

## THE EFFECT OF DOMESTIC INVESTMENT (DI) AND FOREIGN INVESTMENT (FDI) ON ECONOMIC GROWTH IN NORTH SULAWESI PROVINCE

**AGNES LUTHERANI CH.P. LAPIAN<sup>\*1</sup>, EEN NOVRITHA WALEWANGKO<sup>1</sup> and MARYAM MANGANTAR<sup>2</sup>**

<sup>1\*</sup>Department of Development Economics, Faculty of Economics and Business, Sam Ratulangi University, Manado 95115, Indonesia. Email correspondence: agneslapian@unsrat.ac.id

<sup>2</sup>Department of Management, Faculty of Economic and Business Universitas Sam Ratulangi, Manado.

### Abstract

Economic growth is the development of activities in the economy that causes goods produced in society to increase. In each period a society will increase its ability to produce goods and services. Investments of the past that will increase the capital goods and producing capacity of the present. In addition, investment is followed by technological developments in the means of production and accelerating production capabilities. Various countries are not always able to achieve economic growth in accordance with the development of the production capacity possessed by the increasing factors of production. This study aims to determine the effect of Domestic Investment and Foreign Investment on Economic Growth in North Sulawesi Province. The analytical method used is multiple linear regression analysis. The results of the study show that domestic investment and foreign investment either simultaneously or partially have no significant effect on economic growth in the province of North Sulawesi. It is recommended that the North Sulawesi Provincial Government pay more attention to the factors of domestic investment and foreign investment so that it can contribute more to economic growth, especially in North Sulawesi. domestic investment and foreign investment in North Sulawesi so that the research results can better describe the actual conditions over the long term. It is recommended that the North Sulawesi Provincial Government pay more attention to the factors of domestic investment and foreign investment so that it can contribute more to economic growth, especially in North Sulawesi. domestic investment and foreign investment in North Sulawesi so that the research results can better describe the actual conditions over the long term. It is recommended that the North Sulawesi Provincial Government pay more attention to the factors of domestic investment and foreign investment so that it can contribute more to economic growth, especially in North Sulawesi. domestic investment and foreign investment in North Sulawesi so that the research results can better describe the actual conditions over the long term.

**Keywords:** Investment, PMA, PMDN, Economic Growth, North Sulawesi

### INTRODUCTION

Economic growth is the development of activities in the economy that causes goods produced in society to increase. In each period a society will increase its ability to produce goods and services. Investments of the past that will increase the capital goods and producing capacity of the present. In addition, investment is followed by technological developments in the means of production and accelerating production capabilities. Various countries are not always able to achieve economic growth in accordance with the development of the production capacity possessed by the increasing factors of production. Indonesia is one of the developing countries towards national economic development and economic growth. Indonesia adheres to an open economy in running its economy, the government does not escape the interaction of the private

sector or other countries. In this case, Indonesia requires substantial financing to build an equitable and prosperous economy for its people.

Economic growth in a country can see how the increase and development of a country's economy. Economic growth in a country can be positive or negative. If during a period the economy experiences positive growth, it indicates that economic activity in that country has increased. Meanwhile, if during a period the economy experiences negative growth, it indicates that economic activity in that country has decreased. This has happened in Indonesia in mid-1997 to mid-1998 which describes Indonesia's economic growth declining. This has resulted in a decline in Indonesia's economic growth as well as low domestic savings which has caused domestic investment (PMDN) to decline which in turn has an impact on economic growth. Although one or two years after the 1997-1998 economic crisis, the Indonesian economy has again shown positive economic growth, but up to now its average annual growth is still relatively slow compared to neighboring countries which were also hit by the crisis. According to Law No. 6 of 1968 PMDN is the use of the wealth of the Indonesian people, including rights and objects owned by the state or national private or foreign private domiciled in Indonesia.

In Indonesia, it can be seen that the average economic growth from 1998-2014 increased. In 1998-1999 Indonesia's economic growth declined by 6.65%. This happened because of the impact of the monetary crisis experienced by Indonesia. However, in 2000-2004 Indonesia began to fix the economy and economic growth began to improve. Until 2010-2014. Indonesia's GDP growth is 5.80%. Economic growth is defined as the process of increasing output per capita in the long term. The word "per capita" indicates that there are two sides that need to be considered, namely the total output side (GDP) and the population side. The process of increasing output per capita must be analyzed by looking at what is happening to the total output on the one hand, and the total population on the other. So that explains what happens to the total GDP and what happens to the total population. Therefore, the position of the population in economic development is important because economic growth itself is always related to population. In terms of population, Indonesia is a country with a large number and population growth. Indonesia also consists of thousands of islands, diverse cultures, hundreds of tribes, and hundreds of regional languages. This is also the advantage of Indonesia in terms of population. The total population of Indonesia in 2014 was 250 million people with a population growth of 1.49% per year. The situation of such a large population, of course requires great attention from the government / state or related institutions to be able to meet the needs of the population, so that this large population can play a role as a development resource in the country.

## METHODS

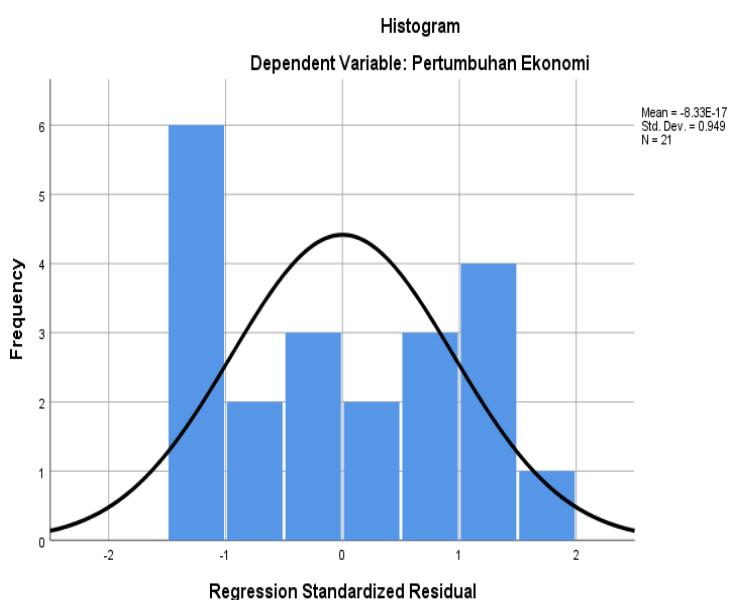
This type of research is associative research. Associative research is research that aims to determine the influence or relationship between two or more variables (Sugiyono, 2015). This study looks for the effect of the independent variable Domestic Investment and Foreign Investment (X), on the dependent variable Economic Growth (Y). The sample of this research is to use Domestic Investment Data and Foreign Investment as well as Economic Growth Data

in North Sulawesi Province for the period 2000-2020.

This study uses the SPSS version 25 program and the results of the classical assumption test are as follows:

### Normality test

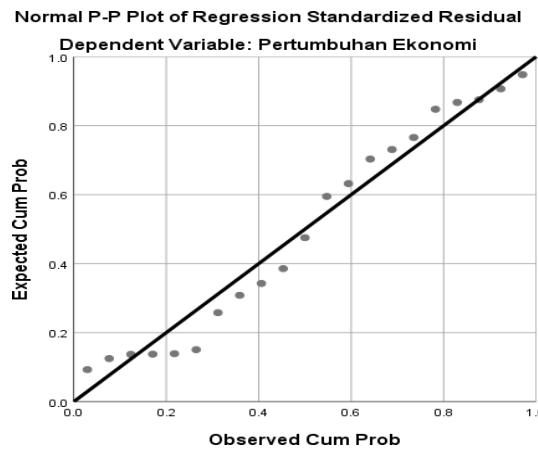
Normality test is conducted to determine whether a regression model, independent variable, dependent variable, or both have a normal distribution or not. Normality test can be done through a graphical approach (histogram and P-Plot). normal. The normality test which was carried out through a graphical approach (histogram and P-Plot) the results were as follows:



**Figure 4.1 Histogram Regression**

Source: Processed Data SPSS Version 25 (2021)

Normal curve in the histogram above, it can be said that the model is normally distributed, because it forms a bell. Another way is to look at the Normal P-Plot Regression Standardized diagram, to see whether the model is normally distributed or not. This can be seen in Figure 4.2 below:



**Figure 4.2 Normal P-Plot Regression Standardized Residual**

Source: Processed Data SPSS Version 25 (2021)

The data in Figure 4.2 shows that the Normal PP Plot of Regression Standardized Residual graph depicts the spread of data around the diagonal line and its distribution follows the direction of the graph's diagonal line. In other words, the presence of points around the linear line indicates that the model is normally distributed.

### Multicollinearity Test

Multicollinearity test is used to determine whether there is a correlation between independent variables with one another. Multicollinearity is tested by calculating the value of VIF (Variance Inflation Factor) and the value of Tolerance. If the VIF value is less than 10 then there is no Multicollinearity or Non-Multicollinearity. If the Tolerance value is greater than 0.1, then there is no Multicollinearity or Non-Multicollinearity. The test results are shown in Table 4.1 below:

**Table 4.1 Multicollinearity Test Results**

Variable	VIF	Tolerance	Description
Internal Investment Country (X1)	1,000	1,000	Non multicollinearity
Internal Investment Foreign (X2)	1,000	1,000	Non multicollinearity

Source: Processed Data SPSS Version 25 (2021)

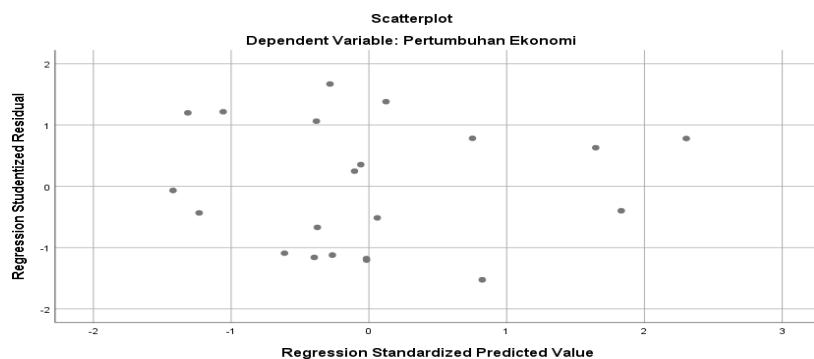
The results of the calculations are shown in Table 4.1, resulting in the VIF value for all X variables less than 10 (<10) and the Tolerance value for all X variables more than 0.1. So it can be concluded that there is no symptom of multicollinearity in this research model.

### Heteroscedasticity Test

Heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residuals of one observation to another observation. If the residual variance from one observation to another observation remains, it is called Homoscedasticity and if it is

different it is called Heteroscedasticity.

A good regression model is the one with homoscedasticity or no heteroscedasticity. The results of the Heteroscedasticity test in this study are shown in Figure 4.3 below:



**Figure 4.3 Scatterplot**

Source: Processed Data SPSS Version 25 (2021)

Figure 4.3 states that the scatterplot graph displayed for the heteroscedasticity test shows points that spread randomly and no clear pattern is formed and in the spread of the points spread below and above the number 0 on the Y axis.

This indicates that there is no heteroscedasticity in the regression model, so that the regression model is appropriate to be used to predict the variable Economic Growth (Y).

#### Autocorrelation Test

The regression model is said to have no autocorrelation if the Durbin-Watson (DB-test) value ranges from DU to 4-DU

**Table 4.2 Autocorrelation Test**

Durbin-Watson
0.373

Source: Processed Data SPSS Version 25 (2021)

Table 4.2 states that the Durbin-Watson (DW) value obtained is 0.373, so it can be concluded that there is a positive autocorrelation. Where durbin Watson value < DL table value is 1.100

#### Multiple Linear Regression Analysis

The next stage is to perform multiple linear regression analysis. Multiple regression analysis was used to determine how much influence the independent variables in this study had on the dependent variable. The calculation of data analysis in this study uses statistical analysis of data processing with the help of the SPSS 25 program. By looking at table 4.3, the form of the regression equation is in table 4.3.

**Table 4.3 Coefficients<sup>a</sup>**

Unstandardized Coefficients			Standardized Coefficients		Collinearity Statistics			
Model		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	28,471	11.862		2,400	.027		
	Domestic investment	.053	.035	.330	1,520	.146	1,000	1,000
	Foreign investment	.042	.042	.217	1,001	.330	1,000	1,000

a. Dependent Variable: Economic Growth

Source: Processed Data 2021

$$Y = 28.471 + 0.053X_1 + 0.042X_2$$

## Discussion

### The Effect of Domestic Investment and Foreign Investment on Economic Growth\

Based on the results of hypothesis testing and the results of multiple linear regression analysis in this study, it shows that the effect of domestic investment and foreign investment has no effect on economic growth. This is shown through the results of the significance test F (sig. F) simultaneously from the variables X1 and X2, towards Y, namely Economic Growth of 0.225. This means that the variable coefficients X1, and X2, do not have a joint effect on Y or Economic Growth, where the significant value is less than 5% (<0.05). This means that hypothesis 1 (H1) which states that the Domestic Investment and Investment. Foreign Capital is suspected of simultaneously influencing Economic Growth, it is rejected.

In addition to using the probability value or Sig value, another method that can be used is to use the calculated F value compared to the table F value. The assessment criteria using this method are, if the calculated F value is greater than the table F value;  $F_{calculated} > F_{table}$  then the research hypothesis is accepted, and vice versa. In the case above, the calculated F has a value of 1.624 while the F table has a value of 3.47. This means that the calculated  $F < F_{table}$ , so the research hypothesis is rejected.

It can also be seen that the result of the Coefficient of Determination or R square( $r^2$ ) is 0.153 which indicates that 15.3% of Economic Growth (Y) is influenced by Domestic Investment and Foreign Investment (X) while the remaining 85.3% is influenced by other variables. which were not investigated in this study. This means that in the process of implementing Domestic Investment and Foreign Investment, it does not have a significant influence where there are several causal factors that make Domestic Investment and Foreign Investment not too

significant.

This is the realization of investment and the challenges faced in the future such as the Covid-19 Pandemic.

### **The Effect of Domestic Investment on Economic Growth**

Based on the results of hypothesis testing and the results of multiple linear regression analysis in this study, it shows that the effect of domestic investment has no effect on economic growth. This is shown through the significant level value for the Domestic Investment variable ( $X_1$ ) is greater than 0.05 with a significant level of 0.146, then the tCount value is 1.520 not greater than the tTable value, which is 1.720 so that  $H_0$  is accepted, meaning that Domestic Investment ( $X_1$ ) has no significant effect on Economic Growth (Y). Thus the hypothesis is rejected.

Economic theory defines or defines Domestic Investment as an investment activity to conduct business in the territory of the Republic of Indonesia carried out by domestic investors using domestic capital.

However, this does not show a significant influence on economic growth, especially in the province of North Sulawesi, because Domestic Investment is not the only supporting factor in increasing economic growth and the realization of PMDN development is often not well targeted, so it cannot increase economic growth.

This is also supported by previous research conducted by Paramita, A. I. D., & Purbadharma, I. P. (2015) with the title The Effect of Investment and Unemployment on Economic Growth and Poverty in

Bali province. The results of the study stated that the investment variable had no significant effect on economic growth and the unemployment variable had a negative and significant effect on economic growth. Meanwhile, the investment and economic growth variables directly have a negative and significant effect on poverty and the unemployment variable has a positive and significant effect on poverty. Furthermore, the effect of investment on poverty through economic growth has a negative and significant effect. For unemployment to poverty through economic growth has a positive and significant effect.

### **The Effect of Foreign Investment on Economic Growth**

Based on the results of hypothesis testing and the results of multiple linear regression analysis in this study, it shows that the influence of foreign investment has no effect on economic growth. This is shown through the significant level value for the foreign investment variable ( $X_2$ ) is greater than 0.05 with a significant level of 0.330, then the tCount value of 1.001 is not greater than the tTable value of 1.720 so that  $H_0$  is accepted, meaning that Foreign Investment ( $X_2$ ) has no significant effect on Economic Growth (Y).

The results of the simple regression equation above provide the understanding that:

1. The constant value of 28.471 gives an understanding that if the Domestic Investment and Foreign Investment factors are not carried out or are equal to zero (0) then the unit of Economic Growth is 28.471.

2. For the variable of Domestic Investment (X1) regression coefficient is positive, this can be interpreted if Domestic Investment (X1) increases by unit, then Economic Growth (Y) will increase by 0.053
3. For the variable of Foreign Investment (X2) the regression coefficient is positive, this can be interpreted if Foreign Investment (X2) increases by unit, then Economic Growth (Y) will increase by 0.042 and Foreign Investment allegedly influencing Economic Growth simultaneously, was rejected.

In addition to using probability values or Sig values, another method that can be used is to use calculated F values compared to table F values. The assessment criteria using this method are, if the calculated F value is greater than the table F value;  $F_{\text{calculated}} > F_{\text{table}}$  then the research hypothesis is accepted, and vice versa. In the case above, the calculated F has a value of 1.624 while the F table has a value of 3.47. This means that the calculated  $F < F_{\text{table}}$ , so the research hypothesis is rejected.

It can also be seen that the result of the Coefficient of Determination or R square( $r^2$ ) is 0.153 which indicates that 15.3% of Economic Growth (Y) is influenced by Domestic Investment and Foreign Investment (X) while the remaining 85.3% is influenced by other variables. which were not investigated in this study.

This means that in the process of implementing Domestic Investment and Foreign Investment, it does not have a significant influence where there are several causal factors that make Domestic Investment and Foreign Investment not too significant. This is the realization of investment and the challenges faced in the future such as the Covid-19 Pandemic.

## Conclusion

This study aims to find concrete evidence about the effect of domestic investment and foreign investment on economic growth in the province of North Sulawesi. This study uses the SPSS 25 program tool to perform the analysis. Based on the results of the analysis and discussion using multiple linear regression and classical assumption test, the following conclusions are obtained:

1. Domestic Investment and Foreign Investment Simultaneously have no significant effect on Economic Growth in North Sulawesi Province
2. Domestic Investment partially has no significant effect on Economic Growth in North Sulawesi Province
3. Foreign investment partially has no significant effect on Economic Growth in North Sulawesi Province.

## REFERENCES

Adipuryanti, NLPY, & Sudibia, IK (2015). Population Influence Analysis Which Work and Investation To Inequality Distribution of Income through District/City Economic Growth in province

Bali.Pyramid 11(1).<https://ocs.unud.ac.id/index.php/pyramid/article/download/18710/1219> 7

Almfraji, MA, & Almsafir, MK (2014). Foreign direct investment and economic growth literature review from 1994 to 2012. *Procedia-Social and Behavioral Sciences*, 129, 206-213. <https://www.sciencedirect.com/science/article/pii/S187704281402850X>

Barimbang, YR, & Karmini, NL (2015). The Influence of PAD, Labor and Investment on Economic Growth in the Province of Bali. *E-Journal EP Unud*, 4(5), 434-450. <https://ocs.unud.ac.id/index.php/eep/article/download/12125/9110/>

Cullison, W. (1993). Public investment and economic growth. *FRB Richmond Economic Quarterly*, 79(4), 19-33. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2129245](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2129245)

Danawati, S., Bendesa, IKG, & Utama, MS (2016). The effect of government spending and investment on employment opportunities, economic growth and income inequality in districts/cities in Bali Province. *E-Journal of Economics and Business, Udayana University*, 7, 2123-2160. <https://ojs.unud.ac.id/index.php/EEB/article/download/13030/14796>

Djarwanto., and Subagyo, P. (2016). *Inductive Statistics*. 4th Edition. Yogyakarta: BPPE.

Eliza, Y. (2015). Effect of Investment, Labor Force and Government Expenditure on Economic Growth in West Sumatra. *PEKBIS (Journal of Economics and Business Education)*, 7(3), 198-208. <https://pekbis.ejournal.unri.ac.id/index.php/JPEB/article/view/2925>

Ghozali, I. (2019). *Multivariate Analysis Application with SPSS Program*.

Semarang: Diponegoro University Publishing Agency.

Jufrida, F., Syechalad, MN, & Nasir, M. (2016). Analysis of the influence of foreign direct investment (FDI) and domestic investment on Indonesia's economic growth. *Darussalam Journal of Economic Perspectives*, 2(1), 54-68. <http://www.jurnal.unsyiah.ac.id/JPED/article/view/6652>

Kuznets, S. (2015). Economic Growth and Income Inequality. *American Economic Review*.

Nizar, C., Hamzah, A., & Syahnur, S. (2013). The effect of investment and labor on economic growth and their relationship to poverty levels in Indonesia. *ISSN Journal of Economics*, 2302, 0172.<https://www.academia.edu/download/35010935/1.1.8.chairul.nizar.pdf>

Paramita, AID, & Purbadharma, IP (2015). The Effect of Investment and Unemployment on Economic Growth and Poverty in Bali Province. *E-Journal of Development Economics, Udayana University*, 4(10),44574

Purnomo, MJ, Lapian, ALCP, & Sumual, JI (2021). Analysis of the Effect of Investment, Labor, and Government Expenditure on Economic Growth in North Sulawesi. *Scientific Journal of Efficiency*, 21(1).<https://ejournal.unsrat.ac.id/index.php/jbie/article/view/34970>

Putri, PI (2014). The Effect of Investment, Labor, Capital Expenditure, and Infrastructure on the Economic Growth of Java Island. *TRACK: Journal Economy and Policy*, 7(2).<https://journal.unnes.ac.id/nju/index.php/jejak/article/view/3892>

Samuelson, Paul, A, and Nordhaus, William, D. (2015). *Macroeconomics*.

Jakarta PT. Educational Media.

Sari, M., Syechalad, MN, & Majid, SA (2016). The effect of investment, labor and government spending on economic growth in Indonesia. *Indonesian Journal of Economics and Public Policy*, 3(2), 109- 115. <http://www.jurnal.unsyiah.ac.id/EKaPI/article/view/5606>

Schumpeter J. (2017): *The Theory of Economic Development. An Inquiry into Profits, Capital, Credit, Interest and the Business Cycle*. Harvard U.

- Sudirman, S., & Alhudhori, M. (2018). Effect of Household Consumption, Investment To Growth Economy province Jambi. *Economics: Journal of Economics and Business*, 2(1), 81-91.<http://economy.unbari.ac.id/index.php/ojskonomis/article/view/33>
- Sugiyono. (2015) *Business Research Methods (Quantitative, Qualitative and R & D Approaches)*. First Edition. Bandung: Alphabeta.
- Sukirno, S. (2016). *Modern Macroeconomics*. Jakarta: PT. Taste of Grafindo Persada
- Sukirno, S. (2017). *Microeconomic Theory Introductory Third Edition*. Jakarta: Press Eagle.
- Sulistiwati, R. (2012). The effect of investment on economic growth and employment as well as community welfare in provinces in Indonesia. *Journal of business economics and entrepreneurship*, 3(1), 29-50.<https://www.academia.edu/download/56247394/10500-ID-influence-investment-on-economic-growth-and-energy-absorption-work-sert.pdf>
- Sunariyah. (2015). *Introduction to Capital Market Knowledge*. Yogyakarta. (UPP) AMP YKPN.
- Supratno. J. (2015). *Statistics*. Jakarta: Erlangga.
- Suwandika, PE, & Yasa, INM (2015). The Effect of Regional Original Income and Investment on Economic Growth and Unemployment Rates in Bali Province. *E-Journal of Development Economics*, Udayana University, 4(7),44554.<https://repositori.unud.ac.id/protected/storage/upload/repositori/8adc53ed6a1393d9974984af55228a67.pdf>
- Wahyuni, IGAP, Sukarsa, M., & Yuliarmi, N. (2014). The effect of government spending and investment on economic growth and the income gap of districts/cities in Bali Province. *E-Journal of Economics and Business*, Udayana University, 3(8), 458-477. <https://ojs.unud.ac.id/index.php/EEB/article/download/8216/7299>