

Analysis of the Effects of Capital Expenditure and HDI on Economic Growth and Poverty in East Aceh District

^{1*} Puja Rizqy Ramadhan

¹ Department of Accounting, Faculty of Social Science, University of Pembangunan Panca Budi, Indonesia

Abstract: The purpose of this study is to analyze the effect of regional government capital expenditure and human development index partially and simultaneously on economic growth and poverty. Local government capital expenditure variables and human development index as exogenous variables, while economic growth and poverty as endogenous variables. This research uses time-series data with time series from 2005-2015. The analysis method uses path analysis with the Eviews program. The results of the study with a significance level of 5% indicate that simultaneously capital expenditure and human development index have no significant effect on economic growth, then simultaneously capital expenditure and human development index have a significant effect on poverty and simultaneously capital expenditure and human development index have a significant effect on poverty through economic growth. Partially capital expenditure has a positive and not significant effect on economic growth, then partially the human development index has a negative and not significant effect on economic growth and capital expenditure has a negative and not significant effect on poverty and the human development index has a positive and not significant effect on economic growth.

Keywords: Local Government Capital Expenditure, Human Development Index, Economic Growth, Poverty.

I. Introduction

The implementation of regional autonomy has given authority to the regions to regulate and manage their respective regional administrations. This is done to be able to realize the demands of society effectively and efficiently to realize public welfare. General welfare can be realized if the local government provides services to the community through programs such as increasing human capital, availability of adequate infrastructure, and availability of sufficient jobs.

The availability of infrastructure spendings such as education facilities and adequate health facilities can increase the Human Development Index (HDI). HDI is one of the important factors in the performance of the regional economy which is expected to be able to encourage economic growth in the long run so that it can be felt by the community. Successful economic performance is characterized by increased productivity and per capita income of the population so that welfare as the main goal of development will be achieved.

East Aceh is one of the districts in Aceh Province. Since 2000, East Aceh District has experienced an expansion aimed at ensuring equitable regional development. The regions resulting from the expansion of East Aceh Regency are Langsa City and Aceh Tamiang Regency. To realize equitable regional development, a budget is needed that can be used as public expenditure such as capital expenditure. East Aceh District Capital Expenditure fluctuates every year. In 2016, East Aceh Regency's capital expenditure amounted to 368,300 billion, then in 2017 it increased by 389,467 billion and in 2018 it decreased by Rp 140,370 billion.

In general, local governments are obliged to optimize revenue potential by allocating higher public expenditure budgets for more productive things, such as spending that can create jobs and improve public services, for example, capital expenditure for the construction of schools and hospitals. By increasing public services, it will have an impact on increasing local revenue (PAD) so that it can encourage increased economic performance. The government budget that is absorbed effectively and efficiently is a public service process that is the most important national goal because government spending is an important instrument that stimulates the performance of the regional economy.

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The United Nations Development Program (UNDP), is a program that develops a measure of development performance called the Human Development Index (HDI). BPS Aceh, states that the indicators used to compile the HDI are life expectancy, community literacy rates, and per capita real income levels based on purchasing power parity (PPP). East Aceh was one of the regencies in the lowest position from 2010 to 2015. East Aceh District consistently ranked 18th HDI during this period.

High economic growth is one of the development priorities of a country, which is one indicator of the success of a development. Economic growth is also used as an indicator to measure a country's economic performance. The rate of economic growth in East Aceh Regency fluctuates every year. In 2015, East Aceh Regency's GRDP experienced a deficit of -5.89%, then in 2016 it was -1.02% and in 2017 it was 4.12%. This is because revenues in the mining and quarrying sectors have experienced a relatively significant slowdown in growth, which has accumulatively caused total economic growth in East Aceh Regency to grow negatively.

Poverty will have a negative impact, thus hampering the process of regional development. Poverty is the inability of the population to meet minimum standards of basic needs that include food and non-food needs. To measure poverty, the Central Statistics Agency (BPS) uses the concept of ability to meet basic needs (basic needs approach).

With this approach, poverty is seen as an economic inability to meet basic food needs. To overcome the problem of poverty, appropriate policies and strategies are needed, so that it will be more effective in reducing poverty. Percentage of Poverty in East Aceh District fluctuated, this can be seen in 2016 the percentage of 15.06%, then in 2017 increased by 15.25% and in 2018 again decreased by 14.49%. This is due to the increasing inequality of income or expenditure distribution among the poor.

II. Literature Review

Arsa (2012: 20) states that capital expenditure is a regional government expenditure that benefits more than one fiscal year and will add assets or regional wealth and result in adding to routine spending. Capital expenditure is classified into two groups, the first group is a public expenditure, which is expenditure whose benefits can be directly enjoyed by the community, for example: building bridges, purchasing ambulances for the public and others. The second group is apparatus shopping, which is spending whose benefits are not enjoyed directly by the community but can be felt directly by the apparatus, for example, the construction of council buildings, the purchase of official cars, and others. Almost all capital expenditure budgets contain commitments for long-term expenditure.

Sularso and Restianto (2011: 113) state that the allocation of capital expenditure is the allocation of budget expenditures for the acquisition of fixed assets and other assets that provide benefits over one accounting period, compared to the total expenditure in the APBD. Capital expenditure allocation is calculated using the following formula:

$$\text{Capital Expenditure Allocation} = \frac{\text{Capital Expenditure}}{\text{Shopping Total}} \times 100$$

The Human Development Index was first introduced in 1990 by one of the international organizations under the auspices of the United Nations, the UNDP (United Nations Development Program). Puji and Dhiah (2011: 4), stated that the human development index (HDI) is a comparative measurement of life expectancy, literacy, education of living standards for all countries throughout the world. Even though it is quite extensive in human development, it is considered the most basic and strategic indicator that can reflect aspects of the opportunity to live long and healthy, have adequate knowledge and skills, and live well, meaning that there is an ease in gaining economic access.

In 1990, this composite index was calculated using a three-dimensional approach, namely the dimensions of longevity and healthy life (life expectancy at birth), the dimension of knowledge (adult literacy rates), and the dimensions of decent living standards (GDP per capita). The three dimensions are then calculated using an arithmetic average to obtain an index of human development.

Changes made by UNDP to the calculation of HDI are based on the need that a composite index such as HDI must be able to be an appropriate measurement tool, with the selection of variables and accurate methods. The two things that are most essential to changes in HDI are changes in literacy and GDP per capita variables and changes in calculation

methods from arithmetic averages to geometric averages (BPS Aceh, 2015: 7).

In general, economic growth is defined as an increase in the ability of an economy to produce goods and services. Economic growth is one of the most important indicators in analyzing economic development that occurs in a country. Economic growth shows the extent to which economic activity will generate additional community income in a given period. Because economic activity is a process of using factors of production to produce output, this process will in turn produce a flow of remuneration for the factors of production owned by the community. With economic growth, it is expected that people's income as a factor of production will also increase.

Sularso and Restianto (2011: 113) state that regional economic growth is an increase (GDP) or GRDP regardless of whether the increase is greater or smaller than the rate of population growth or whether there is a change in economic structure. GRDP growth rate is the rate of growth from year to year which is calculated by the formula:

$$\text{GRDP Growth Rate (G)} = \frac{\text{GRDP } t - \text{GRDP } t - 1}{\text{GRDP } t - 1} \times 100$$

According to Jhingan (2004: 67), the process of economic growth is influenced by two kinds of factors, economic and non-economic factors. A country's economic growth depends on natural resources, human resources, capital, technology businesses, and so on.

Theories about economic growth are as follows (Sukirno, 2006: 432): Classical growth theory. According to the views of classical economists, four factors influence economic growth, namely: population, number of stocks of capital goods, land area and natural wealth, and the level of technology used. In classical economic theory, the factors of production are very important in raising national income and achieving growth. But what the classical economists especially notice is the role of labor, because excessive labor will affect economic growth. Schumpeter's theory, Schumpeter's theory emphasizes the important role of entrepreneurs in realizing economic growth. In this theory, it is shown that entrepreneurs are a group that will continually make updates or innovations in economic activity. Harrod Domar's theory, In this theory, shows the role of investment as a factor that causes an increase in aggregate expenditure. This theory emphasizes the role of the demand side in realizing growth. Neo-Classical Growth Theory, through empirical studies this theory shows that technological development and increasing community skills are the most important factors in realizing economic growth.

According to the Central Statistics Agency, poverty is the inability to meet minimum standards of basic needs which include food and non-food needs. Suyanto (2007: 32), divides the way of thinking that views poverty as an absolute symptom and a relative symptom. The way of thinking (model) about poverty as an absolute symptom of viewing poverty as a condition of material shortage, has little or no means to support one's own life. This realistic perspective consists of two perspectives, namely the cultural perspective and the structural model. Comparing the level of population consumption with the poverty line or the amount of rupiah for monthly consumption. Definition according to Foster in Muthalib (2015: 2), poverty is a condition where a person or a completely lacking family. According to Jhingan (2010: 78), suggests three main characteristics of developing countries that are the causes and at the same time related to poverty.

The development of facilities and infrastructure by local governments has a positive effect on economic growth (Kuncoro, 2004: 68). A fundamental condition for economic development is a balanced level of development capital procurement with population growth. Increased infrastructure and improvements by local governments are expected to spur regional economic growth. According to Brata (2002: 121), the relatively high level of human development will affect economic performance through population capabilities and the consequence is an increase in productivity and creativity of the community. With increased productivity and creativity, the population can absorb and manage the resources that are important for economic growth.

The influence of human development on economic growth through improving the quality of human resources or in economics is commonly referred to as the quality of human capital (Ranis, 2004: 6). Improving the quality of human capital can be achieved if you pay attention to two determinants that are often mentioned in some literature, namely education, and health.

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According to Noor (2015: 258), in terms of the public economy, State expenditure or expenditure in the APBN is shown for the management of meeting public needs. The government is the party that represents and carries out the duties and functions of the State in creating public welfare. The welfare of the people of a region or country is determined by at least two things:

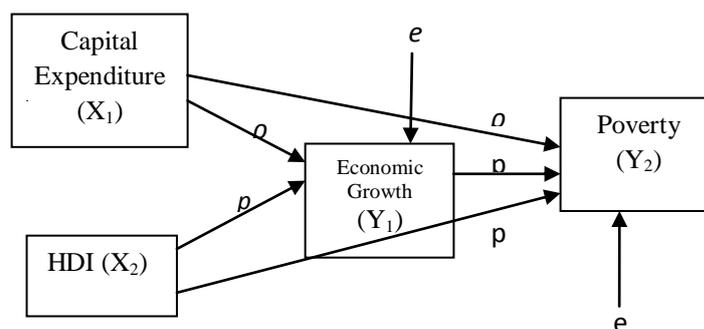
The community has a source of income or an adequate source of income, namely by having a job by their abilities and talents. Fulfillment of services needed by the people of his country. This service is in the form of the availability of goods and services for public needs (water, electricity, health, education, and security) and other public rights to live a decent life.

State expenditure is not only the amount and volume that is important but what also needs to be considered is the accuracy of its use. Can stimulate economic activity in the community so that it contributes to public welfare. As an example of compiling a shopping plan, then the impact of this expenditure can be considered in the community. So it can be concluded that government or government spending plays an important role in poverty alleviation.

According to UNDP (1996) the relationship between poverty rates and human development, namely a large number of poor people also influences human development. Because residents who belong to this group, generally have limitations on the factors of production, so that access to economic activity is experiencing obstacles. As a result, productivity becomes low, in turn, the income received is far from enough. The impact, to meet their basic needs, such as food, clothing, and shelter needs are experiencing difficulties. Especially for other needs such as education, health and others are hampered. The implication is that in areas where there are quite a lot of poor people, it will be difficult to achieve success in human development.

III. Methodology

Data analysis is an important step in research, especially if the research intends to conclude the problem under study. To analyze the data needed a method or method of data analysis. The data analysis method is used to change or analyze research data so that it can be interpreted so that the resulting report is easy to understand. Methods of data analysis using path analysis and data processing using Eviews software. The mathematical model of the path model is often called a structural model, based on the hypothesis of this study, can be formulated as follows:



Picture 1. Full Model

The Substructural Equations in this analysis are:

$$Y_1 = \rho_1 X_1 + \rho_2 X_2 + e_1$$

$$Y_2 = \rho_3 X_1 + \rho_4 X_2 + \rho_5 Y_1 + e_2$$

Direct influence: The effect of each variable X_1 and X_2 on Y_1 are ρ_1 , ρ_2 , respectively. The effects of X_1 and X_2 on Y_2 are ρ_3 , ρ_4 , respectively. The effect of Y_1 on Y_2 is ρ_5 . Indirect influence: The effects of each variable X_1 and X_2 on Y_2 through Y_1 are as follows: The effect of X_1 on Y_2 through Y_1 is $(\rho_1)(\rho_5)$. The effect of X_2 on Y_2 through Y_1 is $(\rho_2)(\rho_5)$. Total effect: The total effect of each variable X_1 and X_2 on Y_2 through Y_1 is as follows: The effect of X_1 on Y_2 through Y_1 is $(\rho_1 + \rho_3) \times (\rho_5)$. The effect of X_2 on Y_2 through Y_1 is $(\rho_2 + \rho_4) \times (\rho_5)$. Then hypothesis testing is done using the t-test, f test, and coefficient of determination.

IV. Results

The Effects of Capital Expenditures on Economic Distribution

Based on the results of the partial hypothesis testing of capital expenditure variables are not significant to economic growth. The probability value of the t-test for capital expenditure variables is 0.0125. Because the probability value of 0.0125 or greater than 5% (0.05), it is concluded that it is partially significant.

This is by research conducted by Ahmad Fajri (2016), with the research title "Effect of Capital Expenditures on Economic Growth of Provinces in Sumatra". The results found that the highest rate of capital expenditure development was obtained by Lampung Province by 41%, followed by West Sumatra Province and Bangka Belitung Province each by 18%. While the lowest capital expenditure development was obtained by Aceh Province by -4%. Capital expenditure does not have a significant influence on boosting economic growth in provinces in Sumatra. This shows that the allocation of capital expenditure policies is still not quite correct so that it is unable to encourage an increase in regional product demand. However, this study is not by Nurmainah's research (2013), the results showed that capital expenditure has a positive and significant effect on economic growth.

The Effect of HDI on Economic Growth

Based on the results of hypothesis testing it is known that the partial effect of the human development index variable is statistically significant on economic growth. The probability value of the t-test for the human development index variable is 0.3065. Because the probability value of the t-test is less than 5% (0.05), it is concluded that the partial effect is not statistically significant. The direct effect of the human development index is known to be -233.1488 and this value has a negative effect on economic growth meaning that any increase in the human development index will decrease economic growth. This is not by research conducted by Pituringsih (2013), which states that the GRDP on HDI shows a negative and significant effect.

The Effects of Capital Expenditures on Poverty

Based on the results of hypothesis testing it is known that the partial effect of the regional government capital expenditure variable is not statistically significant on poverty. The probability value of the t-test for the capital expenditure variable is 0.9567. Because the probability value of the t-test is 0.9567 which is greater than 0.05, it is concluded that the partial effect is not statistically significant.

This is by research Kotambunan, et al (2016). Influence does not fit the theory. This is because there are still government programs that are considered still not on target and even unsuccessful in alleviating poverty. This is because the program has not been able to touch the most fundamental problems that occur in the community so the results have not been effective. Also, the existing programs are considered to be reactive, short-term, and partial.

The Effect of HDI on Poverty

Based on the results of hypothesis testing, it is known that the partial effect of the human development index variable is not statistically significant in poverty. The probability value of the t-test for the human development index variable is 0.6434. Because the probability value of the t-test is 0.6434 which is greater than 0.05, it is concluded that the partial effect is not statistically significant. This is not by the research of Kotambunan, et al (2016) because the human development index figure in East Aceh District is too small so it has not been effective in reducing poverty.

The Effect of Economic Growth on Poverty

Based on the results of hypothesis testing, it is known that the partial effect of the variable of economic growth is statistically significant in poverty. The probability value of the t-test for the capital expenditure variable is 0.0352. Because the probability value of the t-test is 0.0352 which is smaller than 0.05, it is concluded that the partial effect is statistically significant.

This study is by Suadnyani and Darsana (2018). The test results with SPSS obtained the results that simultaneously economic growth, unemployment, and education variables had a significant effect on unemployment in Bangli Regency. Partially, economic growth and education variables have a negative and significant effect on poverty in Bangli Regency.

V. Conclusion

Based on the discussion that has been explained, the following conclusions can be drawn: Capital expenditure has a positive and not significant effect on economic growth, while the human development index has a negative and not significant effect on economic growth. Capital expenditure has a negative and not significant effect on poverty, while the human development index has a positive and not significant effect on poverty. Capital expenditure and the human development index together have an insignificant effect on economic growth. Capital expenditure and the human

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development index together have a significant effect on poverty. Capital expenditure and the human development index together have a significant effect on poverty through economic growth.

Based on the conclusions obtained in this study, then some suggestions are given for development as follows: In increasing economic growth and reducing poverty levels, local governments should be wiser in preparing capital expenditure budget planning in the APBD. So that the capital expenditure budget can be used more effectively. The size of the budget can directly affect economic growth and reduce poverty. In addition to increasing economic growth, the government must also pay attention to the quality of human capital (human development) through education and health to be able to increase the human development index and reduce poverty levels. Increased economic growth may not necessarily reduce poverty because economic growth is not spread evenly in each region so competitiveness is needed so that each region can increase its per capita income which will reduce poverty and raise the human development index.

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