
THE EFFECT OF INCOME DISTRIBUTION, HUMAN DEVELOPMENT INDEX, AND ECONOMIC GROWTH ON POVERTY

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Abstract

This study aims to examine the effect of income distribution inequality, the human development index, and economic growth on poverty. The study was conducted on all provinces in Indonesia in 2016. Inequality in income distribution, human development index, and economic growth are independent variables, while poverty is the dependent variable for the study. The data used in the form of secondary data and processed using multiple linear methods. The test results show that the inequality of income distribution and the human development index has a significant effect on poverty, while the effect of economic growth on poverty cannot be proven empirically.

Key words : Poverty, Income Distribution, Human Development Index, Economic Growth

INTRODUCTION

Increasing economic development is a major problem for every country. Good economic development can have a positive impact on people's welfare, so this must be done in a sustainable manner with the coverage of all aspects of people's lives. As stated by Kakwani and Son (2003), the goal of development is to reduce the level of poverty achieved through economic growth and or income distribution. Economic growth is an indicator of successful development. Keywords: poverty, income distribution, human development index, and economic growth.

Human resource development cannot be separated from economic development efforts that lead to poverty alleviation. According to Santika (2014) the level of human resource development has an influence on the ability of the population to manage various resources to encourage economic growth. Human resource development can produce a quality workforce. A quality workforce will create new jobs and increase the production of goods and services. Furthermore, residents who are already working have income that can be used to buy the products needed, so that the demand for goods and services increases. This condition is very healthy for the economy which in turn has an impact on increasing economic growth.

THEORETICAL BASIS

According to the Central Statistics Agency (BPS), poverty is the inability to meet the minimum standard of basic needs which includes both food and non-food needs. Living in poverty is not only living in a lack of money and low income, but also in other matters such as low levels of health and education, unfair treatment in the law, vulnerability to the threat of crime, powerlessness in determining their own path of life (Suryawati, 2005).

According to Arsyad (2010) poverty can be divided into two types, namely :

1. Absolute Poverty

Absolute poverty is determined according to the income ability of a community to meet minimum basic needs. If the minimum basic needs cannot be fulfilled, then the person concerned is classified as a poor person.

2. Relative Poverty

This poverty is due to income distribution. Even though a person has been able to meet the minimum basic needs, if his income is still much lower than the surrounding community, then that person is still categorized as a poor person.

The poverty measurement carried out by BPS uses the concept of the ability to meet basic needs (basic needs approach). In this case, people who are called poor are those who are unable to meet their basic needs.

Conceptual Framework

This study examines the effect of income distribution inequality, the Human Development Index (HDI) and economic growth on poverty. Poverty as the dependent variable, and inequality in income distribution, Human Development Index (HDI) and economic growth as independent variables.

The research conceptual framework can be described as follows :

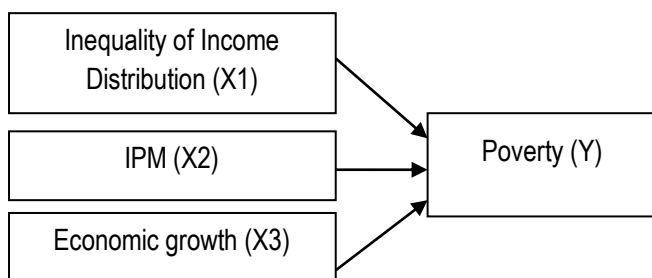


Figure 1. Conceptual Framework

RESEARCH METHODOLOGY

This research is a quantitative descriptive study. The data used are secondary data in the form of Gini ratio data, Human Development Index (HDI) data, economic growth data, and poverty data for all provinces in Indonesia in 2019. The data is obtained from the Central Statistics Agency (BPS).

RESULTS AND DISCUSSION

Classic Assumption Test

Normality Test

The results of the normality test are shown in Table 1 below :

Table 1. Normality Test Results
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		34
Normal Parameters ^{a,b}	Mean	,0000000
	Std. Deviation	3,94615516
Most Extreme Differences	Absolute	,069
	Positive	,069
	Negative	-,063
Kolmogorov-Smirnov Z		,402
Asymp. Sig. (2-tailed)		,997

a. Test distribution is Normal.

b. Calculated from data

Based on Table 1, it is known that the Asymp. Sig. (2-tailed) of 0.997 is greater than 0.05 ($0.997 > 0.05$). Thus it can be concluded that the research data is normally distributed.

Multicollinearity Test

The multicollinearity test results are summarized in Table 2 below :

Table 2. Multicollinearity Test Results

Variabel	VIF	Kesimpulan
Inequality of income distribution	1,263	Multicollinearity free
IPM	1,095	Multicollinearity free
Economic growth	1,346	Multicollinearity free

From Table 2 above, it is known that the VIF value is <10 . This indicates that the model is free from multicollinearity problems.

Heteroscedasticity Test

The results of the heteroscedasticity test are summarized in Table 3 below :

Table 3. Heteroscedasticity Test Results

Variabel	Sig.	Kesimpulan
Inequality of income distribution	0,613	Heteroscedasticity free
IPM	0,512	Heteroscedasticity free
Economic growth	0,969	Heteroscedasticity free

From Table 3 above, it is known that the significance value of each independent variable is greater than 0.05. This means that the research model is free from heteroscedasticity problems.

Hypothesis Test

Test The Coefficient of Determination (Adjusted R²)

The results of the coefficient of determination test can be seen in Table 4 below :

Table 4. The Results Of The Determination Coefficient Test
Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of The Estimate
1	,765 ^a	,586	,544	4,13876

a. Predictors: (Constant), Pertumbuhan Ekonomi, IPM, Ketimpangan Distribusi Pendapatan

b. Dependent Variable: Kemiskinan

From Table 4 above, it is known that the Adjusted R2 value is 0.544. This means that the poverty variable can be explained by the variable inequality of income distribution, HDI and economic growth of 54.4%, while the remaining 45.6% is explained by other variables not included in the model.

Statistical Test F

The results of the F statistical test can be seen in Table 5 below :

Table 5. Statistical Test Results F
ANOVA^b

Model	df	Mean Square	F	Sig.
1 Regression	3	241,966	14,126	,000 ^a
Residual	30	17,129		
Total	33			

a. Predictors: (Constant), Pertumbuhan Ekonomi, IPM, Ketimpangan Distribusi Pendapatan

b. Dependent Variable: Kemiskinan

Table 5 above shows the significance probability value of 0.000. This means that the distribution of income, HDI, and economic growth simultaneously affect poverty.

t Test

The t test results can be seen in Table 6 below :

Table 6. t Test Results
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	57,458	14,132		4,066	,000
Ketimpangan Distribusi Pendapatan	71,359	23,942	,394	2,980	,006
IPM	-1,029	,182	-,697	-5,664	,000
Pertumbuhan Ekonomi	-,183	,413	-,060	-,442	,662

a. Dependent Variable: Kemiskinan

Regression equation :

$$Y = 57.458 + 71.359X_1 - 1.029X_2 - 0.183X_3$$

Table 6 shows the probability of the significance of the income distribution inequality variable of 0.006. The probability of this significance is less than 0.05. This means that inequality in income distribution has a significant effect on poverty. Thus the first hypothesis is accepted.

The IPM variable has a significance probability of 0.000. This significance probability figure is less than 0.05. This shows that the Human Development Index (HDI) has a significant effect on poverty. Thus the second hypothesis is also accepted.

Table 6 shows the probability of the significance of the economic growth variable of 0.662. This significance probability value is greater than 0.05. This means that economic growth does not have a significant effect on poverty. Therefore, the fourth hypothesis is rejected.

Discussion

Effect of Income Distribution Inequality on Poverty

The test results show that the inequality of income distribution has a significant effect on poverty. According to statistical tests, inequality in income distribution has a positive relationship with poverty. This means that the higher the inequality of the income distribution of a region, the higher the poverty rate in that area. Inequality in income distribution can cause certain population groups, in this case the poor, cannot enjoy the benefits of economic development. As a result, the poor have no opportunity to improve their quality of life. They do not have the resources to maintain their health, enjoy an education that can ensure they increase productivity. The benefits of economic development are largely controlled by the rich, so that the rich will get richer, while the poor will get poorer. The results of this study indicate that to overcome poverty, equity must be increased. The poor must be given a portion of the benefits of economic development so that they can improve their quality of life.

The Influence of The Human Development Index (HDI) on Poverty

The test results show that HDI has a significant effect on poverty. Based on statistical tests, HDI has a negative relationship with poverty. This means that the higher the HDI of an area, the poverty in that area will decrease. A high HDI indicates good human resource development. Human resource development is said to improve if each resident has additional income from the results of economic development. Every resident also enjoys health insurance and education. Thus, the population is getting more prosperous and the poverty rate decreases.

The Effect of Economic Growth on Poverty

This study did not find empirical evidence that economic growth has an effect on poverty. The results of this study are not in accordance with initial expectations, namely that economic growth has an effect on poverty. The argument underlying this assumption is that the benefits of economic growth should be able to increase the amount of income of each population, so that they can meet their basic needs. However, this cannot be proven.

The fact that economic growth has no effect on poverty is still acceptable. The level of even distribution of income is the reason this happens. According to BPS data, Indonesia's Gini coefficient in 2016 was 0.394. This figure shows that there is a fairly high distribution inequality in Indonesia. Inequality of income distribution is said to be high if the Gini coefficient value is greater than 0.35 (Todaro, 2003). The high inequality of income distribution causes certain groups in this case the rich population to control most of the benefits of economic growth. As a result, the poor cannot enjoy the benefits of economic growth that can increase their income. The fact that almost 80% of national wealth is controlled by 10% of the rich (Gatra, 2017) shows that the unequal distribution of income causes an increase in economic growth that does not have an impact on reducing poverty. Imagine, 90% of the population only controls 20% of the national wealth. This means that 20% of the benefits of economic growth are shared with 90% of Indonesia's population, while the remaining 80% is enjoyed by the rich 10%. The share earned by the poor is very small, so it makes sense that they cannot escape the poverty line. For this reason, it is very important to increase the distribution of income to alleviate poverty.

CONCLUSION

Based on the results of the tests that have been carried out, the following conclusions can be drawn :

1. Inequality in income distribution has a significant effect on poverty. The results of statistical tests show that inequality in income distribution is positively related to poverty.
2. The Human Development Index (HDI) has a significant effect on poverty. The results of statistical tests show that HDI is negatively related to poverty.
3. This study does not find empirical evidence that economic growth affects poverty. This occurs because the inequality of income distribution in Indonesia is very high.

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