

LITERATURE REVIEW: THE EFFECT OF EDUCATION ON ECONOMIC GROWTH IN CENTRAL JAVA

Mukaromah Syakoer

Widyaiswara Ahli Utama, BPSDMD, Central Java, Indonesia.

E-mail: mukaromahsyakoer1@gmail.com

Abstract—A country can be said to be fair and prosperous is to carry out economic development. Investment in education is not only beneficial for individuals, but also for the general public and the country. It is well known that Central Java has made progress in the field of education. This can be seen from the School Participation Rate (APS) data which has increased from 2018 to 2020. This study uses a literature review technique with a descriptive qualitative approach. Literature review is a scientific survey on a particular topic. The survey is conducted by searching and analyzing literature such as scientific articles, books, theses and others. The findings of this study are that there are many studies that link education and the economy, where education affects economic growth. But on the other hand, there are several supporting factors in increasing economic growth, including capital expenditures, inflation, and PAD. Education is not only obtained formally but can also be obtained from non-formal education to improve abilities and skills for the community. This has an effect on increasing a productive workforce so that economic growth is more optimal

Keywords— *Economic Growth, Education, HDI*

1. Introduction

One of the efforts that can be taken to create a just and prosperous country is economic development. Economic development is usually defined as an effort to increase per capita income. With an increase in per capita income, it can be called economic growth, where problems related to poverty, unemployment and inequality in the distribution of income are resolved. Thus, it can form a just and prosperous country from an economic point of view (Wibowo, 2014).

In addition, the success of a country is determined by the existence of economic growth. Economic growth can be influenced by several factors, namely labor, technological developments and capital. As for the workforce that can have an effect on economic growth, it can be seen in terms of number and capacity. The capacity or quality of the workforce can be seen from education and health (Arifin, 2019).

The education aspect is very important to improve the quality of the workforce. The implication is that the higher the education, the higher the quality of human life. In relation to economic growth, namely the higher the quality of life of the population in a country, the higher the growth rate of peace in that country. The higher the education level of the workforce, the higher the level of productivity will increase the country's economic growth (Nugroho, 2014).

Basically, educational institutions help to improve the quality of human resources. In this case, education has an important role to improve human abilities and character so that it can meet the expectations of society (A. Fauzi, 2018). These efforts can be developed through formal education, namely teaching and learning and employment development for workers, such as increasing workforce competencies and disseminating innovation by increasing community productivity. Many programs have been carried out by the government, most of which consist of programs to increase labor income by increasing the competence of the workforce. The second program is a life skills education program which focuses on the role of the workforce (Pamungkas, 2018).

Nowadays, the attention in higher education is increasing from time to time. This is because many people are widely aware of the importance of education for the future of children in the future and can affect the economy as a whole. Education is considered as the most effective investment which can change individuals and society and can also contribute to the economic system of a country through its role in ensuring employment. Many previous studies reveal the relationship between education and economic growth. On average, researchers use different education indicators in measuring the relationship between education and increased economic growth (Hutabarat, 2020).

Education contributes to economic growth by increasing the literacy rate of the workforce and by providing education it can help people acquire skills and expertise. Basically, the development of Human Resources (HR) concentrates on the indirect capabilities (potential) that humans already have where this is useful for improving skills in order to increase income (Armina, 2019).

The second quarter of 2020, Central Java experienced a decline for economic problems, which was minus -5.91%. However, until now it is gradually improving, the economy in Central Java in the second quarter of 2021 has increased at 5.56%. This figure is much better than the first quarter which was still minus -0.84%. According to the Governor of Central Java, the economic growth in the Central Java region was driven by various sectors. In terms of business fields, economic growth in Central Java is driven by almost all business fields (Dinas Provinsi Jawa Tengah, 2021). Based on the theory of Sukirno (2012) which is seen from the perspective of classical economics, there are 4 aspects that can affect economic growth, namely the number and quality of the population (HR), the availability and adequacy of capital, the area and availability of resources, and the mastery and technological progress (Sukirno, 2012). Based on this theory, the researcher will write a review article about the influence of education on economic growth in Central Java.

2. Materials and Method

One of the efforts that can be taken to create a fair and prosperous country is economic development. Economic development is usually defined as an effort to increase per capita income. With an increase in per capita income, it can be called an economic growth, where problems related to poverty, unemployment and inequality in the distribution of income are resolved. Thus, it can form a just and prosperous country when viewed from an economic point of view (Wibowo, 2014).

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3. Results and Discussion

Investment in education is not only beneficial for individuals, but also for the general public and the country. The level of higher education achieved is believed to increase people's income and productivity. Education is one way to progress and achieve social and economic welfare. On the other hand, if there is no success in providing education, it will give birth to various crucial problems such as the occurrence of crime, unemployment, welfare dependency and even drug abuse which can become a socio-political problem for the government (Subroto, 2014).

It is well known that Central Java has made progress in the field of education. This can be seen from the School Participation Rate (APS) data which has increased from 2018 to 2020. For children aged 7-12 years, from 2018 to 2020 the figures obtained are 99.76%, 99.77% and 99.73 %. For ages 13-15 years, the APS was 95.48%, 96.11% and 96.37%. Meanwhile, for ages 16-18 years, the APS figures obtained were 68.48%, 69.65% and 70.14%. From these figures, it can be seen that it is true that there is an increase in APS every year (Badan Pusat Statistik Provinsi Jawa Tengah, 2020). The APS indicates how much access the school-age population can access to formal education in schools. However, from these data, it can be seen that for the older age group, namely 16-18 years, the APS tends to decrease. Basically, quality human resources are very important to support the growth and expansion of regional economic development. The higher the human resources in an area, the more productive the workforce will be and the higher the opportunity for innovation to be born which is actually the key to sustainable development. From 2010 to 2014 data, the quality of human resources is determined by HDI where in 2014 there was an increase of 1.43% from the 2010 HDI value, which was 66.85% although this value was still below the National HDI, but at least there has been an increase (Pemerintah Provinsi Jawa Tengah, 2015). An increase in education will be associated with an increase in wages or salaries earned. If the salary reflects productivity, the more people who are highly educated or have a lot of training experience, the higher the productivity so that the national economy will be higher. Thus, it also shows that improving education programs can increase economic growth in a region.

Central Java is one of the provinces that can experience rapid economic growth and is fast growing in Klassen's Typology analysis. This is also evidenced by data released by the Central Statistics Agency (BPS) regarding the economy of Central Java in the second quarter of 2021, which increased by 1.03%. Some of the business fields that encourage this growth are Government Administration, Defense and Social Security. This shows that the government also remains consistent in improving efforts so that economic growth increases every year.

From the HDI value of Central Java, it can be seen that education has an influence on economic growth. A person's level of education will affect the productivity of the goods or services produced. Someone with a high school education degree will have different productivity with those with higher education or bachelor's degrees. This will certainly affect the quality of performance in the company, therefore it is able to produce productive output (Asnidar, 2018). As research conducted by Sari (2021) showed that a person's level of education has a positive and significant effect on economic growth in North Sumatra in 2015-2019. This is also in line with research conducted by Rusdi where the level of education has a significant positive relationship to economic growth in Makassar City during the period 2004 to 2013, and the variable level of education is the dominant factor on economic growth in Makassar City. From these results, the researcher concluded that the higher the level of education taken by the community, the higher the economic growth that occurs in North Sulawesi (Sari, 2021).

In line with the research conducted by Sari (2021), the results of Supriyanto et al. (2020) showed the same conclusion, namely the level of community education in Leran Wetan Village has various levels due to many complete educational facilities and institutions, so that the level of education affects economic growth in the area. There are various public educational institutions in Leran Wetan, but it is known that the majority of the community's education level is elementary school. However, the community is more active and encourages other families to always improve their education at a higher level (Supriyanto et al., 2020).

In contrast to the results of the research above, research by Habiballoh (2017) found that the level of education has a negative and insignificant relationship to economic growth in 6 provinces on Java island. (Habiballoh et al., 2017). From the results of this study, it can be seen that economic growth is not only seen in terms of education but there are other factors that can affect economic growth, one of which is inflation. Inflation is a general trend of prices and is continuous. Inflation greatly affects economic growth, because in the economic cycle when inflation occurs and is still normal, both producers and consumers will be fine. Conversely, if the inflation rate is too high, producers will have difficulty selling their products because consumers will adjust their needs more by buying everything as needed or looking for substitute goods at relatively cheaper prices. This is of course detrimental to producers so that the flow of money in the community will slow down so that people's income will decrease so that it can affect economic growth in an area (Asnidar, 2018).

Research conducted by Nuha (2019) showed that there are several factors that can affect economic growth at the district and city levels in 2011-2017 where these factors are local revenue, capital expenditure and population. The results show that local revenue, capital expenditure and population have a positive and significant effect on economic growth. Likewise with the Human Development Index (HDI), in this study the results showed that the HDI had the highest influence among other variables, but had a negative and significant effect (Nuha, 2019). This proves that economic growth is not only influenced by education but also other factors as mentioned above.

Education is one aspect of knowledge, skills, attitudes and behavior in the school environment or also called formal education. But not only formal education, there is still non-formal education which serves to increase literacy rates (Arifin, 2019). Non-formal education is an educational path outside formal education where its implementation can be carried out in stages and in a structured manner. The purpose of this education is to add, replace and complete everything that is still lacking or has not been accepted in formal education. This education can be carried out by special institutions that have been appointed by the government in accordance with national education standards. Examples of non-formal educational institutions are such as courses, training institutions, taklim assemblies and so on. Non-formal education can also affect worker productivity, as research conducted by Fauzi (2019) stated that non-formal education has a positive effect on the skills of cocoa farmers, where these skills will also affect cocoa production. The more skilled the cocoa farmers, the more cocoa production will be (I. Fauzi et al., 2019).

Work productivity is one of the factors that can affect economic growth. Where this has been proven by research conducted by Sugiarto (2015) which states that sectoral labor productivity has a significant effect on economic growth in East Java (Sugiarto et al., 2015). Therefore, non-formal education through the provision of training or guidance to the people of Central Java who lack the opportunity to continue formal education at that time should be given additional skills to support the skills or abilities they already have, so that later when they are working they can increase work productivity and impact on increasing economic growth in Central Java. In this case, the government needs to continue to innovate and move related to encouraging efforts to improve quality and equity in Indonesia, where this is the main problem of education in Indonesia so that its contribution can still be improved properly to economic growth and equity.

Research conducted by Pamungkas (2018) explored the escalation in economic growth and the welfare of people's lives according to the SDG's targets, where the task of education is to improve the quality of human resources. Economic growth is emphasized on several things such as investment, support for science and technology, expansion of opportunities and labor capacity or so on. It focused on the development of human resources who have special expertise or skills obtained from educational institutions, both formal and non-formal. One example is a training service center dubbed PKBM Widya Dharma Nagari, where there are various designs of learning service programs that focus on creating a skilled workforce. The service aimed to accommodate various groups of learning citizens and their learning needs through a training program for workers. Some of them are model training in the workplace or internships, PKBM, and training in the nature (outbound). With a variety of role models offered, it is hoped that it will be able to meet the

needs of the community to continue to receive education so that they have good skills and abilities (Pamungkas, 2018).

4. Conclusion

Investment in education is not only beneficial for individuals, but also for the general public and the country. It is known that Central Java has made progress in the field of education, it can be seen from the School Participation Rate (APS) data which has increased from 2018 to 2020. There are many studies that link education and the economy, where education affects economic growth. But on the other hand, there are also several supporting factors in increasing economic growth, including capital expenditures, inflation, and PAD. Education is not only obtained formally but also from non-formal to improve skills and skills for the community. This has an effect on increasing a productive workforce so that economic growth is more optimal.

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