

EDUCATION INVESTMENT IN ECONOMIC GROWTH FOLLOWING PROVINCES IN INDONESIA IN 2014-2020

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Abstract

Education is the main capital in carrying out the development of a country. The purpose of this study is to determine the effect of education investment proxied by the school participation rate (APS) of elementary, middle and high schools on Economic Growth in 34 provinces in Indonesia in 2014-2020. This study used a dynamic panel regression analysis method with a fixed effect model. The results of this study show that the SD variable has a significant influence on economic growth in 4 provinces in Indonesia, namely the provinces of DKI Jakarta, West Java, Central Java, East Java and in 30 other provinces have no significant effect. The SMP variable has a significant influence on Economic Growth in 2 provinces in Indonesia, namely DKI Jakarta, East Java Province and in 32 other provinces has no significant effect. Meanwhile, the SMA variable has a significant influence on Economic Growth in 4 provinces in Indonesia, namely DKI Jakarta, East Java, Banten, East Kalimantan provinces and in 30 other provinces has no significant effect. The education investment variables proxied by the primary, middle and high school budgets together have a significant influence on economic growth in 30 provinces in Indonesia in 2014-2020 and in 4 other provinces such as Riau, Bali, West Nusa Tenggara and Papua have no significant effect.

Keywords: *Economic growth, education investment, dynamic panel data regression, fixed effect model (fem), indonesia.*

Abstrak

Pendidikan adalah modal utama dalam melaksanakan pembangunan suatu negara. Tujuan penelitian ini adalah untuk mengetahui pengaruh investasi pendidikan yang diproksikan dengan angka partisipasi sekolah (APS) SD, SMP dan SMA terhadap Pertumbuhan Ekonomi pada 34 Provinsi di Indonesia Tahun 2014-2020. Penelitian ini menggunakan metode analisis regresi panel dinamis dengan model fixed effect. Hasil penelitian ini menunjukkan bahwa variabel SD memiliki pengaruh signifikan terhadap pertumbuhan ekonomi pada 4 provinsi di Indonesia yaitu provinsi DKI Jakarta, Jawa Barat, Jawa Tengah, Jawa Timur dan pada 30 provinsi lainnya tidak berpengaruh signifikan. Variabel SMP memiliki pengaruh signifikan terhadap Pertumbuhan Ekonomi pada 2 provinsi di Indonesia yaitu Provinsi DKI Jakarta, Jawa Timur

dan pada 32 provinsi lainnya tidak berpengaruh signifikan. Sedangkan variabel SMA memiliki pengaruh signifikan terhadap Pertumbuhan Ekonomi pada 4 provinsi di Indonesia yaitu Provinsi DKI Jakarta, Jawa Timur, Banten, Kalimantan Timur dan pada 30 provinsi lainnya tidak berpengaruh signifikan. Variabel investasi pendidikan yang diprosikan oleh APS SD, SMP dan SMA secara bersama-sama memiliki pengaruh yang signifikan terhadap pertumbuhan ekonomi pada 30 Provinsi di Indonesia tahun 2014-2020 dan pada 4 provinsi lainnya seperti Kep. Riau, Bali, Nusa Tenggara Barat dan Papua tidak berpengaruh signifikan.

Kata Kunci: *Pertumbuhan ekonomi, investasi pendidikan, regresi data panel dinamis, fixed effect model (fem), indonesia.*

Introduction

The concept of education as an investment has developed rapidly and is increasingly believed by every country that the development of the education sector is a key prerequisite for the growth of other development sectors. The concept of investing in human resources that can support economic growth began to be thought of since the time of Adam Smith (1776), Heinrich Von Thunen (1875), and other classical theoreticians before the 19th century who emphasized the importance of investing in human skills. The thought of Theodore Schultz in 1960 entitled "Investment in Human Capital" in front of "The American Economic Association" was the foundation of modern human capital theory. The main message of this speech is that the acquisition of knowledge and skills through education is not a form of consumption alone but also an investment (Agus Irianto, 2017).

Education investment in a country is a long-term investment. The setting of priorities of various choices of investment activities in the field of education is appropriate, in the long run will encourage the pace of economic growth. A profitable investment is an educational investment to prepare for creativity, productivity and a competitive spirit in its society (Atmanti, 2005). Education makes businesses more efficient, competitive and productive by making the workforce more flexible. This makes scientific knowledge and technological innovation penetrate the "transit" countries from the less skilled and labor-intensive to the highly skilled and capital-intensive (Mendy & Widodo, 2018).

The level of productivity of Indonesian labor resulting from education investment can be known to what extent the competitiveness of Indonesian workers

compared to foreign workers. The wages received by workers are an indicator of productivity because high wages of workers can make a large contribution to national income (Aji et al., 2020). Becker looked at the economic effects of investing in education on jobs and income, and showed how his theory measures incentives for those investments. The approach of human capital also makes it possible to determine the costs and returns of college and high school education (Becker, 1993).

To see school participation in an area, several commonly known indicators can be seen, namely the school participation rate. APS is one of the indicators of the achievement of development in the field of education in an area. The higher the APS, the more school-aged people attend school in an area.

Table 1. School Participation Rate in Indonesia in 2014-2020

Year	School Participation Rate in Indonesia in 2014-2020		
	Elementary School (7-12 Years Old)	Junior High School (13-15 Years Old)	High School (16-18 Years Old)
2014	98,9	94,4	70,3
2015	99	94,7	70,6
2016	99	94,8	70,8
2017	99,1	95	71,4
2018	99,2	95,3	71,9
2019	99,2	95,5	72,3
2020	99,2	95,7	72,7

Source: BPS, 2020.

On the other hand, DAT said, the number of out-of-school children in 34 provinces in Indonesia reached 4,586,322 children. According to data owned by the National Team for the Acceleration of Poverty Reduction (TNP2K), the number of children aged 7-12 years in Indonesia who do not go to school is estimated at 1,228,792 children. For the category of 13-15 years the number is 936,674 children. While the age of 16-18 years there are 2,420,866 children who are not in school. This proves that investment in education in children in Indonesia is still low due to the large number of children who drop out of school, especially at the age of 16-18 years and the lack of public knowledge awareness to have a high education. The school participation rate in

each province in Indonesia is a benchmark to determine how much education level in each province will affect economic growth in each region.

The problem of education is actually inseparable from economic problems. Economic growth in 2014 grew by 5.02 percent, slowing down compared to 5.58 percent in 2013. There are several factors that caused the slowdown in the Indonesian economy in 2014, namely the increase in fuel oil (BBM) prices that occurred in November 2014, the decline in Gross Fixed Capital Formation (PMTB), especially the construction of constructed infrastructure and transportation as well as budget savings ahead of the end of the year such as bans on meetings in hotels and cuts in official travel. Based on quotes from indonesia-investments.com, the Indonesian economy continues to be negatively affected by the slowdown in global economic growth in 2015-2019. Slow growth around the world especially in China, causing commodity prices to continue to show a downward trend.

This research is very relevant and urgent to see the extent of the effectiveness of state public investment to finance education in Indonesia. the virtue of this study is the extent to which the signification of the influence of education investment in each province can affect the economic growth of the businessman. .

Literature Review

1. Investment in Education

Education is an important investment in human capital (Becker, 1975). Investment in education encourages economic growth and economic development, and can create higher quality human resources so as to improve work skills and productivity. Educational investment can be divided into two types, namely *private investment* and *public investment*. Private investment is an educational investment at the micro level or individual level. The form of private investment is an individual who receives formal and non-formal education, while the form of public investment is an investment made by the community or government in the form of providing school buildings, educational institutions, teachers, education funds, providing educational infrastructure, and so on (Todaro and Smith, 2006).

Educational investments provide a higher return value than physical investments in other areas. The reverse value of education is a comparison between the total costs incurred to finance education and the total income that will be earned after a person graduates and enters the workforce (Rokhmani, 2009). Before investing in higher education, the individual will be faced with a comparison of the costs and benefits of his desired education. Rationally, individuals will invest in education if the benefits outweigh the costs. In other words, individuals will invest in higher education if the rate of return is high (McConnell et al., 2016). The rate of return is individual, for example, the increase in wages received by individuals according to the level of education they take. This increase in wages will increase the level of his welfare (Khairunnisa et al., 2015). With investment in education, human resources who have better skills and experience will be obtained.

Education investment is one of the factors that can be used to increase the bargaining value of each individual. The higher the level of education a person will increase self-esteem, a person's social status, then it will have an effect on increasing income. This is possible because educated people are more productive than uneducated people (Hidayati, 2015). Education is an investment of individuals, communities, as well as nations and states because the products of education are indispensable for the continuity and acceleration of a development. Individuals who attend a lot of training and education will have a greater chance of obtaining a job and creating jobs. A person will be able to increase his income through increased education and training (Oktarina, 2019).

Improving the quality of education is the first step of a careful planning to improve the welfare of the community. Investment in education has been proven to be able to improve human living standards (Dedi Saputra, 2015). The analysis of investments in the field of Education converges in the approach of human capital. Human Capital is a term often used by economists for education, health, and other human capacities that can increase productivity if these things are improved (Perkasa, 2017; Mendy, Widodo, 2018)

2. Economic Growth

There are several theories of economic growth including classical, neoclassical, historical, and endogenous economic growth theories. On classical economic growth, Adam Smith argues that the economy will grow with increasing population growth. Furthermore, the theory of neoclassical economic growth, according to Harrod Domar, needs investment to achieve steadfast economic growth. And Solow's growth model is designed to show how the growth of capital inventories, the growth of the labor force, and technological advances interact in the economy, as well as how they affect the output of goods and services of a country as a whole (Mankiw, 2007).

The theory of endogenous economic growth states that economic growth is influenced by internal factors of the economy. This theory argues that investments in human capital, innovation and knowledge are significant contributors to economic growth. The theory also focuses on the positive externalities and overflow effects of a knowledge-based economy that will lead to economic development. The theory of endogenous growth mainly states that the long-term growth rate of an economy depends on policy measures. For example, subsidies for research and development or education increase the rate of growth in some endogenous growth models by increasing incentives for innovation (Romer, 1994).

Economic growth is a condition in which the development of real national income reflects the growth of per capita output and the increasing standard of living of the people (Qoharudin et al., 2011). Economic growth is a problem of a country's economy in the long term towards a better state during a certain period and can also be attributed as a state of increasing the production capacity of an economy which is manifested in the form of an increase in national income (Dewi et al., 2013). Economic growth is measured based on the value of GRDP on a constant price basis, because the value of GRDP is not influenced by price changes so that the changes obtained are real changes that are not affected by price fluctuations (Rosmalia et al., 2014). This increased ability is due to the fact that production factors will always experience an increase in their quantity and quality. Investments will increase the amount of capital goods, the technology used is developing. In addition, the workforce increases as a

result of population development, and work experience and education increase their skills (Sanusi et al., 2014). The growth of the world economy during these two centuries has caused two very important effects, namely: first, the increasing prosperity or standard of living achieved by the world community, second, the opening up of new job opportunities for the growing population (Muttaqin, 2018).

Research Methods

The type of data used is quantitative data using secondary data. The data is sourced from the Indonesian Central Statistics Agency (BPS). The Data used in this study is in the form of panel data which is a combination of *cross section* data with *time series* data. Data *cross section* is 34 provinces in Indonesia and data *time series* with a time span of 2014 to 2020 years. The Dependent Variable is Economic Growth (Y). Independent Variables are Elementary (X1), Middle School (X2) and High School (X3).

The dynamic panel regression model used is *Fixed Effect*. This regression model is in accordance with the needs of analysis on dynamic models and is able to analyze the current year's data through the consideration of the previous year's data (Agung, 2014). The dynamic panel model is very accurately used in analyzing educational investments against economic growth. Because any influence that occurs in the present year is influenced by the circumstances of previous years. This *Fixed Effect* dynamic panel model includes two dimensions, namely area dimensions (spatial) and time (temporal) (Baltagi & Kao 2012). Dynamic panel data models are able to solve endogeneity problems related to the use of dependent variable lag (Urussyiah, 2013).

This model is based on the *Fixed Effect* model which uses an arrangement of residual covariance variants (Ekananda, 2016). If it is found that there is a lag of the dependent variable as an independent variable, then there is a correlation between the dependent and residual variables. Instrument variables are variables that are not related between correlations and individuals. And by applying the model using instrument variables, it can eliminate these correlations. In model dynamic regression is obtained when time ($t-1$) affects the stage of the dependent variable (Agung, 2014).

The equation of the dynamic model is defined on the equation:

$$y_{it} = \alpha_i + \lambda_i y_{i,t-1} + \beta'_i x_{it} \dots + \varepsilon_{it}$$

$$i = 1, 2, 3, \dots, N; t = 1, 2, 3, \dots, T$$

This is done repeatedly for each of the dynamic equalization results in each province:

$$PDRB_{it} = \alpha_i + \beta_{1i} * PDRB_{it}(-1) + \beta_{2i} * SD + \beta_{3i} * SMP + \beta_{4i} * SMA + \varepsilon_{it}$$

Ket:

GRDP = Variable Economic Growth in every Province in Indonesia

GRDP(-1) = Economic Growth in the previous year

Elementary, Junior High, High School = Education Investment Variables in every Province in Indonesia

Dynamic model testing is carried out through a coefficient of determination test (R^2 test), namely the Adjusted R^2 test and the Wald test. The coefficient of determination test (R^2) and the Adjusted R^2 test serve to test *the total variance* to see the effect of independent variables on dependent variables. Eliza (2015) The R^2 test is used to measure how large the proportion of variations of independent variables together influencing dependent variables. The coefficient of determination is the part of the total variation in the dependent variable described by the variation in the independent variable. The value of the coefficient of determination is between zero and one (Retno, 2011). The wald test is used to determine the influence of a variable together. This was done repeatedly for each dynamic equation result for each province/country and every sector during the reign. Simultaneous significance testing to determine whether or not variable relationships exist in the model using the Wald test. The goal is to determine the significance of variables together (Elvis & Bekti, 2018) The Wald test examines the meaningfulness of each predictor one after another, each against the hypothesis $H_0 : \beta_j = 0$ (Harlan, 2018). The statistics of the wald test can be seen as follows:

$$W_j = \left[\frac{\widehat{\beta}_j}{SE(\widehat{\beta}_j)} \right]^2$$

Information:

B_j : estimator for β_j
 $SE(\beta_j)$: Standart error for β_j

Results and Discussion

1. Primary Schools for Economic Growth

To see the influence of independent variables, namely Education Investment proxied by the SD APS on dependent variables (Economic Growth) in 34 provinces in Indonesia, it can be seen from the results of the regression test analysis of dynamic panel data with a *fixed effect model* model on the p-value column < 0.05 for each province in Indonesia. Here are the results of the dynamic panel model equation:

Table 2. Results of the Dynamic Panel Model Equation Test The Effect of Primary School Education Investment on Economic Growth

No.	Province	Dynamic Model Equation			
		R-Square value	R-Square Value Alignment	F-value	P-value
1	Jakarta	0.996331	0.981657	0.090742	0.0000
2	West Java	0.993271	0.966354	0.122772	0.0000
3	Central Java	0.971334	0.856672	0.251537	0.0010
4	East Java	0.999732	0.998660	0.024558	0.0000

Source: Eviews 10 Results, 2021

The processing of the regression test data of the dynamic panel model above was produced by describing the analysis of the effect of Education Investment proxied by the Elementary School Participation Rate (7-12 years) on Economic Growth in 34 Provinces in Indonesia as seen from the p, R-square and adjusted R-square values. The R-Square and Adjusted R² tests showed the combined influence of independent variables in affecting dependent variables, but did not explain the overall total influence. The primary school variable has a significant influence on economic growth in only 4 provinces in Indonesia such as DKI Jakarta (0.0000), West Java (0.0000), Central Java (0.0010) and East Java (0.0000) and in 30 other provinces have no significant effect.

Evidenced by research conducted (Mendy & Widodo, 2018) with the results of the study showing that basic education is not significant in explaining short-term and long-term economic growth. This insignificant relationship occurred due to a significant imbalance in education services in the country, especially for the eastern part of the lagging. As far as education is concerned, people in the area are also experiencing a shortage of books, equipment, and curriculum guides with most elementary schools lacking electricity, which has implications for technology accessibility and e-learning. This is in line with research (Satriawan et al., 2020) that most informal sector workers in Indonesia are poorly educated. The largest percentage, namely at the basic education level (not graduating from elementary school and never going to school) reached 52.13%.

2. Junior High Schools to Economic Growth

The p-value column indicates whether the SMP variable has an effect or not on Economic Growth in 34 provinces in Indonesia. Here are the results of the dynamic panel model equation:

Table 3. Results of the Dynamic Panel Model Equation Test the Effect of Secondary School Education Investment on Economic Growth

No.	Province	Dynamic Model Equation			
		R-Square value	R-Square Value Alignment	F-value	P-value
1	Jakarta	0.996331	0.981657	0.090742	0.0000
2	East Java	0.999732	0.998660	0.024558	0.0260

Source: Eviews 10 Results, 2021

The results of this test show that the majority of the p-value value > 0.05 , which means that the majority of the influence of educational investment proxied by the SMP APS (13-15 years) on Economic Growth in 34 provinces in Indonesia is not too significant, the junior high school variable has a significant influence on economic growth only in 2 provinces in Indonesia, namely in DKI Jakarta Province (0.000) and East Java (0.0260) and in 32 other provinces have no significant effect. The achievement of APS is influenced by educational facilities and infrastructure provided

by the government and the community. However, schools in some areas are still not adequately facilitated, especially outside Java. Based on PISA research, primary and secondary education in Indonesia has not been able to prepare students with critical and analytical thinking skills and has not been able to inspire students to aspire to become researchers in any field. The lack of interest in reading that students have will ultimately affect them in their critical thinking ability. Evidenced by research (Muttakin & Cahyono, 2017) that the level of junior secondary education does not have a significant influence on economic growth.

3. High Schools for Economic Growth

The p-value column shows whether the SMA variable has an effect or not on Economic Growth in 34 provinces in Indonesia. Here are the results of the dynamic panel model equation:

Table 4. Results of the Dynamic Panel Equation Test on the Effect of High School Education Investment on Economic Growth

No.	Province	Dynamic Model Equation			
		R-Square value	R-Square Value Alignment	F-value	P-value
1	Jakarta	0.996331	0.981657	0.090742	0.0229
2	East Java	0.999732	0.998660	0.024558	0.0062
3	Banten	0.991457	0.957287	0.138244	0.0461
4	East Kalimantan	0.999959	0.999797	0.009563	0.0192

Source: Eviews 10 Results, 2021

From this study, it shows that the majority of the influence of Education Investment proxied by the High School Participation Rate (16-18 years) on Economic Growth in 34 Indonesian Provinces is not too significant. The high school variable has a significant influence on economic growth only in 4 provinces in Indonesia such as DKI Jakarta (0.0229), East Java (0.0062), Banten (0.0461), East Kalimantan (0.0192) and in 30 other provinces have no significant effect. This is in line with research conducted by (Sodik & Nuryadin, 2011) as lining that the growth of high school graduates and the growth of elementary school graduates do not affect the regional economic growth of

Central Java. The factors that cause education in Indonesia to be uneven are low human resources, low quality of teachers, low achievement and school facilities and infrastructure. In remote areas, there is still a shortage of teachers due to facility problems and the lack of professional teachers which are considered to be far from expectations.

With a low quality of education, it will produce low human resources and will cause economic development to slow down due to the lack of workers who have higher education so that economic activities that require superior resources cannot develop. As a result, the manufacturing industry is difficult to develop and Indonesia can only export low-priced raw materials.

4. Elementary Schools, Junior High Schools and High Schools towards Economic Growth

Wald Test

Based on the results of the wald test with a dynamic panel regression method with a *fixed effect model*, whether the variables of Education Investment (SD, SMP and SMA) together can affect Economic Growth in 34 provinces in Indonesia. The following are the results of the Wald Test in each province in Indonesia:

Table 5. Wald Test Results

No.	Province	Wald Test	
		F-value	P-value
1	Aceh	92.18713	0.0000*
2	North Sumatra	3.789388	0.0044*
3	West Sumatra	20.92281	0.0000*
4	Riau	808.1680	0.0000*
5	Jambi	22.20613	0.0000*
6	South Sumatra	11.31408	0.0000*
7	Bengkulu	1465.112	0.0000*
8	Buoys	22441.36	0.0000*
9	Kep. Bangka Belitung	73.72128	0.0000*
10	Kep. Riau	0.792778	0.5296
11	Jakarta	56.14051	0.0000*
12	West Java	26.98224	0.0000*
13	Central Java	5.795783	0.0000*
14	IN Yogyakarta	39.98761	0.0001*

15	East Java	625.5655	0.0000*
16	Banten	20.63100	0.0000*
17	Bali	0.939444	0.4398
18	West Nusa Tenggara	0.435358	0.7832
19	East Nusa Tenggara	27.09167	0.0000*
20	West Kalimantan	9.710702	0.0000*
21	Central Kalimantan	382.8801	0.0000*
22	South Kalimantan	122.0575	0.0000*
23	East Kalimantan	4540.350	0.0000*
24	North Kalimantan	251.4878	0.0000*
25	North Sulawesi	260.6655	0.0000*
26	Central Sulawesi	58.32861	0.0000*
27	South Sulawesi	29.70699	0.0000*
28	Southeast Sulawesi	77.40634	0.0000*
29	Gorontalo	167.9249	0.0000*
30	West Sulawesi	19.15207	0.0000*
31	Maluku	26.55142	0.0000*
32	North Maluku	769.7714	0.0000*
33	West Papua	6.194380	0.0001*
34	Papua	0.143528	0.9659

Description *: The result of a significant p-value or p-value < 0.05
 Source: Eviews 10 Results, 2021

The results of the Wald Test show that there are 30 provinces in Indonesia that have a p-value of < 0.05 or 5%. Which means that the education investment variables proxied by the APS for elementary schools, junior high schools and high schools together have an influence on economic growth in 30 provinces in Indonesia in 2014-2020. This is in line with research conducted by (Nugroho, 2014) Education proxied with the Literacy Rate (AMH) has a positive and significant effect on economic growth proxied with Gross Domestic Product (GDP). To increase the participation rate of schools in Indonesia, it is necessary to increase the per capita income of the community, with a high per capita income from the community will make it easier for people to get education so that the Indonesian APS becomes higher. Human resources investment through education will increase economic value in the future. The level of education projects the quality of a country's human resources, the higher the level of education of a person, the higher the quality of the individual and the more effective and efficient the

individual is in producing of a product later this effect will have a direct effect on Indonesia's economic growth.

The results of the Wald Test show that there are 4 provinces in Indonesia that have a p-value of > 0.05 or 5%. This means that the variables of Education Investment (SD, SMP and SMA) together have no influence on Economic Growth in 4 Provinces in Indonesia in 2014-2020 such as Riau Islands (0.5296), Bali (0.4398), West Nusa Tenggara (0.7832) and Papua (0.9659). This is because Indonesia's vast territory as an archipelagic country turns out to be one of the obstacles to the equitable distribution of educational development. Education development cannot be carried out optimally, especially in eastern Indonesia, such as Bali, NTB and also Papua. Even the lowest GRDP in Indonesia is north Maluku at Rp. 27,868 billion rupiah in 2020 and the lowest elementary, middle and high school PPE in Indonesia is Papua at 82.99 percent elementary school, 80.48 percent junior high school and 64.83 percent high school in 2020. Economic growth in north Maluku province mainly came from the agriculture, forestry and fisheries sectors of 21.92% in 2019. and some education is still located and oriented in urban areas, while interest in building educational institutions in rural areas is still very lacking. Then the construction of schools that are only centralized in the Western Region, especially Java Island, makes the distribution of schools uneven.

5. Coefficient of Determination Test

Based on the results of the regression test of dynamic panel data, *the fixed effect* model, whether the overall education investment variables (SD, SMP and SMA) have a joint effect on the dependent variables of Economic Growth in 34 provinces in Indonesia, it will produce the following equation:

Table 6. Dynamic Panel Model Coefficient of Determination Test Results

R-Squared	0.999927
Adjusted R-Squared	0.999561

Source: Eviews 10 Results, 2021

The results of the coefficient of determination test of the dynamic panel model above show that the R-Squared value for all provinces in Indonesia is 0.999561. so that it can be concluded that the independent variable (Education Investment at the

Elementary School, Junior High School and Senior High School levels) can explain its effect on the dependent variable, namely Economic Growth of 99.9% in 34 provinces in Indonesia in 2014-2020 and the remaining 0.1% is influenced by other variables outside of this study.

Conclusion

The purpose of this study is to determine the effect of education investment on economic growth in 34 provinces in Indonesia in 2014-2020. Based on the results of data analysis and processing, it can be concluded that the Elementary School Variable has a significant influence on Economic Growth in 4 provinces in Indonesia, namely DKI Jakarta, West Java, Central Java and East Java Provinces and in 30 other provinces has no significant effect. The Junior High School variable has a significant influence on Economic Growth in 2 provinces in Indonesia, namely DKI Jakarta and East Java Provinces and in 32 other provinces has no significant effect. The high school variable has a significant influence on Economic Growth in 4 provinces in Indonesia, namely DKI Jakarta, East Java, Banten and East Kalimantan Provinces and in 30 other provinces it has no significant effect. The Education Investment Variables proxied by the APS for Elementary Schools, Junior High Schools and Senior High Schools together have a significant influence on Economic Growth in 30 Provinces in Indonesia in 2014-2020. Meanwhile, in the other 4 provinces such as Riau, Bali, West Nusa Tenggara and Papua, they did not have a significant influence.

For the Government, to increase grDP per capita, the government needs to carry out several policies in an effort to increase the role of education in the community so that it can optimally contribute to the productivity of domestic production, especially for per capita income from the community. The government should start promoting the importance of the community having a high education and be more assertive in supervising the School Participation Rate, especially in the High School APS (16-18 years old) because the participation of high schools in 34 provinces in Indonesia is still low when compared to elementary and junior high school APS, which is an average

below 75%. With the improvement of education in the community, it produces quality and productive human resources.

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