

The Analysis Of Economic Growth, The Government Spending Educationsector, Health Sector, And Infrastructure Sector On Human Development Index In East Java

Agus Indrayana

ABSTRACT : East Java province in the 2011-2018 period had spread of the Human Development Index (HDI) which is not evenly distributed in each district and the city. So this causes East Java province is in the classification of Medium Human Development (medium human development). It is thus important to know the factors that affect the Human Development Index in the province of East Java. In this study will be seen how the variables influence economic growth, government expenditure education sector, health sector, and infrastructure to the Human Development Index in the province of East Java in 2011-2018 and Local Government's strategy to improve the Human Development Index of East Java Province.

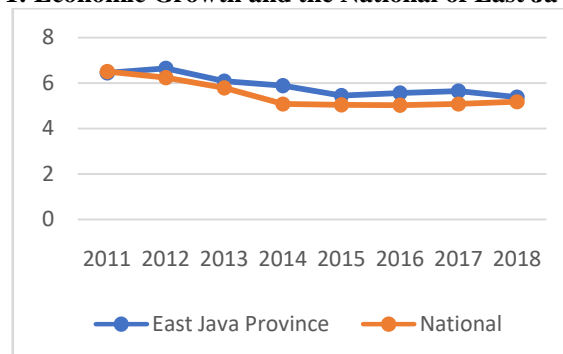
KEYWORD : *Economics Growth, Education, Health, Infrastructure, Human Development Index*

I. INTRODUCTION

Economic development is essentially a series of activities carried out consciously and continuously to achieve a better state simultaneously and continuously. Development must be understood as a multidimensional process that involves the reorganization and reorientation of the entire social and economic system that exists. According to Todaro & Smith (2011) Economic development was initially looked at the successful development of a region the size of the high economic growth, without looking at other aspects, such as income inequality, poverty and so forth. Human Resources just viewed as inputs in the production process, as well as other factors of production, namely land, capital, and technology.

Nanga (2000) revealed that there are at least three times a paradigm shift in economic development. First, the paradigm of growth-oriented development. This paradigm assumes that the Gross National Product or Gross Domestic Product (GDP) is the best single indicator of the success of development. While other issues such as poverty, unemployment, and inequality of income is considered as a secondary issue. This paradigm developed in the 1950s and 1960s. Second, the paradigm of equity-oriented development. In this paradigm, income generation and poverty reduction targeted for primary and also become an integral part of the strategy or policy development is being run. This paradigm then received sharp criticism because they tend to view humans merely as objects of charity assistentialism strategy and strategy. Third, the paradigm of human-centered development. In this paradigm, the purpose of development aimed at human development in the sense of actualization of the values or the potential of humanity, such as self-esteem (self-esteem), independence (self-reliance), dignity (dignity), empowerment (empowerment), and so on.

Figure 1. 1: Economic Growth and the National of East Java Province



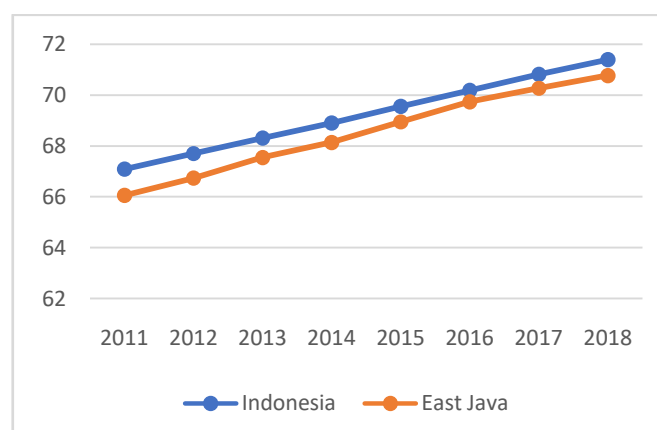
Source: BPS, 2020

Graph 1.1 based on economic growth of East Java province and national levels fluctuated. But the economic growth of East Java Province is still the largest contributor to the national economy is evident that economic growth in East Java province is greater than the national economic growth. In the year of 2018 Economic growth in East Java province grew by 5.55 percent and fell to 5.37 percent. BPS JavaEast (2017) mention the highest growth in the economic structure of East Java province occurred in the mining and quarrying sector amounted to 14.18 percent; followed by the provision of accommodation and eating and drinking at 8.49 percent; information and communication amounted to 7.57 percent; insurance and financial services by 6.99 percent; and education services by 5.97 percent.

In 1990 the idea of human development measurements developed by the UNDP (United Nations Program Development) in the form of the Human Development Index (HDI) / Human Development Index (HDI) and published periodically in the annual report of the Human Development Report (HDR). HDI provides a composite measure of three dimensions of human development that includes health (measured by life expectancy from the time of birth / life expectancy at birth), education (measured by the literacy rate of the adult / adult literacy rate and the average length of schooling of the population adult / mean schooling years) as well as a decent standard of living (measured by purchasing power / purchasing power parity).

Human Resource Development has been considered necessary by the Government of Indonesia. Through state goals contained in paragraph four of Law - 1945, the Government had a duty to protect the entire Indonesian nation and the entire homeland of Indonesia, to promote the general welfare, educating the nation, and participate in implementing world order based on freedom, lasting peace and social justice. According to Ritonga (2014), to achieve the purpose of the state, local governments implement programs and activities to serve the community in all areas of public services, such as health, infrastructure, education and so forth. Government's commitment to build quality or welfare of the community can be seen through the allocation of government expenditure of the three types of expenditure are education spending, health spending, and spending on infrastructure. Based on the indicators on which the measurement of the Human Development Index (HDI), the education and the health sector has an important role to create the resources and human development. Thus there are at least two areas that need to be considered by the Government in connection with efforts to expand the population opportunities to attain a decent life, namely education and health fields. In this case, the Government can realize an increase in the level of welfare through the role of government expenditure allocations in education and health fields. the education and the health sector has an important role to create the resources and human development. Thus there are at least two areas that need to be considered by the Government in connection with efforts to expand the population opportunities to attain a decent life, namely education and health fields. In this case, the Government can realize an increase in the level of welfare through the role of government expenditure allocations in education and health fields. the education and the health sector has an important role to create the resources and human development. Thus there are at least two areas that need to be considered by the Government in connection with efforts to expand the population opportunities to attain a decent life, namely education and health fields. In this case, the Government can realize an increase in the level of welfare through the role of government expenditure allocations in education and health fields.

Graph 1.2: Comparison of HDI EastJava and National



Source: BPS, 2020

In Chart 1.2 shows that Human Development Index (HDI) of East Java began a period of sustained progress in 2011 until 2018. From the year 2011 amounted to 66.06 percent increase to 70.27 per cent in 2017, then

continue rising to 70.77 percent in 2018. By doing so the average growth in the period 2011 to 2018 amounted to 0.98 percent.

However, although the Human Development Index (HDI) of East Java province has increased, Radar Surabaya (2019) said the Human Development Index (HDI) in the province of East Java is in 15th place in Indonesia from 2014 to 2018. Compared to some provinces Java, East Java Province HDI be the lowest Improved Human Development Index (HDI) has committed the Government of East Java Province. The lack of HDI make various efforts made, including the Human Resources (HR) in the sectors of education, health and infrastructure.

East Java Province has the largest local revenue to three when compared with the provinces - the other major provinces. That is the area that includes a large income would impact both on the Human Development Index in the province of East Java. It is also considering that the direct spending of East Java Province which cover development of infrastructure to support regional development, development in education, health, economics and preservation of Natural Resources and others is also the third largest compared to other provinces.

In most previous studies, funding for education, health, and infrastructure and significant positive effect on the formation of the HDI at various locations and time of the study. However, there are also studies with findings in which the education budget turned out to be a negative influence on the formation of the Human Development Index (HDI). Winarti (2014) suggests that the negative effects of the education budget to the Human Development Index (HDI) is caused by the allocation of the education budget that is not allocated all of them to improve the quality of education, but also for the other allocated as employee salaries and other educational costs. With the education spending is not effective, the pressure on the APBN and APBD heavier. Public spending both the state budget and regional budgets are already many have shopping that has the characteristics of binding expenditure. This binding expenditure is expenditure which is mandatory spending, the Government shall be allocated as personnel expenditure, operational expenditure, debt and interest payments and transfer funds to the regions.

Based on the above background, East Java province in the 2011-2018 period had spread of the Human Development Index (HDI) which is not evenly distributed in each district and the city. So this causes East Java province is in the classification of Medium Human Development (medium human development). It is thus important to know the factors that affect the Human Development Index in the province of East Java. In this study will be seen how the variables influence economic growth, government expenditure education sector, health sector, and infrastructure to the Human Development Index in the province of East Java in 2011-2018 and Local Government's strategy to improve the Human Development Index of East Java Province.

II. LITERATUR REVIEW

2.1. The concept of Human Development Index

Human Development Index This is a composite index to measure the extent to which the welfare of the community development can be achieved. Index itself has a sense as a measure which represents about changes in the price or value of a variable over time. Meanwhile, the people are the source of intrinsic or real wealth. The main objective of development is to provide space for the community and created a space to live healthy, long life, and lived his life productively. But it is often forgotten in the process of life-oriented property and money, United Nations Development Program (1990).

The size of the development and use of components within the scope of the national GDP and the GDP within the scope of the regional, but to photograph the overall development of these components is not enough because it is only able to photograph the economic development alone. It required an indicator capable of photographing a comprehensive development that can explain economic growth, social aspects of development, and human welfare. The basic assumptions of human capital theory is someone able to increase its revenue through education. To increase revenue and increase ability to work, it is expected that each year the school will be able to increase both.

Yunitasari (2007), said that the value of the HDI ranges from 0-100 as measured by longevity, education and living standards. The third dimension of the three has a way of measuring different. All three are calculated with life expectancy, educational attainment and per capita expenditure. If IPM only be seen in the perspective of expenditure per capita course, means that the scope of the study is only based on economic status of a region / country based on revenue per year. But the scope of the HDI has far broader dimensions because the views on the economic perspective, it means that IPM always correlate with the level of social welfare. Or in other words the higher the constituent components of the HDI will increasingly affect the lives and welfare of the community better.

Samahdumin (2001), explains that the human development paradigm that puts the human being as the focus and final goal of all development activities. The main objective of human development is to achieve control over resources (revenue to achieve a decent life), improving health (longevity and health) and improving education (literacy and skills to participate in economic activities in society).

Conclusion of human development is to be shown on the achievement of improvements in the quality of supporting the growth of human (human growth), the folk revival, without feeling intimidated on others, socially have a role.

2.2 Theory of Economic Growth

Classical economics initiated by Adam Smith mentioned that the output is affected by two main factors, namely population growth and growth in total output, Kuncoro (2010).

Adam Smith also explained that at an early stage in an increase in labor economy will lead to an increase in per capita opinion, but the number of growing population will lead to the law of diminishing and bring on conditions equal to the marginal production output. Under these conditions led to a per capita income reaches the maximum value. Total population in maximum condition called optimal population. The population will lead to a decrease in output when population increase exceeds the optimal point, Kuncoro (2010).

Harrod-Domar in economic growth theory emphasized the importance of investment in the economy to add or replace capital goods. Harrod-Domar growth theory reveals that the increase in national output or GDP growth due to the increase of the capital stock in the form of investment, Todaro and Smith (2011).

Solow growth theory is a neo-classical growth model who became a pillar in the theory of economic growth that contributes to the era of neo-classical economic thought, so that the originator Robert Solow was awarded the Nobel Prize in economics. Solow growth model is a development of the Harrod-Domar model. Solow added a third variable which is the technology into the growth equation model (growth equation).

Solow growth model initiated was created to elaborate how the capital stock, labor force growth, and technological development intersect in the economy, as well as elaborate on how they affect the output of goods and services in the aggregate, Mankiw (2013). Solow model suggests that in the long run output is determined exogenously, or can be determined outside the model. Solow model estimates that in the last stage of convergence will occur in the economy and eventually the economy is in a state of steady-state dependent on technological advances and increased manpower. These conditions indicate the long-term economic equilibrium, Mankiw (2013).

Romer (1986) and Lucas (1988), is the theorists of economic growth that explain the conception of new growth theory also called endogenous growth theory raised akbat critique of the model of neo-classical does not explicitly explain the long-term growth (long run growth). Technology in the neoclassical growth model assumed exogenous, which according to the neo-classical growth can bring the economy into a stable state (steady state) and diminish returns to capital in the absence of technological change Barro (2004).

Technological changes in the new growth theory is assumed as endogenous variables. Advances in technology are one of them driven by adannya qualified human resources, so as to give birth to the technological innovations that have a positive impact on economic progress. Along with technological innovation, the development of the world is changing, marked the production process more effective and efficient by using modern technology.

Romer (1986) describes the endogenous growth can encourage long-term growth (long run growth) through the accumulation of knowledge. By using the model of aggregate growth increasing returns which an endogenous growth model equilibrium to technological changes. Romer (1990) to develop advanced models on the impact of human development on economic growth, assuming the technology as a non-rival and good excludable partially or in other words there are externalities.

2.3 Government spending

The main activity of the government in fiscal management is the management of revenue in the form of state revenue from tax and non-tax and expenditure means expenditure of the Government. In this research focus is more emphasis on the expenditure side of the government, especially in health and education and infrastructure. In planning the size of the budget for public goods, the Government must Offsetting between earned income in taxes and non-taxes and debt / borrowing. If the government is too large in the expenditure budget of the reception will cause fiscal imbalance.

Aktivitas Government in the provision of public goods is divided into two, including:

1. Out expenditures Used

These expenditures relate to government spending that is capital in the form of public sector investments such as schools, roads, hospitals, and so forth. As well as government spending on goods and services that are routine consumables such as consumer goods and labor.

This expenditure in the economy is a resource. Keynes said this principle is called the term crowding out, where this principle would occur in conditions of full employment. This condition occurs when there is an increase in spending on public goods amounting to Rp1, this is the income of the non-public sector.

2. Transfer (transfer expenditure)

These expenditures do not reflect requests the Government will request the working tenga. These expenditures include funding layoff victims, interest on debt, subsidies and pensions.

2.4 Definition and Classification Infrastructure

There is no standard definition of infrastructure, Torrissi (2009) Tinbergen (1962) distinguished terms of infrastructure and suprasrtuktur but did not give a standard definition theoretically. Buhr (2003) argues that economic development can be achieved with so-called infrastructure preconditions. There is a uniqueness about the study of the infrastructure, where infrastructure has the characteristics as the fulfillment of social and economic needs as well as the nature of mass production. Infrastructure facilities classified as physical or material referred to infrastructure.

Torrissi in Jochimsen (1966) suggested that in society there are infrastructure refers to the norms and values of society. This infrastructure is used as the primary basis for masyarakat to undertake economic activities. Torrissi the sense described by the term personal infrastructure. Jochimsen (1966: 133) explains that the infrastructure is affected by the quantity and quality of human beings involved in the market economy. It tersbut refers to the division of labor, skill and their contribution to the increase in economic activity.

In an economic perspective Torrissi (2009) argued that the infrastructure is seen as the driving wheels of the economy. There are at least two criteria: infrastructure infrastructure as capital goods and infrastructure as a public good. As described infrastructure as capital goods investment spending, public ownership, had capital ratios and high output and long term. As public goods infrastructure use is not rivalry and not excludable. In a usability perspective described Torrissi (2009: 9) in Buhr (2003) that infrastructure is a suggestion to increase the growth in economic variables.

2.5 Regions financial

Understanding local finance as contained in the explanation of Article 156 paragraph 1 of Law No. 32 of 2004 on Regional Government, is as follows: "Finance area are all rights and obligations of the regions that can be valued in money and everything is in the form of money and goods that can be used belonging to the area relating to the implementation of those rights and obligations ", Pusdiklatwas BPK (2007).

Mamesah in Halim (2007; 23) states that: local finance can be defined as all the rights and obligations that can be valued in money, as well as everything in the form of money or goods that may be used as the wealth of the area along not owned by the state or the higher regions as well as other parties in accordance with prevailing regulations.

III. METHODOLOGY

This type of research used in this research is quantitative research with descriptive approach. Quantitative research aimed to find out how much the variables (a number). These variables are arranged in a model that estimated by regression analysis which then results will be described.

In the quantitative approach used a number of data that is independent variable (independent variable) and the dependent variable (dependent variable). By using this quantitative approach is expected to be known how much influence economic growth, government expenditure Education Sector, Healthcare Sector, and Infrastructure Against Human Development Index of East Java Province.

Methods of data collection is systematic and standardized procedures in order to obtain quantitative data, in addition to the method of data collection has the technical functions to enable researchers collecting data in such a way so that the numbers can be given to the object studied. The type of data used is the panel that is a combination of time series and cross section that is using the 8 years from 2011 to 2018. Sources of data used to reach the goal in this study was obtained through literature entirely good from BPS literature, journals and previous research as a method of data collection, so it is not necessary sampling techniques and questionnaires. As support, use reference books, print and electronic newspapers,

IV. RESULT

4.1 Effect of Economic Growth Against the Human Development Index in East Java Province

From the results of panel data regression analysis using a fixed effect model can result in that variable of economic growth showed a significant number that is equal to 0.000 with a significance level at α 5% (0.05) and the coefficient value the positive value of 1.02E-05, meaning that if the value of economic growth has increased by 1 percent, it will increase the Human Development Index in 38 counties and cities of East Java Province of 1.02E-05 percent.

Economic growth is a necessary requirement in the development process. Arsyad (2010) mentions epistemologically economic growth merupakan increase in the GDP / GNP of a country or region ceteris paribus. One indicator to determine and analyze the economic development of a country or region is the most important indicator of growth.

When economic growth occurs in a region atupun country then the country has the ability to provide public goods and economic goods to the people. With the economic growthin parallel advances in technology and institutional improvements in a country will grow. Kuznets in Arsyad (2010) divides the four categories of economic growth, including: (1) an increase in revenues in line with consumer demand. (2) the growth of labor

caused by the increase in human and physical resources. (3) many new innovations due to advances in technology. (4) international trade occurs due to the openness of the area and the long-term capital flows will affect economic growth.

(Todaro and Smith, 2011) divides economic growth into three components, including: (1) the increase in the flow of capital, (2) the increase in population, (3) technology is more advanced. To safeguard economic sustainability, economic growth is the most fundamental requirement. When the increase in population each year increases, automatically needs of the economy will follow suit, so it takes a revenue increase as well. This can be realized if there is an increase output aggregate of goods and services or so-called increase in GDP. So with the increase in GDP will increase national income.

4.2 Influence of Education Against Human Development Index in East Java Province

From the results of panel data regression analysis using a fixed effect model can result in that variable education shows that a significant number of 0000 with the α significance level of 5% (0:05) and the coefficient value the positive value of 3.249630, Meaning that if the value of education increased by 1 percent, it will increase the Human Development Index in the 38 counties and the city of East Java Province 3.249630 percent.

The results are expressed by Kemdikbud (2016) in Soleha (2016) which states that the research is in line with the findings of the World Bank in 2013 in the report Education Public Expenditure that the budget of the educational function of 20% of the budget has not been effective in improving the quality of education in Indonesia. The spread of education allocation that is in Indonesia mentioned are used for salary spending the majority of teachers and teacher certification programs are increasing every year.

The level of education of a society can reflect the level of social welfare in the region. Education becomes a necessity that must be met as the capital of the nation's progress. Conducting a thorough and equitable education for the entire population of East Java development priorities East Java Province Government in the field of education.

4.3 Health Effects Of Human Development Index in East Java Province

From the results of panel data regression analysis using a fixed effect model can result in that health variables showed a significant number that is equal to 0.000 with a significance level at α 5% (0.05) and the coefficient value the positive value of 2.056238, Meaning that if the health value increased by 1 percent, it will increase the Human Development Index in the 38 counties and the city of East Java Province 2.056238 percent.

Seeing the results of these estimates according to research conducted Mahulauw and Mahardika (2016) which states that the government in the field of health pengeluaran effect of 0.291. These results showed a positive figure with an error rate of 0.05 level of significance value reached 0.0001. The conclusion on the findings of that added by Rajkumar and Swarop in Mahulauw and Mahardika (2016) found that a 1 percent increase for public pengaluan health scores per GDP reducing mortality under the age of 5 years at 0.32 percent. This condition is due to government spending on health has been efficient and effective in both spending directly or indirectly.

4.4 Effect of Infrastructure Against Human Development index in East Java Province

From the results of panel data regression analysis using a fixed effect model can result in that variable figures show that economic growth was not significantly by 0.9684 with a significance level at α 5% (0:05) and α 10% (0.10) and the value of the coefficient is negative for -1.17E-14, Meaning that if the value of the infrastructure have increased by 1 per cent it will not increase the Human Development Index in the 38 counties and the city of East Java Province -1.17E-14 percent.

The biggest contributor to the value of the Human Development Index (HDI) of East Java province is the city of Surabaya with a value of 81.74 per cent in 2018. As well as a row followed by Malang with a value of 80.89 percent and Madiun with a value of 80.33 percent 2018. While the lowest position contributor to the Human Development Index (HDI) for East Java province first position is occupied by Sampang with HDI value by 61 percent the second lowest position is Bangkalan with a value of 62.87 percent and the lowest third position is occupied by Lumajang with HDI value of 64.83 percent. And if we look at table 1.1, more broadly, to the data the city / district next lowest in East Java province after Lumajang occupied by Probolinggo, Sumenep, Bondowoso, Pamekasan, Jember, Situbondo and Pacitan. Among the districts in East Java province which have been mentioned earlier, the majority inhabited by an ethnically pure ethnic Madurese, then the big question we are what the districts are predominantly controlled by an ethnically pure ethnic Madurese HDI value is very low, when compared to the city / other districts in East Java province, especially in the fields of infrastructure, so that the infrastructure is not a significant effect in improving the HDI in East Java province.

Anggraini and Muta'ali (2013) disclose the construction of the region or regions between the district and the city that is in Java and Madura island is the biggest contributor of inequality Human Development Index (HDI) in the province of East Java. This is due to inequality in Foreign Direct Investment (FDI) and Domestic Investment (DCI).

V. CONCLUSION

After a test of macro-economic variables, namely economic growth, public expenditure on education, health, infrastructure and the human development index in the province of East Java in 2011-2018, it can be concluded as follows:

1. The increase in economic growth will increase people's income, aggregate output of goods and services, and the GDP of a region that can automatically improve the human development index. With the increase in economic growth will increase revenue for the country or region, and will increase the per capita income of the people of East Java province which became one of the composite index in calculating the HDI.
2. The pattern of a negative relationship between government spending education sector due to the inefficiencies in the management of education funds that should be a minimum of 20% of APBN / APBD but the majority of the user's shopping teacher salaries and teacher certification programs and the lack of an active part of society and the lack of access to education for people in remote areas so berimpilikasi to the decline in HDI in East Java province.
3. Government spending will increase the health sector and health service improvement and acceleration programs from public and private health which will increase the life expectancy is a major component in human development index and a decrease in the infant mortality rate in East Java province.
4. Government infrastructure spending has no effect on the Human Development Index. This is caused by the uneven development of infrastructure in East Java province which is a supporter of economic development. As it is known that the growth or economic development is a prerequisite for achieving human development.

REFERENCE

- [1]. Amalia, Lia. 2007. Economic Development. Yogyakarta: Graha Science Arsyad, Lincoln. 1999. Economic Development. Fourth Edition. STIE YKPN Yogyakarta Boediono, (1997), Theory of Economic Growth, BPF, Yogyakarta.
- [2]. Boediono. Series Synopsis 1992. Introduction to Economics No. 4 Theory of Economic Growth. Yogyakarta: BPF
- [3]. Denty Octavianingrum (2015). Influence Analysis of Investment, Labor, and Education Levels Of Growth In Yogyakarta: Study 5 District / State Kota. Skripsi. Universitas Yogyakarta
- [4]. Deddy Rustiono (2008), Influence Analysis of Investment, Labor, and Economic Growth on Government Spending Is Java Tengah. Tesis.
- [5]. Eko Wicaksono (2013) Analysis of the Economic Growth and Factors Affecting District / Municipality in Java Tengah. Skripsi. Universitas Diponegoro
- [6]. Ghozali, Imam. 2016. Applications Multivariate Analysis with IBM SPSS Program 23. Semarang: Diponegoro University Publishers Agency.
- [7]. Heidy Menajang (2016) Effect of Labor Against Investment and Economic Growth Samratuangi Manado. Skripsi. Universitas City.
- [8]. Mankiw, N. Gregory. 2003. Macroeconomic Theory of Translation. Jakarta: PT. Gramedia Pustaka Utama.
- [9]. Mankiw, N. Gregory. 2000. Macroeconomic Theory. Fourth Edition. Publisher, Jakarta.
- [10]. Solow, Robert M. and TW Swan. 1956. A Contribution to the Theory of Economic Growth. Journal of Economics. MIT.
- [11]. Suryana, 2000. Economic Development: Problems and Approaches. Publisher Salemba Four First Edition, 2000.
- [12]. Sugiyono. 2009. Business Research Methods (Quantitative Approach, Kualitatif and R & D). Alfabeta. Bandung.
- [13]. Sollow, M. 1987. Robbert growt Theory: An Exposition, Oxford University Press.
- [14]. Sukirno, Sadono. 2000 Modern Macroeconomics: Developments Thought From Classical To New Keynesian. King Grafindo Library
- [15]. Tarin, Robinson. 2012. Regional Economic Theory and Applications. Jakarta: PT. Bumi Script.
- [16]. Todaro, MP and SC Smith. 2006. Economic Development. Ninth Edition.
- [17]. Erland, Jakarta.
- [18]. Tarin. 2014. Regional Economic Theory and Applications Revised Edition. Jakarta: PT. Earth Literacy.
- [19]. Todaro, MP (2000). Economic Development. Harlow: Addison-Wesley.
- [20]. Todaro, MP and SC Smith. 2006. Economic Development. Ninth Edition.
- [21]. Erland, Jakarta.
- [22]. Todaro, Michael. Q. And Stephen C. Smith in 2004, Economic Development in the third world, the eighth edition. Jakarta: Erland