THE EFFECT OF FOREIGN AND DOMESTIC INVESTMENT AND GOVERNMENT SPENDING ON GROWTH CENTRAL KALIMANTAN PROVINCE ECONOMY 2015-2019

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Abstract. The purpose of this study was to determine the effect of foreign and domestic investment variables and government spending on gross regional domestic product in Central Kalimantan Province. The analytical tool used is multiple linear regression with panel data, from the test results obtained the value of the coefficient of determination R2 is 0.981, this indicates that the ability of the independent variable to explain the dependent variable is 98.10%. The results of the study conclude that simultaneously foreign investment, domestic investment, and government expenditure have a positive and significant effect on gross regional domestic product, with the results of the F statistic of 16.798 being greater than the F table of 4.737, while the results of the partial test show that investment foreign investment, domestic investment and government spending have a significant effect on gross regional domestic product.

Keywords: foreign capital; domestic capital; government expenditure; economic growth

I. INTRODUCTION

Economic growth is an indicator to determine how successful a country's economic development is and as a determinant of the existence of further development policies. The problem of economic growth can be seen as a long-term macroeconomic problem from one period to the next which in producing goods and services will increase according to Mankiw [1]. Economic development is intended to create high economic growth and to eliminate or reduce poverty and income inequality. So far, the output growth rate between districts/cities in Indonesia is uneven, because most developing countries only pursue economic growth by delaying equity, because if economic growth has grown, it will be easier to achieve equity or even equity can occur by itself (trickle down effect) [2]. One of the indicators to measure the level of regional economic growth is to use the gross regional domestic product, in this case the increase in goods and services reflects the standard of living and the level of economic development of the community. With regional autonomy, it gives authority to a region in planning, supervising, controlling and evaluating regional policies, in Mardiasmo's research (Hartati, 2013). Central Kalimantan is an area that has high potential to compete in improving the regional economy. Based on the following table, the value of economic growth between provinces in Kalimantan is as follows Table 1 can be understood that Central Kalimantan Province is an area that has the highest average growth rate among other provinces, although in the last 3 years the highest growth has been achieved by North Kalimantan Province.

Table 1. ADHK 2010 Growth Rate
By Province in Kalimantan (%) 2015 – 2019

Province	2015	2016	2017	2018	2019	Averagea
West Kalimantan	4,88	5,20	5,17	5,07	5,00	5,06
Central Kalimantan	7,01	6,35	6,72	5,64	6,17	6,38
South Kalimantan	3,82	4,40	5,28	5,12	5,25	4,78
East Kalimantan	-1,20	-0,38	3,13	2,67	4,77	1,80
North Kalimantan	3,40	3,55	6,80	6,05	6,91	5,34

Source: BPS in Figures, 2020 (data processed)

The economic growth of Central Kalimantan Province can be described as follows Table 2.

Table 2 Value of GRDP and Economic Growth
Province of Central Kalimantan 2015 – 2019

Years	PDRB ADHK 2010 (Milliar Rp)	Growth (%)
2015	78.891,00	7,01
2016	83.900,20	6,35
2017	89.541,20	6,72
2018	94.595,80	5,64
2019	100.428,60	6,17

Table 2 shows that the value of gross regional domestic product always increases, but over the years the

impact of economic growth is getting smaller, while in 2018 it was the lowest growth rate during the period 2015 – 2019 at 5.64% growth rate, while in 2015 has the highest growth rate of 7.01%. Gross National Product in Indonesia is known as gross domestic product, while for areas whose territory is a small part of the region it is known as gross regional domestic product. Regencies/cities are administrative regions that have strong authority to develop the Indonesian economy as a whole, policies that are able to support economic development for their local communities, one of which is the indicator of gross regional domestic product growth [1], in various theories capital and government spending have an important role as support in economic development.

The accumulation of capital will determine the fast or slow economic growth that will occur in a country. Capital is divided into 2 types based on the source, namely foreign and domestic investment. The role of foreign capital in development is first, external sources of funds (foreign capital) can be utilized by developing countries as a basis for accelerating investment and economic growth. Second, increasing economic growth needs to be followed by changes in the structure of production and trade. Third, foreign capital can play an important role in fund mobilization and structural transformation. Fourth, the need for foreign capital decreases as soon as structural changes actually occur (although foreign capital will be more productive in the future). investment), investment in the form of public expenditure, investment made by the government (public investment). According to Wagner's law [4] an economy if economic growth increases, government spending will also increase, the tendency by Wagner called the law to always increase the role of government, where this analogy is with increasing economic growth, the need for the provision of public goods will also increase so that financing is needed. through government revenue which in the end government spending will also increase, mainly because the government must regulate relationships that arise in society, law, education, recreation, culture and so on [4].

Government spending consists of three main items which can be classified as follows: government spending on the purchase of goods and services; government spending on employee salaries; government spending for transfer payments [5].

Table 3. Level of Investment and Government Expenditure 2015 – 2019

| Years | Investasi (Miliar Rp) | | Government Expenditure (Billion Rp) |
	FCO (USD $ Million)	DCO (Billion Rp)	
2015	1.088,58	33.138,15	11.930,80
2016	12.771,21	23.775,36	11.652,20
2017	71,18	7.392,39	12.093,90
2018	229,67	18.336,14	12.591,60
2019	283,50	8.591,90	13.033,40

From table 3 above, it can be seen that the level of investment in Central Kalimantan fluctuates. The largest investment occurred in 2016 with an investment value of 12,771.21 USD in the form of foreign investment (PMA) and 23,775.36 billion Rupiah from domestic investment (domestic). This research is based on the Keynesian approach to output where $Y = C + I + G$ in the closed economy assumption (yd) where $yd = y – Tx + TR$ where Tx is tax and TR is transfer payment. This statement shows that output is formed from consumption, investment and government spending, both of which investment and government spending have a positive influence on output, because when there is an increase in investment or government spending, the output will also automatically increase.

Reviewing various previous studies conducted by [6] where this study examines the effect of investment, government spending and labor on gross regional domestic product. The results of the research show that the amount of investment, both foreign investment and domestic investment and government spending in 8 Regencies/Cities of Banten Province in 2010-2014 has a positive and significant impact on the growth of gross regional domestic product in Banten Province. Research by [7] where this study also aims to determine the effect of foreign investment, domestic investment and capital expenditure on the economic growth of the Province in Indonesia, the results of the research show that foreign investment, domestic investment and capital expenditure have a positive and significant effect. to the economic growth of the provinces in Indonesia in 2010 - 2013.

Research that is not much different from [8] where this study also aims to determine the effect of foreign investment, domestic investment and government spending on economic growth in districts/cities in South Kalimantan Province, the results of the research show that foreign investment, investment Domestic production and government spending have a positive and significant impact on economic growth in the County/City of South Kalimantan Province in 2011 - 2015.

Differences in research results from several previous researchers showed different results. An increase in investment shows the potential that is increasingly providing great opportunities for investors. There is an increase in government spending regularly every year with an increase of 3% per year making the potential for development and economic growth to be achieved. Based on various potential investment opportunities as well as encouragement from government spending, it shows that there is a large influence on the contribution to the formation of gross regional domestic product which will also increase, this is the basis for research on the effect of foreign and domestic investment and government spending on gross regional domestic product in Kalimantan Province. Middle. The formulation of the problem in this study is whether there is an influence between foreign and domestic investment and government spending on gross regional domestic product in Central Kalimantan Province in 2015-2019. Based on this

description, the author aims to determine how the influence of foreign and domestic investment and government spending on gross regional domestic product in Central

II. RESEARCH METHODS

In this study, the object observed was in the Regency/City in Central Kalimantan Province, the thing that underlies the selection of the research location is because it is one of the areas with high productivity potential, Central Kalimantan is able to compete with other provinces where the population is the smallest compared to other provinces. on the island of Kalimantan, but the development of the economy, trading activities as well as mining and plantations have a special attraction for investors.

This research was conducted by processing investment data, government spending and gross regional domestic product in 2015 – 2019, choosing a time range for 5 years for the 2015 – 2019 period because in that year there was high economic growth, where there was curiosity about whether investment and government spending had a positive impact. a large contribution to the high economic growth that was formed during the 5 years period. This research belongs to the type of quantitative descriptive research, namely research conducted to emphasize the analysis on numerical data (in the form of numbers) which is processed by certain statistical methods and interpreted in the form of descriptions [9][10]. To facilitate and avoid errors in interpreting, the researcher will provide a definition of each object under study, so that it is easily understood by the reader, this object is as follows:

(1) Gross Regional Domestic Product. Gross Regional Domestic Product is the total production or output of goods and services within a certain period (one year), produced by a region. In its preparation, it is divided on the basis of current prices and constant prices. The preparation is based on current prices, i.e. GRDP is valued at current prices in each year, while the presentation is based on constant prices, GRDP is assessed entirely at the base year price, namely in 2010, so because every year it is valued at the same price (base year price). , then the development of GRDP from year to year is solely due to the development of real production, not caused by price increases (Statistics, 2015).

(2) Foreign Investment. According to Law no. 25 of 2007 concerning Investment, foreign capital is capital owned by foreign countries, individual foreign nationals, foreign business entities, foreign legal entities, and/or Indonesian legal entities whose capital is partly or wholly owned by foreign parties. Foreign investment is an activity to invest capital to conduct business in the territory of the Republic of Indonesia carried out by foreign investors, either using fully foreign capital or in joint ventures with domestic investors.

(3) Domestic Investment. According to Law no. 25 of 2007 concerning Investment, domestic investment is an individual citizen of Indonesia, an Indonesian Business Entity, the Republic of Indonesia or a region that invests in the territory of the Republic of Indonesia.

(4) Government Expenditure. Government spending in a government expenditure activity, one of its functions is to maintain regional economic stability, which consists of 3 main posts, namely personnel expenditure, goods and services expenditure, interest payments.

The type of data used in this study is secondary data, the source of this research data is taken from the website of the Central Statistics Agency, the Office of Investment and One Stop Services of Central Kalimantan Province, and the National Single Windows For Investment. Data collection techniques used are observation, documentation, and literature review. The steps taken are observation of data on realization of foreign-owned capital, realization of domestic-owned capital, government spending and GRDP in the form of panel data available and published by related sources as well as several reports, scientific journals, literature and other sources that support and have relationship with research studies.

The analytical technique used to answer the hypothesis in this study is quantitative descriptive analysis and multiple linear regression analysis. This research uses panel data or pooled data which is a combination of data arranged in time series (time series) and taken from several sectors (cross section). This study uses a simple analytical approach combining all time series and cross section data by estimating panel data. The panel data model for the regression technique is formulated as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e_i$$

Y	: Gross Regional Domestic Product
α	: Constant
$\beta_1 \beta_2 \beta_3$	: The coefficient of each variable
X_1	: Foreign investment
X_2	: Domestic investment
X_3	: Government Expenditure
e_i	: Error term

To determine the effect of the independent variable on the dependent variable which has more than one dependent variable, this study uses a multiple regression model (Ordinary Least Square/OLS). Multiple regression analysis was carried out with the following steps:

(1) Selection of the Estimation Model. The panel data analysis technique in this study can be done using the common effect model (CEM) method, either with a fixed time series or a fixed cross section effect.

(2) Statistical Testing. The best regression model is analyzed by conducting further tests, namely statistical testing by performing the F test and T test. The F-statistical test is used to test the significance of all independent variables as a single unit (partial) or measure the effect of the independent variables simultaneously (simultaneously) in affect the dependent variable. With the criteria, if $-hit > -tabel$: then Ho is accepted Ha is rejected, which means that the independent variable ($X1,X2,X3$) simultaneously the dependent variable (Y) is not significant, whereas if $-hit < -tabel$: then Ho is rejected Ha is accepted, which means that the independent variable ($X1,X2,X3$) simultaneously on the dependent variable (Y) is significant. If it shows the

influence of one or more of the independent variables on the dependent variable, the next test will be carried out, namely the T-test, the t-statistical test is used to test the partial effect of the independent variable on the dependent variable, the statistical T-test basically shows how far the influence of an individual explanatory variable in explaining the variation of the dependent variables. Criteria $-hit > $-table: then Ho is rejected Ha is accepted, which means that the independent variable $(X1,X2,X3)$ partially has a positive effect on the dependent variable (Y) is significant, while $-hit < $-table: then Ho is accepted Ha is rejected, which means that the independent variable $(X1,X2,X3)$ partially has a positive effect on the dependent variable (Y) is not significant.

(3) Furthermore, the determinant coefficient test $(R2)$ is to measure the level of accuracy or compatibility of the panel data regression, which is the proportion of the contribution percentage $(X1,X2,X3)$ to the variation of Y. The value of R^2 is between 0 (zero) and 1 (one) that is $0 < R^2 < 1$. If R^2 is getting closer to 1 (one), then the model is good and the influence between the dependent variable Y is getting stronger.

III. RESULTS AND DISCUSSION

Overview of Research Objects

Central Kalimantan Province is one of the provinces located on the island of Borneo which is located in the center, which consists of 14 regencies. The growth rate of the Gross Regional Domestic Product of Central Kalimantan Province at Constant Prices in 2015 – 2019 shows an increasing trend with an average GRDP achievement of Rp. 8,947,136.00 billion. The lowest GRDP gain occurred in 2015 at Rp. 7,889,100.00 billion, while the highest occurred in 2019, which was Rp. 10,042.860.00 billion. The GRDP condition of Central Kalimantan Province during 2015 to 2019 can be seen in the following Figure 1.
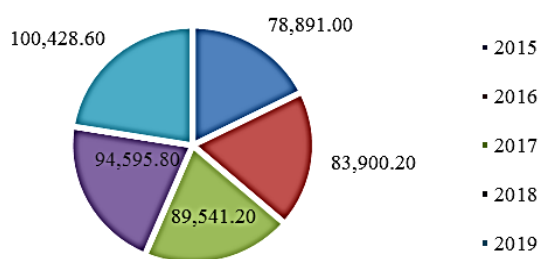

Figure 1. GRDP 2015 – 2019

During 2015 to 2019 investment conditions were highly volatile and unstable. The average FDI in Central Kalimantan Province is $2,888.83 Million US. The highest FDI amounted to $12,771.21 Million US in 2016, and the lowest FDI occurred in 2017 to $71.18 Million US. The condition of PMA in Central Kalimantan Province during 2015 to 2019 can be seen in the following figure2.

The condition of domestic investment in Central Kalimantan Province in 2015 – 2019 also showed fluctuating conditions with an average of Rp. 18,246.79 billion.
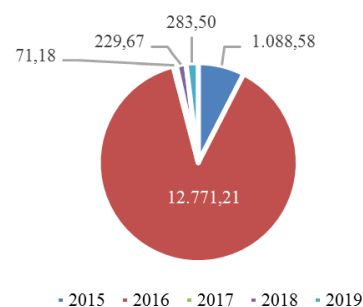

Figure 2. Realization of Foreign Investment in 2015 - 2019

The highest PMDN gain occurred in 2015 amounting to Rp.33,138.15 billion and the lowest occurred in 2017 where the realization was only Rp.7,392.39 billion. The following is the condition of PMDN in Central Kalimantan Province.
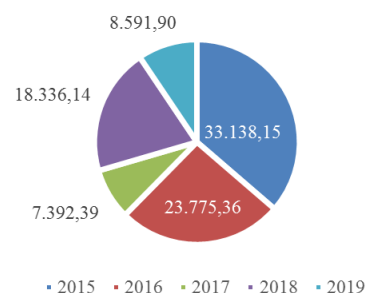

Figure 3. Realization of Domestic Investment in 2015 – 2019

Meanwhile, Government Expenditures that occurred during the period 2015 – 2019 in Central Kalimantan Province continued to increase, an average of 6.38% increase every year. Over time, with population growth which is also increasing, this becomes the basis for increasing government spending to support the regional economy.
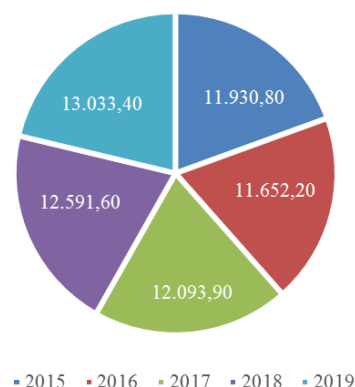

Figure 4. Government Expenditures in 2015 – 2019

During the period 2015 – 2019, the average government expenditure in Central Kalimantan Province was Rp. 12,260.30 billion. Government spending in general

experienced a positive upward trend from year to year. The smallest government expenditure occurred in 2016 which amounted to Rp.11,625,620 billion and the highest was Rp.13,033.40 billion in 2019. Financial independence is very important for the region, especially related to the contribution of regional finance to regional economic growth itself. . The contribution of local government spending to regional economic growth is an opportunity that can be utilized to encourage the regional economy, in this case the gross regional domestic product in Central Kalimantan Province.

Hypothesis testing

Based on the data that has been collected and analyzed using multiple linear regression analysis tools, the regression coefficients and constants are obtained as follows: $Y = -6,593,919,777 + 41,141X1 - 31799X2 + 1,305,215X3$. The independent variable regression coefficient shows the magnitude of the changes that will occur in the dependent variable due to changes in each independent variable. From the multiple regression equation above, the following analysis is obtained:

(1) The constant value of -6,593,919,777 indicates that if foreign investment/PMA (X1), domestic investment/PMDN (X2), and government spending/PPm (X3) the value is 0 (constant) then the regional domestic product level gross/GDP (Y) is negative, which is 6,593,919,777. This shows that if there is no foreign investment/PMA (X1), domestic investment/PMDN (X2), and government spending/PPm (X3) then the gross regional domestic product/GRDP (Y) in Central Kalimantan Province is -6,593 .919,777.

(2) The regression coefficient value of the foreign investment/PMA variable (X1) is positive, namely 41,141. This shows that there is a positive influence between foreign investment/PMA (X1) on gross regional domestic product/GRDP (Y) of 41.141 percent, so if foreign investment/PMA (X1) increases by 1, then gross regional domestic product/GRDP (Y)) will increase by 41,141 with the assumption that the other independent variables [variables of domestic investment (PMDN) and government expenditures (PPm)] are constant.

(3) The regression coefficient value of the domestic investment/PMDN variable (X2) is negative, which is -31.779. This shows that there is a negative effect between domestic investment/PMDN (X2) on gross regional domestic product/GDP (Y) of -31,779, so if domestic investment/PMDN investment (X2) increases by 1, then gross regional domestic product/ GRDP (Y) will decrease by 31,779 with the assumption that the independent variables [variables of foreign investment (FDI) and government expenditures (PPm)] are constant.

(4) The regression coefficient value of the government expenditure/PPm variable (X3) is positive, namely 1.305.215. This shows that there is a positive influence between government spending/PPm (X3) on gross regional domestic product/GDP (Y) of 1,305,215, so if government spending/PPm (X3) increases by 1, then gross

regional domestic product/GRDP (Y) will increase by 1,305,215 with the assumption that the other independent variables [variables of domestic investment (PMDN) and investment (PMA)] are fixed.

(5) This hypothesis testing is conducted to determine whether or not there is a significant relationship between the independent variables and the dependent variable, either simultaneously or partially. The F test is a test to determine whether there is a simultaneous (simultaneous) effect between all independent variables on the dependent variable. Based on the results of the F test, it can be seen that the calculated F value is greater than the table F value. The calculated F value is 16.798 > F table 4.737, this means that Ho is rejected and Ha is accepted. Based on the test results, it can be concluded that the independent variables [(PMA (X1), PMDN (X2), and PPm (X3)] simultaneously affect the dependent variable gross regional domestic product (Y).

(6) The next test is a T test which is a test to determine whether or not there is a partial (individual) effect between each independent variable [(PMA (X1), PMDN (X2), and PPm (X3)] on the dependent variable /GDP (Y). From the estimation results, it can be seen that the t-count value and the probability value of each independent variable, namely the foreign investment/PMA variable (X1) has a t-count value of 1.470 and a probability value of 0.380. This means the t-count value is greater than t table (3.470 > 2.776) and the probability value is 0.049 > = 0.050 then Ho is rejected and Ha is accepted. Thus, it can be concluded that the foreign investment/PMA variable (X1) partially has a positive and insignificant effect on regional domestic product gross (Y).

(7) The variable of domestic investment/PMDN (X2) has a t-count value of -3.335 and a probability value of 0.023. This means that the value of t-count is greater than – t table (- 3.335 < -2.776) and the probability value is 0.023 < = 0.050 then Ho is rejected and Ha is accepted. Thus, it can be concluded that the variable of domestic investment/PMDN (X2) has a partial and significant effect on regional gross domestic product/GDP (Y).

(8) The variable government expenditure/PPm (X3) has a t-count value of 4.01 and a probability value of 0.015. This means that the value of t count is greater than + t table (4.001 > 2.776) and the probability value is 0.015 < 0.050, then Ha is rejected and Ha is accepted. Thus, it can be concluded that the variable government expenditure/PPm (X3) partially has a positive and insignificant effect on gross regional domestic product/GDP (Y).

(9) The coefficient of determination (R^2) is used to determine the proportion or percentage of the total variation in the dependent variable applied by the independent variable as seen from the existing R-squared. The result of testing the coefficient of determination R-squared is 0.981. This shows that the ability of the independent variables consisting of foreign investment/PMA (X1), domestic investment/PMDN (X2) and government spending/PPm (X3) in explaining the dependent variable gross regional domestic product/GDP (Y) is 98.10 percent, while the remaining 1.90 percent is explained by other variables outside the model.

IV. CONCLUSION

This study aims to examine the effect of foreign and domestic investment and government spending on gross regional domestic product in Central Kalimantan Province, using panel data with OLS multiple linear regression model. The conclusion in this study is that foreign and domestic investment and government spending together have no significant effect on gross regional domestic product, while partially foreign investment and government spending have a positive effect on gross regional domestic product in Central Kalimantan Province in 2015 – 2019 while domestic investment has no effect on gross regional domestic product. This research has been carried out in accordance with scientific procedures, however, it still has limitations. This research only uses independent variables, namely PMA, PMDN, and government expenditures that can affect GRDP, while there are many other factors that can affect the GRDP variable. From the research results obtained, there are several suggestions that can be taken into consideration, namely for further researchers to conduct research by adding other independent variables such as net exports, household consumption expenditures, and gross domestic capital formation to see their effect on economic growth.

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