AN ANALYSIS OF DEFINING FACTORS OF ECONOMIC GROWTH IN EAST KALIMANTAN PROVINCE, INDONESIA

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Abstract

In this research, the variables of government expenses in education and health sectors, government expenses in infrastructure sector, investment toward economic growth in East Kalimantan Province will be analyzed. The result of this research shows that the variables of government expenses in education and health sectors do not significantly affect the investment in East Kalimantan Province, while the variables of government expenses in infrastructure sector significantly affect the investment in East Kalimantan Province with the assumption of other factors which affect the size of investment are considered constant. Other finding shows that the variables of government expenses in education and health sector significantly affect the economic growth in East Kalimantan Province while the variables of government expenses in infrastructure and investment sectors do not significantly affect the economic growth in East Kalimantan Province with the assumption of other factors which affect the size of economic growth are considered constant.

Keywords: Government expense the education, health and infrastructure, investment, economic growth

I. INTRODUCTION

One of the objectives of macroeconomic development is to promote the economic growth in addition to two other objectives, those are stability and equity. These indicators are important to conduct an analysis of economic development which happens in a country, because it can provide a macro overview of government policy that has been done. The indicator of successful development of an area can be seen from the level of economic growth, economic structure and a high level of welfare.

Economic development as a sustainable improvement process from a society in order to get better, the development process aims to improve the welfare, dignity and values of the society including the improvement of the basic needs, the improvement of the life standard and economic and social choices for all of the society (Todaro and Smith, 2006).

In accelerating economic growth is determined by various factors. Within the scope of regional (provincial), the factors influencing the economic growth is government expense on education and health sectors as a target of region government policy in improving knowledge, education, training, skills and expertise of the community to realize the quality of human resource (Maruthappu, et al. 2015; and Pirim, et al. 2014).

The region economic development is determined by the amount of government expense in providing education and health facilities and infrastructure; it is based on the theory of Wagner. Reproductive government expense, especially on public health expenses sector will generate benefits for the surrounding communities. The improvements in education and health sectors are one of the indicators of economic development (Sukirno, 2000).

Government expense of infrastructure sector (Alshahrani, et al., 2014, Arpaia & Turrini, 2008, and Loizides & Vamvoukas, 2005) and the increase in government expense education and health sectors (Maruthappu, et al. 2015, and Pirim, et al. 2014) plays an important role in unemployment and increase economic growth in the province of East Kalimantan Province. In addition to government expense for education and health sectors, is as well as government expense of infrastructure sector.

Other components which may affect the economic growth and the unemployment rate is government investment and private investment, government investment is generally allocated to build facilities and infrastructure which in turn is expected to drive economic growth in turn, can improve the welfare of society. Empirically, the link between investments on economic

growth based on studies Haider, et al. (2007) and Ghani, and Din (2006) that public investment and private investment plays in economic growth. This research aimed to examine the effect of government expense for education and health sector, and government expense in infrastructure, and investment to economic growth.

II. LITERATURE REVIEW

1. Theory of Economic Growth

Economic growth explains or measures the achievement of the development of an economy. In an actual economy, economic growth means economic development physically happens in a country, such as increasing the number and production of industrial goods, increase the amount of infrastructure, education facilities, increase production of economic activities that already exist, and various other developments.

In general, economic growth is defined as the increase in the ability of an economy to produce goods and services. Economic growth is one indicator that is important in the analysis of the economic development that occurs in a country. Economic growth showed the extent to which economic activity would generate additional income of the people in a given period. Because, basically, economic activity is a process for the use of production factors to produce output, then this process will in turn generate a stream of remuneration to production factors owned by community (Basri, 2002), with the economic growth it is expected that public revenue as the owners of production factors will also increase.

The economy is considered growth if the entire real remuneration against the use of production factors in a given year is greater than the previous year. In other words, the economy is said to grow if the real income of the people in a given year is greater than the real income of the people in the previous year (Basri, 2002).

In other words that the economic growth refers to quantitative change and is usually measured by using data of Gross Domestic Product (GDP) or income or total market value of final goods and services resulting from an economy over a certain period (usually one year).

2. Theory of Government Expense

This theory can be classified into two parts, among which the theory of macro (Mangkoesoebroto, 2001) consisting of:

a. Rostow and Musgrave, where they connect the government expense with the stages of economic development. In the early stages of economic development, according to them, the ratios of government expense to national income is relatively large. That's because at this early stage the government should provide a variety of facilities and infrastructure. At the intermediate stage of economic development, government investment is still required in order to spur growth in order to be able to take off. At the same time the position of private sector investment is also increasing. But the magnitude of the government role is because at this stage many market failures caused by economic development itself, namely the case of negative externalities, such as environmental pollution. In a development process, according to Musgrave, total investment ratio to national income grew, but the ratio of public investment to national income will decrease. Meanwhile Rostow found at an advanced stage of development was occurred transitional government activity, from the provision of economic infrastructure to expenses for social services such as health and education. Theory of Rostow and Musgrave are the views arising from the observation of the experience of economic development experienced by many countries, but not based on a particular theory. In addition it is not clear, whether the stage of economic growth occurred in one step, or several steps may occur simultaneously.

b. Wagner law, Wagner makes the observation of European countries, United States and Japan in the 19th century which shows that the government activity in the economy tends to increase. Wagner measures of the ratio of government expense to national products. The findings by Richard Musgrave called law of growing public expenses. Wagner himself called it the law of ever increasing state activity. According to Wagner, there are five things that cause government expense always increases that demands for increasing security protection and defense, rising society income levels, urbanization accompanying economic growth, the development of

democracy and bureaucracy inefficient that accompanies the government development.

c. Peacock and Wiseman, they express another opinion in explaining the behavior of the government development. They based it on an analysis of "dialectics of government acceptance-expense". The government is always trying to enlarge its expense by relying on tax revenue. Though people do not like paying increasingly big taxes. Referring to the theory of voting, they argue that the public has a tolerance limit of the tax, which is a level where people can understand the magnitude of the tax charges required by the government to finance the expenses. The tolerance level of this tax is a constraint that limits the government to raise the tax charges that is not arbitrarily or arbitrary. According to Peacock-Wiseman, economic development led to tax charges increased that although the tax rate may not change, in turn resulting in increased government spending as well. So under normal circumstances, the increase in national income also increases both government revenue and expense. If the normal condition so disturbed, say due to war or other externality, then the government was forced to increase the expense to overcome the interference. Consequently, the demand arises to obtain greater tax revenue. The greater tax charges cause private funds for investment and working capital to be reduced. This effect is called the displacement effect. The postulate pertaining to this effect stating, social disruption in the economy led to private activity is replaced by government activity. Resolving interruption is often not sufficiently funded solely by taxes so that the government may have to also borrow funds from abroad. After the interruption is resolved, the obligation to settle debts and pay interest is coming. Government expense is also becoming swollen with the new obligations. Further result is that the tax does not fall back to previous levels despite the disturbance was over. If at the time of social disruption in the economy arising replacement effect, then after ending disorders also occur another effects called inspection effect.

3. Investment Concept

Investment is a course of action invests some funds in order to gain added value in the form of profit (return) in the future. Gordon et al (1993), formulates investment with the

following terms of sacrificing owned assets now in order to get the asset at a future course with a larger amount. Jones (2004) defines investment as a commitment to invest some funds in one or more assets for some period in the future. Definition of Reilly and Brown (2003), which states that the investment is a commitment to tie asset today for some period of time into the future in order to earn income that can compensate for the sacrifices of investors.

III. RESEARCH METHODS

This research is research that explains the causal relationship between the variables or called explanatory research is a research to determine and influence explanations between the given variable and followed by hypothesis testing. In addition, this research included in the descriptive research due to it provides a descriptive explanation of the variables to be studied.

In this research will be analyzed variables government expense for education and health sector, government expense in infrastructure, investment on economic growth in East Kalimantan, Indonesia. The data used in this research is quantitative data and data sources used are secondary data. The data used in this research is data panel, or a combination of *time series* data and *cross session*. *Time series* data in this research is the research observation time of the year 2008 - 2014 that is seven (7) years. The conceptual framework of the research is described as follows.

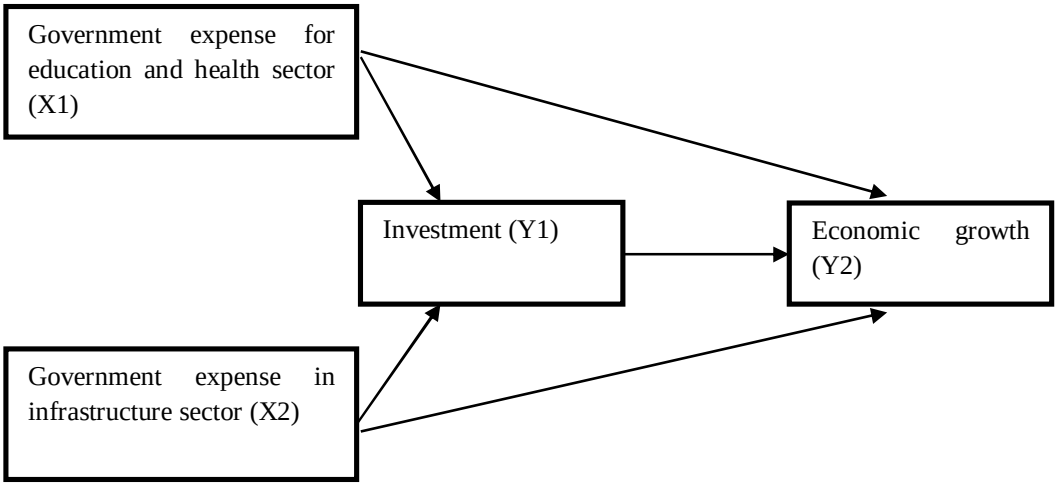

Figure 1. Conceptual Framework

Based on the framework and the problems studied, it can be made the following hypothesis:

1) H1: Government expense for education and health sectors has a significant effect on economic growth.
2) H2: Government expense for infrastructure sectors has a significant effect on economic growth.
3) H3: Government expense for education and health sectors has a significant effect on investment.
4) H4: Government expense for infrastructure sector has a significant effect on investment.
5) H5: Investments has direct significant effect on economic growth.

IV. RESULTS AND DISCUSSION

The research model was analyzed using AMOS program. In this research there is some relation between exogenous and endogenous variables, then to make it easier to analyze the functional relation between variables then coefficient values arranged in the form as shown in Table 1 below:

Table 1. Functional Relation between Variables

Variable	Variable	Coefficient	Critical Ratio	Probability	Information
Government expense for education and health sector	Investment	0,140	1,890	0,059	Not Significant
Government expense infrastructure sector	Investment	0,544**	5,318**	0,000**	**Significant**
Government expense for education and health sector	Economic growth	0,544*	2,546*	0,011*	**Significant**
Government expense infrastructure sector	Economic growth	0,224	1,160	0,246	Not Significant
Investment	Economic growth	0,236	1,722	0,085	Not Significant

Information: *) Significant at the level of 5 percent

**) Significant at the level of 0.1 percent

Government expense variables influence for education and health sectors (X1) of investments (Y1) of 0,140 with the *critical ratio* value of 1,890 at a significance level of 0,059. The coefficient indicates that the variable government expense for education and health sector did not significantly affect investment in East Kalimantan assuming other factors that affect the size of the investment is considered a constant. The results of this research contradict the findings of Wang (2005) that government expense significant impact on private investment. Studies Njuru, et al. (2014) also found that the allocation of funds from the government is essential for private investment.

The effect of government expenses for infrastructure sector variable (X2) on investments (Y1) amounted to 0,544 with the *critical ratio* value of 5,318 at a significance level of 0,000. The coefficient indicates that the variable of government expense for infrastructure sector has significant effect on investment in East Kalimantan assuming other factors that affect the size of the investment is considered a constant. Studies Basar, et al. (2011), government expense contributed positively to private investment. With the change of government expense for infrastructure sector will have an impact on increased investment in East Kalimantan.

The effect of government expenses for education and health sector variable (X1) on economic growth (Y2) amounted to 0,544 with the *critical ratio* value of 2,546 at a significance level of 0,011. The coefficient indicates that the variable of government expense for education and health sectors has a significant effect on economic growth in East Kalimantan assuming other factors that affect the size of the economic growth that is considered constant. Statistical tests result on the effect of government expense for infrastructure sector on economic growth has been relevant to the findings Mihaiu, et al. (2013), Basar, et al. (2011), and Bello, et al. (2012) that government expense had a positive impact on private investment.

The effect of government expenses for infrastructure sector variable (X2) on economic growth (Y2) amounted to 0,224 with the *critical ratio* value of 1,160 at a significance level of 0,246. The coefficient indicates that the variable of government expense for infrastructure sector did not significantly influence economic growth in East Kalimantan assuming other factors that affected the size of the economic growth considered constant. The effect of investment variable (Y1) on economic growth (Y2) amounted to 0,236 with the *critical ratio* value of 1,722 at a significance level of 0,085. The coefficient indicates that the investment

variable had no significant impact on economic growth in East Kalimantan assuming other factors that affected the size of the economic growth considered constant.

V. CONCLUDING REMARKS

Government expense for education and health sectors as a form of East Kalimantan provincial government policy did not effective in improving the investment but government expense could trigger regional economic growth, while public expense sector had been shown to increase investment both public and private investment. Investment had not contributed significantly to the economic growth of the region.

It is expected that APBD allocation be the government priority scale of district / city in East Kalimantan as a strategic objective in improving economic growth. Government maximizes investment in the region by creating stability in the economic, social, legal and social. Investment is one of the important factors in the process of economic growth, so that required investment as important capital for regional development.

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