still relies on food crop agriculture for their economy. Apart from agriculture, other sectors that made a large contribution were the trade, hotel and restaurant sector, the service sector and the manufacturing sector which each contributed 16.71% 6.72% and 12.5% (state in 2009). The poor people's number development in South Sulawesi Province is quite fluctuating. This is proven from the data, where in 2000 the number of poor people was at 1,198 (millions) which then increased in 2001 to 1,296.3 (millions). Another increase occurred in 2002 to 1,308.3 (million people) and decreased in 2003 to 1058.5 (million people). From 2004 to 2005, the number of poor people decreased at the level of 1,000.6 (millions) and 1,000.5 (millions) respectively. In 2006 the number of poor people increased to 1,112 (millions) and decreased successively from 2007 to 2013 which respectively anchored at 1,083.4 (millions), 1,031.7 (millions), 963.6 (millions) souls, 913.4 (millions), 916.4 (millions) 805.92 (millions), and 787.67 (millions).

The number and percentage of poor people in South Sulawesi decreased consistently during the 2006-2010 period. In 2010, the number of poor people in South Sulawesi amounted to 913 thousand people or nearly 12% of the total population. This number is smaller compared to 2006, where the number of poor people was 1.1 million people and 10,15 percent of the total population. Thus, currently, for every 9 residents in South Sulawesi, one of them is classified as poor. The percentage of poor people in South Sulawesi has always been below the national average during the 2006-2010 period.

However, the percentage decline of poor people nationally took place faster than in South Sulawesi. Indonesia decreased by an average of 4.46% per year. The implication is that in the next few years the percentage of poor people in South Sulawesi will be squeezed even more by the national

average. Implicitly, this fact also shows that on average other provinces experienced a relatively faster decline in poverty rates compared to South Sulawesi.

Relatively, the position of South Sulawesi nationally and regionally has not changed in the last 5 years. Nationally, South Sulawesi ranks 17th out of 33 provinces. Regionally, of the 6 provinces on the island of Sulawesi, South Sulawesi occupies the second lowest position after North Sulawesi. Gorontalo, which is the result of division from North Sulawesi, recorded the highest percentage of poor people on the island of Sulawesi. The number of poor people in South Sulawesi is high but the percentage is low. In terms of numbers, South Sulawesi has the highest population of poor people in Sulawesi. But the percentage is the second lowest after North Sulawesi. In 2010, the number of poor people in South Sulawesi reached 913 thousand people. The lift is two times larger than Southeast Sulawesi and four times that of North Sulawesi and Gorontalo.

However, the percentage of poor people in South Sulawesi is only 1.6% or only half of Gorontalo, where Gorontalo is the area with the highest percentage of poor people on the island of Sulawesi. The proportion of poor people living in rural areas is far greater than in urban areas. The number of poor people decline in rural areas has also been slower than in urban areas. In 2010, 87% of the total poor population lived in rural areas and 13% lived in urban areas. This number is slightly different from 2006 where 85% lived in rural areas and 15% lived in urban areas.

The average poor population in rural areas only decreased by 4% per year, while in urban areas it decreased by 7% per year. As a result, the distribution of poor people has changed slightly. The proportion of poor people living in rural areas tends to increase and vice versa in urban areas tends to decrease. The poverty depth index (P1) and poverty severity index (P2) in South Sulawesi showed a consistent decline during the 2006-2010 period. P1 decreased from 3.43 in 2006 to 1.91 in 2010 indicating that the average expenditure of the poor tends to be closer to the poverty line. Meanwhile, P2 decreased from 1.00 to 0.49 in the same period, indicating that the disparity in spending among the poor was narrowing or improving.

Income inequality in South Sulawesi has tended to increase in the last three years. This kind of trend also occurs at the national level. Economic growth which tends to increase and the open unemployment rate which tends to decrease has a positive impact on reducing the percentage number of poor people. However, the inequality of income distribution is indicated by the Gini coefficient increase, which tends to increase indicating that economic growth has provided greater benefits for the rich population or income group. The South Sulawesi population is only around 3.35% of the total population of Indonesia. From the total population that falls into the poor category, South Sulawesi contribute for 2.82% of the total poor population in Indonesia.

CONCLUSION

Based on the results of research analysis and discussion, it can be concluded that there is a significant relationship between economic growth and the number of poor people in South Sulawesi Province. This finding was obtained through statistical analysis which showed a significance value of 0.035 with an α significance level of 5%. The existence of a significance value that is smaller than the α level indicates that the relationship between economic growth and the number of poor people is statistically significant.

Thus, economic growth has a real impact on poverty levels in the region. These results support the hypothesis or assumption that when there is an increase in economic growth, this contributes to a decrease in the number of poor people. Therefore, the policy implications that support economic growth in South Sulawesi Province can be considered as a strategy to reduce poverty levels. Other factors may also influence poverty levels, and further research may be needed to understand more deeply the dynamics of the relationship between economic growth and poverty at the provincial level.

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