

The Role of Education in Indonesia's Economic Development: Theoretical Perspective of Human Capital

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Abstract : The purpose of this study is to understand the role of education in Indonesia's economic development from a theoretical perspective of human capital. This study uses a descriptive quantitative method with a moving average auto regression model to see the relationship between education and health, technological development, poverty and GDP in Indonesia. We found that education plays a role in promoting economic, health, technological development and suppresses or is negatively related to poverty.

Keywords: Education, Poverty, GDP

JEL Classification : C10J24,N10

1 INTRODUCTION

Indonesia is a very large country with millions of people living in it. Of course, the very large population of Indonesia needs to be managed properly and the quality of life and environment of all Indonesian people needs to be improved (Maxton-Lee, 2020). Education plays an important role in economic development (Nnadozie & Jerome, 2019). Education is a mechanism for developing human resources through increasing knowledge and human behaviour that is more productive and is an effort to increase human capital. Education increases labour productivity, alleviates poverty, develops technology, increases income. Education provides a foundation for economic development and social welfare (Psacharopoulos, 2014).

Education increases economic efficiency and social consistency. By increasing the value and efficiency of human labour. Helping alleviate poverty, increase the

productivity of society as a whole and educate the community (Averett, et al., 2018). Education increases the competitiveness of a country with a world market that is wide open with changes in technology and fast production methods. Education plays a role in nation-building and interpersonal tolerance so as to build stronger social capital (David-Hadar, 2018).

2 LITERATURE REVIEW

Education is a major determinant of a country's standard of living by increasing the development and empowerment of people's skills and knowledge by providing the best educational services to all levels of society (Thomas, 2014). Education is one of the human capital investment mechanisms and plays a very important role in economic development (Min & Zhu, 2019). Unequal education tends to have a negative impact on welfare and social justice because it will create social distancing and income inequality or increase the gap in economic inequality. The impact of economic inequality in society creates an increase in crime which has a negative impact on the economy as a whole in a country. Education makes a major contribution to technological development and industrial technical changes that have an impact on economic efficiency and increase production output so as to drive GDP as a whole (Prezenza & Sheehan, 2017).

Education has the potential to reduce economic inequality, help alleviate poverty and encourage community participation in the economy thereby increasing per capita income (Samuels, 2017). Education for groups of people who are at the poverty line can encourage them to make better and healthier life decisions, in the end, push them out of poverty by increasing income and increasing economic productivity. There is a positive relationship between health and education where both are important elements in human capital. Education has the potential to cut the cycle of poverty and improve the welfare of the poor and improve the quality of life of the community (Samani & Marinova, 2020). Equitable education is an important thing that cannot be ignored because the equal distribution of education is one of the efforts in economic equality which in turn improves social welfare (Yu, 2014). Education is very important in economic development. Economic development is very dependent on the quality of education. A good education system not only promotes economic development, but community productivity, and increases the per capita income of the community so that the quality of life of the community is economically and socially better and increases (Erçetin, et al., 2019).

3 RESEARCH OBJECTIVE AND METHODOLOGY

The method used in explaining the effect of This study uses a descriptive quantitative method with a moving

average auto regression model with an econometric model as follows:

$$Y_t = \beta_1 E_t + \beta_2 T_t + \beta_3 H_t + \beta_4 P_t + e_t$$

Where

Y = GDP

E = Education

T = Technology

H = Health

P = Poverty

The research period starts from 2007 to 2019 in Indonesia

4 RESULTS AND DISCUSSION

This section will explain the results of the descriptive The estimation results of the autoregressive moving average:

$$GDP = 14.9395698386 * Technology - 36394.7112561 * Poverty + 1116090629.8 * Health + 8335238501.11 * Education + 2.07206279216e+12$$

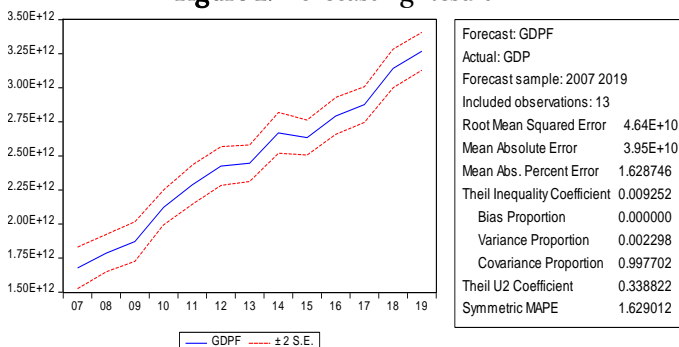
With the estimation table as follows :

Table 1. Estimation Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Technology	14.93957	9.621891	1.552665	0.1591
Poverty	-36394.71	14108.67	-2.579599	0.0326
Health	1.12E+09	1.36E+09	0.818375	0.4368
Education	8.34E+09	3.23E+09	2.583746	0.0324
C	2.07E+12	6.00E+11	3.453438	0.0087
R-squared	0.990849	Mean dependent var	2.46E+12	
Adjusted R-squared	0.986274	S.D. dependent var	5.05E+11	
S.E. of regression	5.92E+10	Akaike info criterion	52.72912	
Sum squared resid	2.80E+22	Schwarz criterion	52.94641	
Log likelihood	-337.7393	Hannan-Quinn criter.	52.68446	
F-statistic	216.5659	Durbin-Watson stat	2.321188	
Prob(F-statistic)	0			

Based on the estimation results, the direction of the relationship between technological innovation, Health and Education are positive with GDP, which means that these three elements are the driving elements of the economy. Where the direction of the Poverty relationship is negative, which means that GDP can reduce the Poverty number. Forecasting is presented to predict the impact and role of Education on GDP.

Figure 1. Forecasting Result



Increasing education in Indonesia is followed by economic growth that continues to grow and develop. This shows that education plays a very important role in the Indonesian economy.

5 CONCLUSION

Education plays a very important role in the development of the Indonesian economy. Where Education is an element in human capacity in developing knowledge and understanding of new information and productive and good behaviour. So it can be said that education is the basis or foundation of human capital.

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