Study of Aggregate Human Resource Management, Education and Indonesian Economic Growth

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Abstract : Education is an important element in economic growth. The purpose of this study is to observe government investment in education with economic growth within the frame of work management of aggregate human resources using descriptive quantitative methods of the Ordinary Least Squares (OLS) model. We find a significant positive relationship between investment in education and economic growth in the study period 2000 to 2019.

Keywords: : Human Resources, Education, Indonesia

JEL Classification: C0,G0,E4

1 Introduction

Human Resource Theory states that investing in education benefits a higher wage (Warner, 2013). Learning in developing self and knowledge is early, but learning can last until the end of life. Humans can continue to learn and develop themselves in improving the quality of themselves and experience until old age as provisions for younger people through the transfer of expertise and knowledge. Investments in skilled or skilled workers at any age yield higher returns than investments in less skilled or skilled workers. Abilities or skills are formed at an early age. One reason for the changing patterns of return on education investment is the race between technology and education (Guryan, 2009), as the labour market adapts to automation. In this new world, workers' ability to compete is hampered by the education system's poor performance in most developing countries. Technological changes and global competition require the mastery of competencies and new skills for many people.

An education system that prepares children well from an early age continues to reform and uses education improvement and accountability information. Countries need to improve quality, do their best, and expand opportunities, based on efficiency and equity. This means that it must be equitable and can serve the educational

needs of all levels of society. Aggregate education investment carried out by the government should boost the economy, which in turn, the growth of education quality and the economy go hand in hand.

2 LITERATURE REVIEW

Education directly affects economic growth because teaching is a mechanism to improve the quality of human resources. And, human resources are an essential element in the production of an economy. Human resources include human physical capital, technology and the number of workers, and their quality. The quality of human resources is primarily determined by human capital (knowledge, skills and habits). Increasing the level of workers' education increases human capital to increase human productivity in improving economic outcomes (Marquez-Ramos & Mourelle, 2019).

Education is one of the mechanisms for improving selfquality and human capital. Human capital enables people to work better and faster. Education is, of course, critical because instruction can boost productivity which in turn drives economic growth. Humans become the workforce, where human capital is an element to increase labour productivity, and thus production growth will increase along with the development of human capital (Marianaa, 2015). Education is a mechanism for increasing economic innovation and technological development which is an essential factor in driving growth. Education is a knowledge enhancement mechanism needed to understand and process new information and new technology created by others so that it can be used to drive economic growth (Sabates, 2010).

Education, in all respects, is one of the fundamental factors of development. Education is the basis of human capital development, which is the foundation of knowledge development and has an impact on technological development which in turn increases economic growth (Neaum, 2019). Government spending on education or government investment in education to improve education services for the public has a positive relationship with economic growth. government spending on education or increasing government investment to enhance education quality can increase participation rates and boost economic growth (Shafuda & De, 2020).

3 RESEARCH OBJECTIVE AND METHODOLOGY

The method used in this research is descriptive quantitative Ordinary Least Square. Ordinary Least Squares (OLS) is the most common estimation method for linear models. With the econometric equation as follows:

 $GDPt1 = \beta t1IEt1 + c$

4 RESULTS AND DISCUSSION

Estimation results of the Ordinary Least Square of Education Investment in Indonesia with Indonesia's Economic Growth

GDP = 93.180508432*IE + 2030.16809113

With the estimation table as follows:

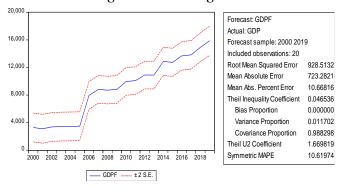
Table 1. Estimation Result

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Variable	Coefficient	Std. Error	t-Statistic	Prob.
IE	93.18051	4.808045	19.38012	0
С	2030.168	421.2559	4.819323	0.0001
R-squared	0.954267	Mean dependent var		9005.93
Adjusted R- squared	0.951726	S.D. dependent var		4454.63
S.E. of regression	978.7389	Akaike info criterion		16.7050 5
Sum squared resid	17242737	Schwarz criterion		16.8046 2
Log likelihood	-165.0505	Hannan-Quinn criter.		16.7244 8
F-statistic	375.5892	Durbin-Watson stat		1.15316 2

From the estimation results, it can be seen that the relationship between education investment is significant and positive, which means that the higher investment in education has an impact on increasing people's human capital so that people's performance can increase and can encourage economic growth.

To see the forecast or forecasting of education investment on economic growth is presented in the following diagram:

Figure 1. Forecasting result



 $Source: Author\ Computing$

From the results of computer computation, it can be seen that the increase in education investment carried out by the government is in the same direction and that it can boost the Indonesian economy with a very significant leap in 2005.

5 CONCLUSION

Based on the estimation results, education in Indonesia has a positive relationship to economic growth and is one of the driving factors for economic growth. Education is an essential element in the economy because education can increase human capital, which improves performance and encourages economic productivity, promoting economic growth.

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