# Analysis Of the Influence of Investment, Export, Import, Consumption on Economic Growth (GDP) (Case Study in Banten Province and DKI Jakarta Province 2007-2021)

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**Abstract.** Economic development is a process of change towards a better state. Increasing economic growth and reducing poverty are the goals of economic development. The success of economic development is characterized by increasing total output, high economic growth rates, low unemployment, equitable distribution of income, and stable prices. The broad measure of total output is Gross Domestic Product (GDP). According to experts, Gross Domestic Product (GDP) is an indicator variable for the success rate of economic development. Economic development requires investment in both domestic and foreign investment as a means of innovation in expanding economic growth. Increased consumption will encourage investment. Exports are the benefits of a total surplus of output and imports are needed to meet the needs of science and technology. DKI Jakarta Province is the Capital of the State of Indonesia as well as the center of government and business growth for the Republic of Indonesia, while Banten Province is one of the supporting provinces for the capital which is classified as a new province. Banten Province and DKI Jakarta certainly have a hierarchical relationship and interdependence in economic development. The success of economic development in Banten Province is inseparable from the success of the DKI Jakarta Province's economic development and vice versa. Therefore, synergy is needed in solving economic development problems to increase regional economic growth. Noting this, researchers are motivated to conduct quantitative research using the Cross Section Data Regression method (software reviews-9) on the variables that affect economic growth (Gross Domestic Product) "Analysis of the Effects of Investment, Exports, Imports, and Consumption on Economic Growth" and "Analysis of the Effects of Investment, Exports, Imports, and Consumption on Economic Growth" its Implications for Poverty, Case Studies in Banten Province and DKI Jakarta Province 2007-2021."

**Keywords:** Domestic Investment; Foreign Investment; Export; Import; Consumption; Gross Domestic Product; and Poverty

## 1 Introduction

Economic growth is a development model that relies on an increase in national income which is centered on production. Economic development problems are related to poverty,

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unemployment, and income distribution, development indicators are generally seen in the development of a country's gross domestic product (GDP). Factors affecting the gross domestic product (GDP) are household consumption, exports, imports, and investment, both domestic and foreign. The increase in consumption value will lead to an increase in the volume of exports and imports which in turn will encourage domestic investment and foreign investment. Increased investment, exports, imports, and consumption can affect the increase in economic growth.

DKI Jakarta Province is the Capital of the State of Indonesia as well as the center of government and business growth for the Republic of Indonesia, while Banten Province is one of the supporting provinces for the capital which is classified as a new province. Banten Province and DKI Jakarta have a hierarchical relationship and are interrelated in economic development. The progress of economic development in Banten Province is inseparable from the economic progress of DKI Jakarta Province. Therefore, synergy is needed in dealing with regional economic development programs.

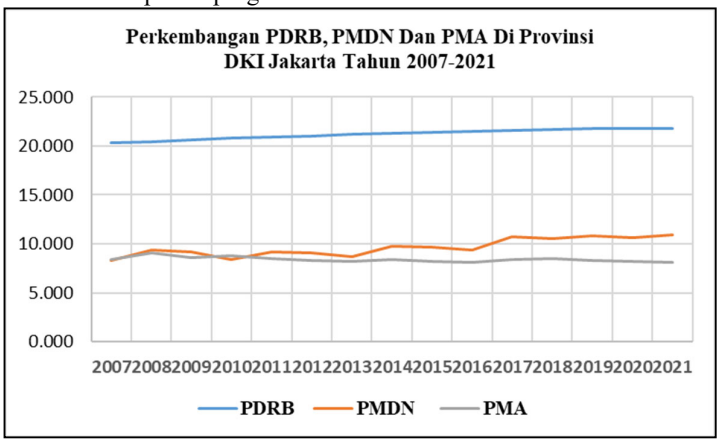


**Fig 1.** Movement of GRDP, PMDN and PMA in 2007-2021

In Figure 1, we can see that economic growth, domestic investment, and foreign investment in the United States 2007-2021 in Banten Province and DKI Jakarta experienced fluctuations. Economic growth tends to experience a relatively stable increase, while domestic investment fluctuates but tends to be increased and foreign investment declines.

Figure 2 below shows that the development of exports, imports, consumption, and poverty has fluctuated, exports, imports, and consumption have an increasing trend with relatively balanced movements. Meanwhile, the state of community poverty has a decreasing trend every year, it indicates that increasing economic growth is in tandem with the decreasing level of community poverty.

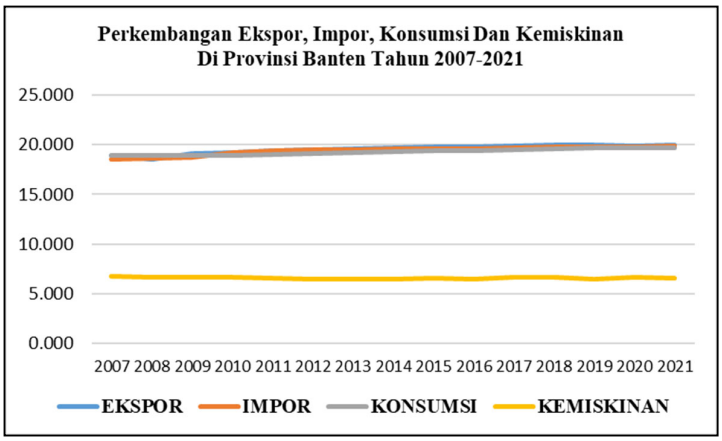


**Fig.2.** Movement of Exports, Imports, Consumption and Poverty in 2007-2021

Through the Panel Least Square cross-section method, the researcher wants to know the impact of local and foreign investment, exports, imports, and consumption on Banten Province's economic growth and DKI Jakarta. The data used is BPS data for the period 2007-2021.

**Research Problem**

1. How is the simultaneous domestic and foreign investment have an impact, export, import, and consumption on economic growth?
2. How are the partial effects exports, local investment, and foreign investment, imports, and consumption on economic growth?
3. How does economic growth affect poverty?

**Theoretical Framework**

Economic growth is the increase in the the creation of products and services, as well as the country's prosperity community.[1] Poverty, absorption of savings, and capital formation are considered part of the problems of economic growth.[2] Smith's theory states that economic growth occurs simultaneously and has linkages with other components, if there is an increase in a variable it can encourage investment levels, technological progress, specialization, and expand the market.

Keynes's economic growth paradigm is formulated in the Y= f (C, I, G, X-M), where Y stands for national income, C stands for consumption, I stands for investment, G stands for government spending, X stands for exports, and M stands for imports. According to the Harrod-Domar theory, a country's economic growth is proportional to its population is determined by capital accumulation in the form of new investments in addition to capital stock. Investment is an investment in a business over a relatively long period, which can be in the form of physical or non-physical projects." [3]

According to Investment There are two categories of capital status under Law No. 25 of 2007: domestic investment (PMDN) and foreign investment (FI) (PMA). Foreign investment (PMA) is an investment activity carried out by foreign entrepreneurs to conduct business in the Republic of Indonesia, both in the form of entirely foreign capital and domestic capital cooperation. Domestic investment (PMDN) is an activity in which domestic entrepreneurs invest their own money. comes from within the country to carry out business activities in the

Republic of Indonesia. The advantages of both domestic and international investment (PMDN) (PMA) are creating new companies, increasing the export industry, supporting technological progress, increasing market competitiveness, and stimulating economic growth.

Foreign trade is defined as "trade that comprises export and or import operations of products and or services beyond state borders," according to Government Regulation No. 29 of 2021 on the implementation in the commercial sector Goods and/or services are delivered. outside of the customs area is known as export, whereas the delivery of goods and or services into the customs area is known as import. The occurrence of exports and imports is due to differences in resources between countries.

Regional export-based growth theory states that increasing exports is an effective way to increase inflows of money and can trigger regional development growth.[4] [5] The export market is considered the main driver of the regional economy.[6] The theory of David Ricardo (1817) states that trade between countries is considered to provide benefits even though the country does not have an absolute advantage, profits can still be obtained by specialization. [7]

Gregory Mankiw (2007) argues that consumption is the amount of money spent by households on products and services to suit their requirements and satisfaction. The consumption theory of James Dusenberry states that the consumption of a society is determined by high income, if income increases then consumption increases, if consumption increases it will increase economic growth. On the other hand, if consumption decreases, economic growth will also decrease.

Economic growth is considered to affect poverty, increasing economic growth is considered to reduce the poverty ratio.[8] According to the Central Bureau of Statistics, poverty is an economic and material inability to meet basic needs as measured by household expenditure. Amartya, (2006) states that poverty is the insufficiency of several basic skills needed to obtain the minimum benefits of production.[9]

## 2 Research Methods

This study used a descriptive statistical approach as its research method and statistical verification. The descriptive statistical method was used to answer the problems regarding all research variables independently. The statistical verification method is a method used to determine causality between variables through hypothesis testing using statistical calculations to obtain evidence from data transformation.

The data in this study is quantitative and in the form of "A combination of time series and cross-sectional data," as defined by panel data. or a sectional view units measured at different times and the behavior of cross-sectional units is observed over time", (Ghozali, 2016). While the times series data is "data that shows differences in subjects from time to time and recorded carefully according to the time sequence of events, to describe the pattern of development, phenomena, and dynamics of changes in the quantity and quality of data".

The model Explanatory investigation using Multiple Linear Regression Analysis is used in this study (Multivariate Linear Regression Analysis) with the econometric technique of the Least Square Panel Method to test the hypothesis of the effect of the variables to be studied. The assumptions of the model built can be formulated as follows:

$Y_i = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e_i$

Where:

$Y_i$ = The value of the response change in the i-th observation

$e_i$ = Residual or $e_i = Y_i - \bar{Y}_i$

$\beta_0$ ; $\beta_1$ = parameter (coefficient)

$X_1$, $X_2$ … = the value of the independent variable from the i-th observation

The research variables studied were: Domestic Investment ($X_1$); Foreign Investment ($X_2$); Export ($X_3$); Import ($X_4$); Poverty ($X_5$); while the dependent variable (dependent) is Gross Domestic Product (Y) and the intervening variable is the Poverty Index (Z).

**Classical Assumption Test.**

a. The normality test is performed to see if the data is spread evenly method used is the Jarque-Bera method. Test parameters: $H_0$: If the probability value of Jarque-Bera < $\alpha = 0.05$ the Data is not distributed in a uniform manner. H1: The data is regularly distributed if the Jarque-Bera probability value is greater than 0.05.
b. Multicollinearity test was used to The To see if the regression model demonstrated a relationship between the independent variables, the Variance Inflation Factor (VIF) test was utilized. Parameters for the test: If the Variance Inflation Factor (VIF) number is more than ten, then reject $H_0$, meaning that the data has symptoms of multicollinearity. If the value of Variance Inflation Factor (VIF) < 10, then accept $H_0$, meaning that the data does not have multicollinearity symptoms.
c. Heteroscedasticity test seeks to see if there is a difference in variance between the residuals of one observation and the residuals of another in a linear regression model. The White technique was employed in this case. Hypothesis: $H_0$: homoscedasticity, $H_1$: Heteroscedasticity. Outcome parameter of White's test: If the value of Obs*R-square or prob Chi-square $\alpha$ > (0.05) accept $H_0$. If the value of Obs*R-square or prob Chi-square $\alpha$ > (0.05), reject $H_0$.
d. Autocorrelation test seeks to In a Look for a link between the confounding error in period t and the confounding error in period t-1 using a linear regression model (previous). The Breusch-Godfrey Test can be used to perform an autocorrelation test. H0: no autocorrelation; H1: autocorrelation; H2: autocorrelation; H3: autocorrelation; H4: autocorrelation; H5: autocorrelation; H6: autocorrelation; Parameters of the Breusch-Godfrey Test: H0 is approved if the Prob. If the Prob. Chi-Square value is 0.05, and the Chi-Square value is > 0.05, H0 is refused ().

**Model Test**

a. Uji Chow (*Chow Test*) used to determine the right For estimate, use the The Fixed Effect Model (FEM) or the Common Effect Model (CEM) (FEM). Hypothesis: H0: FEM (Fixed Effect Model) Test, H1: Common Effect Model (CEM) Test (CEM) Test parameters: If the cross-section value of the Chi-square cross section is more than or equal to 0.05, accept H0 as the best Common Effect Model; if the cross-section value of the Chi-square cross section is less than or equal to 0.05, reject H0 as the best Fixed Effect Model.
b. Uji Housman (Housman Test) used to select the correct Estimation Hypothesis: Fixed Effect Model (FEM) or H1: Fixed Effect Model (FEM), H0: Random Effect Model (REM) (FEM), Test parameters: Model with Random Effects (REM) Accept H0, which suggests the Random Effect Model is the best, if the probability cross section random value (p-value)

is greater than or equal to 0.05. If the cross-section probability is random, (p-value) < of α = 0.05 then reject $H_0$ means the best Fixed Effect Model

c. Uji Lagrange Multiplier (LM Test) used to select the appropriate Common Effect Model (CEM) For estimate, use the Random Effect Model (REM). H0: Common Effect Model (CEM), H1: Random Effect Model (REM) (REM). Parameters of the Breusch-Pagan test; If the prob value is positive. If Breusch - Pagan is less than or equal to 0.05, accept H0, which indicates The Common Effect Model is the most effective. If the prob value is greater than one. If Breusch - Pagan's value is less than 0.05, reject H0. As a result, the Random Effect Model is the most effective.

**Multiple Linear Regression Estimation Test**

A multiple linear regression test is used to determine the effect partially and or simultaneously between the independent variable and the dependent variable.

The regression equation for model 1 is: $Y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e_i$

The regression equation for model 2 is: $Z_i = \beta_0 + \beta_1 y_t + e_{ii}$

a. Partial t-test was carried to examine if the independent variable influenced the dependent variable Hypothesis: H0: 0 = 1 = 0: Has no significant effect; H1: 0 = 1 0: Has a significant effect; H2: 0 = 1 0: Has a significant effect; H3: 0 = 1 0: Has a significant effect; H4: 0 = 1 0: Has a significant effect; H5: 0 = 1 0 Parameters for testing: If the prob t-statistic is Ho is rejected if the t-statistic is less than 0.05 () or if the t-table is bigger than the t-statistic. Ho is acceptable if the prob t-statistic is larger than 0.05 () or the t-statistic is greater than t table.

b. A simultaneous F-test was carried out in order to determine the effect of the independent variable at the same time (simultaneously) on the dependent variable. Hypothesis: $H_0$: $\beta_0=\beta_1=\beta_2=\beta_3=\beta_4=\beta_5=0$ Independent variables (X) have no significant impact on the dependent variable at the same time variable (Y). $H_1$ ; $\beta_0 \neq \beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 \neq \beta_5 \neq 0$ At the same time, The dependent variable is significantly influenced by independent factors (X) (Y). parameters that will be examined If F-count > F-table or P-value 0.05, reject H0; if F-count > F-table or P-value > 0.05, reject H1.

**Research Model**

Based on the independent variable, intermediate variable, and dependent variable have a connection, the research model can be formulated as follows:

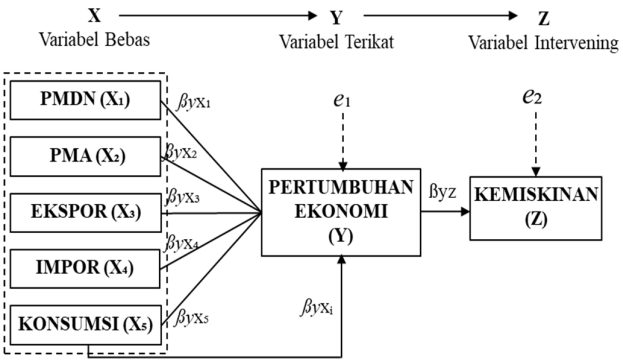


**Fig.3.** Research Method

The schema of the relationship between economic growth and the variables that influence it can be modeled as follows:

$Y_i = \beta_0 + \beta_1 X_{1t} + \beta_2 X_{2t} + \beta_3 X_{3t} + \beta_4 X_{4t} + \beta_5 X_{5t} + e_i$

$Z_i = \beta_0 + \beta_1 y_t + e_{ii}$

Information:

$X_1$ = Domestic Investment (PMDN)
$X_2$ = Foreign Investment (PMA)
$X_3$ = Export
$X_4$ = Import
$X_5$ = Consumption
Y = Economic Growth (Gross Domestic Product)
Z = Poverty
$\beta yx_i$ = The relationship of the Independent variable (X) with the dependent variable (Y)
$\beta yz$ = The relationship of the Independent variable (Y) with the dependent variable (Z)
$e_1$ $e_2$ = Residual.

## 3 Results and Discussion

### 3.1 Classical Assumption Test

**Data Normality Test**

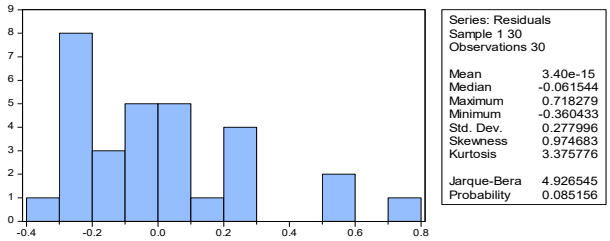


Fig 1. Histogram Normality Test Module 1

*Source: Results of secondary data processing software eviews-9*

The Jarque-Bera value can be observed in the results of the normality test of model 1 (figure 1). is 4.9265 with a There is a link between the independent variable, intermediate

variable, and dependent variable, which suggests that the independent and dependent variables are not the same follow the normal residual.

**Multicollinearities Test**

**Table 1.** Multicollinearity Test Results

| Variable | Coefficient Variance | Uncentered VIF | Centered VIF |
|---|---|---|---|
| C | 22.94943 | 7372.756 | NA |
| PMDN | 0.013164 | 372.8983 | 3.576792 |
| PMA | 0.066036 | 1363.788 | 6.741346 |
| EKSPOR | 0.060929 | 7506.784 | 2.754392 |
| IMPOR | 0.023390 | 2948.954 | 2.583288 |
| KONSUMSI | 0.031474 | 3581.724 | 4.226725 |

*Source: Eviews-9 Software data processing results*

Based on the results of the Variance Inflation Factor (VIF) In the test (table 1), the value of Variance Inflation Factor is known (VIF) of the independent variable of PMDN: 3.5767, PMA: 6.7413, Exports: 2.7543, Imports: 2.5832, and Consumption: 4.2267, the value of all independent variables ( independent) is smaller than the number 10 (VIF < 10) then $H_0$ is accepted meaning that it can be interpreted that all independent variables are Domestic Investment ($X_1$), Foreign Investment ($X_2$), Export ($X_3$), Import ($X_4$), Consumption ($X_5$ ) does not contain or does not contain symptoms of multicollinearity.

**Heteroscedasticities Test**

**Table 2.** Output Estimation of White Test

Heteroskedasticity Test: White

| | | | |
|---|---|---|---|
| F-statistic | 2.075068 | Prob. F(5,24) | 0.1039 |
| Obs*R-squared | 9.054752 | Prob. Chi-Square(5) | 0.1069 |
| Scaled explained SS | 6.883860 | Prob. Chi-Square(5) | 0.2294 |

*Source: Eviews-9 Software data processing results*

The results of the white test (table 2) show the 9.0547 Obs*R-squared value and 0.1069 Prob.Chi-Square value, Prob.Chi-Square value > 0.05 (α), it can be explained that the Domestic Investment variable ($X_1$) ), Foreign Investment ($X_2$), Exports ($X_3$), Imports ($X_4$), Consumption ($X_5$) and Gross Domestic Product (Y) have no symptoms of heteroscedasticity.

**Autocorrelation Test**

**Tabel 3.** Hasil Uji Breusch-Godfrey

Breusch-Godfrey Serial Correlation LM Test:

| | | | |
|---|---|---|---|
| F-statistic | 0.281923 | Prob. F(2,22) | 0.7570 |
| Obs*R-squared | 0.749668 | Prob. Chi-Square(2) | 0.6874 |

*Source: Eviews-9 Software Secondary Data Processing Results*

The Obs*R-squared value of 0.7496 and the Prob. Chi-Square value of 0.7496 are the results of the Breusch-Godfrey test (table 3.), 0.6874 > 0.05 (α) so it can explain that the data studied does not contain autocorrelation.

### 3.2 Cross Section Data Regression Model Test.

**Chow Test**

**Table 4.** Chow Test Result

| Effects Test | Statistic | d.f. | Prob. |
|---|---|---|---|
| Cross-section F | 124.439899 | (1,23) | 0.0000 |
| Cross-section Chi-square | 55.737792 | 1 | 0.0000 |

*Source: Eviews-9 Software Secondary Data Processing Results*

The Chow test (redundant fixed effect test) has a Chi-square cross-section value of 55.7377 with a probability of 0.0000 and a probability value of 0.0000 based on the results of the Chow test (table 4) is less than degrees or degrees of freedom 0.05 (0.000 < 0.05) then reject H0 which means the Fixed Effect method is better.

**Hausman Test**

**Table 5.** Hausman Test Result

| Test Summary | Chi-Sq. Statistic | Chi-Sq. d.f. | Prob. |
|---|---|---|---|
| Cross-section random | 0.000000 | 5 | 1.0000 |

*Source: Eviews-9 Software Secondary Data Processing Results*

According to the Hausman test results (table 5), the statistical Chi-square probability value is 1.0000 > 0.05, and the Chi-square statistic value is 0.0000, which is less than the Chi-square probability value table of 12.5915 (0.0000 < 12.5915) then accept H0 which means a good model is Random Effect Model (REM) approach.

**Lagrange Multiplier (LM-Test)**

**Table 6.** LM Test Breush-Pagan Test Result

| | Test Hypothesis | | |
|---|---|---|---|
| | Cross-sectio... | Time | Both |
| Breusch-Pagan | 0.000768 | 0.000150 | 0.000919 |
| | (0.9779) | (0.9902) | (0.9758) |

*Source: Eviews-9 Software Secondary Data Processing Results*

Based on table 6. the The Lagrange Multiplier test results reveal that the Breusch-Pagan probability value is 0.9779 > 0.05 (value), or the cross-section value is 0.0007 > 0.0001 (hypothesis time test value), then accept $H_0$ which means the Common Effect Model is a method that good to use.

### 3.3 Hypothesis Test

**Uji F- simultaneous Model 1.**

**Table 7.** Output Linear Regression Cross Section Model 1.

Dependent Variable: LN_PDB
Method: Panel Least Squares
Date: 03/19/22 Time: 13:24
Sample: 2007 2021
Periods included: 15
Cross-sections included: 2
Total panel (balanced) observations: 30

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 11.54780 | 4.790556 | 2.410534 | 0.0240 |
| LN_PMDN | 0.610549 | 0.114737 | 5.321318 | 0.0000 |
| LN_PMA | -0.234856 | 0.256974 | -0.913929 | 0.3698 |
| LN_EKSPOR | -0.178890 | 0.246839 | -0.724723 | 0.4756 |
| LN_IMPOR | 0.889835 | 0.152936 | 5.818337 | 0.0000 |
| LN_KONSUMSI | -0.480226 | 0.177409 | -2.706892 | 0.0123 |

| | | | |
|---|---|---|---|
| R-squared | 0.908999 | Mean dependent var | 20.45963 |
| Adjusted R-squared | 0.890040 | S.D. dependent var | 0.921540 |
| S.E. of regression | 0.305585 | Akaike info criterion | 0.643677 |
| Sum squared resid | 2.241168 | Schwarz criterion | 0.923917 |
| Log likelihood | -3.655156 | Hannan-Quinn criter. | 0.733328 |
| F-statistic | 47.94641 | Durbin-Watson stat | 1.857764 |
| Prob(F-statistic) | 0.000000 | | |

*Source: Eviews-9 Software Secondary Data Processing Results*

In table 7 The prob (F-statistics) value of 0.0000 is smaller ()greater (>) than 0.05, and the F-statistic value is 47.9464 (more (>) than 0.05) the F-table of 5.05, so reject $H_0$ and accept $H_1$ which means that the variables of Domestic Investment ($X_1$), Foreign Investment ($X_2$), Exports ($X_3$), Imports ($X_4$), Consumption ($X_5$) simultaneously have a significant effect on Gross Domestic Product (Y). Meanwhile, the Prob (F-statistic) value is 0.0000, and the Adjusted R-squared value is 0.8900 or 89.00 % which means that the variables of Domestic Investment ($X_1$), Foreign Investment ($X_2$), Export ($X_3$), Import ($X_4$), Consumption ($X_5$) are Simultaneous has a significant influence on the variable Gross Domestic Product (Y) with an influence strength of 89.00 % Other variables outside of the model influence the remaining 11.00 percent.

**T-Partial Test**

Based on table 7, the partial effect of Domestic Investment ($X_1$), Foreign Investment ($X_2$), Export ($X_3$), Import ($X_4$), Consumption ($X_5$) on Gross Domestic Product (Y) can be explained as follows:

a. Domestic investment ($X_1$) has a Ho is rejected if the t-statistic if the t-statistic is 0.0000 0.05 () or if the probability value is 0.0000 0.05 () value is 5.3213 > from the t-table value (df=n-k-1) = 1.7396. (Y). If the domestic investment variable (X1) grows by one unit, the regression coefficient (11) of 0.610549 can statistically explain it, it will increase the Gross Domestic Product (Y) by 0.610549 units,
b. Foreign investment ($X_2$) has a If the t-statistic The t-statistic and/or a probability value of 0.3698 > 0.05 value of -0.9139 from the t-table value (df=n-k-1) = 1.7396, Ho is accepted,

implying that foreign investment (X2) has a negligible negative effect on GDP (Y). The statistical explanation for the regression coefficient (12) of -0.234856 is as follows: if the foreign investment variable (X2) grows by one unit, the regression coefficient (12) decreases by one unit, the Gross Domestic Product (Y) will decrease by 0.234856 units.

c. Export ($X_3$) has a t-statistic a t-statistic with a probability value of 0.4756 > 0.05 () and/or a t-table with a probability value of 0.4756 > 0.05 () value of -0.7247 value (df=n-k-1) = 1.7396, Ho is acceptable, implying that exports (X3) have a negligible negative impact on GDP (Y). The statistical explanation for the regression coefficient (13) of -0.178890 is that if the export variable (X3) grows by one unit, the Gross Domestic Product (Y) will increase by one unit. 0.178890 units.

d. Import ($X_4$) has a Ho is rejected if the imported variable (X4) has a significant positive effect on the gross domestic product (t-statistic probability value of 0.0000 0.05 () and or a t-statistic value of 5.8183 > from the t-table value (df=n-k-1) = 1.7396. (Y). The regression coefficient value (14), 0.889835, of the variable Import (X4) may explain statistically, namely, if the import variable grows by one unit, the The Gross Domestic Product (Y) will rise by one unit, to 0.889835.

e. Consumption ($X_5$) has a Ho is rejected if the t-table value (df=n-k-1) = 1.7396 has a t-statistic probability value of 0.0123 0.05 () and or The t-table yielded a t-statistic value of -2.7068. value (df=n-k-1) = 1.7396. (Y). The -0.480226 value of the regression coefficient (15) of the consumption variable (X5) can statistically explain how if the consumption variable grows by one unit, the gross domestic product (Y) will increase by one unit 0.480226 units.

**Model 2 Simultaneous F-Test.**

Effect of Gross Domestic Product (Y) on Poverty (Z)

**Table 8.** Output Linear Regression Cross Section Model 2.

Dependent Variable: LN_KEMISKINAN
Method: Panel Least Squares
Date: 03/19/22 Time: 13:26
Sample: 2007 2021
Periods included: 15
Cross-sections included: 2
Total panel (balanced) observations: 30

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 6.744596 | 1.327604 | 5.080275 | 0.0000 |
| LN_PDB | -0.418602 | 0.064825 | -6.457380 | 0.0000 |

| | | | |
|---|---|---|---|
| R-squared | 0.598265 | Mean dependent var | -1.819857 |
| Adjusted R-squared | 0.583918 | S.D. dependent var | 0.498734 |
| S.E. of regression | 0.321706 | Akaike info criterion | 0.633980 |
| Sum squared resid | 2.897845 | Schwarz criterion | 0.727394 |
| Log likelihood | -7.509705 | Hannan-Quinn criter. | 0.663864 |
| F-statistic | 41.69776 | Durbin-Watson stat | 1.848922 |
| Prob(F-statistic) | 0.000001 | | |

*Source: Eviews-9 Software Secondary Data Processing Results*

The F-statistic probability value is 0.0000, as shown in table 8, and the value is smaller (<) than $\alpha = 0.05$, and or F-statistic is 41.6977 > from the F-table 1.61, then rejecting $H_0$ means that Gross Domestic Product (Y) has a negative effect. significant to the Poverty Severity Index (Z). While the adjusted R square value of 0.5839 or 58.39% can explain that the level of influence of gross domestic product (Y) on the poverty severity index (Z) is 58.39% Other variables outside of this study model account for the remaining 41.61 percent.

The t-statistic of the Gross Domestic Product (Y) variable has a The t-statistic is -6.4573, and the probability value is 0.0000, which is smaller () than the value of = 0.05 from the t-table of (df=n-k-1) = 6.3137. While the value of the regression constant coefficient ($\beta_0$) of 6.7445 can explain if the Gross Domestic Product (Y) does not change, the poverty rate is 6.7445 units. While the coefficient value of the gross domestic product (Y) of -0.4186 can explain statistically if the value of Gross Domestic Product (Y) increases by 1 unit, it will reduce the value of the Poverty Severity Index (Z) by 0.4186 units.

## 4 Conclusion

a. Domestic investment makes a significant positive Gross Domestic Product Contribution, the value of prob(t-stat) is 0.0000 < 0.05, the coefficient value of 0.6105 can explain if PMDN increases by one unit then GDP will increase by 0.6105.
b. 2) Foreign investment has an insignificant negative contribution to Gross Domestic Product, the prob(t-stat) value is 0.3698 > 0.05. The coefficient value of -0.2348 can explain if FDI If GDP rises by one unit, it will fall by 0.2348.
c. 3) Exports have an insignificant negative contribution to Gross Domestic Product, the prob(t-stat) value is 0.4756 > 0.05. The coefficient value of -0.1788 can explain if exports increase by one unit, it will decrease GDP by 0.1788.
d. Imports have a significant positive contribution to Gross Domestic Product, the prob(t-stat) value is 0.0000 < 0.05. The coefficient value of 0.8898 can explain if imports increase by one unit it will increase GDP by 0.8898.
e. Consumption has a significant negative contribution to Gross Domestic Product, the prob(t-stat) value is 0.0123 < 0.05. The coefficient value of -0.4802 can explain if consumption It will reduce GDP by 0.4802 if it rises by one unit.
f. Simultaneously, Domestic investment, foreign investment, exports, imports, and consumption all have a substantial positive impact on GDP. Domestic Investment, Foreign Investment, Exports, Imports, and Consumption have an influencing power of 89.00 percent, while the remaining 11.00 percent is influenced by other factors outside the model, according to the prob (F-statistic) value of 0.0000 and the Adjusted R-squared value of 0.8900.
g. Gross Domestic Product has a significant negative contribution to poverty reduction; The prob(t-statistic) value of 0.0000 0.05 and the t-statistic value of -6.4573, as well as the coefficient value of -0.4186, demonstrate this. This means that increasing the Gross Domestic Product by one unit reduces poverty by 0.4186 units. The probability value (F-statistic) of 0.0000 and the Adjusted R-squared value of 0.5839 can explain that the Gross Domestic Product has a strong influence of 58% on poverty.

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