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Article

Analysis of Economic Growth in Several Districts in West Kalimantan

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Abstract: This study aimed to determine whether government, corporate, and village budgets influence the economic growth of West Kalimantan. The study was conducted in Bengkayang, Sambas, Landak, Mempawah, Kubu Raya, Sanggau, Sekadau, Sintang, Ketapang, North Kayong, Melawi, and Kapuas Hulu Districts. This study utilized the economic growth rate from the Bureau of Economic Analysis, government investment in regional capital expenditures, village funding from the Indonesian Ministry of Finance, and private investment in each district from the Investment Coordinating Board. In addition, this study employed panel data with multiple linear regression analysis to investigate the issue. The outcome demonstrated that private investment promotes economic expansion and growth; however, government investment and village finances have no effect and do not harm economic growth.

About the Author(s)

Helma Malini is an academic and researcher at the Faculty of Economics and Business, Universitas Tanjungpura. Most of the courses she teaches and the research she conducts are related to Finance. Nonetheless, Helma finds solace in pursuing study in the fields of Islamic Economics and Islamic Finance.

I. Introduction

In a closed economy, three players affect national output: the household, the private or business sector, and the government. These three are economically interdependent. The household sector received gains from the sale of its production factors. The private sector produces revenue through selling goods and services on the market. The private sector will use part of the revenue to compensate the household sector for the use of its production factors (Putra, 2021, p. 62; Satibi, 2017).

On the other hand, the greatest challenge of regional development is focusing on endogenous development (using local people, institutions, and resources). This viewpoint necessitates incorporating regional initiatives into the development process to stimulate economic activities and employment. Increasing a community's output of goods and services constitutes economic expansion. Production and revenue growth are dimensional measures of expansion. A rise in GDP indicates an increase in national revenue (GDP). Indonesia has pursued planned, sustainable, and equitable growth without losing justice and stability since 1969.West Kalimantan is comprised of 12 regencies and two towns, as well as magnificent hilly and coastal landscapes. It is West Kalimantan's sources of source (Malini, Seinna, et al., 2022). When a region's potential is optimally exploited, considerable foreign and domestic investment capital flows are possible. Greater capital flows into West Kalimantan will stimulate economic growth. The author chose the province of West Kalimantan because this province shows strong economic growth with striking differences in economic growth in its district. Therefore, it is interesting to see why the differences are there.

Agriculture, trade, and manufacturing are key economic drivers in West Kalimantan, with respective growth rates of 4.30 percent, 6.60 percent, and 3.10 percent. However, the COVID-19 pandemic weakened the economic growth of West Kalimantan Province by -1.82 percent in 2020 (Malini, Yang, et al., 2022). The COVID-19 pandemic has a major impact on practically every nation, including Indonesia. The effect is felt in many aspects, not just limited to a certain area. With the COVID-19 pandemic,

investments have become a matter of concern. In addition, the quantity of regulations in a country influences economic activities (Tambunan, 2005).

Business investment may affect the short- and long-term growth of the economy. Because physical capital is produced and sold, a rise in business investment directly raises the current gross domestic product (GDP) level. Investment is an element of total demand. Therefore, an increase in investment will lead to an expansion of short-term economic growth. Increased investment and economic growth will boost economic expansion if there is excess capacity.

Larger investment increases the likelihood of future economic growth, creating a cyclical relationship between economic growth and investment. Research and development ought to be accelerated. Businesses can invest more in research and development when their profitability is enhanced by rapid economic expansion. By expanding exports and attracting foreign investment, developing countries can increase income and employment, and by transferring technology and managerial know-how, they can bolster the activities of their domestic private sector firms and provide the necessary funding for development.

Capital expenditures and village funding allocated annually by the central government through the State Budget (APBN) can boost regional economic growth. Government-distributed Village Fund Allocation (ADD) funds economic and infrastructure development in villages (Nasir, 2022).

Capital creation entails expenditures on fixed assets or other assets that give benefits for more than one accounting period, as well as maintenance costs to preserve or extend the useful life, capacity, and quality of assets. Land, equipment, structures, roads, irrigation and network systems, and other fixed assets are examples of fixed assets. Capital Expenditures solely account for the acquisition or construction costs of tangible fixed assets. To provide services, local governments need capital expenditures. The demand for facilities and infrastructure for government activities and public institutions drives capital expenditures. Most local governments purchase fixed assets once a year, based on budget and public services

targets with long-term financial effects (Faraglia et al., 2013; Lamba et al., 2020).

Investments by the government finance long-term activities. It is anticipated that government investment in capital assets will have a stronger and more enduring multiplier effect. Investment stimulates economic expansion. A flourishing economy enhances a nation's prosperity, production, employment, and income distribution. Economic expansion is necessary for future expansion. Producing goods and services is beneficial to all areas of the economy. These operations require a factory, office, machinery, production, research and development, transportation, and communication infrastructure (Aschauer, 1990).

Regional Government Equity Participation is an investment made by the government. Each sector of the economy contributes to the gross regional product. Gross value added (GVA) is defined as output (at basic prices) minus intermediate consumption (at purchaser prices) (Aobdia et al., 2018). According to Hammami and Boujelbene (2015), Economic growth is the expansion of economic activities that increases the production of goods and services and the wealth of a community. Economic growth is defined as an increase in gross national product, irrespective of whether the increase is higher or lower than the population growth rate or whether there are changes in economic structure or not (Wulandari et al., 2018).

The issue in this study is the extent to which those factors (Government Investment, Private Investment, and Village Fund Budget) contribute to regional economic growth. As stated in Lin and Sosin (2001) private investment and government spending have a significant effect on economic growth and poverty. Thus, a study of how private investment, local government investment, and village budget impacted economic growth becomes important. In this study, economic growth is defined as the development of an economic activity that causes the number of goods and services produced by a community to increase constantly and is characterized by an increase in the gross regional domestic product (GRDP) in a region over a given period. In this study, the GRDP at current prices is used to figure out the rate of economic growth (Wiryawan & Otchia, 2022).

In the process of production growth, human resources play a passive role. In other words, a society's population will adapt to its work demands (Lin & Sosin, 2001). Capital stock is a production factor that actively impacts the output level. It is indispensable to the expansion of output (Suhendra & Malini, 2022).

Up to the "maximum limit" of natural resources, production growth is determined by the capital increase. If the prevailing wages is greater than the subsistence wages, the population will increase. If pay surpasses subsistence, people marry at a younger age, live longer, and produce more offspring. If wages fall below the subsistence level, the population will decline (Kennedy et al., 2019; Malini, 2021; Syadullah & Setyawan, 2021).

A.   Conceptual Framework

The author aimed to determine the effect that the central government and private investment have on economic growth, using the village fund budget of the Regency Government in West Kalimantan Province as the moderating variable. Diagram of study structure:
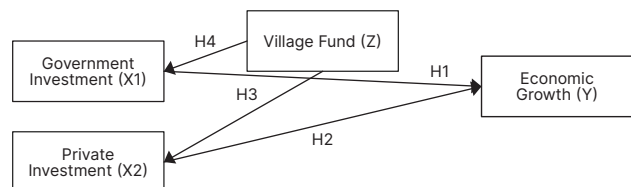

Figure 1. Conceptual Framework

Influence Between Research Variables

1. Independent Variable

    The independent variable (X1) is Government Investment, and (X2) is Private Investment.

2. The dependent variable (Y) is a variable that is influenced by the independent variable. The dependent variable in this study is Economic Growth, with the proxy of GRDP prices.

3. Moderating Variables

Moderating variable, namely the variable that moderates or directs the influence of the independent variable on the dependent variable. The moderating variable in this study is the Village Fund Budget (Z) which moderates the effect of Government Investment and Private Investment on the economic growth of the independent and dependent variables.

B.   Hypothesis

1.   Government Investment and Economic Expansion

Investments from both the public and private sectors are required to improve national output. This investment activity will help bring the level of production up to the best level and increase the level of output.

The availability of infrastructure sponsored by government capital expenditures, such as road building, electricity, sewage, irrigation, telecommunications, and others, reflects government investment activity. A study by Wulandari et al. (2018) suggests that government spending has an effect on economic growth, and a study by Anjaya (2018, p. 75) verifies that capital spending has a major positive effect on economic growth. Based on the previous studies, the following is a proposed theory about how government spending affects economic growth:

H1   : Government investment contributes positively to economic growth.

2.   Private Investment's Impact on Economic Expansion

Farmers, microentrepreneurs, local manufacturers, and international firms will invest in the region if the investment climate (infrastructure) is favorable. These companies' innovations and infrastructural investments support economic growth. A study by Atkins et al. (2020) showed that private investment has a favorable and significant effect on economic growth. Based on the previous studies mentioned above, the proposed hypothesis for the effect of private investment on economic growth is as follows:

H2   : Private investment positively affects economic expansion

The ADD modifies the relationship between private investment and economic growth. To have autonomy for the village, a village government system that can organize, manage, find, and use all the community's potential is needed (Nica, 2013). Utilizing village money emphasizes the view that village funds may foster equitable economic growth with the assistance of central and local governments. To move the village economy, it is important to work with businesses in the village. Empirical evidence of a study by (Masduki et al., 2022) showed that there is a correlation between private investment and economic expansion. Based on the statements discussed above, the following is the proposed hypothesis to study how private investment affects economic growth with the Village Fund Budget as the moderator:

H3   : ADD enhances private investment's impact on economic growth

The ADD reduces government spending on economic growth. Government-allocated regional funding. ADD comes from regional tax revenue sharing and central and regional financial balance funds. Village funds are regulated by Law No. 6 of 2014. Village funds are regulated by Law No. 6 of 2014. The law requires the central government to transfer 10% of the cash allocated to the regions, excluding district/city government transfer funds, to the village fund (Shinta & Solikin, 2022).

H4   : ADD strengthens government investment's effect on economic growth

II.   Methods

Data on the economic growth from 2017 to 2021 of districts in the province of West Kalimantan was published by BPS. Economic growth data from BPS and private investment data from the Investment Coordinating Board's website www.bkpm.go.id and BPS were used, as well as data from the Ministry of Finance's DJPK website on Government Investment and ADD. This analysis uses panel data for the years 2017 to 2021. These are secondary data from multiple sources, such as the findings of economic growth

publications from the BPS and private investment data from the Investment Coordinating Board and the Ministry of Finance's website.

The aforementioned perspective is wrong because the author's reference to establishing the population is incorrect; the research population will consist of 12 districts in the province of West Kalimantan. A sample is a subset of the population that the researcher wishes to analyze. A sample is reflective of the size and characteristics of the population. To ensure that the sample is representative of the existing population and based on existing factors, a particular sampling procedure is utilized. The author employed a form of purposive sampling for this sampling strategy. Based on the aforementioned understanding, the authors establish the characteristics used in this study to aid future research. Private Investment, Government Investment, and Village Fund Budget Information for the years 2017 to 2021, as issued by the Investment Coordinating Board and the Ministry of Finance of the Republic of Indonesia. The sample was chosen to accurately represent the population. There are sixty data panels contained in this study (12 districts x 5 years).

Table 1. Variable and Definition

VARIABLE	VARIABLE TYPE	VARIABLE DEFINITION
Government Investment	Independent (X1)	Realization of Government Investment through capital expenditures (Rp) obtained from the publication of DJPK Ministry of Finance of the Republic of Indonesia from 2017 - 2021.
Private Investment	Independent (X2)	Realization of Private Investment (Rp) obtained from the publication of the Investment Coordinating Board (BKPM) and BPS from 2017 - 2021.
Village Fund	Moderator (Z)	Realization of Village Funds (Rp) obtained from the publication of DJPK of the Ministry of Finance of the Republic of Indonesia from 2017 - 2021.
Economic Growth	Dependent (Y)	The index was obtained from BPS publications from 2017 - 2021 in the form of a percentage converted into numbers.

A. Multiple Regression Analysis

Multiple regression analysis was carried out if the number of independent variables was at least two. The regression equation in this study without moderation was:

$$PE_{it} = a + b_1 IP_{it} + b_2 IS_{it} + e_{it}$$

Remarks:
PE = Economic Growth
IS = Private Investment
IP = Government Investment
e = residual
a = constant
b_1 until b_2 = coefficient regression coefficient regression

B. Panel Data Regression Estimation Method

1. Pagan Breusch Test

The Breusch Pagan test was conducted to assess whether there was an individual effect, time, or both in the fixed and random effect models.

C. Moderating Regression Analysis

Economic growth as the dependent variable was first tested separately with the following equation:

$$PE_{it} = a + b_1 DD_{it} + e_{it}$$

Remarks:
PE = Economic Growth
a = constant
$b_1 DD$ = Regression Coefficient
e = residual

Then the Village Fund (DD), as a reinforcement of the relationship between the independent variable and the dependent variable, cannot stand alone in this study but becomes an addition to IP, IS (independent variable), and PE (dependent variable), so that it becomes a reinforcing variable for IS, IP (independent Variable), then the X2 variable must be attached to the IP and IS variables. If it is added, new variables appear, namely the multiplication variable between IP (independent variable) and DD (moderating variable), and multiplication between IS (independent variable) and DD (moderating variable), so that this coefficient increases its effect on the dependent variable. The model for a moderating variable is:

$$PE_{it} = a + b_1IS_{it} + b_2IP_{it} + b_3DD_{it} + b_4DD*IP_{it} + b_5DD*IS_{it} + e_{it}$$

Remarks:
PE = Economic Growth
DD = Village Fund
IS = Private Investment
IP = Government Investment
DD*IP = Interaction between Village Fund DD and Government Investment
DD*IS = Interaction between village fund and private Investment
e = residual
a = constant
b_1 until b_5 = coefficient regression

In the equation above, it is clearly seen that DD is an amplifier for the IP and IS variables in the relationship to the PE variable, but DD must also be an independent variable in the model. If hypothesis testing is carried out on the model coefficients, there will be several alternatives which are shown in Table 2.

Table 2. Test Results and Moderation Type

No.	Testing Result	Moderating Type
1.	If the effect of Z on Y at the first output is not significant and the interaction effect (Z*X1 and Z*X2) at the second output is significant, then the effect of Z on Y at the first output is not significant.	Pure Moderator
2.	If both the effect of Z on Y at the first output and the interaction effect (Z*X1 and Z*X2) at the second output are significant, then the effect of Z on Y at the first output is significant.	Quasi Moderator
3.	If the effect of Z on Y at the first output is substantial but the interaction effect (Z*X1 and Z*X2) at the second output is not significant, then the effect of Z on Y at the first output is significant.	Predictor Moderator Variable
4.	There is no significance between the effect of Z on Y at the first output and the interaction effect (Z*X1 and Z*X2) at the second output.	Homologizer Moderator (The variable in question has the potential to be a moderating variable).

The hypothesis in the research to be tested was formulated into a statistical hypothesis as follows:

$$A = \frac{R2/k}{(1-k2)/(n-k-1)}F$$

Remarks:
F = F Test
n = Sample number

k = Exogen Variable
2 = Coefficient Determination

Moderation regression means whether the individual independent variable has a significant effect or there is no dependent variable. The hypothesis test used in this study was the t test. The t-test was conducted to determine the significant level of the independent variable individually on the dependent variable:

$$T = \frac{r\sqrt{n-2}}{r\sqrt{1-r^2}}$$

Remarks:
t = t test
r = Defined partial correlation
n = Sample

The significance is 5% (a = 0.05), with a 95% confidence level of degree (dk) = n-k-1. This number was chosen to represent the variable test and is the level of significance that is often used in research. The rules of significance test using the EVIEWS program are:

a. If the significance value of t < 0.05, then H0 is rejected, meaning that there is a significant effect between one independent variable on the dependent variable.

b. If the significance value of t > 0.05, then H0 is accepted, meaning that there is no significant effect between one independent variable on the dependent variable.

III. Results and Discussion

The general description of respondents is a description of general data related to this research from 12 (twelve) district governments in West Kalimantan Province. The general description of the research object is as describe in Table 3.

From Table 3, it was found that the average investment value of district governments in the form of capital expenditures has all decreased. The largest decline in the local government Investment was in Melawi Regency (-25.41%), and the smallest was in Ketapang Regency (2.65%). The allocation of activities funded through capital expenditures are long-term investment to boost economic growth of one region. Activities such as road building, funding education and health care for one region are

Table 3. Overview of District Government Investment Growth in West Kalimantan Province in 2017–2022

IP =	Government Investment					Average (%)
	2018	2019	2020	2021	2022	
Bengkayang	-0,059	-68.86%	-5.10%	-48.81%	11.37%	-23.45%
Sambas	-0,026	-11.47%	15.66%	-42.97%	21.39%	-4.00%
Landak	0,027	-10.71%	-15.56%	5.72%	-29.66%	-9.49%
Kapuas Hulu	-0,421	0.06%	11.74%	-50.01%	28.10%	-10.44%
Sekadau	-0,126	-6.24%	-19.07%	11.95%	-37.97%	-12.79%
Sanggau	-0,034	-21.73%	15.20%	-64.84%	-0.53%	-15.07%
Sintang	-0,017	-29.58%	11.26%	-25.43%	-10.50%	-11.19%
Ketapang	0,492	26.27%	11.16%	-64.14%	-9.17%	2.65%
Kubu Raya	-0,174	18.95%	-53.71%	-46.48%	35.42%	-12.65%
Kayong Utara	0,103	-53.59%	-7.40%	1.83%	1.67%	-9.44%
Mempawah	-0,853	-24.79%	4.69%	-11.03%	5.58%	-22.17%
Melawi	0,108	-106.43%	35.90%	-81.34%	14.06%	-25.41%

Table 4. Overview of Private Investment Growth in Districts in West Kalimantan Province in 2017–2022

	Private Investment					Average (%)
	2018	2019	2020	2021	2022	
Bengkayang	97.09%	-3221.37%	57.10%	65.34%	-125.48%	-625.46%
Sambas	65.52%	-224.63%	11.23%	-17.99%	-40.78%	-41.33%
Landak	90.86%	-295.49%	-574.95%	-43.54%	74.41%	-149.74%
Kapuas Hulu	99.13%	-1667.34%	-1.06%	50.08%	-105.45%	-324.93%
Sekadau	81.51%	-116.86%	-43.60%	-167.86%	15.13%	-46.34%
Sanggau	84.69%	-1141.78%	36.43%	-193.00%	-7.47%	-244.22%
Sintang	97.80%	-834.21%	68.58%	-387.07%	9.94%	-208.99%
Ketapang	71.66%	-948.87%	10.10%	7.34%	43.76%	-163.20%
Kubu Raya	89.09%	-337.54%	-32.25%	-64.68%	53.02%	-58.47%
Kayong Utara	100.00%	0.00%	100.00%	0.00%	100.00%	60.00%
Mempawah	96.70%	-1599.42%	7.01%	91.54%	14.98%	-277.84%
Melawi	-140.92%	-107.74%	94.84%	-1174.69%	-34.32%	-272.56%

funded through capital expenditure. Based on the theoretical foundation, Melawi Regency and Ketapang Regency need much more bigger government investment in order to improve the quality of their region. Particularly for essentials sectors such as education and health that needed more government investment in order to improve the quality of life of people in that region.

According to the data presented in Table 4, only one district had average increase in private investment, namely North Kayong (60%) while eleven other districts experienced a loss, with Bengkayang Regency experiencing the most substantial decline (-625.46%). Many West Kalimantan emerging regions have high transaction costs. There could be poor infrastructure construction, inconsistent utility service, and low labor productivity. Occasionally, an economy's growth becomes stiff and resistive to new opportunities as a result of excessive government control and inadequate planning. However, natural resources provide an opportunity and a growing urgency to address

Table 5. Overview of Village Fund Budget Growth in District Governments in West Kalimantan Province in 2017–2021

	Village Fund					Average (%)
	2018	2019	2020	2021	2022	
Bengkayang	21.67%	-4.70%	12.78%	2.68%	2.53%	6.99%
Sambas	21.76%	11.37%	15.68%	-1.12%	-0.12%	9.51%
Landak	21.67%	16.92%	16.84%	-0.73%	1.08%	11.15%
Kapuas Hulu	21.49%	4.60%	14.48%	1.35%	1.34%	8.65%
Sekadau	21.72%	-3.29%	17.92%	0.00%	4.37%	8.15%
Sanggau	21.58%	-1.21%	14.27%	1.68%	3.99%	8.06%
Sintang	31.22%	0.15%	12.93%	2.90%	-0.02%	9.44%
Ketapang	20.57%	6.63%	15.06%	1.95%	2.48%	9.34%
Kubu Raya	21.48%	10.88%	16.20%	1.15%	2.55%	10.45%
Kayong Utara	21.73%	2.99%	17.11%	5.56%	5.79%	10.64%
Mempawah	22.39%	7.08%	17.01%	0.05%	4.20%	10.15%
Melawi	20.44%	-1.53%	14.17%	2.34%	2.07%	7.50%

Table 6. Overview of Economic Growth (GDP at Current Prices) in Districts in West Kalimantan Province in 2017–2021

	Economic Growth (PDRB)					Average (%)
	2018	2019	2020	2021	2022	
Bengkayang	9.01%	7.62%	7.46%	0.32%	6.93%	6.27%
Sambas	8.46%	7.78%	7.53%	0.68%	7.27%	6.34%
Landak	8.59%	8.11%	7.51%	1.79%	7.53%	6.71%
Kapuas Hulu	9.63%	7.95%	7.63%	0.66%	7.21%	6.62%
Sekadau	9.54%	9.26%	8.95%	2.08%	7.91%	7.54%
Sanggau	8.44%	6.74%	5.43%	3.83%	8.11%	6.51%
Sintang	8.80%	8.27%	8.79%	0.20%	6.59%	6.53%
Ketapang	11.00%	10.02%	9.05%	2.20%	9.08%	8.27%
Kubu Raya	10.83%	10.03%	9.49%	-0.60%	7.37%	7.42%
Kayong Utara	9.68%	8.07%	8.15%	1.75%	7.21%	6.97%
Mempawah	9.31%	8.35%	8.37%	2.89%	5.94%	6.97%
Melawi	8.08%	8.05%	7.84%	1.69%	7.01%	6.53%

these problems. A region with a resource-rich economy, such as Bengkayang, must adjust to substantial structural change, presenting an opportunity and a need for public and social capital expenditures. Nonetheless, the government cannot focus primarily on one region. Thus, private investment could replace the government's role in this area, especially in non-monopolized industries.

Table 5 shows that the average village fund budget for the province of West Kalimantan's twelve districts has increased. The highest increase was in Landak Regency (11.15%), while the lowest was in Bengkayang Regency (6.99%). The Village Government Work Plan prioritizes the use of Village Funds to support community development and empowerment to improve the well-being of village communities, the quality of human life, and the reduction of poverty. Bengkayang Regency has experienced a decline in village funds, which will hinder the ability of villages in Bengkayang to achieve and enhance the improvement and consolidation of Village

SDGs data and village development data collection through IDM; vegetable and animal food security; prevention and reduction of stunting; and enhancement of the quality of human capital for villagers.

Table 6 indicates that the economic growth of all twelve districts in the province of West Kalimantan increased. The lowest increase was in Bengkayang Regency (6.27%) compared to Ketapang Regency (8.27%). The rise of the economy increases the state's capacity and the accessibility of public goods. When economies flourish, the government receives more tax and acquires better capacity and resources to provide public goods and services, such as healthcare, education, social protection, and basic public services. Once again, Bengkayang Regency was categorized as a region with low economic growth. If the economy slows down, people's incomes will likely stagnate or decrease. When their income decreases, their standard of living also decreases. This decreases individuals' purchasing power and hence inhibits economic growth.

Table 7. Descriptive Statistics (In Billion Rupiah)

Variable	Lowest	Highest	Average
Government Investment	122.73	896.80	270.61
Private Investment	0.00	880.00	100.19
Village Fund	3.49	31.23	13.34
Economic Growth (PDRB)	38.67	348.60	156.29

Source: Data Analysis for 2017-2021 Using SPSS

The government investment variable had a minimum value of 122.73, a maximum value of 896.80, and an average value of 270.61, as shown in Table 7. The private investment variable had a minimum value of 0.00, a maximum value of 880.00, and an average value of 100.19. The village fund budget variable had a minimum value of 3.49, a maximum value of 31.23, and an average value of 13.34. The lowest value of the economic growth variable (GRDP) was 38.67, the highest value was 348.60, and the average value was 156.29.

A. Data Analysis

1. Estimating Regression with Panel Data

In this study, the Analysis method was employed to process data analysis methodologies. There were multiple methods for estimating the regression model with panel data, including the Common Influence Test model, the Fixed Effect Test, and the Random Effect Test, from which the optimal method for examining the effect of each independent variable on the dependent variable was selected. This strategy was aided by the use of algorithm to lower the residual value and produce more stable data. The results of each test of panel data regression are provided below.

a. Random Effect Model

Table 8. Common Effect

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4294.103	2547.480	1.685628	0.0974
X1	0.021643	0.011294	1.916414	0.0604
X2	-0.132059	0.470544	-0.280653	0.7800
Z.	0.021596	0.014946	1.444910	0.1541
R Square	0.217023	Mean dependent var		13337.61
Adjusted R-squared	0.175078	S.D. dependent var		8099.711
S.E. of regression	7356.581	Akaike info criterion		20.70892
Sum squared resid	3.03E +09	Schwarz criterion		20.84854
Log likelihood	-617.2676	Hannan-Quinn criter.		20.76353
F-statistic	5.173964	Durbin-Watson stat		1.568627
Prob(F-statistic)	0.003162			

Source: Data Analysis for 2017-2021 Using SPSS

This model represents a strategy for merging panel data in OLS known as Common Effect estimation. The method emphasizes individual and temporal measurements. It is estimated that the economic growth rate and the independent variable occur simultaneously.

b. Fixed Effect Model

Fixed Effect approach is a statistical model that use dummy variables to identify differences in intercepts. The Fixed Effect explanation is that the intercept for the location variable is distinct from the intercept for the time variable (Time Intervenient). Thus, this method presupposes that the regression coefficient (slope) between place and time data remains constant.

Table 9. Fixed Effect Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2357.012	2682.087	0.878798	0.3836
X1	0.036146	0.013148	2.749165	0.0082
X2	0.492547	0.628208	0.784052	0.4366
Z.	0.003171	0.017060	0.185897	0.8532
	Effects Specification			
	Cross-section fixed (dummy variables)			
R Square	0.285771	Mean dependent var		13337.61
Adjusted R-squared	0.189625	S.D. dependent var		8099.711
S.E. of regression	7291.429	Akaike info criterion		20.75035
Sum squared resid	2.76E +09	Schwarz criterion		21.02960
Log likelihood	-614.5106	Hannan-Quinn criter.		20.85958
F-statistic	2.972251	Durbin-Watson stat		1.785602
Prob(F-statistic)	0.010659			

Source: Data Analysis for 2017-2021 Using SPSS

c. Random Effect Model

Table 10. Random Effect Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4294.103	2524.919	1.700689	0.0945
X1	0.021643	0.011194	1.933538	0.0582
X2	-0.132059	0.466377	-0.283160	0.7781
Z.	0.021596	0.014814	1.457821	0.1505
	Effects Specification			
			S.D.	Rho
Cross-section random			0.000000	0.0000
Idiosyncratic random			7291.429	1.0000
	Weighted Statistics			
R-squared	0.217023	Mean dependent var		13337.61
Adjusted R	0.175078	S.D. dependent var		8099.711
S.E. of regression	7356.581	Sum squared resid		3.03E +09
F-statistic	5.173964	Durbin-Watson stat		1.568627
Prob(F-statistic)	0.003162			
R-squared	0.217023	Mean dependent var		13337.61
Sum squared resid	3.03E +09	Durbin-Watson stat		1.568627

Source: Data Analysis for 2017-2021 Using SPSS

Random Effect Technique is a technique that is injected into the variable dummy in fixed effects in order to discover what is currently unknown. However, this will result in a reduction in the degree of freedom, hence diminishing the effectiveness of the parameter. Using the error terms as a random effect approach, this problem can be resolved.

Table 11. Random Effect Model IP, IS, ADD to PE

c.	Coefficient	Std. Error	t-Statistic	Prob.
C	2357.011	2682.086	0.878797	0.383553
X1	0.036146	0.013148	2.749164	0.008196
X2	0.492547	0.628207	0.784051	0.436566
Z.	0.003171	0.017060	0.185896	0.853248
	Effects Specification			
	Cross-section fixed (dummy variables)			
R-squared	0.285770	Mean dependent var		13337.61
Adjusted R	0.189624	S.D. dependent var		8099.711
S.E. of regression	7291.429	Akaike info criterion		20.75035
Sum squared resid	2764576986.422742	Schwarz criterion		21.02959
Log likelihood	-614.5105	Hannan-Quinn criter.		20.85958
F-statistic	2.972251	Durbin-Watson stat		1.785601
Prob(F-statistic)	0.010659			

Source: Analysis for 2017-2021 Using Eviews 10

Based on Table 11, the results of the Random Effects model test can be written down the regression formula through the following equation:

$$KK_{it} = 2357.011 + 0.036146\ IP + 0.492547\ IS + 0.003171\ ADD$$

B. Validating Hypotheses

1. Validating Hypotheses, I

The hypothesis was tested using multiple linear regression analysis at a significance level of = 0.05. Following the assessment of the classical assumptions and the finding that the model may be used to test multiple regression analysis, the next step is to test the hypothesis. The hypothesis was: Government Investment and Private Investment have a substantial positive impact on economic growth.

Table 12. Determinant Coefficient Analysis Weighted Statistics

R-squared	0.21702294	Mean dependent var	13337.610
Adjusted R	0.17507774	S.D. dependent var	8099.7111
S.E. of regression	7356.58131	Sum squared resid	7.950079
F-statistic	5.17396370	Durbin-Watson stat	1.5686266
Prob(F-statistic)	0.00316152		

Source: Data Analysis for 2017-2021 Using EViews 10

Based on the Random Effect Model (REM) regression output in the R-squared value column, where the coefficient of determination (R Squared) of the regression model is 0.21702294, it can be concluded that 21.702294% of the variance of the dependent variable of economic growth is influenced by changes in the independent variables, namely Government Investment. and Private Investment, whereas 78.297806% is influenced by other factors not discussed by the researcher.

Table 13. Simultaneous Regression Coefficient Significance Test (Test F)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
R-squared	0.21702294	Mean dependent var		13337.610
Adjusted R	0.17507774	S.D. dependent var		8099.7111
S.E. of regression	7356.58131	Sum squared resid		3030680167.9509
F-statistic	5.17396370	Durbin-Watson stat		1.5686266
Prob(F-statistic)	0.00316152			

Source: Data Analysis for 2017-2021 Using EViews 10

Based on the REM output, the F statistic value (F Count) of the regression model was 5.173963 while the f table is sought in the F statistical table, based on the criteria (α) 0.05, df1 (total variable-1) = 4-1=3, df2 (n-k -1) = 60-2-1=57 the f table value is 2.77.

The computed F value (5.173963), based on the F test criteria, was greater than the F table (2.77), hence Ho was rejected and Ha was accepted. A combined Government Investment and Private Investment have a substantial impact on economic growth.

The t test determines how the independent variable affects the dependent variable

Table 14. Regression Coefficient Significance Test (t- Test)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4294.10283	2524.918840	1.700689450	0.0945489
X1	0.02164337	0.011193659	1.933538285	0.0582307
X2	-0.13205949	0.466377142	-0.283160302	0.7780980
Z.	0.02159569	0.014813685	1.457820689	0.1504755

Source: Analysis of 2017-2021 Using EViews

individually (partial). Ghozali utilized a 0.05 t test (2013).

The REM regression result in the t-statistic column shows that the Government Investment variable (X1) has a t-count of 1.933538285 and the Private Investment variable (X2) 0.2831603. Thus, the value of t statistical table t is 2.002465 based on the criteria (α) 0.05, df1 (total variable-1) = 4-1=3, df2 (n-k-1) = 60-2-1=57.

The test results allow these decisions:

Government investment (X1) and economic growth (Y)

If Ho was accepted, government investment had no meaningful impact on economic growth since t-count (1.9335382) was smaller than t-table (2.002465).

Private investment (X2) and economic growth (Y)

The judgment criteria for the t-test rejected Ho and accepted Ha because t-arithmetic (-0.2831603) was smaller than t-table (2.002465). Private investment hurts economic growth.

2. Hypothesis II

Hierarchical regression analysis was used to examine the moderating and primary effects of the study. This method requires two regression equations, one for the main effects and one for both the main and moderating effects.

Before performing the moderation test, it must be determined whether Z (moderating) is a Pure Moderator, Quasi Moderator, Variable Moderator Predictor, or Moderator Homologizer.

From Table 15, the results of testing the influence of the Z variable on Y indicated that the Village Fund Budget (Z) variable had a significant

Table 15. The Influence of ADD (Z) towards PE (Y)

Dependent variables: Y

Method Panel Least Squares

Date: 07/22/ 22: 10:15

Sample: 1 60

Periods included: 12

Cross-sections included: 5

Total panel (balanced) observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	7126.233	2074.830	3.434611	0.0011
Z.	0.039743	0.011756	3.380675	0.0013
R-squared	0.164614	Mean dependent var		13337.61
Adjusted R	0.150211	S.D. dependent var		8099.711
S.E. of regression	7466.640	Akaike info criterion		20.70704
Sum squared resid	3.23E +09	Schwarz criterion		20.77685
Log likelihood	-619.2113	Hannan-Quinn criter.		20.73435
F-statistic	11.42896	Durbin-Watson stat		1.470485
Prob(F-statistic)	0.001299			

Source: Data Analysis for 2017-2021 Using Eviews 10

Table 16. The Influence of IP, IS, IP*Z, IS*Z towards PE (Y)

Dependent variables: Y

Method Panel Least Squares

Date: 07/22/ 22: 10:22

Sample: 1 60

Periods included: 12

Cross-sections included: 5

Total panel (balanced) observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2264.110	7223.246	-0.313448	0.7551
X1	0.045101	0.031736	1.421122	0.1610
X2	0.654289	1.073564	0.609455	0.5448
Z.	0.058377	0.040754	1.432432	0.1578
X1Z	-1.14E-07	1.49E -07	-0.768180	0.4457
X2Z	-5.20E-06	6.05E -06	-0.859190	0.3940
R-squared	0.240540	Mean dependent var		13337.61
Adjusted R	0.170220	S.D. dependent var		8099.711
S.E. of regression	7378.212	Akaike info criterion		20.74509
Sum squared resid	2.94E +09	Schwarz criterion		20.95452
Log likelihood	-616.3527	Hannan-Quinn criter.		20.82701
F-statistic	3.420630	Durbin-Watson stat		1.588478
Prob(F-statistic)	0.009319			

Source: Data Analysis for 2017-2021 Using Eviews 10

effect on Economic Growth with a t-Statistic value of 3.380675 and a probability value of 0.0013 < 0.05.

Table 16 shows that the Village Fund Budget (Z) factors cannot moderate IP and IS on economic growth, since IP*Z is 0.4457 > 0.05 and IS*Z is 0.3940 > 0.05.

The moderating variable Z was a predictor moderation variable since the first output is significant, and the interaction effect (Z*X1 and Z*X2) on the second output was not significant.

Government investment did not affect economic growth (t = 1.9335382; Sig. > 0.05). Hence H0 was accepted, and H1 was rejected. West Kalimantan's district government's capital expenditures cannot enhance the economy. This study indicated that West Kalimantan's district administration cannot stimulate regional economic growth through capital expenditures. Capital investments that do not attain their full potential and have no direct impact on the community might be the cause of this situation. Private investment affects economic growth, which refutes H0 and supports H1. Capital Investments are a component of the

government's work strategy for accomplishing development. The public can observe government acts, such as infrastructure expenditure, subsidy expenditure, education expenditure, and others, only after the spending process has been completed. The importance of government expenditures cannot be overlooked. The spending mechanism must be constructed in a way that allows a regulated spending process. As a non-profit organization, the government is not required to earn a profit, but it does not mean that it can spend money at will. Government auditors give increased attention to audits of expenditures, as the vast bulk of regional budget leakage happens during the disbursement. This loss may be the result of unscrupulous actions or incompetent management of the expenditure process by government administrators.

This study indicated that even modest declines in private investment can harm the local economy. Therefore, the private sector must

assist the government in growing the regional economy. There is a favorable association between a nation's private investment and infrastructure expansion. The expanding GDP will assist the government's development initiatives, and the government will become more active in infrastructure development to support and attract investors.

In addition, this investment will improve the economic climate. The formation of new firms is related to investment or investment level. During this epidemic, various business sectors are expanding, including MSMEs, medical equipment, and housing. New companies will increase employment levels, which, in turn, will boost consumer purchasing power and domestic consumption.

IV. Conclusion

Data on private investment, regional government investment, village fund budget, and economic growth indicated the following for West Kalimantan regency: Since government capital expenditures had not stimulated West Kalimantan's economy, the first hypothesis was false. Private investment stimulated economic expansion and growth. Government expenditures and municipal budgets had no effect on economic growth. Investment stimulates growth. Results indicated that government investments funded by community funds in West Kalimantan Province might not affect the economy.

In this interaction, village finances only predict variable moderation, refuting the third hypothesis. The fourth hypothesis explored the effects of private investment and village finances on economic growth. This test demonstrated that private investment and village finances impacted economic development. This study revealed that local governments in West Kalimantan prioritized community-related capital expenditures and adhered to the plan's capital expenditure budget. Reduce bureaucracy in West Kalimantan to attract private investment. The central government should continue to support village fund budget policies that stimulate local enterprises. This study was both theoretical and applied science. It impacted government investment, private investment, and budget theories for village funds. Local economies are enhanced through the impact of research on government, private, and village fund budgets. This study should shed light on the impact of government, corporate, and local funds on economic growth. Independently, private, government and village budgets affected economic growth. This study did not demonstrate that not all independent variables influence economic growth.

This study could aid regional governments in boosting the economy, particularly through investments and village fund expenditures.

This study enables the district's highest administration to examine elements that promote economic growth.

Numerous variables might affect the study's results. Future research should focus on Indonesia as a whole to ensure economic planning. For studies on organizational commitment, job-relevant knowledge, information asymmetry, locus of control, and district government financial limitation, it could be interesting to investigate why a large proportion of government investment in West Kalimantan did not boost the economy.

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