

Analysis of Regional Financial Management and Public Sector Services on Economic Growth in East Kalimantan

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Abstract

Regional Financial Management is the government financial management issued by the regional government. The task of regional financial management has been regulated under laws and regulations, one of which is related to activities in public sector services. This research analyzed the effect of regional financial management and public sector services on economic growth in East Kalimantan during 2018-2019. Based on the research results, regional financial management positively affected economic growth in East Kalimantan with a coefficient of 35.697. If the regional financial management increases by 1% (*ceteris paribus*), the economic growth in East Kalimantan will increase by 35.697%. Similarly, public sector services positively affected economic growth in East Kalimantan with a coefficient of 51.062. It means that if public sector services increase by 1% (*ceteris paribus*), the economic growth in East Kalimantan will increase by 51.062%..

Keywords: Regional financial management, public services, economic growth

1. Introduction

The Indonesian government has issued some instruments to influence its macroeconomic activities, one of which is a policy instrument. A policy instrument is an economic variable under government control that can influence one or more macroeconomic targets. The theories of John Maynard Keynes and other economists have helped explain what forces cause various economic fluctuations and helped formulate an approach to overcome the worst effects resulted from the business cycle. With macroeconomic policies, such as enacting or changing fiscal policy or other policies, the government can control the economy towards better output, price stability, job opportunities, and international trade. As an organization or household, the government does a lot of financial management to finance its activities. Financial management is to run the daily wheels of government and finance economic activities, in the sense that the government must move and stimulate its economic activities in general. The government must pioneer and run economic activities that the public or private sector is not interested in carrying out.

In this case, the government deems that it is necessary to handle certain economic activities alone without the private sector intervention. Hence, the government carries out various financial management. However, the national economy has not yet recovered due to the US dollar fluctuation against the Rupiah, which also affects East Kalimantan's economic growth. Regardless of this condition, the economic actors have begun to improve and anticipate the financial sector and are supported by declining bank interest rates. As a result, the economic activities in the real sector begin to move, leading to an increased rate of East Kalimantan's economic growth. According to available data, the regional financial management in East Kalimantan has increased every year. The economy of East Kalimantan Province in 2019, as measured by Gross Regional Domestic Product (GRDP),

reached 164.42 trillion IDR at current prices and 123.05 trillion IDR at constant prices. As a result, the economic growth of East Kalimantan in 2019 was 6.89%, higher than that in 2018, which was 1.83%. The highest growth was achieved by the mining and quarrying business sector in terms of production, reaching 11.46%.

2.Theoretical Review

2.1Government Financial Management

Besides achieving the ultimate goal of its financial management policies, the government must also take into account the targets, both those who will enjoy and those who will be affected by the policy. Enlarging financial management with the sole purpose of increasing the national income or expand job opportunities is not enough. The government must consider which layers of society working and having an increased income. The government also needs to find ways to increase its roles in the economy without weakening the private sector activities. The development of government financial management is related to the stages of economic development, consisting of early, middle, and advanced stages. In the early stage of economic development, the percentage of government investment to total investment is large because, at this stage, the government must provide infrastructure such as education, health, transportation infrastructure, and so on (Mangkoesobroto, 2002, p. 170).

At the middle stage of economic development, government investment is still needed to increase economic growth to take off. However, at this stage, the role of private investment is also getting larger. It results in many market failures and causes the government to provide public goods and services in more significant quantities and better quality.

In addition, at this stage of economic development, inter-sectoral relations are increasingly complicated. For example, economic growth generated by industrial sector development inseparably results in a higher air and water pollution level. In this case, the government must intervene to regulate and reduce the negative effects of pollution on society. The government must also protect and increase the welfare of workers who are in a weak position. According to Musgrave, the ratio of private investment (in percentage) to GNP will get smaller in the development process.

Rostow argued that government activities shifted from providing financial management infrastructure to social activities such as old age welfare programs, health service programs, and others (Mangkoesobroto, 2002, p.170).

According to Wagner, five factors cause government financial management to increase continually. These five factors include the demand for increased security and defense protection, increased people's income levels, urbanization accompanying economic growth, development of democracy, and bureaucratic inefficiency accompanying the government development (Dumairy, 2006, p.167).

Furthermore, Mangkoesobroto (2002, p.2) stated that there is always government intervention or investment in the economy in any country. In a modern economy, the roles of government can be classified into three major groups, namely:

a.Allocation Role

The state-owned resources can be used to produce private goods and public goods. Private goods/services refer to goods/services whose availability can be fulfilled by the market system through transactions between sellers and buyers. However, not all public needs for goods and services can be provided by the private sector. On the other side, goods and services that this market system cannot provide are called public goods/services, so they need to be allocated by the state, such as road infrastructure, defense, air cleaning, and so on.

b. Distribution Role

Through fiscal policy, the government can change the position of the income distribution. One way is to implement a progressive tax system in which a higher tax burden is imposed on the rich, and a relatively lighter one is destined for the poor, accompanied by subsidies. In addition, through subsidies, the government can indirectly influence income distribution through budgetary policies, for example, by providing cheap housing loans for low-income groups and fertilizer subsidies for farmers.

c. Stability Role

In addition to allocation and distribution roles, the government has a major role as an economic stabilizer through various regulations. As a result, the government is trying to maintain a high level of job opportunities, a relatively stable price level, and an adequate level of economic growth.

According to Sukirno (2002, p.151), the amount of government financial management to be carried in a certain period depends on many important factors, including the amount of tax revenue, the objectives of short-term economic activity, and long-term economic development, and considerations of politics and security.

d. Government Financial Management can be divided into two:

1. Regional Officials refers to Financial Management aimed for daily maintenance or administration of government, including personnel expenditure, goods expenditure, various kinds of subsidies (regional subsidies and price subsidies), installments and interest on government debt, and other financial management. The routine expenditure budget plays an essential role in supporting the smooth functioning of the government system mechanism and the efforts to increase efficiency and productivity, which will help achieve the targets and objectives of each stage of development. Therefore, everyday savings and efficiency of financial management need to be carried out to increase the government savings for financing national development. The savings and efficiency can be realized by better management of financial allocations, controlling and coordinating the purchase of goods and services for the needs of the department and non-department state institutions, and gradually reducing various kinds of subsidies.

2. Public Services refer to financial management, which increases public capital in the form of the development of both physical and non-physical infrastructure. This development financial management is divided into two: with rupiah funds and project assistance. Development financial management is financial management aimed at financing development programs so that the budget is adjusted to the funds. Funds are then allocated to various fields according to the planned priorities.

3 Economic Growth Theory

In short, economic growth is the process of increasing output per capita in the long term. This definition emphasizes three aspects: process, output per capita, and long-term. First, economic growth is a “process”, or how the economy develops or changes over time.

Economic growth means the development of economic activities causing the goods and services produced in the community to increase, ultimately improving the community’s prosperity. Economic growth problems can be viewed as macroeconomic problems in the long run. The ability of a country to produce goods and services will increase over time because the production factors will always experience an increase in quantity and quality. The investment will increase the number of capital goods as the technology used is evolving. In addition, the workforce increases due to the developing population, work experience, and education increase skills (Sukirno, 2002, p. 10).

a. Classical Growth Theory

This classical theory was pioneered by Adam Smith, David Ricardo, Maltus, and Jhon Stuart Mill, stating that economic growth was influenced by four factors: land area, population, number of goods and capital, and technology. These figures focused their attention on the effect of population growth on economic growth. They assumed that the land area, natural wealth, and technology had not changed. According to Sukirno (2006, p.247), the classical growth theory outlines the following views:

- 1) The level of development of a community depends on four factors: the population, the number of capital goods, land area, and the level of technology used
- 2) The national income can be divided into three types: workers’ wages, entrepreneurs’ profits, and land rent fees received by landowners.
- 3) An increase in wages will lead to population growth
- 4) The level of profit is a determinant of the amount of capital formation. If there is no profit, the capital formation will not occur, and the economy will reach the stationary state level.
- 5) The law of diminishing returns applies to all economic activities. Without technological progress, population growth will lower wages and profits but increase land rent costs.

b. Neo-Classical Approach (Robert M. Solow)

There is a possibility of changes in interest and wage rates in the model developed in Solow's theory (Sukirno, 2006, p. 263). The growth process is seen as a process taking place with variable balances among the factors of production. The prices of production factors are flexible, so there is a possibility of substitution among the production factors involved in the production process.

In circumstances where the amount of labor exceeds the supply of capital, the wage rate will decrease relative to the price of capital (the interest rate). Conversely, if the capital increase exceeds the increase in the number of workers, the wage rate will increase. Thus, changes in the prices of production factors and substituting one type of production factor with another can mutually limit the possibility of deviations from the growth equilibrium.

c. Keynes Approach

The classical theory assumes that without government intervention in the economy, economic development will run optimally. However, it turns out that in the 1930s, there was massive unemployment, arising Keynes's criticism with a macro approach to overcome unemployment, looking at the economy as a whole. Therefore, to overcome unemployment, Keynes needed to improve financial management so entrepreneurs increased investment, which would increase the workforce. Thus, the intervention of the government is required in terms of printing money. It can increase the purchasing power of the people, ultimately increasing productivity.

d. Neo Keynes Approach

1) Theory of Roy F. Harrod

Harrod's concern revolves around economic growth, which can occur continuously in a stable equilibrium state. In this connection, Harrod in Sukirno (2006, p. 256) describes two understanding concepts regarding the growth rate as the key ideas: (1) the growth rate of production and income at a level considered adequate from the point of view of entrepreneurs or investors (commonly known as the warranted rate of growth); and (2) the growth rate different from the warranted rate as mentioned above).

Harrod has suggested that continuous growth in equilibrium (with stable income and full employment opportunities) can only be achieved if the two conditions referred to above are met, namely the ongoing warranted growth rate and the natural growth rate. However, the factors determining the warranted growth rate are different and separable from the factors determining the natural growth rate. Therefore, it is rare and perhaps coincidental that the warranted growth rate is the same as the natural growth rate (the rate of growth determined by the underlying conditions related to workforce growth and productivity gains).

Harrod in Sukirno (2006, p. 264) states that equilibrium in the growth process needs policy interventions to overcome instability and deviation disorders, which are the primary growth characteristics.

2) Theory of Evsey D. Domar

Domar's idea in Sukirno (2006, p.258) resists the application of the principle of investment multiplier. The rate of growth in effective demand is directly related to growth in production capacity. The model reveals that the growth in demand is equal to the increase in investment (I) multiplied by the multiplier. Meanwhile, the growth in production capacity is equal to investment (I) divided by the capital-output ratio (K). The result indicates that growth in demand is equal to the growth in production capacity: $\Delta I/I$ (equal to the growth in demand) and will relatively increase more than s/k (growth in production capacity): $\Delta I/I > s/k$. Such circumstances will bring investment in increasingly large amounts. Similarly, Harrod states that if the investment growth rate deviates from the s/k critical rate (the growth rate to production capacity), the deviation will continue in the same direction. The suggestion implies a need for policy intervention if the trend of deviation is to be returned to the equilibrium path.

e. Rostow's Theory of Growth

According to Rostow in Sukirno (2006, p.167), the process of development and growth can be divided into the following five stages of economic growth, classifying the position of every country in the world.

1) Traditional Society

Traditional society is defined as one whose structure is developed within limited production functions based on pre-Newtonian science and technology and pre-Newtonian attitudes towards the physical world. But the critical fact about this type of society is that there is a limit to attainable output per head. This limit arises due to the absence of access to modern science and technology. This type of society allocates a large proportion of its

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resources to agriculture. It is characterized by a hierarchical social structure in which there is a slight possibility for vertical mobility.

2) Preconditions to Take-off

In this second stage of growth, foundations and prerequisites for economic transformation (take-off stage) are laid, where the economy develops rapidly. In this stage, there are many changes in society's attitudes towards science, risk-taking, and profit-earning, which deviate from the traditional habits of society. With the development of science and technology, society begins to adapt itself to a more advanced economic life.

3) Take-off Stage

During this stage, there are leading sectoral industries that develop rapidly and generate significant profits, in which generally these profits are reinvested into new and original industries. Thus, the development of these various industrial fields can encourage further progress and renewal of the national economy.

4) Drive to Maturity

This stage of economic growth occurs when a country's economy becomes "mature", where the application of science and modern technology has developed and expanded to all fields and sectors of the economy. At this stage, the national economy has reached what is referred to as a state of "momentum" or being capable of generating self-sustained growth. So, the society's economy in this period has given rise to self-generating forces. Self-generating forces exist from the environment in the economy that can move forward and develop by themselves. At this stage, economic progress and prosperity have been achieved at a very high level. The economy has advanced to such a level that income and consumption have been so high. As a result, the average income of each individual continues to increase significantly. In general, the consumption level of every individual in the community and country exceeds the basic needs (in this case, food, clothing, housing, and others).

5) Mass Consumption

This era of mass consumption was marked by population migration to suburban areas and widespread use of cars, durable consumer goods, and household appliances. At this stage, the balance and direction of public attention shift from supply to demand, from production issues to consumption and welfare issues in a broad sense.

Conceptual Framework and Hypotheses

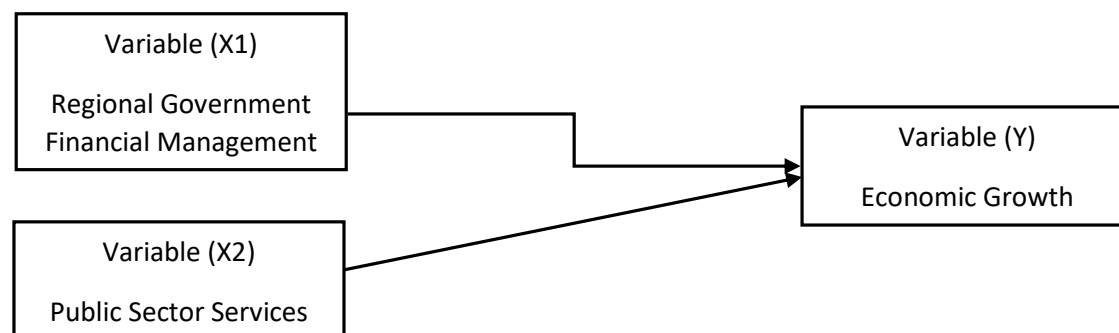


Figure 1. Conceptual Framework

Based on the explanation above, we formulated the following hypotheses:

1. Regional government influences the economic growth in East Kalimantan.
2. Public sector services influence economic growth in East Kalimantan

3 Research Methodology

3.1 Variable Operational Definition

Operational definitions of the variables studied in this research were summarized as follows:

1. Regional Financial Management (X_1) is financial management to maintain or carry out daily regional government wheels, including personnel expenditures, goods expenditures, various kinds of subsidies (regional

subsidies and good price subsidies), installments and interest on government debt, as well as the amount of other routine financial management, calculated in rupiah per year from 2018 to 2019.

2. Public sector services (X_2) is the financial management that increases public capital in developing both physical and non-physical infrastructure, calculated in rupiah per year from 2018 to 2019.

3. Economic Growth (Y)

Economic growth is the process of increasing per capita in the long run, which emphasizes three aspects (process, output per capita, and long-term), calculated in rupiah per year from 2018 to 2019.

3.2 Data Analysis Technique

Effects of the independent variables on the dependent variable were analyzed using the econometric model by regressing the existing variables using the Ordinary Least Square (OLS) method. The data used were time-series data from 2018 to 2019. Furthermore, the data were analyzed quantitatively using the multiple regression method with SPSS. Here is the regression equation used in the econometric model: $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \mu$

Where :

- Y = East Kalimantan’s GRDP
- α = Constant
- β_1, β_2 = Regression coefficient
- X_1 = Regional Financial Management of East Kalimantan
- X_2 = Public sector services of East Kalimantan
- μ = Term of error

4. Discussion

The model was formed and estimated using time series data from 2018 to 2019. This method was used due to its specification in analyzing between the independent variable and dependent variable. The analysis was further continued using the SPSS program. This model was later assumed partially to see how the financial management of regional officials and public services on economic growth in East Kalimantan.

Table 1. Regression Results from SPSS

Model	Regression	Unstandardized Coefficient	R Square	t	F	DW	VIF
1	(Constant)	1953,114	0,923	0,391	71,761	1,130	1,062
	X_1	35,697		10,095			
	X_2	51,062		8,706			

a. Dependent Variabel : PDRB

b. Predictors : (Constant), Regional Financial Management and public sector services

After obtaining the results of data regression above, the data were then analyzed using the following regression equation:

$$Y = 1953.114 + 35.697 X_1 + 51.062 X_2 + \mu$$

Y = East Kalimantan’s GRDP (Billion rupiah)

X_1 = Regional Financial Management (Billion rupiah)

X_2 = Public sector services (Billion rupiah)

μ = Term of error

1. The results of the estimation model can be interpreted as follows:

a. Variable X_1 (regional government financial management) positively affects East Kalimantan’s economic growth with a coefficient of 35.697. Therefore, if the Regional Financial Management increases by 1% (*ceteris paribus*), the economic growth in East Kalimantan will increase by 35.697%.

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b. Variable X2 (public sector services) positively affects East Kalimantan's economic growth with a coefficient of 51.062. If the public sector services increase by 1% (*ceteris paribus*), the economic growth in East Kalimantan will increase 51.062%.

2. Coefficient of Determination (R Square)

The R Square coefficient of 0.923 indicates that Regional Financial Management can simultaneously provide variations in the explanation of economic growth of 92.3%. In comparison, the remaining 7.7% is explained by other variables that are not included in this model estimation or are in the disturbance or error term.

3. Statistical t-test

The statistical t-test is an individual test to prove that this regression coefficient is statistically significant. The statistical t-test in this research can be explained as follows:

a) Regional government financial management

1) $H_0: \beta_1 = 0$ (there is no effect of the regional government financial management)

$H_1: \beta_2 \neq 0$ (there is an effect of the regional government financial management)

2) $\alpha = 5\%$ t table = 1.761

$$Df = 15 - 1 = 14$$

3) $t_{\text{count}} = 10.095$

4) Decision making criteria:

H_0 is accepted if $t\text{-count} < t\text{-table}$

H_1 is accepted if $t\text{-count} > t\text{-table}$

The results of the above calculation indicate that the t_{count} is greater than the t_{table} ($10.095 > 1.761$), meaning that the regional financial management influences East Kalimantan's economic growth at the 95% confidence level ($\alpha = 5\%$).

b) Public Sector Services

1) $H_0: \beta_1 = 0$ (there is no effect of public sector services)

$H_1: \beta_2 \neq 0$ (there is an effect of public sector services)

2) $\alpha = 5\%$

$$t_{\text{table}} = 1.761$$

$$Df = 15 - 1 = 14$$

3) $t_{\text{count}} = 8.706$

4) Decision making criteria:

H_0 is accepted if $t\text{-count} < t\text{-table}$

H_1 is accepted if $t\text{-count} > t\text{-table}$

The results of the above calculation indicate that the t_{count} is greater than the t_{table} ($8.706 > 1.761$), meaning that the public sector services influence East Kalimantan's economic growth at the 95% confidence level ($\alpha = 5\%$).

4. Statistical F-Test

The statistical F-test is used to test whether the overall regression coefficient is significant in determining the value of the dependent variable.

a. $H_0: \beta_1 = 0$ (there is no effect of Regional Financial Management and public sector services)

$H_1: \beta_2 \neq 0$ (there is an effect of Regional Financial Management and public sector services)

b. $\alpha = 5\%$; $n - k = 13$

$$F_{\text{table}} = 3.81$$

c. $F_{\text{count}} = 71.761$

d. Decision making criteria:

H_0 is accepted if $t\text{-count} < t\text{-table}$

H_1 is accepted if $t\text{-count} > t\text{-table}$

The results of the above calculation indicate that the F_{count} is greater than the F_{table} ($71.761 > 3.81$), meaning that the Regional Financial Management and public sector services significantly influence East Kalimantan's economic growth at the 95% confidence level ($\alpha = 5\%$).

5. Conclusion

From the findings and discussion, the following conclusions are presented:

1. Variable X_1 (regional government financial management) positively affected East Kalimantan's economic growth with a coefficient of 35.697. It means that the increase in the Regional Financial Management of 1% (*ceteris paribus*) will raise economic growth in East Kalimantan by 35.697%. Likewise, Variable X_2 (public sector services) positively affected East Kalimantan's economic growth with a coefficient of 51.062. It means that the increase in public sector services of 1% (*ceteris paribus*) will raise economic growth in East Kalimantan by 51.062%.

2. Variable X_1 (the regional government financial management) and variable X_2 (public sector services) had a simultaneous effect on East Kalimantan's economic growth with an R-square coefficient of 0.923. It means that the Regional Financial Management and public sector services are simultaneously able to provide variations in the explanation of economic growth of 92.3%, while the remaining 7.7% is explained by other variables that are not included in this model estimation or are in the disturbance or error term.

Suggestion

1. Regional Financial Management should be continuously improved to increase economic growth, considering that the government's financial management system fluctuates, for example, the leadership changes, which also affect the financial management system. In other words, the stability of economic growth is considered essential.

The government is expected to pay more attention to economic growth, which tends to fluctuate using a standardized financial management system. In this way, it is hoped that the level of economic growth continues to increase, although it is not easy to change the applicable system

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