

# THE IMPACT OF CAPITAL EXPENDITURE, INVESTMENT, AND LABOR FORCE ON ECONOMIC GROWTH IN SOUTH KALIMANTAN

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#### Abstract

This study aims to analyze the influence of capital expenditure, investment, and labor force on the economic growth of regencies / cities in South Kalimantan. Approach in this research use explanatory research method. The analysis technique used is panel data regression with Fixed Effect Model (FEM). The results show that only the variable of the labor force significantly affects economic growth with a meaningful negative relationship that if an increase in economic growth will cause the total labor force to decline. The highest Individual Intercept is in Banjarmasin City, Banjar District, Hulu Sungai Tengah, whereas. Intercept Individual is lowest in Barito Kuala, Tapin and Hulu Sungai Selatan regencies, meaning that if the variable of Capital Expenditure, Private Investment and Labor is considered Constant, the highest Economic Growth occurs in Banjarmasin City followed by Banjar and Hulu Sungai Tengah Regency, while Growth Lowest economy in Barito Kuala District, Tapin and Hulu Sungai Selatan

Keywords: Economic Growth, Capital Expenditure, Investment, Labor Force

#### INTRODUCTION

Decentralization according to Law Number 32 Year 2004 regarding Regional Government in article 1, paragraph 7, is the transfer of authority of government by the central government to autonomous regions to regulate and manage government affairs within the system of the Unitary State of the Republic of Indonesia. The authority granted to local governments is to exercise the broadest possible autonomy to regulate and administer its own governmental affairs on the basis of autonomy and assistance tasks, except for matters involving foreign affairs, defense, security, judiciary, monetary and fiscal affairs, and religion [1].

Economic growth narrowly can be interpreted with the increase of total production of a region. In addition, economic growth can be interpreted as an increase in income per capita and the increase of people's welfare. Economic growth will never be separated from the role of economic actors, namely the government that acts with public and fiscal policy instruments, private sector that play a role in the development of investment and the community itself that can serve as inputs of production factors and guarantee the creation of markets in the economy. The source of investment for development can comefrom government budget where in local government it is called as APBD as a public investment. In addition, the private sector in the economic development also contributed positively, namely by making an investment known as private investment.

South Kalimantan as one of the provinces in Indonesia faces a threat in terms of growth in recent years. This is reflected in the growth rate of Gross Regional Domestic Product (PDRB), when viewed from the pattern that keeps decreasing since 2015. In the national level, the trend is increasing while in South Kalimantan Province it shows a declining trend. Meanwhile, the allocation of funds in APBD districts/cities for capital expenditure has increased from year to year, as well as the Labor Force, as well as the development of Private Investment is relatively developed with uneven patterns between districts/cities and tend to fluctuate.

Keynes's analysis shows the importance of the role of aggregate spending on the amount of goods and services that the enterprise sector will produce in determining the level of economic activity. Keynes's analysis is more concerned with the demand aspect, which is analyzing the role of the demand of various groups of society in determining the economic activity to be achieved in an economy, the demand is the effective demand of demand accompanied by the ability to pay for goods and services requested [2]

Keynes divides aggregate demand for two types of expenditures: household consumption and capital investment by entrepreneurs; in its development aggregate expenditure can be differentiated to four components of household consumption, corporate investment, government spending, and exports. Government expenditure is an activity related to the function of the government to regulate economic activity but can also affect the level of aggregate spending in the economy, due to market imperfection, the school of neutrality until New Keynes believes that government policy is still needed to stabilize the economy [2]

Government spending has a theoretical basis that can be seen from the identity of the national income balance that is Y = C + I + G + (X-M) which is a legitimate source of Keynesian view of the relevance of government intervention in the economy. From the above equation it can be observed that the increase or decrease in

government expenditure will increase or decrease the national income. Many considerations underlie the government's decision to regulate its spending. Government routine spending is used for unproductive expenditure and leads to consumption while capital expenditure is more investment-intensive. [2]

The relationship between economic growth and government spending in economic development theory is mentioned, that economic growth and government expenditure have a positive reciprocal relationship. Wagner mentions that in an economy if economic growth increases then government spending will also increase [3], where the analogy to Wagner's Law is that with increasing economic growth the need for public goods supply will also increase so that financing is required through government revenue ultimately government spending will also increase or can be interpreted high economic growth will also reflect the amount of government spending funds to finance the needs of government services. The Keynesian school supports that opinion, with increasing government spending will encourage an increase in demand for goods and services in an aggregate, thereby promoting economic growth.

In the theory of endogenous growth, government spending has a role in economic growth with the assumption that government expenditure implications are for productive activities such as infrastructure spending. Shopping that is productive and in direct contact with the public interest will be able to stimulate the economy. For example, infrastructure development will encourage investment, with economic investment expanding and creating new jobs that will absorb unemployment and reduce poverty. In the late 1960s, many developing countries began to realize that economic growth is not synonymous with economic development. High economic growth, at least beyond the developed countries in the early stages of development, can be achieved but accompanied with issues such as unemployment, poverty, lame income distribution, structural balance. This reinforces the belief that economic growth is a necessary but not sufficient condition for the development process [4].

Economic growth is a process of increasing per capita output in the long term. The definition includes three aspects, namely: process, output per capita and long term. Economic growth is a process, not an economic picture at a time. Reflect the dynamic aspect of an economy, ie see how an economy develops or changes over time. Economic growth is associated with an increase in per capita output. In this case it is related to the total output (GDP) and the population, because the output per capita is the total output divided by the total population. So the process of increasing per capita output must be analyzed by looking at what happens with total output on the one hand, and the population on the other. In other words, economic growth is the perspective of the timeframe of an economy being said to be growing if it is long enough (10, 20 or 50 years, or even longer) to increase output per capita. Of course in that time there could be a decline in output per capita, due to crop failure, for example, but if in the long term the per capita output shows an ascending trend then we can say that economic growth occurs. [5]

Theories about the growing percentage of government spending on GNP. Wagner states in an economy if percapita income increases, relative government spending will also increase. According to Wagner there are five things that cause government spending to always increase, namely: demands for increased security and defense protection, increase in income levels, urbanization that accompanies economic growth, demographic development, and bureaucratic inefficiencies that accompany government development [3].

Peacock and Wiseman's theory is based on a view that the government is always trying to enlarge its expenditure by relying on tax revenue, whereas people do not like to pay bigger taxes. [3] states the following: economic developments lead to increased taxation even though tax rates do not change, and increased tax revenues leads to increased government spending. Increased government spending from year to year describes the government's activities are increasing. By allocating funds appropriately, the efficiency of government spending can be increased so that national production is expected to increase.

Based on the background and some relevant theoretical reviews, the research problem is formulated as follows: How the influence of variables, private investment capital expenditure, and the amount of labor force to increase economic growth District/ City in South Kalimantan Province, What variable dominant influence economic growth Districts / City in the province of South Kalimantan, and how the individual intercept in each districts/city in South Kalimantan Province.

#### **METHODS**

In this research the researcher will analyze the factors influencing economic growth in South Kalimantan Province. The research uses approach explanatory research method that explains the influence of capital expenditure, private investment and labor force Districts/City in South Kalimantan Province to the growth of economist. The type of data used is secondary data in the form of panel data that is a combination of time series and cross-sections covering capital expenditures, private investment, and labor force, Gross Regional Domestic

Bruto to calculate economic growth, Districts/City in South Kalimantan province obtained from agencies and the official website of BPS Central and South Kalimantan Province, as well as financial bureau of South Kalimantan Provincial Secretariat

The Research Variables consist of Economic Growth (GRO) which is a percentage figure that describes the growth of gross regional domestic product of Kab / Kota in constant price year t year t-1, Total Private Investment (INV) is Total Private Investment (PMA and PMDN) in each District / City in South Kalimantan Province, Capital Expenditure (BM) is the capital expenditure incurred by the Realization of Districts/City APBD in South Kalimantan, Total labor Force (AK) is Number of population above 15 years old in respective districts / municipalities in the province of South Kalimantan.

The analytical method used in this research is regression analysis of panel data, panel data is data which is structured time unit as well as cross section, this data has advantage because robust to some type of violation of assumption Gauss Markov namely heterokedastisitas and normality [6] to know the magnitude of the effect of a variable changes to other variables. Data processing is done with Eviews version 8 program with the following equation:

Note:

Letter ( is a districts/cities in South Kalimantan Province and the letter t is time period, independent variable which is independent variable consists of several variables, namely capital expenditure (BM), PMA and PMDN (INV), and labor force (AK) which started from 2005-2015 covering 13 districts/cities thus there are 143 observations for 11 years. Based on equation 1 can be explained as follows::

GRO	=	Economic Growth
BM	=	Capital Expenditure
INV	=	Total Investment
AK	=	Amount of Labor Force
ε <sub>it</sub>	=	random error
α	=	intercept which implies endowment of economic growth of each Districts/City
$\beta_i$	=	parameter coefficient of economic growth model

#### FINDINGS AND ARGUMENT

The Effect of Capital Expenditure, Private Investment, and Labor For Economic Growth based on processed eviews 8, based on the best FEM Hausman test model, where based on this model it is known that R2 value of 0.423575 means that simultaneously economic growth can be explained by variables free consisting of Private Investment, Capital Expenditure and Labor Force of 42.35% while the remaining 57.65% influenced by other factors outside the model. The regression equation of panel data generated is as follows:

if seen only partially variable Labor Force significantly affect the economic growth of the Regency / City in South Kalimantan Province with a negative relationship. This negative relationship means that if there is an increase in economic growth of 1% will reduce the number of force 0,0000220 person.

Against the old debate about the use of fiscal policy to stabilize the economy and encourage economic growth [7]. A key issue in the debate relates to the effectiveness of public spending to boost economic growth. The neoclassical view that in extreme positions denies the use of fiscal policy to regulate the economy even during the economic crisis, and those who emphasize the efficiency of fiscal policy to stabilize economic fluctuations and stimulate growth. There is consensus about the short-term impact of fiscal policy on the economy. Temporary fiscal policies may increase or decrease national income or counter macroeconomic disturbances that should affect national output. The Cobb-Douglas Solow model is added to public capital as a factor. Government spending is used as a proxy for public capital which is then broken down by the sector. It helps us to investigate the impact of each sector on economic growth. This decomposition in three expenditure streams: (i) spending on building human capital through public spending on education and health; (ii) expenditure on buildings; spending on public infrastructure on transportation and communications, social services and others; and (iii) administrative expenditures required for government functions. Regression results indicate that in short-term public expenditures does not affect growth. However, Cointegration and VECM show that there is a long-term relationship between public spending and growth

MuritalaTaiwo and Taiwo Abayomi research, trying to empirically test the trend and the effect of government spending on real GDP growth rate in Nigeria last decade (1970-2008) using econometric model of Ordinary Least Square (OLS) technique. The findings indicate that there is a positive relationship between real GDP and capital spending. It can therefore be recommended that the Government should promote efficiency in the allocation of development resources through an emphasis on private sector participation and privatization  $\langle$  commercialization [8].

Districts/ City in South Kannantan i Tovince raber i						
Variables	Coefficient	Std. Error	t-Statistic	Prob.		
С	8.003609	1.631161	4.906694	0.0000		
INV	8.93E-08	2.84E-07	0.314256	0.7539		
BM	1.52E-09	2.76E-09	0.550778	0.5829		
АК	-2.20E-05	1.12E-05	-1.968769	0.0514		
R-squared	0.423575	Mean depend	ent var	5.233586		
Adjusted R-squared	0.298265	S.D. dependent var		2.017254		
S.E. of regression	1.689845	Akaike info criterion		4.052118		
Sum squared resid	328.3914	Schwarz criterion		4.595861		
Log likelihood	-259.6743	Hannan-Quinn criter.		4.273076		
F-statistic	3.380223	Durbin-Watso	on stat	1.418973		
Prob(F-statistic)	0.000005					

Table 1 Effect of Private Investment, Capital Expenditure and Labor Force on Economic Growth
Districts/City in South Kalimantan ProvinceTabel 1

Source: Processed Eviews

As in the previous two studies, the majority of studies support the hypothesis that state expenditures, in particular the education and infrastructure sectors have a positive correlation with economic growth (Gray, Cherry, 2007). This research is generally conducted on OECD countries differing from developing countries because they have state institutions that are relatively more advanced in terms of technology, human resource capability, transparency and accountability (Simane, Trecery, 2007) in [9], so it is reasonable that in this study the results are different from research findings in other countries. Conditions in the districts / municipalities of South Kalimantan Province is one of them is because the role of capital expenditure in the Regency / City in South Kalimantan Province is relatively small compared to personnel spending as well as research in some other areas also have the same tendency because most of the portion of local spending is for employee expenditure so that it is less productive and does not give big multiplier effect to regional economic growth, besides private investment also with relatively same condition with relatively small amount in almost all Districts/City. data processing with Eviews can be seen in tables 1.

In panel data regression with Fixed Effects Model (FEM) will result in individual value added with intercept value, so that the intercept value of each Regency / City in this study will be different, the bigger the individual effect will the greater the intercept, in other words if assumed that the independent variable in the research is considered constant (there is no effect) then the higher the individual effect then the Individual Intercept is greater, Eviews processed products about Intercept, Individual effect, and Individual Intercept for District/City can be seen in table 2. The highest Individual Intercept is in Banjarmasin City, Districts Banjar, Hulu Sungai Tengah, while Individual Intercept is the lowest in Barito Kuala, Tapin and Hulu Sungai Selatan regencies. This indicates that if the variable of Capital Expenditure, Private Investment and Labor Force is considered Constant, the highest Economic Growth in Banjarmasin is followed by Banjar and Hulu Sungai Tengah Regency while Economic Growth is lowest in Barito Kuala, Tapin and Hulu Sungai Tengah Regency while

The implications of research results for districts / municipalities in South Kalimantan Province are that economic growth leads to a decrease in the number of jobs, the local government should pay attention to whether the reduction in the number of labor force due to the increase of school-aged children as a result of the government's 9-year compulsory education program, and the occurrence of economic growth is followed by an increase in household opinion so that the school age becomes longer or reaches 12 years and even more. For districts with the lowest intercept means that it is very important to increase the influence of other variables outside the model in order to increase economic growth, such as creating conditions that support the growth of industries in the area with the provision of infrastructure and ease of licensing to establish business.,

No	Kabupaten/Kota	Intercept	Individual Effect	Intercept Individual
1	Kab. Tanah Laut	8.0036	0.338655	8.342255
2	Kab. Kota Baru	8.0036	0.246833	8.250433
3	Kab. Banjar	8.0036	2.57658	10.58018
4	Kab. Barito Kuala	8.0036	-3.2238	4.7798
5	Kab. Tapin	8.0036	-0.89523	7.10837
6	Kab. Hulu Sungai Selatan	8.0036	-0.71401	7.28959
7	Kab. Hulu Sungai Tengah	8.0036	0.628239	8.631839
8	Kab. Hulu Sungai Utara	8.0036	-0.38815	7.61545
9	Kab. Tabalong	8.0036	-0.09526	7.90834
10	Kab. Tanah Bumbu	8.0036	-0.48797	7.51563
11	Kab. Balangan	8.0036	-1.39445	6.60915
12	Kota Banjarmasin	8.0036	4.080864	12.084464
13	Kota Banjar Baru	8.0036	-0.50808	7.49552

Table 2 Intercept, Effect Individual and Individual Intercept Districts/City in South Kalimantan
Province

Source: Processed Eviews

### CONCLUSION

Based on the findings of this study, it can be concluded that the variables of capital expenditure, private investment and labor force together significantly influence the economic growth of the District/City in South Kalimantan Province, although the effect is relatively small as below 50%, partially the significant labor force variable influences the economic growth of the District/City in South Kalimantan Province, the highest Individual Intercept occurs in Banjarmasin, Banjar, Hulu Sungai Tengah, while the Individual Intercept is the lowest in Barito Kuala, Tapin and Hulu Sungai Selatan regencies. This indicates that if the variable of Capital Expenditure, Private Investment and Labor force is considered Constant, the highest Economic Growth occurs in Banjarmasin City followed by Banjar and Hulu Sungai Tengah District while Economic Growth is lowest in Barito Kuala, Tapin and Hulu Sungai Tengah District while Economic Growth is lowest in Barito Kuala, Tapin and Hulu Sungai Tengah District while Economic Growth is lowest in Barito Kuala, Tapin and Hulu Sungai Tengah District while Economic Growth is lowest in Barito Kuala, Tapin and Hulu Sungai Tengah District while Economic Growth is lowest in Barito Kuala, Tapin and Hulu Sungai Selatan Regency

The results of this study can explain the effect of variable capital expenditure, private investment, and the overall labor force on economic growth, indicating that the independent variables in the research can not stand alone but must synergize with each other, in order to achieve economic growth, and the attention of the policy makers and should synergize as well to mobilize all the variables as a whole meaning not only to find sources of funds both from within and outside the country to increase investment, but it is very important to maintain and improve infrastructure, improve and prepare the labor force through increased knowledge with formal and non-formal education, so that later can be absorbed by the labor market.

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