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Research Articles

Analysis of the Impact of Economic Growth on the Realization of Foreign Investment and Domestic Investment in Indonesia in 2017-2021

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Abstract: This research is based on the fluctuating conditions of Indonesia's economic growth (based on 2017–2021 GRDP data) and the crucial role of investment as a driver of national development. The main objective is to analyze and empirically test the effect of the realization of Foreign Investment (PMA) and Domestic Investment (PMDN), both partially and simultaneously, on Economic Growth in Indonesia during that period. The quantitative method used is the Panel Data Regression approach, combining *time series* and *cross-section data* from 34 provinces. Panel data analysis is processed using Eviews for testing the t-test (partial) and F-test (simultaneous). The main hypothesized findings indicate that partially, PMDN has a significant positive effect, while FMA is hypothesized to have a negative effect. However, simultaneously, both investment variables are collectively predicted to provide a positive and significant contribution to the acceleration of Economic Growth in Indonesia.

Keywords: Economic Growth; Foreign Investment; Domestic Investment; Panel Data Regression; Domestic Investment; Foreign Direct Investment
JEL Classification: E22: Investment ; Capital, **F21:** Investment Foreign Direct Investment (FDI), **O47:** Empirical Model Economic Growth (Empirical Studies of Economic Growth)

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1. Introduction

In general, economic growth in Indonesia can be defined as the process of continuous change in a country's economic conditions toward better conditions from year to year. An economy can be said to be experiencing change and development if its economic level is higher than previously achieved (Gwijangge et al., 2018) .

Economic growth can be said to be increasing if the use of production factors in a given year is greater than in the previous year. In other words, economic growth is the development of economic activities that results in an increase in the production of goods and services within society and an increase in societal prosperity (Alfin Syaiful Izza et al., 2023).

With increasing national income and per capita income, it can encourage economic development, economic growth can occur along with increasing production of goods and services for social and economic activities (Amdan, Laode. Rafi'i, M, 2023) .

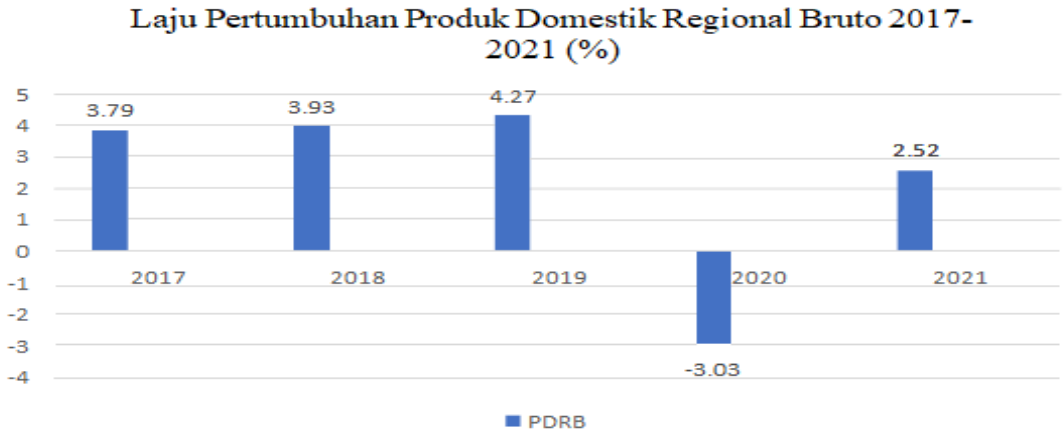

Figure 1. Gross Regional Domestic Product Growth Rate, 2017-2021 (%)
Source: Central Statistics Agency, 2025

Figure 1.1 shows that the growth rate of gross regional domestic product (GDP) fluctuates from year to year. In 2017, the province's GRDP reached 3.79%. In 2018, the GRDP increased by 0.14% to 3.93%. In 2019, the GRDP increased by 0.34% to 4.27%. However, in 2020, the GRDP decreased to -3.03%. And in 2021, the GRDP increased again to 2.52%.

The per capita GRDP growth rate showed the highest value in North Maluku at 14.99 percent. The lowest per capita GRDP growth rate was in Bali at -3.63 percent (BPS, 2021).

The impact of foreign direct investment (FDI) on economic growth is inseparable from the importance of both domestic and foreign investment. Investment is an activity that creates added value by purchasing capital goods and production equipment to increase the value of goods and services available in the economy. Foreign Direct Investment (FDI) increases economic growth in two ways: capital accumulation and increased productivity of production factors through technological advancement. Advances in advanced technology and the ability to absorb it by human resources are determinants of economic growth. The contribution of FDI to growth is enhanced by its interaction with the level of human resources (Alice et al., 2021) .

Foreign direct investment (FDI) plays a significant role in Indonesia's efforts to meet domestic investment needs. FDI increases production capacity and facilitates technology transfer from abroad, bringing with it the influx of foreign investment. This form of foreign direct investment can also enhance the competitiveness and competitiveness of domestic products through the presence of foreign investment (Jufrida et al., 2016) .

The relationship between foreign direct investment (FDI) and economic growth

significantly contributes to Indonesia's national development. Increasing investment through the expansion of capital goods can impact the economy. The presence of FDI can contribute to economic development by increasing capital investment, creating jobs, and increasing national production. Investment is a key factor in improving people's standard of living. Increasing national income capacity also enhances an economy's ability to produce goods and services (Putri et al., 2022).

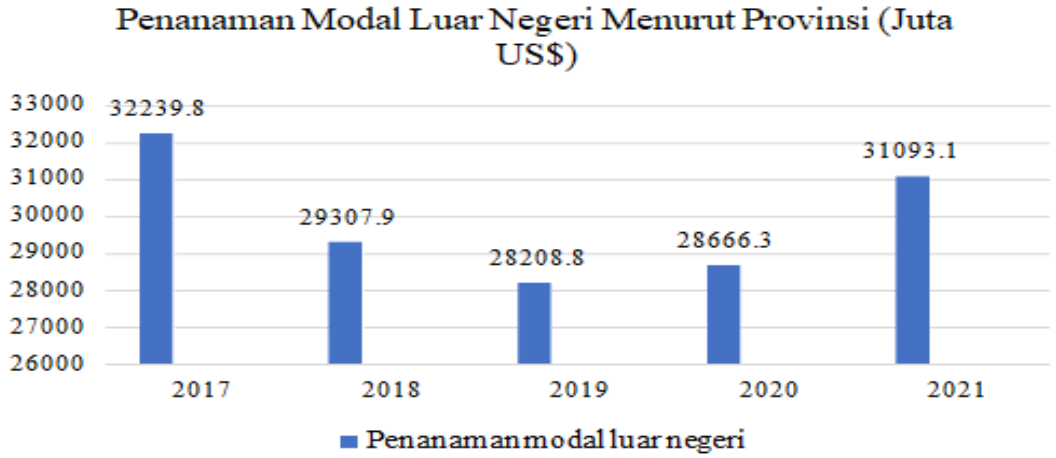

Figure 2. Foreign Investment by Province, 2017-2021 (Million US$)
Source: Central Statistics Agency, 2025

Figure 2 shows that in 2017, foreign investment reached 32,239.8%. In 2018, the amount of foreign investment decreased to 29,307.9%, and in 2019, the amount of foreign investment decreased again to 28,208.8%. In 2020, foreign investment increased to 28,666.3%, and in 2021, it increased again to 31,093.1%.

Foreign investment shows that the highest value is in West Java at US$5,573.5 million. And the lowest foreign investment is in Maluku at US$8.0 million (BPS, 2021). Domestic investment also influences economic growth, because it will encourage increased output and automatically increase demand for inputs, thereby increasing employment opportunities and community welfare as a consequence of increased income received by the community (Suindyah, 2011). Investment is one of the supporting factors in increasing economic growth needed by developing countries. Indonesia is one of the developing countries that requires investment as capital for implementing national development. Therefore, the government establishes basic policies in investment that encourage the creation of national businesses that are conducive to investors to strengthen the economy and accelerate investment growth (Siregar et al., 2024) .

The relationship between domestic investment and economic growth is the availability of resources to increase capacity/production in the future. Economic growth is inextricably linked to the distribution and allocation of investment between regions. This relationship does not need to be separated from private and government investment, given that the factors determining the location of these two types of investment are not always the same. Generally, investment will increase job opportunities and address economic problems, among other issues (Yuliani, 2019) .

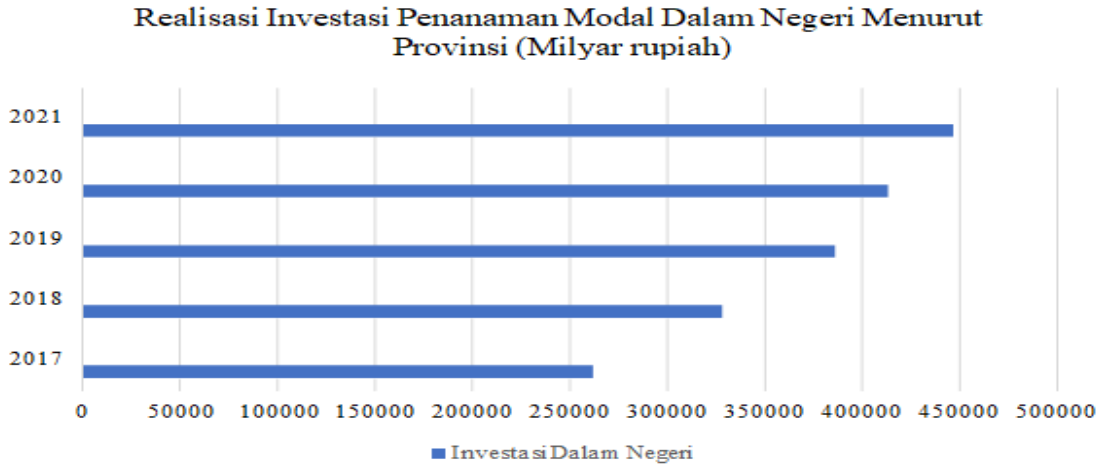

Figure 3. Realization of Domestic Investment by Province, 2017-2021 (Billion Rupiah)
Source: Central Statistics Agency, 2025

Figure 3 shows that domestic investment fluctuates. In 2017, domestic investment was IDR 262,350.5 billion. In 2018, domestic investment increased to IDR 328,604.9 billion, and in 2019, it rose again to IDR 386,498.4 billion. In 2020, domestic investment increased again to IDR 413,535.5 billion, and in 2021, it rose again to IDR 447,063.6 billion.

Domestic investment realization shows the highest value in Jakarta, at 54,708.2 billion rupiah. The lowest domestic investment realization is in West Sulawesi, at 395.3 billion rupiah (BPS, 2023) .

Economic growth explains that the economy is a measure of a society's standard of living over time. Based on this background, the realization of foreign and domestic investment influences economic growth. It is very interesting to understand the state of economic growth and the interplay between the realization of foreign and domestic investment.

2. Literature Review

Theory of Economic Growth Areas

The Harrod-Domar growth theory is an extension of Keynes's analysis of national economic activity, which focuses on analyzing the conditions needed for the economy to grow and develop steadily in the long term (Arsyad, 1999: 64-69). This theory operates under several key assumptions: the economy is in a state of full employment and capital goods are fully utilized; the economy consists of only two sectors (households and firms), without involving the government and foreign trade; the amount of public savings is proportional to national income; and the Marginal Propensity to Save (*MPS*) and the Capital Increase-Output Ratio (*ICOR*) are constant (Sukarniati et al., 2021) .

In addition, there are four main factors that influence economic growth according to Samuelson (2004: 250): Natural Resources (SDA) such as land, gas, oil, and minerals, which now also include the development of environmentally friendly technologies (Li et al, 2020); Human Resources (HR), including the quantity and skills of the workforce which are influenced by the level of education and training; Capital Formation or capital accumulation which requires savings in current consumption (10-20 percent of *output* in countries with rapid growth); and Technological Change and Innovation which drive progress to improve

living standards.

Theory of Economic Growth

Economic growth can be defined as the development of economic activity that continuously increases the volume of goods and services produced by society, where a country's production capacity continues to increase due to increases in the quantity and quality of production factors (Sukirno, 2013).

In general, economic growth theories are divided into two large groups, namely classical economic growth theory which is based on the effectiveness of free market mechanisms and pioneered by Adam Smith and David Ricardo and modern economic growth theory. Economic growth is the development of activities that occur over time, resulting in an increase in real national income as measured by the percentage increase in real national income in a particular year compared to the previous year (Sukirno, 2012).

This definition encompasses GDP/GNP growth, regardless of whether the increase exceeds population growth or involves changes in economic structure (Subandi, 2011). Sustained economic growth in advanced industrial countries can provide greater resources for their citizens, such as for health, pollution control, and education. In short, economic growth can be explained as an increase in production or gross national income over a certain period, reflected in an increase in the physical capacity to produce goods and services over time (Prasetyo, 2009).

Economic growth is a quantitative change and is generally measured using Gross Domestic Product (GDP). GDP serves as a standard measurement that includes the total production of goods or services in a country/region over a certain period, while also measuring the income generated from that production or the value spent on purchasing goods or services (OECD, 2020). A very important concept in the regional context is Gross Regional Domestic Product (GRDP), which is an indicator of the economic success of all economic activities in a region. GRDP is defined as the total value of final goods and services produced by all economic units in a particular region, regardless of ownership. The economic growth of a region is specifically measured by the increase in GRDP at constant prices, which reflects the increase in real production of goods and services from year to year (BPS, 2010). Thus, the formula for calculating economic growth is as follows:

Economic Growth = ((Current GRDP - Previous GRDP) / Previous GRDP) x 100%

Domestic Investment

Domestic Investment (PMDN) is defined by Investment Law No. 25 of 2007 as investment activities undertaken by Indonesian citizens (WNI) to start businesses in Indonesia. PMDN can be implemented by individual Indonesian citizens, state-owned enterprises, or national governments, and is a key and important domestic source in driving economic growth (Alice et al., 2021).

This domestic investment is open to various forms of commercial or business in the territory of the Republic of Indonesia, except for fields of activity or types of business that are declared closed, or that are open with requirements and limitations on state capital ownership in individual industries, which are further regulated through Presidential Decree

No. 36 of 2010 concerning changes to the list of required economic branches and investment fields (Firdaus Jufrid, Mohd. Nur Syechalad, Muhammad Nasir, 2016). Thus the formula for calculating domestic investment is as follows:

Domestic Investment Growth Rate = ((Current investment - Previous investment) / Previous investment) x 100%

The Relationship between Foreign Investment Realization and Economic Growth

Foreign Direct Investment (FDI) plays a crucial role in influencing the economic growth of developing countries. Its impacts encompass many aspects, such as employment opportunities, production, prices, income, exports, imports, the balance of payments, and the general welfare of the recipient country (Hussain and Haque, 2016). Investment formation is generally a key determinant of economic growth and development. This occurs because a portion of people's income is set aside as savings, which are then needed to form investments. This capital formation, in addition to creating employment opportunities, also directly increases production capacity and drives economic growth (Prasetyo, 2009).

The Relationship Between Domestic Investment and Economic Growth

Domestic Investment (PMDN) is considered to be able to effectively boost the economy of developing countries; increasing PMDN will directly increase economic growth (Jufrida, 2016). High levels of domestic investment have implications for increased **production capacity** , which in turn increases public income. Domestic investment serves as a resource to increase production capacity and future income. This automatically triggers an increase in production and demand, thereby increasing employment opportunities and public welfare, which are received as a consequence of increased income (Amar, 2012).

3. Method

Types and Approaches of Research

This research uses a quantitative approach based on a positivistic perspective, aiming to analyze measurable information (numbers) to test established hypotheses (Sugiyono, 2018). A quantitative approach is used to identify the relationship and specific characteristics between two variables. This research also applies a descriptive method to determine the existence of independent variables (Sugiyono, 2018: 48).

Research Location

The research locations were purposively selected throughout Indonesia. This selection was based on the consideration that data on Economic Growth, Realized Foreign Investment, and Domestic Investment showed fluctuating conditions during the period studied.

Population, Sample, and Sampling Techniques

The population of this study is all provinces in Indonesia, which is the generalization

area of the objects/subjects studied (Sugiyono, 2019). The sample used is part of this population, namely 34 provinces, selected for the time period 2017–2021 (Sugiyono, 2017: 81).

Types of Data and Data Collection Techniques

Type of data used This is panel data, combining *cross-sectional* data (34 provinces) and *time series data* (2017–2021). The data used is secondary data obtained from official sources, namely the Central Statistics Agency (BPS), covering the variables Realized Foreign Investment, Domestic Investment, and Economic Growth.

Data analysis

Data analysis is an important research activity in the form of a systematic process in compiling and managing data to achieve interpretation of the findings obtained (Sugiyono, 2020: 132). In this study, the analytical technique applied is Panel Data Model Regression (*Pool Data*), which was chosen because the data used is a combination of time series data *and* data between individuals/regions (*cross section*). Statistical processing was carried out using Eviews software, a sophisticated computing program that facilitates researchers in accessing powerful calculation, forecasting, and statistical modeling tools through an innovative and easy-to-use interface. This panel data regression model is used to formulate a general model equation that will test the relationship between variables. The general model equation for panel data regression is as follows:

$Yit = \alpha + \beta 1X1it + \beta 2X2it + \varepsilon it$

Information :

Y : Economic growth

α : Constant

β1β2 : Independent Variable Coefficient

X1 : Realization of Foreign Investment

X2 : Domestic investment E : Error Coefficient

i : Number of provinces studied in Indonesia t : research period, namely 2017-2021

Approaches to determining the Estimation Model. In the regression model estimation model using panel data, there are three approaches, including:

1. Common Effect Model (CEM)

This approach is the simplest panel data model because it only combines time series and cross-sectional data. This model ignores the time or individual dimensions, so it can be assumed that company data behaves the same across time periods. This method can use the Ordinary Least Squares (OLS) approach or the least squares technique to estimate panel data models.

2. Fixed Effect Model (FEM)

This model assumes that differences between individuals can be accommodated through differences in their intercepts. To estimate panel data, the fixed effects model uses a dummy variable technique to capture differences in work culture, management, and incentives.

However, the slope is similar across companies. This estimation model is often referred to as the Least Squares Dummy Variable (LSDV) technique.

3. Random Effect Model (REM)

This model estimates panel data where disturbance variables may be interrelated over time and between individuals. In the Random Effects model, differences in intercepts are accommodated by error terms for each company. The advantage of using the Random Effects model is that it eliminates heteroscedasticity. This model is also called the Error Component Model or the Generalized Least Squares (GLS) technique.

Determining the Panel Data Regression Estimation Method to select the most appropriate model, there are several tests that can be carried out, including:

1) Chow Test

The Chow test is conducted to determine whether the CEM or FEM approach is better for panel data regression. The hypothesis in the Chow test is:

H0: cross section probability value F > α (0.05), CEM

H1: cross section probability value F < α (0.05), FEM

2) Hausman test

The Hausman test is conducted to determine whether the FEM or REM approach is better for panel data regression. The hypothesis in the Hausman test is as follows:

H0: Chi-Square prob value > α (0.05), REM H1: Chi-Square prob value < α (0.05), FEM

3) Lagrange Multiplier Test

The Lagrange Multiplier test is conducted to determine whether the CEM or REM approach is better for panel data regression. The hypothesis in the Lagrange multiplier test is as follows: H0: Breusch-Pagan probability value > α (0.05), CEM H1: Breusch-Pagan probability value < α (0.05), REM. A model is said to be good if it has passed a series of classical assumption tests. There are two stages of testing in the classical assumption test as follows:

1. Normality Test

The normality test is used to determine whether panel data on the variables used are well-distributed. Normality can be tested using the Jarque-Bera (JB) test. If the JB probability value is >0.05, the regression model is considered to be normally distributed. However, if the JB probability value is <0.05, the regression model is not normally distributed.

2. Multicollinearity Test

If there is a significant relationship, then there are common aspects in the independent variables, and vice versa, this should be avoided. This cannot be used to determine the joint contribution of the independent variables to the dependent variable. Multicollinearity testing can be seen from the correlation coefficient value between the independent variables. If it is >0.8, the model is experiencing multicollinearity. Conversely, if the correlation coefficient value of the independent variables is <0.8, the model is free from multicollinearity.

In this study, to test the hypothesis, the individual parameter significance hypothesis is used, also known as the Partial t-Test and the Determination Coefficient Test.

1. Partial t-Test (t-Test)

This test essentially shows the extent of the influence of an individual independent variable, and whether it has a significant effect on the dependent variable. This test uses a significance level of a = 0.05.

If the calculated t-prob value is smaller than 0.05, it can be concluded that the independent variable has a significant effect on the dependent variable, whereas if the calculated t-prob value is greater than 0.05, it can be concluded that the independent variable does not have a significant effect on the dependent variable.

2. Simultaneous f-test (f-test)

This test is conducted to determine whether or not there is a simultaneous effect between the independent variables on the dependent variable. This test is performed by examining the F value in the ANOVA table, with a significance level of 0.05.

If the calculated f value is smaller than 0.05, it can be concluded that the independent variable is rejected and the dependent variable is accepted, which means that the independent variable has a significant influence on the dependent variable, whereas if the calculated f value is greater than 0.05, it can be concluded that the independent variable is accepted and the dependent variable is accepted.

4. Results and Discussion

Table 1. Common Effect Model (CEM) Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1_FOREIGN_INVESTMENT_	188.0303	15.20880	12.36326	0.0000
X2_DOMESTIC_INVESTMENT	26.81003	1.223774	21.90766	0.0000
R-squared	0.989777	Mean dependent var		885467.4
Adjusted R-squared	0.989718	SD dependent var		2599750.
SE of regression	263613.2	Akaike info criterion		27.81372
Sum squared residual	1.20E+13	Schwarz criterion		27.84988
Log likelihood	-2431.700	Hannan-Quinn criter .		27.82839
Durbin-Watson stat	0.401539			

X1 (Foreign Investment) has a coefficient of 188.0303 with a p-value = 0.0000, meaning it has a positive and significant effect on economic growth. X2 (Domestic Investment) has a coefficient of 26.8100 with a p-value = 0.0000, also having a positive and significant effect on economic growth. The R-squared value = 0.9898, meaning 98.98% of the variation in economic growth can be explained by the two independent variables. This model states that every 1 unit increase in foreign investment will increase economic growth by 188.03 units, and a 1 unit increase in domestic investment will increase economic growth by 26.81 units. However, this model does not consider the unique characteristics of each province, so it may be less accurate.

Table 2. Fixed Effect Model (FEM) Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	570613.4	32710.14	17.44454	0.0000
X1_FOREIGN_INVESTMENT_	-0.620661	15.59093	-0.039809	0.9683
X2_DOMESTIC_INVESTMENT	15.03902	0.555767	27.05994	0.0000
Effects Specification				

Cross-section fixed (dummy variables)

R-squared	0.999209	Mean dependent var	885467.4
Adjusted R-squared	0.999002	SD dependent var	2599750.
SE of regression	82114.32	Akaike info criterion	25.65494
Sum squared residual	9.31E+11	Schwarz criterion	26.32406
Log likelihood	-2207.807	Hannan-Quinn criter .	25.92635
F-statistic	4840.925	Durbin-Watson stat	2.603095
Prob(F-statistic)	0.000000		

X1 (Foreign Investment) has a coefficient of -0.6207 and a p-value of 0.9683, indicating it is statistically insignificant. This means that foreign investment does not have a significant impact on economic growth when differences between provinces are taken into account. X2 (Domestic Investment) has a coefficient of 15.0390 with a p-value of 0.0000, indicating it is statistically significant. This indicates that domestic investment significantly contributes positively to economic growth. The R-squared value of 0.9992 is very high, indicating that the variables in the model explain almost all of the variation in economic growth data. The FEM model reveals that local factors such as domestic investment have a much greater influence on economic growth than foreign investment. This indicates that local capital-based development is more effective when considering the unique conditions of each province.

Table 3. Random Effect Model (REM) Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	46972.91771572038	29561.3654115784	1.588996890394028	0.1138975645160086
X1_FOREIGN_INVESTMENT_	233.4113566727947	6.802479870898889	34.31268612367851	7.5375638016 5461e-79
X2_DOMESTIC_INVESTMENT	20.92950709590676	0.447960322 5208866	46.72178772023 03	1.1620577691 98971e-99
	Effects Specification		**Elementary School**	**Rho**
Random cross-section			161964.269297077	0.7955201238692398
Idiosyncratic random			82114.32318074579	0.2044798761307603
	Weighted Statistics			
R-squared	0.9465741727623172	Mean dependent variable		195795.0246027919
Adjusted R-squared	0.9459529422130419	SD dependent var		604311.7345207448
SE of regression	140490.5316128871	Sum squared residual		33948653893 33.921
F-statistic	1523.708346066411	Durbin-Watson stat		1.2079616946 00343
Prob(F-statistic)	3.860183658398034e-110			
	Unweighted Statistics			
R-squared	0.9860736869658672	Mean dependent variable		885467.3638857144
Sum squared residual	1637753673 0093.87	Durbin-Watson stat		0.2503958572 173113

X1 (Foreign Investment): Coefficient 233.4114, p-value is very small (~0.000), meaning it has a positive and significant effect on economic growth. X2 (Domestic Investment): Coefficient 20.9295, p-value is also very small, meaning it is significant and positive. Adjusted R-squared = 0.9459, indicating this model can explain 94.59% of the data variation. This model concludes that both foreign and domestic investment have a positive effect on economic growth, but this model has not fully considered the specific effects between provinces.

Table 4. Chow Test

Variable	Coefficient	Std. Error	t-Statistic
C	1106.84111785	21134.90314921581	0.0523702952427821
X1_FOREIGN_INVESTMENT	187.9842080966	15.27824284475223	12.30404634923005
X2_INVSDLM_NEGERI	26.80820862272	1.227811326523907	21.83414344174642

R-squared	0.9897774103982	Mean dependent variable	
Adjusted R-squared	0.9896585430772	SD dependent var	
SE of regression	264376.25969631	Akaike info criterion	
Sum squared residual	12021906750854.6	Schwarz criterion	
Log likelihood	-2431.698741190	Hannan-Quinn criter .	
F-statistic	8326.7411302087	Durbin-Watson stat	

Prob(F-statistic)	6.64109395601061e

The Chow test was used to compare whether the Common Effects (CEM) or Fixed Effects (FEM) model was more appropriate. The cross-section F-value was 48.38, with a p-value <0.05. This means that H0 is rejected, and the FEM model is more appropriate than the CEM. There are significant differences in characteristics between provinces, so the FEM (which takes these differences into account) is superior to the CEM, which ignores them.

Table 5. Hausman test

Test Summary		**Chi-Sq. Statistic**	**Chi-Sq. df**	**Prob.**
Random cross-section		333.48289816090	2	3.84688106931046
Cross-section random effects test comparisons:				
Variable	**Fixed**	**Random**	**Var(Diff.)**	**Prob.**
X1_FOREIGN INVESTMENT_	0.6206605727107	233.41135667279	196.8034563001	1.75959922106649
X2_INVDLMNG	15.039023351845	20.929507095906	0.108208627271	1.04208632730360

The Hausman test was used to select between the Fixed Effect Model (FEM) and the Random Effect Model (REM). The Chi-Square value = 333.48, p-value < 0.05. Therefore, H0 is rejected → the FEM model is more appropriate to use than the REM. Provincial characteristics are not random and have a systematic influence on the results. Therefore, the FEM model was chosen as the best model in this study.

Table 6. Lagrange Multiplier Test

	Hypothesis Test		
	Cross-section	**Time**	**Both**
Breusch-Pagan	110.9319	0.151603	111.0835
	(0.0000)	(0.6970)	(0.0000)
Honda	10.53242	-0.389363	7.172226
	(0.0000)	(0.6515)	(0.0000)
King Wu	10.53242	-0.389363	3.048868
	(0.0000)	(0.6515)	(0.0011)
Standardized Honda	10.78618	-0.361216	2.903236
	(0.0000)	(0.6410)	(0.0018)
Standardized King Wu	10.78618	-0.361216	0.090215
	(0.0000)	(0.6410)	(0.4641)
Gourieroux , et al.	--	--	110.9319
			(0.0000)

This test aims to compare the CEM model with the REM model. The Breusch-Pagan

value = 110.93, p-value = 0.0000. Therefore, H0 is rejected, meaning the REM model is better than the CEM. When comparing the model that assumes all data is homogeneous (CEM) and the one that assumes random differences between provinces (REM), the REM is more accurate. However, because the Hausman test shows that FEM is better than REM, the best model remains FEM.

Thus, the Fixed Effect Model (FEM) is the best model in this study, and the FEM results show that domestic investment has a significant influence on economic growth, while foreign investment is not significant when taking into account differences between provinces.

5. Conclusions and Recommendations

Conclusion

Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM), as well as through testing the selection of the best model with the Chow test, Hausman test, and Lagrange Multiplier test, the following conclusions can be drawn:

1. The best model used in this study was the Fixed Effect Model (FEM). This model was chosen because it can accommodate differences in characteristics between provinces in Indonesia more accurately than other models.
2. Domestic investment (X2) has been shown to have a positive and significant impact on economic growth in Indonesia in the 2017–2021 period. This indicates that domestic investment has a significant contribution to increasing GRDP and regional economic growth.
3. Foreign investment (X1) has no significant effect on economic growth in the FEM model. This indicates that although foreign investment plays an important role at the macro level, its impact is uneven when considering differences across regions in Indonesia.
4. The FEM model in this study has an R-squared value of 0.9992, indicating that the independent variables in this study are able to explain almost all of the variation in economic growth. This section presents the conclusions drawn from the description and discussion, or the results of the research discussion. Describe these conclusions in a coherent and systematic paragraph. Recommendations should be based on the analysis and conclusions drawn.

Recommendation

To promote equitable economic growth, the government needs to reorient foreign investment toward productive sectors and underserved regions, while strengthening domestic investment (PMDN) in the regions through streamlined permitting and support for local businesses. To maximize investment impact, improving human resource quality through vocational training relevant to industry needs is crucial. Furthermore, transparency of investment realization data by sector and region must be improved to facilitate analysis and the development of targeted strategies.

Improving the transparency of investment data is also crucial for policy evaluation. Future research is recommended to diversify the variables used. In addition to foreign and domestic investment, analyses should include other factors such as infrastructure, labor force, inflation, government spending, or political stability to provide a more comprehensive

understanding and analysis of the drivers of economic growth.

Thank-you note

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