

# The Influence of School Participation Rates and Poverty on the Human Development Index in Indonesia 2019

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**ABSTRACT.** Quality of education becomes one of the problems to implement national education in Indonesia, this is proved by the low of human capital index or human resources index (SDM), Indonesia was ranked 87th out of 157 countries in HCI published by world bank in 2018. Indicator to measure the quality of the human resources existing in Indonesia is human development index (HDI). Human development index (HDI) is an important measurement recognized internationally to describe the success of human development. Therefore, develop HDI has to become an important highlight to determine development policies. Many factors influence human development index in Indonesia, there are school participation rates and poverty. The goals of the research were analyze the influence of school participation rates and poverty on the human development index in Indonesia 2019. Data used in this research was secondary data obtained from national statistical agency. Analysis method used in this research were descriptive and quantitative. Analysis tool used to analyze the influence was cross section data by E-Views 9. Based on the results of data analysis showed that school participation rates and poverty influence the human development index in Indonesia 2019. Based on the results of the research, it is hoped that the government and society must make efforts to increase the school participation rates and to decrease the poverty so HDI will increase and gives impacts on increasing the quality of national education in Indonesia.

**Keywords:** *human development index; poverty; and school participation rates.*

## 1. INTRODUCTION

The development paradigm that is currently developing is human resources development as seen by the quality of human life in each country. One of the benchmarks used in seeing the quality of human life is human development index (HDI) (Dewi, 2017). HDI is a reflection of the human development achievement in the long term, IPM as indicators of the other side of development, not only measuring economic outcomes in the short term, but also human development index (HDI) explains how population can access development results to get incomes, education, health, and etc (BPS, 2020: 185). HDI is informations about budgets and programs of

event implemented effectively thus can be used as evaluation material for development policy makers. For government, human development index (HDI) is strategic data because it is used as performance measurement, and HDI can be used as one of the way to monitor areas that need attention or encouragement in order to reach development targets (Fauzan, et al., 2020). Human development index in Indonesia continuous to increase, started from 2015 until 2019 amounting to 69.55%, in 2016 amounting to 70.18%, in 2017 amounting to 70.81%, in 2018 amounting to 71.39%, and 2019 amounting to 71.92% (Figure 1.).

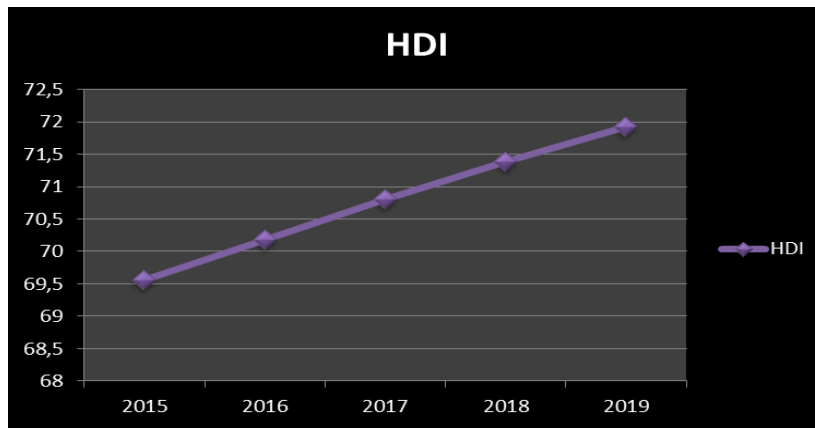


Fig1. Human Development Index in Indonesia (BPS, 2020)

Although the Indonesian HDI as a whole has increased, the problem is that the HDI rates are quite different between several provinces in Indonesia. The lowest percentage of human development index in Indonesia 2019 is Papua Province 60.84% and the highest percentage of human development index in Indonesia 2019 is DKI Jakarta with the percentage of human development index of 80.76%. The factor thought to influence HDI is the quality of education. Quality of education becomes one of the problems to implement national education in Indonesia, this is proved by the low of human capital index or human resources index (SDM), Indonesia was ranked 87th out of 157 countries in HCI published by world bank in 2018. Education is one of the important aspects in measuring the quality of human life because the higher the level of education of a person, the knowledge and expertise will also increase so that it can encourage to increase work productivity. Education makes a large enough contribution to socioeconomic development by increasing the cognitive, affective and psychomotor domains so education is able to create a quality workforce (Kusumaningrum, 2018).

The indicator used to measure the level of education is the school participation rate for ages 16-18 years. Several previous studies on HDI, stated that the influencing variable on HDI is school participation rates (APS). Based on Hanifah's results of her research (2019) it shows that school participation rate has significant positive effect on the human development index. Besides that, the results of other research conducted by Nurmasari, Ispriyanti & Sudarno (2017) shows that human development index (HDI) in Central Java influenced by factor of school participation rates (APS) in senior high school level. Based on the publication of The Central Bureau of Statistics Republic of Indonesia (BPS, 2020), school participation rates in Indonesia continuous to increase (Figure 2.). The lowest percentage of school participation rates in Indonesia 2019 is Papua Province 63.50% and the highest percentage of school participation rates in Indonesia 2019 is DI Yogyakarta with the percentage of school participation rates of 88.97%.

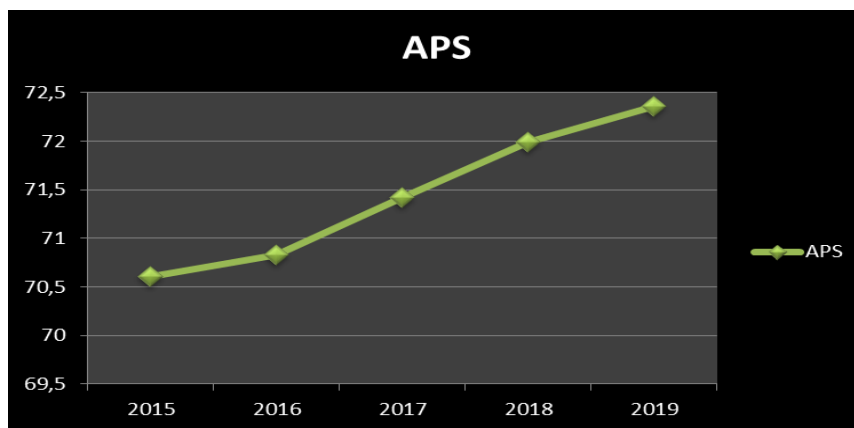


Fig 2. School Participation Rates in Indonesia (BPS, 2020)

Another factor thought to affect HDI is poverty. According to the results of research conducted by Kusumaningrum (2018), it shows that the number of poor people is significant and has a negative effect on the human development index. Poverty is one of the problems that usually happen in a country. The fight against poverty, as well as the goal of poverty reduction, is really a long-term effort. Poverty reduction is a difficult mission in many countries, however, the risk of falling back into poverty is also quite high if governments are not cautious about their policies. The general formula for poverty reduction can be understood by

the efforts to improve productivity, increase capital, improve the quality of education, etc (Tung, 2019). Indonesia as one of the countries in the developing category considers the problem of poverty and seeks a way out to be implemented in government policies. Poverty can be seen from the percentage of poor population, the percentage of poor population in Indonesia 2019 is 9.22%. The percentage of poor population in Indonesia continuous to decrease started from 2015 until 2019 namely 11.13%, 10.70%, 10.12%, 9.66%, and 9.22% (Figure 3.).

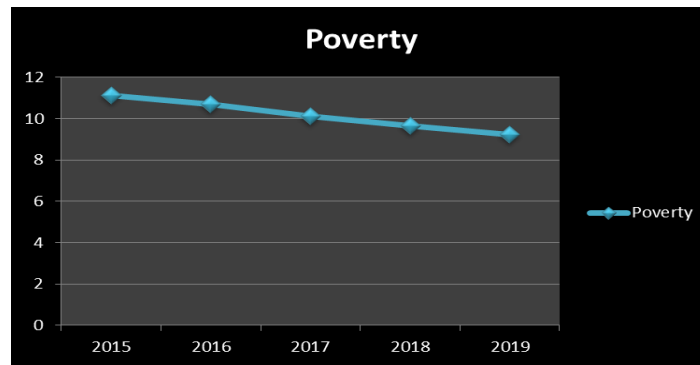


Fig 3. The Percentage of Poor Population in Indonesia (BPS, 2020)

Seeing the above phenomena, human development or improving the quality of human resources is very important in determining the development policy strategy of the Indonesian government. Based on these background, the objectives of these study are (1) to describe the influence of the school participation rates on the human development index in Indonesia 2019; (2) to describe the influence of poverty on the human development index in Indonesia 2019.

## 2. LITERATURE REVIEW

### 2.1. Human Development Index (HDI)

In the new paradigm, development is growing as a multidimensional process in the context of economic growth, equitable distribution of income, and poverty alleviation. This shows that the development indicators that should be used are not only economic indicators but also social indicators such as the human development index (HDI)/IPM and physical quality of life index (PQLI) can influence the development indicators of a country against other countries (Bhakti, Istiqomah & Suprpto, 2014).

The human development index explains how people can access development results in obtaining income, health, education, and so forth. HDI was introduced by United Nations Development Programme (UNDP) in 1990 and published periodically in the annual report of the human

development report. HDI was formed by three basic dimensions: a long and healthy life; knowledge; and a decent standard of living (BPS, 2020). The concept of human development focuses on human resources in line with economic growth. The development of human resources physically and mentally implies increasing the basic capacity of the population which will then provide opportunities to participate in the sustainable development process (Sumaryoto, 2020).

### 2.2. School Participation Rates

School Participation Rates is the proportion of school children at the age level of education in the age group that corresponds to the education level (BPS, 2020). Identification of the HDI components of the education dimension by looking at the school participation rate for 16-18 years old. The basis for the consideration used in the selection of this variable is that the age of 16-18 years is the age of the child who is studying at the Senior High School (SMA) level. Since 2012, the Indonesian government has launched a 12 years compulsory education program, therefore the selection of 16-18 years old in seeing the school participation rate is very appropriate. A high APS indicates that there are greater opportunities to access education in general (Fauzan, et al., 2020).

**2.3. Poverty**

To measure poverty, BPS-statistics Indonesia has used the concept of basic needs approach. Therefore, poverty is viewed as economic inability to fulfill food and non food basic needs which are measured by consumption/expenditure. The method used is calculating poverty line, which consists of two components that are food poverty line (FPL) and non food poverty line (NFPL). The poverty line was calculated separately for urban and rural areas. Identify the HDI components in the dimensions of a decent standard of living by looking at the percentage of poor population. A person whose expenditure per capita per month is below the poverty line is considered to be poor (BPS, 2020).

**3. METHOD**

The type of research is quantitative research. According to Sugiyono (2004: 14). Quantitative research is a research method in the form of numbers and analysis using statistics. The population used in these study were 34 provinces in Indonesia with samples being all members of the population into the study sample because the data used was secondary data. The sampling technique in this study was using non probability sampling with a saturation sampling technique. Saturation sampling is a sampling technique if all members of the population are used as samples. Another term of saturation sampling is a census, where all members of the population are sampled (Sugiyono, 2015: 124).

Research variables are the object of research, or what is the focus of research (Arikunto, 2006: 10). The independent variable in this study are school participation rates and poverty. The dependent variable in this study is human development index. Data collection technique in this study was secondary data with secondary data collection methods, namely the documentation method. The documentation method is to find data in the form of notes, transcripts, books, newspaperapers, magazine, inscriptions, agendas, etc (Arikunto, 2006: 231). The data analysis technique in this study were quantitative descriptive analysis and inferential analysis of multiple regressions with the analysis prerequisite test, namely the test for normality and linearity. Classical assumption test used in this study were multicollinearity test, heteroscedasticity test, and autocorrelation test, and hypothesis test consisting of partial test (t test), simultaneous test (F test), and test coefficient of determination R2.

**4. RESULTS AND DISCUSSION**

As described in the previous chapter, this study aims to analysis human development index per province in Indonesia 2019, to achieve these

objectives this study uses multiple linear regression with the least squares method (OLS) using Eviews Version 9. Regression results are obtained as following:

**TABLE 1.** Results Of Multiple Linear Regression Analysis

Independent Variable	Coefficient	t-statistic	Prob
Constants	54.43554	10.60833	0.0000
School Participation Rates	0.289056	4.253380	0.0002
Poverty	-0.487643	-6.543183	0.0000

Source: Processed Data, 2020.

The multiple regression results in Table I. It was known that the factors that significantly affect the human development index in Indonesia are school participation rates and poverty. The analysis prerequisite test carried out in this study consisted of: normality test and linearity test. The normality test used by using the histogram normality test through the probability value JB. JB probability value shows the value of 0.009168. This means that the JB probability value > 0.05, it can be concluded that the residual is normally distributed.

Linearity test aims to determine whether two or more variables have a relationship that is linear or not significant. Linearity test is performed on each independent variable and is bound by the results of the Prob F count, it can be seen in the F-line probability column statistics. In this study the value of 0.7784 is greater than 0.05 so it can be concluded that the independent variable is linear with the dependent variable. After the analysis prerequisite test was carried out the classical assumption test consisted of multicollinearity test, heteroscedasticity test, and autocorrelation test. Based on the three classic assumption tests, it was concluded that the data were free from interference with multicollinearity tests, heteroscedasticity test, and autocorrelation test.

Hypothesis test results are based on the results of the partial test (t test) in Table 1. The result of statistical testing on school participation rates on the human development index is obtained probability of 0.0002 < 0.05, then H1 is accepted. This means that there is effect of school participation rates on the human development index. The second variable of poverty with a probability of 0.0000 < 0.05, then H2 is accepted. This means that there is effect of poverty on the human development index. The F test aims to find out whether the overall independent variable have a simultaneous effect on the dependent variable

(Kuncoro, 2009: 120). Based on the simultaneous test, it shows that the probability value of F-statistics is 0.000000 with a significant 5%, then H<sub>0</sub> is rejected and H<sub>3</sub> is accepted. The last hypothesis test is testing the coefficient of determination R<sup>2</sup>. Based on the R-squared test, it is known that the R-squared value is 0.657582. This means that 66% of the variation in human development index is explained by the independent variables of school participation rates and poverty while the remaining 34% is explained by other factors outside of research.

#### **4.1 Effect of School Participation Rates on The Human Development Index**

The new growth theory emphasizes the importance of the role of government especially in increasing the human development index and encouraging research and development to increase human productivity (Dewi, 2017). Education is human capital investment because basically the costs incurred for education can be classified as an investment. Education will be able to improve the quality of human resources which can be seen from the increase in one's knowledge and skills. The higher the level of education of a person, the knowledge and expertise will also increase so that it can encourage to increase work productivity. The company will get more results by hiring a workforce with high productivity, so the company will also provide a higher salary to that person.

The theory is in accordance with the results of the t test which can be explained by a coefficient value of 0.289056, it can be said that school participation rates has positive effect on the human development index. It means if school participation rates increase 1% then human development index will increase at 0.29%.

#### **4.2 Effect of Poverty on The Human Development Index**

There is an important relationship between HDI and productive income capacity. Income is the main determinant and outcome of human development. Poor people use their energy to participate in economic growth, but poverty due to lack of education, and poor nutrition and health reduces their capacity to work. Thus, the result of the low HDI is that poor people cannot take advantage of productive income opportunities due to economic growth (Dewi, 2017).

This theory is in accordance with the results of the t test which can be explained by a coefficient value of -0.487643 it can be said that poverty has negative effect on the human development index. It means if poverty increase 1% then the human development index will decrease at 0.49%.

## **5. CONCLUSION**

Development is carried out to realize the prosperity of the community through economic development in overcoming various development and social problems such as education and poverty. The development of human resources is considered as a fundamental competitive problem in reducing poverty and increasing school participation rates. The form of manifestation of human resource development that is focused by the government, both central and regional, is through education which is expected that all people can take education as a provision to enter the workforce.

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