



## THE EFFECT OF ECONOMIC GROWTH AND INFLATION ON FOREIGN DIRECT INVESTMENT (FDI) IN ASEAN COUNTRIES

Muttaqien<sup>1</sup>, Wardhiah<sup>2</sup>, Muhammad Hafizh<sup>3</sup>, Frengki Putra Ramansyah<sup>4</sup>, Cut Zira Maulida<sup>5</sup>

Faculty of Economics and Business Universitas malikussaleh<sup>1,2,3,4,5</sup>

Corresponding E-mail: <sup>1)</sup> [Muttaqien@unimal.ac.id](mailto:Muttaqien@unimal.ac.id), <sup>2)</sup> [wardhiah@unimal.ac.id](mailto:wardhiah@unimal.ac.id)

<sup>3)</sup> [Muhhammad.hafizh@unimal.ac.id](mailto:Muhhammad.hafizh@unimal.ac.id)

### Abstract

*This study aims to determine and see the effect of economic growth and inflation on foreign direct investment (FDI), besides that this study is also to analyze economic growth and inflation on FDI in ASEAN countries. The population in this study were 11 ASEAN countries but after researchers determined the criteria, researchers only took 7 samples in this study. This study uses panel data regression data analysis. The results showed that the economic growth variable had a positive and significant effect while inflation had no effect on FDI. While simultaneously economic growth and inflation affect foreign direct investment (FDI).*

**Keywords :** *Economic growth, inflation, and foreign direct investment.*

### Introduction

ASEAN, as a group of Southeast Asian countries, formed an economic cooperation known as the ASEAN Economic Community (AEC) to encourage regional economic growth. Economic growth, which is measured through an increase in national income or Gross Domestic Product (GDP), is an important indicator in assessing the success of a country's economic development (Andinata et al., 2018). One of the factors that support economic growth is Foreign Direct Investment (FDI), which allows foreign companies to establish or expand their businesses in other countries. FDI plays an important role in the development of the goods and services industry, by providing benefits in the form of innovation, technology, management expertise, job creation, and the development of the industrial sector in the recipient country (Putri & Wilantari, 2016).

Economic growth often fluctuates, which is influenced by various factors, including investment and inflation. Fathoni et al. (2017) explained that economic growth includes an increase in the production of goods and services, such as industry, infrastructure, and capital goods, which is beneficial for developing countries. Investment, particularly Foreign Direct Investment (FDI), plays an important role in providing capital for production and increasing economic growth. Inflation, which is defined as an increase in the prices of goods and services, can affect the economy both positively and negatively. Low inflation can support economic growth, but high inflation is potentially harmful (Septiatin et al., 2016; W. N. Putri, 2023). The decline in FDI in 2020 due to the COVID-19 pandemic had an impact on the economies of ASEAN countries, reducing people's purchasing power and increasing inflation. This is in accordance with the findings of Anwar et al. (2016), which states that inflation has a significant negative impact on foreign investment.

### Research Method

#### Location and Object of Research

The location of the research conducted in this study was obtained from [www.worldbank.com](http://www.worldbank.com). The objects to be examined in this study are economic growth, inflation, exchange rates on foreign direct investment (FDI) in ASEAN countries.

#### Population and Sample

The population to be used in this study are 11 ASEAN countries. In this study, the method used in sampling is the purposive side method. This method is based on criteria that have been determined by the researcher and adjusted to the needs of the study. The criteria for this sampling are listed in the following table.

Sample selection criteria	Total
Countries in ASEAN	11
Countries that did not publish data in the world bank in the period 2018-2022	4
Number of sample	7

### Data Type and Source

There are two types of data contained in a study, namely primary data and secondary data. In this study the authors used secondary data sources sourced or obtained from [www.worldbank.com](http://www.worldbank.com). The type of data used in this study is panel data.

### Data Collection Technique

Researchers in this study used literature studies and data documentation collected regularly from the annual reports of each country to obtain data that met the criteria (Handayani, 2020).

## Results and Discussion

ASEAN has become an attractive region for foreign investors due to its large economic potential and growing population. ASEAN governments are working to develop investment and infrastructure to attract more investors. Foreign direct investment occurs when a company from one country invests in a business in another country, aiming to have a long-term impact on that business.

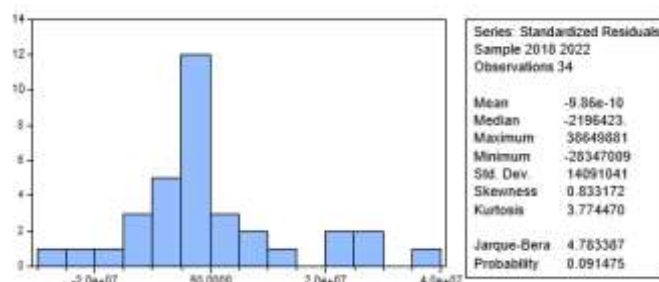
### 3.1 Descriptive Statistics

Descriptive statistical analysis aims to process, analyze, and compile data so that it can be presented in a clearer and more informative way (Ghozali).

	PE	INF	FDI
Mean	2.5911	2.2411	141806
Median	3.5500	2.1000	43126
Maximum	8.8000	6.1000	900557
Minimum	-9.5000	-1.1000	20474
Std. Dev	4.3036	1.8827	230392
Skewness	-0.9585	0.3983	2.3100
Kurtosis	3.5553	2.6055	7.7828
Jarque-Bera	5.6441	1.1196	58.709
Probability	0.0594	0.5712	0.0000
Sum	88.100	76.200	4.82
Sum Sq, Dev	611.20	116.98	1.75

The results of data analysis show that the economic growth variable has an average of 2.59% with a standard deviation of 4.30%, a minimum value of -9.50%, and a maximum of 8.80%. For the inflation variable, the average is 2.24% with a standard deviation of -1.10%, and a minimum value of -1.10%. Meanwhile, the Foreign Direct Investment (FDI) variable has an average of 141,806 with a standard deviation of 230,392, with a minimum value of 204,749 and a maximum of 900,557.

### 3.2 Normality Test



The table shows the results of the normality test for each analyzed data based on their respective probability values. The results indicate a probability value of 0.091475, which is  $\geq 0.05$ , concluding that the data is normally distributed. This study uses panel data from 7 countries over the 2018-2022 period.

### 3.3 Multicollinearity Test

	PE	INF
PE	1.000000	0.460042
INF	0.460042	1.000000
INF	0.090152	0.390017

The table shows the results of the normality test for each analyzed data based on their respective probability values. The results indicate a probability value of 0.091475, which is  $\geq 0.05$ , concluding that the data is normally distributed. This study uses panel data from 7 countries over the 2018-2022 period.

### 3.4 Heteroscedasticity Test

Variable	Coefficient	Std.error	t-statistic	Prob.
C	10481054	3315492.	3.161236	0.0042
PE	193398.5	423624.2	0.456533	0.6521
INF	110956.9	1024208.	0.108334	0.9146
KURS	-63960.69	157343.7	-0.406503	0.6880

Effects Specification			
Cross-section fixed (dummy variables)			
R-squared	0.396929	Mean dependent var	10069778
Adjusted R-squared	0.170777	S.D. dependent var	9699704.
S.E. of regression	8832714.	Akaike info	35.06575
Sum squared resid	1.87E+15	Criterion	
Log likelihood	-586.1178	Schwarz criterion	35.51468
F-statistic	1.755143	Hannan-Quinn criter.	35.21885
Prob(F-statistic)	0.130607	Durbin-Watson stat	1.983328

Based on the table above, it can be seen that all variables in this study—economic growth, inflation, and exchange rates—produce values greater than 0.05. Therefore, it can be concluded that the data used in this study is free from heteroskedasticity issues.

### 3.5 Autocorrelation Test

Variable	coefficient	Std.error	t-statistic	Prob.
C	28189015	11905063	2.367817	0.0318
PE	-871001.5	2016720	-0.431890	0.6720
INF	4212844.	4694545.	0.897391	0.3837
R-squared	-0.238283	Mean dependent var		20297393
Adjusted R-squared	0.085939	S.D dependent var		29226233
S.E.o fregression	27942186	Akaik info criterion		37.31384
Sum squared resid	1.17+16	Schwarz criterion		37.51267
Log like lihood	-350.4815	Hannan-quin criter		37.34749
F-statistic	1.564115	Durbin-watson stat		0.740130
Prob (F-statistic)	0.239458			

From the data processing results using E-Views, the Durbin-Watson value obtained is 0.740130. Based on the Durbin-Watson table, the dL value is 1.2833, the dU value is 1.6528, the 4-dU value is 2.3472, and the 4-dL value is 2.7167.

### 3.6 Panel Data Regression Estimation

variable	coefficien			
	t	Std. error	t-statistic	Prob.
C	23454429	7596637	3,087475	0.0050
PE	404288.0	791928.7	3.700219	0.0177
INF	238482.	1887441.	1.263394	0.2186

#### Effects Specification Cross- section fixed (dummy variables)

R-squared	0.625892	Mean dependent var	14260542
Adjusted R- squared	0.485601	S.D. dependent var	23037986
S.E. of regression	16523210	Akaike info criterion	36.31836
Sum squared resid	6.55+15	Schwarz criterion	36.76729
		Hannan-Quinn criter	36.47146
		Durbin-Watson stat	1.915068

From the results above, the constant value is 23,454,429. This indicates that the value will remain constant at 23,454,429.

### 3.7 t-test

1. The constant ( $\beta_0$ ) = 3.087475 indicates that if economic growth, inflation, and exchange rates are assumed to remain unchanged, the value of FDI (foreign direct investment) will be 3.087475, assuming ceteris paribus.



2. The variable of economic growth has a t-value of 3.700219. Since the t-value  $>$  t-table and the probability value is 0.0177, which is smaller than 0.05, it can be concluded that economic growth has a positive and significant effect on FDI.
3. The inflation variable has a t-value of 1.263394. Since the t-value is smaller than the t-table and the probability value is greater than 0.05, it can be concluded that inflation does not have a significant effect on FDI.

### 3.8 F-test

The F-test results show an F-statistic value of 4.461398 with a significance level of 0.001601. Meanwhile, the F-table value at a 1% significance level and degrees of freedom  $df = (k-1) (n-k) = (3-1) (35-3) = 2(32)$  is 2.91. Comparing the F-statistic from Table 4.5, which is 4.461398, with the F-table value of 2.91, it is evident that the F-statistic is greater than the F-table value ( $4.461398 > 2.91$ ). Therefore, it can be concluded that economic growth and inflation variables significantly influence FDI.

### 3.9 Coefficient Of Determination

Based on the data analysis results using the fixed effect model presented in Table 4.5, the adjusted R-square coefficient is 0.625892. This indicates that 62.58% of the dependent variable can be explained by FDI. Meanwhile, the remaining 37.42% is influenced by other factors outside the model used in this study, such as unemployment, interest rates, and other external factors.

### 3.10 The Effect of Economic Growth on Foreign Direct Investment (FDI)

The analysis results indicate that the variable of economic growth does not significantly affect Foreign Direct Investment (FDI). This is evident from the t-statistic value being greater than the t-table value, which shows that economic growth has a positive and significant impact on FDI. This finding aligns with the study by Desti (2019), which also states that economic growth influences FDI.

### 3.11 The Effect of Inflation on Foreign Direct Investment (FDI)

The analysis results show that the inflation variable does not have an effect on Foreign Direct Investment (FDI). Ratih's (2011) study also found that inflation does not influence FDI, which is suspected to be due to the habits of the public and producers in managing expectations related to inflation, making the presence or absence of inflation considered a normal condition. Additionally, research by Anthoni Mayes (2015) aligns with these findings, also stating that inflation does not affect FDI.

## CONCLUSION

Based on the data analysis conducted in this study, the conclusions that can be drawn are as follows:

1. Economic growth affects foreign direct investment (FDI) in ASEAN countries during the 2018-2022 period.
2. Inflation does not affect foreign direct investment (FDI) in ASEAN countries in 2018-2022.

The results of this study are expected to broaden the understanding of the influence of macroeconomic factors and the variables that influence them. For parties interested in digging deeper into macroeconomics in ASEAN countries, it is recommended to modify the independent variables, either by adding new variables or extending the time series data. This will allow for more objective and varied research.

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