

Effect of Government Spending on Transportation Sector against Economic Growth and Income Distribution

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Abstract

This research is a literature review, the reviewing of the theoretical framework of the various sources of books and the results of previous studies related to the Effects of Government Spending on Transportation Sector Against Economic Growth and Income Distribution. Results of this study resulted in a theoretical framework that models the result that there are significant government spending in the transport sector to the economic growth and income distribution.

Keywords: Government Spending, Economic Growth and Income Distribution

Introduction

The era of decentralization policy in Indonesia reached significant development since the inception of regional autonomy in 1999, beginning with the passage of Act No. 22 of 1999 on Regional Government subsequently amended by Act No. 32 of 2004 on Regional Government. The products of this legislation made to create a system of regional autonomy and encourage a more democratic system of government. Regional autonomy is expected to encourage development that better suit the characteristics and needs of each region. It is proportionally realized by the setting, the distribution and utilization of national resources with justice, as well as providing a source of funding that is set through the financial balance between the central government and local governments. Finance area governed by the issuance of Law No. 25 of 1999 on Financial Balance between Central and Regional, later amended by Law No. 33 of 2004 on Financial Balance Central and Local Government.

According to Iqbal and Suleiman (2010), Indonesia's economy is promising achievement with an average growth of 5.5% after a period of reform and 7% in the New Order. The average difference between the economic growth before the economic crisis and after the economic crisis caused in part by the decline in the level of infrastructure investment. According to data published by the Central Bureau of Statistics, Indonesia investment ratio to Gross Domestic Product (GDP) in 2006 amounted to 3.5%, much lower than the pre-crisis level of investment of around 8% in 1997.

Average decline of economic growth and decline in the ratio of investment to GDP after the crisis, suggesting an association between economic growth and investment. Production theory and theories of economic growth involves the role of variable capital or investments for his role on output or the growth of output. A decrease in the ratio of investment to GDP after the crisis gives an indication of the sustainability of the disruption of economic growth at the same level as the previous period.

The role of investment or capital in the economy of Indonesia, also can not be separated from the role of government capital expenditures, where the investment itself consists of private investment and government investment. Local Government allocates capital expenditure in the budget expenditure is far below the value for the operating expenses, even greater expenditures for employees. Table 1 shows the role of the local government budget is only 23% on average for the capital expenditure of a total budget of 33 provinces in Indonesia. Shopping roads, irrigation network and only about 11% in 2010 to 2012.

The ratio of government spending to GDP the field of land transport provinces in certain years, there are four provinces of Maluku, North Maluku, Papua, East Nusa Tenggara, West Papua relatively large ratio of GDP, while the other provinces are relatively evenly below the figure of 8.93%. Central government expenditure ratio to GDP sea transportation each province, in certain years for Maluku province of North Maluku, East Nusa Tenggara, West Papua relatively large ratio of GDP, while the other provinces are relatively evenly below the figure of 2.49%, for the province Banten lower the ratio relative to DI Yogyakarta PDRBnya as well as a ratio to GDP figures each year zero.

Transport infrastructure are recognized by the government of Indonesia as one of the main elements of the economy, given the vastness of the territory, as well as the remoteness of untapped trade potential. Stakeholders realize the importance of investing in new transport infrastructure, as well as the maintenance and improvement of existing transport infrastructure. The provision of transport infrastructure services (in terms of quantity and

quality) inadequate seen as one of the main obstacles in order to achieve inclusive growth (World Economic Forum, Global Competitiveness Report, 2009-2010). Two other major obstacle is inefficient government bureaucracy, and public policy that is not stable. Not surprisingly, the business community in general and investors in particular, have considered transport as one of the main obstacles to doing business in Indonesia. Information available suggests that access to transport infrastructure, between one province to another province, very different (Iqbal and Suleiman, 2010).

In PP 32 of 2011 on the Master Plan for the Acceleration and Expansion of Indonesian Economic Development (MP3EI) 2011-2025, mentioned the availability of infrastructure will provide connectivity services that will reduce transportation costs and logistics costs in order to improve product competitiveness and accelerate economic movement. Mobility evaluated road network of connectivity between the center of activity in the area served by a network of roads and residents who have served the road network.

World Economic Forum (WEF) in 2012, shows three interesting facts related infrastructure in Indonesia. First, that the limitations of transport infrastructure and poor quality is the most serious obstacle faced by employers. The second group of the Association of Southeast Asian Nations, or ASEAN, ranking the quality of infrastructure of Korea is ranked ninth, followed by Malaysia and Thailand respectively on rank 32 and 46 at the level of the world, Indonesia is ranked 78 world level, only better than the Philippines (ranked 96) and Vietnam (rank 95). Third, of all components of the infrastructure in Indonesia the worst is the condition of the port is ranked 104, it is very contradictory to the geographical condition of Indonesia as a maritime country. While the best transportation infrastructure in Indonesia is an airport that ranks 89 in the world.

Infrastructure and means of transport is the main foundation of regional development, particularly infrastructure is necessary to support the economic and social activities in the area. Purposes of the infrastructure beside the highway, other elements are also included in the infrastructure of the area / region is; land transportation terminals, seaports, airports.

Transport infrastructure funding could come from the budget of the central government, local government, state enterprises or private investment, which contributes the role of government to be the dominant transport infrastructure. This is because it is a means of public transportation, so the government should be more involved in the provision of public facilities. The government made the allocation of transportation infrastructure funding through the state budget or the budget, so that the role of government spending on transportation infrastructure is vital.

Indonesia as a developing country is in full swing doing development in all fields, especially in the development of transport infrastructure. According to Easterly (2008), many local governments are stuck on consumer financing rather than financing productive. These issues formed the basis for less rapid economic growth of a region as a result of the development of infrastructure, especially transport infrastructure as a driver of the economy of a region.

The allocation of public expenditure on transport infrastructure is much lower than for other consumer goods allocation, such as energy subsidies and personnel expenditure are shown in Table 3. As an illustration in the state budget in 2012, transport spending figures only reached 63.26 trillion, while spending on energy subsidies reaching Rp. 168.5 trillion and personnel expenses reached Rp. 215.8, trillion.

The budget available in the state budget is not sufficient for transport infrastructure investment, even tend to decrease the proportion of the state budget. According to data from the Ministry of Finance, the funds available from the state budget to finance the construction of roads and bridges tend to decrease every year, which is about 13.3 trillion rupiah in 2008 to 9.6 trillion in 2010. The funds are available to finance road improvements and existing bridges tend to increase recorded from 3.0 trillion to 6.5 trillion for the same period. Realization change the state budget (APBN-P) in 2012, there were only 30 to 40 percent of the total budget for capital expenditures budgeted for infrastructure.

Transport infrastructure is believed to be driver or drivers for the development of an area. Therefore, the welfare disparity between regions can also be identified from the transport infrastructure gap. The way to measure the relative inequality of income distribution among the population of a country or region that has been widely recognized is through the use of the Gini coefficient (Gini Ratio). This coefficient can measure relative inequality of income distribution among the population of a country or region that has been recognized internationally.

The linkage between the central government expenditure ratio field of transportation by land, sea and air to the GDP by the Gini ratio. Both of these variables have a positive trend. Further comparison of the Gini ratio of 33 provinces and nationwide in 2006 for the provinces of Jakarta, Yogyakarta, Papua and West Papua is still above the national Gini ratio is 0.35%, whereas in 2012 the national Gini ratio showed a positive trend with a rate of 0.41% some provinces showed the Gini ratio is above national, is the province; Gorontalo, Papua, West Papua, Jakarta, West Java, Yogyakarta, North Sulawesi, Bali. The phenomenon of the increase in the Gini coefficient in comparison with Figure 1.7. of central government spending areas of land, sea, air 2006 s / d 2012 in the provinces in Indonesia are likely to rise, showing a direct relationship.

Based on the previous description it can be seen that government spending is a type of policy that can be done by the government as one of the steps for the welfare of society and towards economic growth. Central government expenditures transport infrastructure (land, sea, air) is part of the government spending in influencing economic growth and income distribution. So in this study is very important to define the role of central government expenditures transport infrastructure for land, sea and air to economic growth and income distribution.

Review of The Literature

Theory of Economic Growth

Economic development of a country can be addressed to achieve the welfare of the community in a sustainable manner. Welfare is a goal that still is global and it is difficult to measure the level of prosperity of a country. In this case, economic theory provide a wide range of approaches to measure and determine the level of prosperity of a country. One is to determine the level of a country's economic growth.

Conceptually, the country's economic growth showed a growth of economic activity from one period to the next. Economic activities which are intended to produce output (revenue). So that economic growth is basically shows the development of the output of the period to the next. In order to achieve the required level of capital accumulation output corresponding to the desired output level. Economic growth in this sense mathematically derived from the following equation (Meier and Rauch, 2000: 123):

Output is assumed to be a function of capital (physical capital and human capital), then:

$$Y = f(k).$$

The special shape of the equation can be written into:

$$f(k) = Ak$$

Based on the formula above, then economic growth is a process of increase in output per capita in the long run produced by the economy of a region. Based on such understanding, then there are three aspects to be considered in economic growth, which is the process of growth, output per capita and the long term economic growth (Boediono, 1999: 12). The first aspect stressed that economic growth is a process that takes place in a dynamic and not a picture of the economy at a time. The second aspect is output per capita shows the total output compared with the population. While the third aspect shows that an economic growth can occur when the increase in output per capita occurred in the time period long enough. To achieve higher economic growth as expected, then there are three things that need to be considered, namely: the presence of capital accumulation, population growth, especially the growth of the labor force and the presence of technological progress (Todaro, 2000: 115).

Abdul Halim (2009: 42) confirms that the development indicators have improved as the development of economic development. This development effort involving several economists from major universities in different countries. Here are some of the indicators used in evaluating the economic growth, namely: First, the growth of Gross Domestic Product (GDP), when development economics emerging, economic development is defined as the change in GDP from a static condition for a long time, then grow between 5 to 7 percent or higher within a period of one year (Todaro, 2003: 18). By itself many countries that use GDP as an indicator to evaluate the course of economic development. Second, the growth of GDP per capita, GDP per capita is a measure of national income that takes into account the total population. This measure better reflects the level of welfare. GDP per capita is an indicator of the development of a more fundamental and is still in use today, although it contains many weaknesses. GDP per capita, has at least two advantages: (i) GDP is relatively easy to calculate. All countries have data on GDP and population so that GDP per capita can be calculated for all countries. (ii) this measure adequately represent the essence of development is the increase kesejahteraan. Third, GDP per capita in Purchasing Power Parity. Exchange rate calculation does not take into account items that are not traded and that the prices of goods that are not traded lower in developing countries than in developed countries. Fourth, the size of the welfare of others, in addition to national income is the index of quality of life or the physical quality of life index (PQLI). PQLI are non-economic index which is a combination of three indicators:

(i) infant mortality. (ii) the life expectancy from age 1 year. (iii) the level of literacy. Fifth, the human development index or the Human Development Index (HDI), HDI summarizes the three variables welfare into three components (Anand and Sen, 2000: 5), namely: longevity, education, standard of living, as an indicator of the standard of living is the real per capita GDP, usually measured in purchasing power parity (Purchasing Power Parity).

The use of real value in GDP (at constant prices) is more precise than the price prevailing as at constant prices further demonstrate actual output, so that GDP at constant prices is very suitable for analyzing a country's economic performance. The increase in GDP is not an indicator of economic growth or increased prosperity. Because of the increase in GDP would be meaningless if the population growth rate is faster than the growth of GDP. Therefore, the per capita income is considered as an indicator of growth or prosperity is relatively good. However, some criticism of the GDP per capita as an indicator of development to enhance the GDP per capita with the approach of Purchasing Power Parity (PPP) per capita which indicates the development process (Abdul Hakim, 2009. P.43).

The fundamental point of departure of the discourse on the analysis of economic growth is the Solow growth model (Romer, 2006). The fundamental question of the difference in growth traditionally begins on growth theory Solow model, known as the Solow model - Swan developed by Solow (1956) and T W. Swan (1956). Solow model focused on four (4) variables: output (Y), capital (K), labor (L) and knowledge (A).

The production function is mathematically expressed as follows:

$$Y(t) = F(K(t), A(t), L(t))$$

Where: t is denoted as time.

Note that the time does not enter into the production function directly, but through the input of K, L and A. This means Output changed within a certain time if the inputs change. In certain cases, capital and labor has not changed but the resulting output is increased. The increase in output was due to the increase of knowledge.

Solow model incorporates technology into capital or as constant as follows:

- a. When technological advances into the capital in the form of $Y = f(AK, L)$, on-call as well as capital-augmenting.
- b. When the technological progress is neutral in the form $Y = AF(K, L)$ is called ju-ga as Hicks-Neutral

Meanwhile Mankiw, Romer and Weil in Berg (2001) have tested the Solow model that has been expanded (augmented Solow model) by adding "human capital" of the production function. Both Mankiw, Romer and Weil show that physical capital and human capital per worker will increase over the amount of investment sufficient to offset the need for new workers, closing depreciation, or excess labor due to technological advances. Basically the economy is always in need of replacement of human capital which has depreciated.

The concept of Government Spending

Government spending reflects government policy. If the government has set a policy to purchase goods and services, government expenditures reflect the costs to be incurred by the government to carry out these activities.

Model Construction of Government Spending.

The model was developed by Rostow and Musgrave in Mangkoesobroto (1999), which connects the development of government spending with the stages of economic development are distinguished between the initial stage, intermediate stage and advanced stage. In the early stages of economic development, the percentage of total government investment to large investment because at this stage the government should provide infrastructure such as education, health, transportation and so on. At the intermediate stage of economic development, government investment is still needed to boost economic growth in order to take off, but at this stage the role of private investment has been even greater. The role of the government remains large at the intermediate stage, because of the greater role that the private sector is much cause market failure, and also led the government should provide public goods and services in the amount of more and better quality. Moreover, at this stage of economic development led to relationships between sectors increasingly complex (complicated). For example, economic growth posed by the development of industrial sector, causing increasing levels of air and water pollution, and the government should intervene to regulate and reduces the negative effects of pollution on the community.

Musgrave found in the process of development, private investment as a percentage of GNP and the greater percentage of government investment as a percentage of GNP will be smaller. At the economic level further,

Rostow said that economic development, government activity shifted from the provision of infrastructure to expenditures for social activities as well, old age welfare programs, public health programs, and so forth.

The role of government developmental theory proposed by Musgrave and Rostow is a view that is generated from observations based economic development experienced by many countries, but not based by any particular theory. Moreover, it is unclear, whether the stage of economic growth occurs in one step, or several steps may occur simultaneously (Mangkoesebroto, 1995).

Theoretical Framework

Influence of Transport Infrastructure and Economic Growth

James Heintz et al, (2009). How Infrastructure Investments Support the US Economy: Employment, Produktivity and Growth, research shows the impact of transport infrastructure on economic growth. shows a country road, roads and bridges are important transportation system for the residents and the US economy, the Bureau of Economic Analysis estimates that the present value of public assets road infrastructure total 2.6 trillion. Department of Transportation regularly evaluates the condition of roads, bridges, and transit systems of the United States. Realizing the lack of adequate transport infrastructure would be detrimental to the competitiveness of the US and will undermine the performance of the manufacturing to operate. Inefficient transport infrastructure increases the cost and increase the risk of affecting the declining competitiveness of the economy. Results of the study in 1950-1979, public infrastructure investment and economic growth as a whole grow together, infrastructure investment growth rate average of 4.0 percent per year during the study period while overall economic growth average of 4.1 percent. While the study period of 1980-2007, public infrastructure growth fell to 2.3 percent annually, while the average economic growth of 2.9 percent. The final conclusion that the decrease in transport infrastructure investment becomes a significant factor causing the decline of economic growth in the United States in the study period. The research methodology used The Input-Output Model.

A study has ever done is to analyze long-term trends in the development of economic infrastructure and to discuss long-term relationship with economic growth in South Africa, entitled "An Analysis of Economic Infrastructure Investment In South Africa" conducted by Peter Perkins, Johann Fedderke and John Luiz (2005).

In this study, long-term relationship between economic infrastructure and real GDP are tested using the methodology Pesaran, Shin and Smith (PSS; 1996-2001). Each pair of test-PSS F-test to establish whether there are long-term equilibrium relationship between two variables, as well as the direction of the relationship. PSS F-statistics: to identify the direction of the relationship between economic infrastructure and economic growth. This suggests a long-term relationship of economic infrastructure investment and public sector fixed capital to Gross Domestic Product (GDP), from the road to the GDP, and GDP for various types of infrastructure.

The variables used in this study to examine the relationship between economic infrastructure and real GDP refers to the size of infrastructure such as; Infrastructure Infrastructure Investment and fixed capital stock. Infrastructure question is: railways, roads, port, Airport, phone lines and electricity.

PSS approach to testing showed the results of a long-term relationship with estimating the error correction specification, the shape of the model as follows:

Results of this study stated that there are two-way relationship between economic infrastructure and economic growth. Approach PSS F-statistics in real GDP of South Africa and various railway infrastructure goods and services showed a long term relationship of GDP for the railway line, from GDP to stock coaching / training, and of GDP for passenger travel, as well as the simultaneity potential between GDP and locomotives as well as between GDP and stock of goods. Another thing is the existence of a long-term relationship of road and passenger vehicles to GDP, and the simultaneity between goods vehicles and GDP. Long-term relationship of GDP to the volume of cargo at the port, and of GDP by the number of passengers transported by South African Airways (SAA). Relatively strong growth rates for fixed telephone line during the 20th century. Long-term relationship of GDP by the number of fixed telephone lines, and the simultaneity between GDP and electricity.

Xiugen Mo and Guagqing Chi (2009), in a study entitled "The Temporal and Spatial Effect of Highways on China's Economic Growth", examines the impact of road infrastructure to economic growth in China Year 1996-2007. This study used a spatial model to test the hypothesis that the density of roads have an impact on regional economic growth, the impact of which vary during different time periods. Then departs from the hypothesis, also tested whether the investment in highway infrastructure providing spillover effects to other areas.

This research was conducted at the district level GXZAR 1996 to 2007 in China. The dependent variable is the average GDP growth (GDP Growth) during the eleventh period, ie from 1996 to 2007, while the independent variable is the density of highways and other control variables in 1996.

Temporal and spatial lag impact of the highway should be considered in the economic model. suppose H is the number of roads in the area, and Y output, the production function is given in the form:

The dependent variable dependent spatial bias if the empirical model estimated by OLS. The influence of the spatial density of roads served by the spatial lag density of highways. A spatial lag of the dependent variable was also added into the equation so that:

Where y is the average growth rate of GDP over a period of time, H is the density of the highway, w_y and w_H is the weighted growth rates and weight density of the highway, i represents the area, e is the error term; a and b are parameters, X is a vector and other control variables including early GDP, investment, human capital, and other control variables such as rail transport.

The results of the OLS models showed spatial dependence as shown by Moran's I residual, the LM test of spatial dependence lag, and the LM test of spatial dependence diverse but significant during the period. As well as short and long periods, LM-lag and LM-error is significant. OLS model shows LM-lags always greater than LM-error during the initial period 1996-1997. This means preferably lag spatial model of the spatial model error.

The next result was found positive effects and decreasing of density of highways to economic growth, there is no strong evidence to support the existence of spillover effects. Results from the 1996 model Table 2 shows the average density of the neighboring district road has been negative and statistically significant for some period.

Amadi, C., N. Nyekachi, Nyenke, C. (2013), conducted research on Public Spending on Transport Infrastructure and Economic Growth in Nigeria, 1981-2010, aims to examine the role of government spending on transportation infrastructure to economic growth in Nigeria, using Ordinary Least Square (OLS), the frame of mind to follow Nurudeen and Usman (2010), and Ogundipe and Aworinde (2011) in the analysis of the impact of government spending on infrastructure to economic growth in Nigeria. that line of thought offers a precise analysis of the relationship between government spending on transportation infrastructure and economic growth in Nigeria.

Structural equation model of growth as follows:

$PDBR = f(\text{TRCPs, RDCPs, OESPs, EDUPs, Htps})$

Where :

PDBR = real gross domestic product

TRCPs = Public spending on transport and communication

RDCPs = Public spending on roads and construction

OESPs = Public spending on electricity and drinking water

EDUPs = Public spending on education

Htps = Public spending on health

Conclusion The results showed that public expenditure on transport infrastructure is negatively related to economic growth and insignificant.

Influence of Government Expenditure and Economic Growth

Jr Huang, Tsung., 2005. The Role of Fiscal Decentralization in Regional Economic Growth in China The aim of this study was to determine the role of fiscal decentralization on regional economic growth of China. using data from 31 provinces in China 1996-2004, estimation techniques ordinary least squares (OLS). The results showed that fiscal decentralization has a U-shaped relationship with regional economic growth, which means that fiscal decentralization contribute negatively to economic growth in the region in the early stages. However, the negative effects decreased with an increase in the degree of fiscal decentralization. After passing through the negative process level, fiscal decentralization will contribute positively to regional economic growth. Other variables, such as the annual growth of fixed asset investment area, the total value of imports and exports, inflation, population growth rate, the region, and a time trend, also has contributed to regional economic growth. According to the main findings of this study, fiscal decentralization is not the only variable to encourage regional economic growth, instead is fiscal centralization might be able to meet this goal as well. However, if Fiscal decentralization is the main fiscal system and very difficult to go back to the initial situation of fiscal centralization, this study shows that.

The Chinese government has made great strides in the future fiscal reform. In the study results show the values of the FDA and FDB in the whole of China is only 45.35% and 52.77% in 2003, although below the critical level respectively of 52.56% and 61.67%. This reveals that the degree of fiscal decentralization is below the critical level, and still have negative effects on regional economic growth and fiscal reform affecting the institutional transition costs. Using the FDB as an example, in 2003 there were seven areas (including Beijing, Guangdong, Zhejiang, Shanghai, Jiangsu, Shandong, and Fujian) with FDB is greater than the critical value, implying economic growth in this region will benefit in the future from fiscal reform as the area has more fiscal autonomy. However, other areas with FDB below a critical value still has to suffer the consequences of fiscal decentralization policy. This explains why the situation of China still has serious regional disparities in economic development as demonstrated by Huang.et.al. (2003).

According to Martinez-Vazquez and Bahl. 2003, the Chinese road to reform fiscal federalism continues to be strong not only by tax policy and tax administration reform, but also by various economic policies that reduce the efficiency of the fiscal system. In addition, Martinez-Vazquez and Rider (2005) shows that China has not fully used the potential of fiscal decentralization to increase the allocation of resources and thus achieve their growth potential. If the main goal the Chinese government is sustainable economic development and to reduce regional development disparities, this study suggests that the government should adopt a policy of more aggressive fiscal reforms in the future. During the Chinese government can allow areas with low economic growth, particularly in the western regions which have fiscal autonomy, it can allow to boost economic growth and further reduce regional disparities in China.

Abu Nurudeen and Abdullahi Usman, 2010, conducted a study entitled Government Expenditure and Economic Growth in Nigeria, 1970-2008: A disaggregated Analysis that aims to determine the effect of government spending on economic growth, this research using a co-integration and error correction method for analyzing the relationship between government spending and economic growth. As for the theoretical basis of this research using Keynesian theory and endogenous growth. Results showed that total government expenditure of capital (TCAP), total government recurrent expenditure (TREC), and government expenditures for education (EDU) negatively affect economic growth. Conversely, increased government spending for transport and communications (TRACO), and health (HEA) results show an increase in economic growth. Structural equation of economic growth as follows:

$$Y = \beta_0 + \beta_1 \text{TREC} + \beta_2 + \beta_3 \text{TCAP} \text{AGR} + \text{DEF} + \beta_4 \beta_5 \beta_6 \text{HEA} \text{EDU} + + \beta_8 \beta_7 \text{TRACO} \beta_9 \text{FISBA} + \text{IFN} + \varepsilon$$

Musaba, EC, Chilonda P., & Matehaya, 2013, perform research under the title Sectoral Impact of Government Expenditure on Economic Growth in Malawi, 1990-2007, aims to assess the impact of sectoral government expenditure to economic growth in Malawi. By using time series data 1980-2007, analysis of co-integration in the context of error correction model (VECM) is used to estimate the effect of the growth of government spending in agriculture, education, health, defense, social protection, transport and communications. Short-term results showed no significant relationship between sectoral government spending and economic growth. Long-term results show a significant positive effect on economic growth and defense spending on agriculture. While spending on education, health, social protection, transport and communications negative relationship to economic growth. The equations were used as follows:

$$\ln \text{GDP} = \beta_0 + \beta_1 \ln \text{AGE} + \beta_2 \ln \text{EDU} + \beta_3 \ln \text{HEA} + \beta_4 \ln \text{DEF} + \beta_5 \ln \text{SOC} + \beta_6 \ln \text{TRAC} + \varepsilon$$

Where,

$\ln \text{GDP}$ = natural log of real GDP

$\ln \text{AGE}$ = natural log of real government spending on agriculture.

$\ln \text{EDU}$ = natural log of real government spending on education.

$\ln \text{HEA}$ = natural log of real government expenditure on health.

$\ln \text{DEF}$ = natural log of real government spending on defense

$\ln \text{SOC}$ = natural log of real government spending on social protection

$\ln \text{TRAC}$ = natural log of real government spending on transportation and communication.

Greg Edame Ekpung, 2014. Conducting research with the title Trends Analysis of Public Expenditure on Infrastructure and Economic Growth in Nigeria, The aim of this study is to examine trends in public spending on infrastructure in Nigeria between 1970-2010; compares trends in public expenditure between the various regimes in Nigeria between 1970-2010; evaluate the relationship between expenditure on infrastructure and long-term

economic growth; accessing the factors that affect the growth of public spending in infrastructure. Rostow, 1961 in Edame 2012, government spending is a function of the stage of development of the economy with government spending structural equation model of the above study are shown as follows:

$$GE = f(\text{Pop, Rev, GDP, Pp, BA (Xn)})$$

Where:

GE = government spending

Pop = Population

Rev = Acceptance

GDP = Gross Domestic Product

Pp = price of crude oil

BA = The budget allocation

Xn = Other index such as the delivery of health services, roads, education.

The model for the analysis of trends in public spending on infrastructure is a modified version of Chakraborty (2003), Fan and Rao (2003), Chakaravorty and Mazumdar (2006). modifikasi version of the equation in this study:

$$PE = \beta_0 + \beta_1 \text{Grev} + \beta_2 \text{POPD} + \beta_3 \text{EXTRES} + \beta_4 \text{OPN} + \beta_5 \text{URB} + \beta_6 \text{PE}_{t-1} + \beta_7 \text{DUM} + \epsilon_t$$

Where:

PE = Government spending

Grev = Penerimaan government

POPD = Density

EXTRES = External Reserves

OPN = Disclosure

URB = Level of Urbanization

PE t-1 = previous year Government Expenditures

DUM = Dummy type of regime

ϵ_t = confounding factors.

Next some research on the role of government spending to national economic growth in the long term (Aschauer 1989; Barro 1990; Tanzi and Zee 1997). The study found mixed results on the effects of government spending on economic growth (Fan and Rao 2003). Some authors showed a positive effect, others are negative and a group of other writers even insignificant. Those who have found a negative relationship between government spending and economic growth include Landau (1983) and Levine & Renelt (1992 In a study of 96 countries), Landau (1983) found a negative relationship between government consumption and real output growth.

Conclusion of the study that the response rate of urbanization, openness, government revenue, external reserves, population density and types of high public expenditure, particularly in the short term and with a higher adjustment to the long-term static balance. Therefore, short-term changes in the level of urbanization, openness, government revenue, external reserves, population density and the type of regime (regime of military or civil administration), it is in the form of growth in public spending in Nigeria. Instead, Vector Error Correction (VEC) showed that the level of public infrastructure (roads, water supply, electricity supply, transport and housing is very low, especially in the short term and the adjustments were weak toward the long-term static equilibrium, these results are very informative because obviously showed a decrease in public utilities, which indicates that the infrastructure spending, have not yielded positive results during the period of the study.

Methodology

Nazir (2005: 93) states that the study of literature or literature, in addition to looking for a secondary data source that will support the research, it is also necessary to know the extent to which science-related research has progressed, as well as the extent to which there are conclusions and generalizations ever made so that the situation required is obtained. Furthermore Sugiyono, adding the study of literature related to theoretical study and other references relating to values, culture and norms that develop in social situations were studied, besides literature studies are very important in the study, this is because the study will not be separated from the literature scientific (Sugiyono, 2012: 291).

Conclusion and Recommendation

From the results of this research literature review resulted in a theoretical framework model, the results showed that there Effect on Government Expenditure Growth and Income Distribution. Researchers recommend to the next researcher to use the model of the theoretical framework of this research as a model to conduct further research based on phenomena that occur in the field.

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