

DETERMINATION OF THE HUMAN DEVELOPMENT INDEX AND AFFECTING FACTORS IN EAST JAVA PROVINCE 2016-2020

Endrahadi Fikri Putra Ramadhan¹ and Eni Setyowati¹

¹Universitas Muhammadiyah Surakarta, Jl. A. Yani Pabelan Tromol Pos I Kartasura
Surakarta 57102 , Indonesia

endrahadi1216@gmail.com ; es241@staff.ums.ac.id

ABSTRACT

The achievement of economic development can be seen in the success of human development. United Nation Development Program (UNDP) (2008) made the Human Development Index indicators to measure progress in human development. Human development index in 38 districts/cities in East Java have to be analyzed because they include lower-medium category. The purpose of this study is to test and analyze the economic growth, poverty, General Allocation Fund, and minimum wages partially and simultaneously on the human development index in 38 districts/cities in East Java. The method used is the panel data regression. The conclusion that is simultaneously variable economic growth, poverty, General Allocation Fund, and minimum wages have a significant effect on the human development index in 38 districts/cities in East Java while partially economic growth, the General Allocation Fund and wages are also a significant effect on human development index in 38 districts/cities in East Java.

KEYWORDS: *Economic growth, poverty, General Allocation Fund, and minimum wages, human development index, panel data regression*

1 INTRODUCTION

The achievement of economic development can be seen in the success of human development. Human development is defined as a process for expanding more choices to the population through empowerment efforts that prioritize improving basic human abilities so that they can fully participate in all fields of development (BPS, 2011).

Human development is an important issue in economic development because it involves human quality so it needs attention. There are 2 reasons underlying human development that need attention (Ginting et al, 2008). First, many developing countries have succeeded in achieving high economic growth, but have failed to reduce the human development gap. Second, human resources as input in the process of economic growth, if human development is successful, the quality of human resources will be better so that it can encourage accelerated economic growth.

The new growth theory emphasizes the importance of the government's role, especially in improving the quality of human resources (Suliswanto, 2010). Improving the quality of human resources can be demonstrated through increasing one's knowledge and skills. Increased knowledge and expertise will be able to encourage an increase in a country's productivity so that it has an impact on economic performance (Suliswanto, 2010).

Several important factors in development that are very effective for human development are education and health (BPS, 2008). Education and health are basic human needs that need to be possessed in order to be able to increase their potential. The higher the basic capability of a nation, the higher the opportunity to increase the nation's potential. The demand for basic capabilities is felt to be getting higher, if it does not become a demand, the nation will be unable to compete with other more advanced nations (BPS, 2008).

Economic growth is now seen as a variable that has a role in driving and encouraging human development. Economic growth and human development are interrelated and contribute to each other (Anggraini, 2012). UNDP (2011) reveals that the quality of human development can increase if it is supported by high economic growth and balanced with income distribution so that economic growth will be very effective in improving human development. The contribution of economic growth to human development is through government revenues so that government revenues increase which can then be invested in human development (Anggraini, 2012).

Poverty is a problem in development that can affect the human development index. Poverty can also have a fairly serious effect on human development because the problem of poverty is a complex problem that actually stems from the purchasing power of people who are unable to meet basic needs so that other needs such as education and health are neglected (Mirza, 2012). This makes the human development gap between the two large and in the end the HDI achievement target set by the government is not realized properly.

Special Allocation Funds are funds sourced from the APBN which are allocated to certain regions with the aim of helping to fund special activities which are regional affairs and in accordance with national priorities. DAK is intended to help finance special activities in certain regions which are regional companies in accordance with national priorities, in particular to finance the needs for basic public service facilities and infrastructure that have not reached certain standards or to encourage the acceleration of regional development in Law Number 33 of 2004. (Halim 2014: 16). The increase in DAU will increase the standard of living for the community so that purchasing power also increases. The increase in purchasing power has an impact on the increase in the Human Development Index.

The minimum wage policy is a wage system that has been widely applied in several countries, which basically can be seen from two sides (Sulistiawati, 2012). First, the minimum wage is a means of protection for workers to maintain that the value of the

wages received does not decrease in meeting the needs of daily life. Second, a means of protection for companies to maintain worker productivity (Simanjuntak, 1992 in Gianie, 2009). The regional minimum wage is a component of the income of a person living in an area so that the wage level is one indicator that can reflect the welfare of the people of a country. An increase in the regional minimum wage will increase the need for a decent living so that a decent standard of living will also increase. As a result of the increase in the minimum wage received, people's purchasing power has increased so that it has a positive impact on the human development index . The minimum wage is also one of the considerations for investors who want to invest in an area, especially investors who want to build factories or industries that absorb a lot of labor. The higher the regional minimum wage of a region, the higher its economic level (Bappeda. 2010).

Hukom (2015) conducted research on the human development index for the period 2006-2013 in the province of Central Kalimantan. The purpose of the research conducted by Hukom (2015) is to describe the development of the Human Development Index (IPM) in Central Kalimantan Province in 2006- 2013 and to analyze the effect of the level of capital expenditure, economic growth and poverty on the Human Development Index (IPM) in Central Kalimantan. The research method used is panel data regression. The dependent variable is the Human Development Index (HDI) while the level of capital expenditure, economic growth and poverty are independent variables. The results obtained are that capital expenditures have a positive and significant effect on the Human Development Index (IPM) in Central Kalimantan, economic growth has a positive and significant impact on the Human Development Index (HDI) in Central Kalimantan, and poverty levels have a negative and significant impact on the Human Development Index (HDI) in Central Kalimantan.

The human development index in this study is influenced by economic growth, GAF, poverty, and minimum wages. Economic growth is used as a variable that affects the human development index because economic growth is seen as a variable that has a role in driving and encouraging human development. This study, it was decided to use the average human development index data for the 2016-2020 period because in 2016-2020 BPS has used the new human development index calculation methodology. Two reasons are used as the basis for changing the methodology for calculating HDI (BPS, 2015). First, the literacy rate is no longer relevant in measuring education because it cannot fully describe the quality of education, so it is replaced by the expected length of schooling and the average length of schooling. The literacy rate in most regions is already high, so it is not possible to properly differentiate the level of education between regions. In addition, GDP per capita is replaced with GNI per capita because GDP per capita cannot describe the income of the people of a region. Second, the use of the arithmetic mean formula in calculating HDI illustrates that low achievement in one dimension can be covered by high achievement in other dimensions

2 MATERIALS AND METHODS

The data used in this study is a type of secondary data. The type of secondary data used consists of two types of data, namely periodic data (time series) and cross section data. Periodic data namely data based on the period of occurrence or from time to time, in this study used data valid for 5 years starting from 2016-2020. The areas used in this study are 38 district/cities in East Java. The research approach used by the author in solving the problem formulation is to use a quantitative approach, namely research that focuses on hypothesis testing based on model used either test) or jointly the analytical individually (t (F test). A quantitative approach is used to see whether the results of the analytical model used are statistically (significant) or not. In this study the authors used a statistical method approach with panel data regression models. The author also uses views 10 Software to perform panel data regression.

$$IPMit = \beta_0it + \beta_1KMSit + \beta_2PDRBit + \beta_3DAUit + \beta_4UMPit + \mu it$$

where:

HDI = Human Development Index (%)

KMS = Poverty

PDRB = Economic Growth

DAU = General Allocation Fund

UMP = Provincial Minimum Wage (%)

i = Districts

t = Year 2016-2020

β = Constants

$\beta_1, \beta_2, \beta_3, \beta_4 = \mu$ Regression Coefficient = Error

2 RESULTS AND DISCUSSION

3.1 Classic assumption test

3.1.1 Normality Test

In this study, the normality test of the residuals used the Jarque Bera (JB) test. In this study, the significance level used. The basis for decision making is to look at the probability numbers from the JB statistics, with the following conditions.

If the probability value is 0,05, the the assumption < 0,05, then the assumption of normality is not fulfilled.

Figure 3.1 Normality Test

Note that based on Figure 3.1, it is known that the probability value of the JB statistics is 0,606501. Because the probability value of 0,606501, is greater than the significance level, which is 0,05. This means that the assumption of normality is met.

3.1.2 Multicollinearity Test

The results of the multicollinearity test, it can be concluded that there are no symptoms of multicollinearity between the independent variables. This is because the correlation value between independent variables is not more than 0.9 (Ghozali, 2013:105).

3.1.3 Autocorrelation Test

The value of the Durbin-Watson statistic is 1.994336. Note that because the Durbin-Watson statistic is between 1 and 3, i.e. $1 < 1.994336 < 3$, the non- autocorrelation assumption is met. In other words, there is no high autocorrelation symptom in the residuals.

3.1.4 Heteroscedasticity Test

It is known that the Prob Obs*R- Squared value is $0.3496 > 0.05$, which means that there is no heteroscedasticity.

3.1.5 Chow Test

The decision-making rules for the hypothesis are as follows. If the probability value of Chi- square cross-section < 0.05 , then it is rejected and accepted If the Chi-square cross-section probability value is 0.05, then it is accepted and rejected.

Based on the results of the Chow test in Table 4.5, it is known that the probability value is 0.0047. Because the probability value is $0.0047 < 0.05$, the estimation model used is the fixed effect model (FEM)

3.1.6 Hausman Test

If the random cross-section probability value is 0.05, then it is accepted and rejected.

Based on the results of the Hausman test, it is known that the probability value is 0.0003. Because the probability value is $0.0003 < 0.05$, the estimation model used is the fixed effect model (FEM).

3 CONCLUSION

The human development index , the following conclusions can be drawn:

1. The first hypothesis shows that the variables of economic growth, poverty, DAU, and the minimum wage simultaneously have a significant effect on the human development index in 38 districts/cities in East Java.

2. The second hypothesis partially shows that:
 - a. The economic growth variable partially has a positive and significant effect on the human development index in 38 regencies/cities in East Java.
 - b. The DAU variable partially has a positive and significant effect on the human development index in 38 districts/cities in East Java.
 - c. The minimum wage variable partially has a positive and significant effect on the human development index in 38 districts/cities in East Java.
 - d. The poverty variable partially has a negative but not significant effect on the human development index, in 38 districts/cities in East Java.

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