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Do Economic Growth, Income Distribution, and Investment Reduce Poverty Level?

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ABSTRACT

Poverty is a condition of the population's inability to meet a decent standard of living. Poverty is also a measure of success in the development of a country or region. This study proposes a hypothesis where economic growth, income distribution, and investment are considered to have a large enough impact on reducing poverty in Enrekang Regency. The data used in this study is secondary data in the form of time series data for the period 2011-2020. The data analysis technique used multiple linear regression analysis. The results of this study indicate that economic growth and income distribution have no significant effect on the poverty level in Enrekang Regency. Meanwhile, investment has a significant negative effect on the poverty level in Enrekang Regency, which means that an increase in multisectoral investment can reduce poverty in this region. So that one of the important things in this study is the hope that the level of labor-intensive investment in Enrekang Regency can continue to be increased in various economic sectors.

Keywords: *Economic Growth, Income Distribution, Investment, Poverty.*

INTRODUCTION

One of the goals of economic development is to create prosperity and prosperity through development in the economic sector. One of the goals of economic development is to reduce poverty. Poverty is a disease in the economy, so it must be cured or at least reduced. Therefore, efforts to eradicate ruins must be carried out comprehensively, covering various aspects of people's lives, and carried out in an integrated manner

The implementation of development programs with the spirit of Regional Autonomy is directed at regional development, especially in regions that have a relatively high poverty rate which continues to increase from year to year. Regional development is carried out in an integrated and kite manner according to the priorities and needs of each region with economic development goals and objectives that have been determined through long-term and short-term development, therefore, one of the main indicators of successful economic development is the poverty rate (Wijayanto, 2010).

Poverty in Indonesia is still dominated by rural areas. The Central Statistics Agency (BPS) released data in September 2018 that the number of poor people in Indonesia reached 9.66 percent or around 25.67 million people. Of this percentage, poverty in rural areas reaches 13.10 percent or around 15.54 million people, while in urban areas it is 6.89 percent or around 10.13 million people. Although accumulatively poverty in Indonesia is in the single digits, in reality, this number is still very large.

The average poor household has 4.63 household members. The poverty line is IDR 1,901,402/household/month (BPS, 2019). This means that every poor household in Indonesia supports family members ranging from 4-5 people per household both in urban areas and especially in rural areas. Meanwhile, casuistically, the number of dependents of poor families is greater than the aforementioned average.

An interesting phenomenon is that one of the regencies in South Sulawesi Province, namely Enrekang Regency, although this area is very productive in the agricultural sector, the poverty rate in this area is still quite high. The latest data released by the Central Statistics Agency (BPS) in 2019, that poverty in Enrekang Regency in 2018 reached 12.49 percent or around 22,530 people. The percentage of poverty in this area exceeds the national poverty rate and ranks 7th out of 24 districts/cities in South Sulawesi with the highest poverty percentage.

According to BPS (2016), poverty is the inability from an economic point of view to meet basic food and non-food needs as measured from the expenditure side. The inability to meet the minimum standard of living by the level of living is considered poverty (Todaro, 2006; Andiny, & Mandasari, 2017). Poverty arises because of the inability of some people to organize their lives to a level that is considered human. This condition causes a decrease in the quality of human resources so that their productivity and income are low.

One of the factors that affect the level of poverty is economic growth. Economic growth is an increase in the ability of an economy to create goods and services. High economic growth accompanied by growth results in all business sectors is urgently needed to reduce poverty levels. So to accelerate poverty reduction, economic growth must be increased (Sukirno, 2010). Meanwhile, Sen in (Todaro, 2006), argues that the problem of poverty is not only a matter of income alone but is related to the capabilities that must be possessed by a person in this case one of which concerns the problem of accessibility both to education, health and job opportunities.

The equitable distribution of income is something that needs to be considered in regional development. Alesina, & Rodric (Patta, 2012) suggest that the inequality of income distribution will adversely affect the decline in the welfare of the people of a region. The distribution of income reflects the equitable or unequal distribution of the results of the development of an area among the population. Enrekang Regency also experiences the problem of income distribution inequality, income distribution inequality is the difference in income between high-income groups and low-income groups. Inequality of income distribution is reflected in the Gini Ratio, if the Gini Ratio is close to zero, it indicates low inequality and if the Gini Ratio is close to one, it indicates high inequality.

One important factor that is seen as having a role in alleviating poverty is the level of capital formation in an area through increased investment. Investment is an expenditure that adds to the means of production and in the end, can increase income and will increase economic growth. In addition, it is determined that there are incentives to invest in funds obtained from the community. Foreign investment and domestic investment are the most important sources for developing regions and can make a substantial contribution or contribution to development. Yolanda et al (2018) in their research found that investment influences the poverty level, while economic growth and government spending do not affect the poverty level.

Several related studies that have similarities and differences in the results of research on Economic Growth, Income Distribution, and Investment on Poverty Levels include; Safuridar, (2017). His research shows that economic growth hurts poverty. Meanwhile, Nurlina & Chaira (2017) The results of their research find that economic growth has a negative effect on income distribution as seen from the Gini ratio. Kurniasih & Dosinta (2018) The results show that economic growth has a positive but not significant effect on reducing income inequality. Nadhifah (2018) The results of his research partially find that economic growth, income distribution inequality, and unemployment have a positive and significant effect on poverty levels

MATERIAL AND METHOD

This study uses an explanatory approach. Explanatory research aims to explain the relationship between two or more variables. The data used in this study are quantitative data and the data source in this study is secondary data in the form of time series data for the 2011–2020 period. The research technique used is documentation and literature study of journals and other literature. the research was conducted in Enrekang Regency. The data analysis technique used is multiple linear regression analysis using SPSS version 23 software. The formula used to test the whole in this study is as follows:

$$PovryRt_t = \beta_0 + \beta_1\, EcoGrw_t + \beta_2\, GnRtio_t + \beta_3\, Ln\ Inves_t + \mu_t \qquad (1)$$

Where: *PovryRt* is Poverty Rate (Percent); *β0* is a Constant; *β1, β2, β3* are the values of the Regression Coefficient; *EcoGrw* is Economic Growth (Percent); *GnRtiot* is the Income Distribution/gin ratio (Percent); *Inves* is the amount of investment (Rupiah); *t* is the Time Series/cross-section (year); *μ* is the Error term

RESULT AND DISCUSSION

A data normality test is used to see if normal or abnormal data is to be analyzed. A good regression model is a normal distribution. To see the normality of the data, a graphical approach can be used, namely the Normality Probability

Plot. It can be seen that the data (dots) spread around the diagonal line and follow the direction of the diagonal line, so the regression model fulfills the assumption of normality.

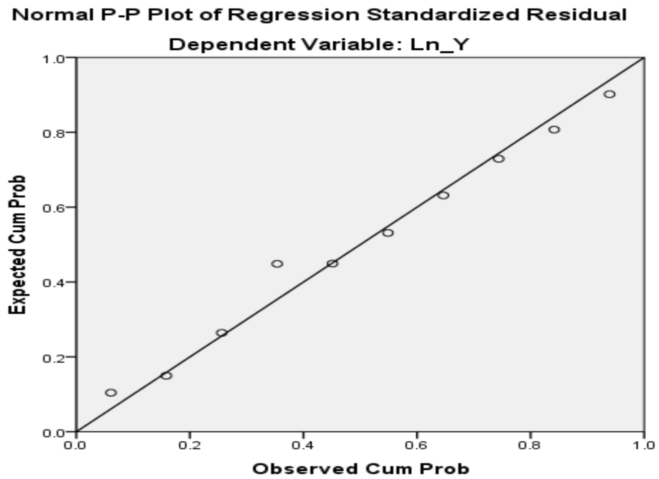

Figure 1. Normality test results
Source: SPSS 23 output, data will be processed in 2022

The results of the multicollinearity test in this study can be seen in Table 2 as follows

Table 1. Multicollinearity test results

Variable Independent	*Tolerance*	*VIF*
X1	.614	1.627
X2	.867	1.153
X3	.664	1.507

Source: SPSS 23 output, data will be processed in 2022

Based on Table 1. It can be seen that the VIF value of each variable is less than 10, namely economic growth (X1) at 1.627, income distribution (X2) at 1.153, and investment (X3) at 1.507. The tolerance value of each variable is greater than 0.1, namely economic growth (X1) of 0.614, income distribution (X2) of 0.867, and investment of (X3) of 0.664. So it can be concluded that there is no multicollinearity between the independent variables.

The heteroscedasticity test is used to see whether in a regression model there is an inequality of variance from the residuals of one observation to another. A good regression model is that there is no heteroscedasticity. Detecting the existence of heteroscedasticity can be done by using Scatterplot. One way to detect whether there is heteroscedasticity is to see whether there is a certain pattern on the Scatterplot graph between the predicted value of the dependent variable (SRESID) and its residual (ZPRED). The results of the heteroscedasticity test are shown in Figure 2 as follows:

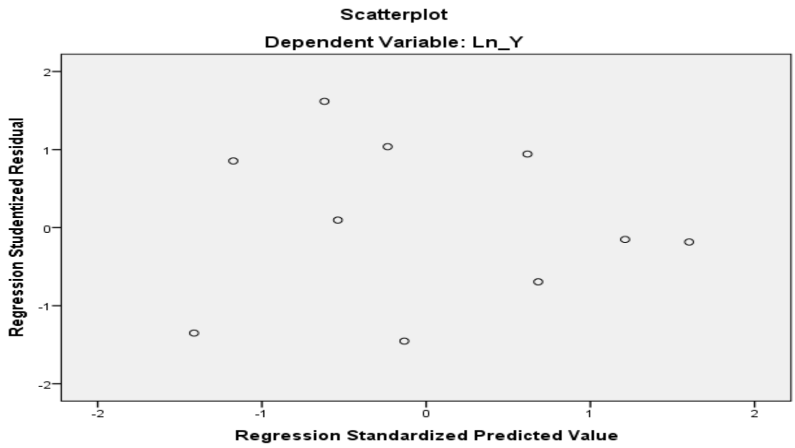

Figure 2. Heteroscedasticity test
Source: SPSS 23 output, data processed in 2022

The autocorrelation test is intended to ensure that in a linear regression model there is a correlation between the confounding error in period t and the error in period t-1 or the previous period. If there is a correlation, it is called an autocorrelation problem. One of the methods used to detect the presence or absence of autocorrelation is the Durbin-Watson test. If the Durbin-Watson value is close to 2, it indicates that there is no autocorrelation.

Table 2. Autocorrelation test results

Model	R	R Square	Adjusted R Square	Std. An error in the Estimate	Durbin Watson
1	.895[a]	.800	.701	.02790	2.171

Source: SPSS 23 output, data processed in 2022

Based on the results of data processing, it was found that the Durbin Watson (DW) value was 2.171, so it can be said that there is no autocorrelation.

Testing the hypothesis in this study uses multiple regression analysis to determine the effect of the variables Economic Growth (X1), Income Distribution (X2), and Total Investment (X3) on the Poverty Level (Y) in Enrekang Regency.

Table 3. Multiple linear regression results

Independent Variable	B	T	Sig
X1	.019	.874	.416
X2	-.607	-1.882	.109
X3	-.104	-3.560	.012
(Constant)			3.781
R Square			.800
Adjusted R Square			.701

Source: SPSS 23 output, data processed in 2022

Based on Table 3, a multiple regression equation can be made based on the value of each coefficient obtained as follows:

$$Y = 3{,}781 + 0{,}019\, X_1 - 0{,}607\, X_2 - 0{,}104 X_3 \qquad (2)$$

Table 3 above shows that the significant value of the economic growth variable (X1) is 0.416, Income Distribution (X2) is 0.109, and the significance value for the investment variable is 0.012. Based on the significance level used, namely 0.05 with a 95 percent confidence level, it can be concluded that only the significance value of the investment variable (X3) has a significant effect on the poverty rate in Erekang Regency, while other variables do not have a significant effect on reducing the poverty rate in Enrekang Regency.

The coefficient of determination (R square) is 0.800, this indicates that the influence of the independent variables namely economic growth, income distribution, and investment on the poverty level is 80 percent while the remaining 20 percent is influenced by other factors not included in this study. While to reduce the bias of the regression equation, the Adjusted R square value shows a value of 0.701, which means that the model used in this study can explain the relationship between variables by 70 percent, the rest is influenced by other factors outside the model observed.

The constant coefficient value (β0) of 3.781 means that if economic growth, income distribution, and investment are ignored in the observations or have a value of 0 then the poverty rate in Enrekang Regency is a constant value. While the value of the regression coefficient of investment (β3) is -.104 means that if the level of investment increases by 1 percent, the poverty rate in Enrekang district will decrease by 0.104 percent

Impact of economic growth on poverty level

The results of this study indicate that economic growth has no significant effect on the level of poverty in the Enrekang Regency. The economic structure of Enrekang Regency is still dominated by the agricultural sector. The average economic growth in Enrekang Regency during the 2010-2020 period was around 6 percent annually, except for 2020 due to the Covid-19 pandemic, economic growth in this region contracted to 1.25 percent, the slowdown in economic growth significantly impacted employment absorption in all business field. This condition also has a direct impact on increasing the poverty rate in Enrekang Regency in particular, and in South Sulawesi in general.

During the observation period, the average business sector proliferated. however, in terms of business field contribution, the agricultural sector makes a significant contribution to the formation of GRDP in this region. In general, there has not been a shift in the economic structure in this region, so the economy tends to rely more on the agricultural sector. Even though this area is very prospective for the agricultural sector, relying on this sector as the main driver of the economic field is not good enough, because this sector is more likely to produce seasonal unemployment. So that economic growth in Enrekang Regency which is driven by the agricultural sector has not been able to directly reduce the poverty rate, especially in rural areas where more poor families depend on agricultural products. The results of this study are research conducted by Nurlina & Chaira (2017) who found that economic growth has a negative and insignificant effect on income distribution as seen from the Gini ratio.

Impact of inequality of income distribution on poverty level

Based on the results of the research that has been done, show that the distribution of income has no significant effect on the poverty level in Enrekang Regency. This means that if the inequality of income distribution decreases, it does not affect the increase or decrease in the poverty level significantly. This is because the impact of economic growth that reduces the inequality of income distribution in urban areas has not been able to optimally reduce poverty in rural areas.

The benefits of reducing inequality in income distribution are only felt by certain groups. The poor do not get additional income from economic growth, which causes rural residents to remain in a cycle of poverty. There is a need for equal distribution and expansion of employment opportunities in all economic sectors that can absorb a lot of productive workers in rural areas.

The results of this study are supported by research conducted by Tumiarsih (2019), the inequality of income distribution is not significant to the poverty level in East Java. In line with these findings, Indrawati (2020) also revealed the results of her research that inequality in income distribution has no significant effect on poverty levels.

Effect of investment on poverty level

The results of the research that has been done show that investment has a negative and significant effect on the poverty rate in Enrekang Regency. This means that if investment increases, the poverty rate in Enrekang Regency will decrease.

This role stems from three important functions of investment activity, namely, first, investment is a component of aggregate spending, so an increase in investment will increase aggregate demand, national income, and employment opportunities, second, namely the increase in capital goods as a result of the investment, will increase production capacity, and third, namely, Investment is always followed by technological developments.

This supports the results of research conducted by Yolanda et al., (2018), which states that the higher the investment, the lower the poverty rate. In line with these findings, Nizar et al., (2013) in his research revealed that there was a negative and significant effect between investment and poverty levels. Likewise, the results of research conducted by (Ratih et al, 2017; Prasetyawan, 2017) found a negative and significant relationship between investment and poverty levels.

Research conducted by Gomanee et al, (2003); Mosley et al. (2004) find that higher government spending on education, agriculture, and housing, and facilities (water, sanitation, and social security) all have negative and statistically significant impacts on poverty. so is the case with research conducted by Fan et al. (2002), on the effect of public spending on rural poverty across Chinese provinces, which distinguishes between spending on rural education, targeted poverty alleviation, telecommunications, irrigation, power generation, agricultural R&D, and rural roads. They find that spending on rural education has the greatest impact on poverty, followed by spending on agricultural R&D and then by spending on rural roads, (Anderson, et al, 2006).

CONCLUSIONS

Based on the results of research and discussion, it can be concluded that partially the variables of economic growth and income distribution have no significant effect on the poverty level in Enrekang Regency. The results of this study found a negative and significant influence between investment on poverty levels in Enrekang Regency. The level of capital formation or investment that continues to increase every year has a significant impact on reducing poverty in this region. Therefore, the results of this study are expected to encourage the Enrekang Regency Government to continue to increase investment in various economic business fields, and of course, labor-intensive investments. In this case, the investment posture supports the development of infrastructure that encourages community economic activity and creates new jobs for the local community.

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