

Research Article

Identifying the Influence of Foreign Direct Investment Toward the ASEAN Economic Community 2025

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Abstract.

ASEAN as a region has a great economic potential, which explains the large interest in terms of investment in the region. The ASEAN Economic Community (AEC) cooperation program is also a milestone in increasing foreign investment in ASEAN. This study uses a quantitative approach, with the subject of this research being 10 ASEAN countries in 2015–2021. The dependent variable used in this study is foreign direct investment, and the independent variables are government effectiveness, political stability, trade openness, and the workforce. The data in this study comes from the world bank. The analytical method applied in this study is the panel data regression analysis method. Based on the research results, it can be concluded that trade openness and labor force had a positive and significant impact on foreign direct investment in 10 ASEAN countries in 2015–2021. At the same time, government effectiveness and political stability had a positive but insignificant effect. The results of simultaneous testing show that government effectiveness, political stability, trade openness, and the workforce influenced foreign direct investment in 10 ASEAN countries in 2015–2021. The government can use this study in determining foreign investment policies, especially those related to maintaining a stable investment climate.

Keywords: ASEAN, foreign direct investment, government effectiveness, labor force, political stability, trade openness

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1. Introduction

The government must treat foreign investment specifically, especially in developing countries [1]. The governments of ASEAN countries, where most countries are developing countries, see the importance of foreign direct investment. ASEAN countries formed a collaboration, namely the ASEAN Investment Forum, which aims to be a place for ASEAN countries to promote increased investment inflows in the ASEAN region.

ASEAN is a region that has great potential in terms of the economy. Combining a large population and high economic growth amid global uncertainty creates promising business opportunities for the ASEAN region. Moreover, most ASEAN countries are

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developing countries trying to achieve advanced status, which opens up many business and investment opportunities.

The ASEAN Economic Community (AEC) cooperation program is also a milestone in increasing foreign investment in ASEAN. A key to increasing the competitiveness of the ASEAN region in attracting foreign direct investment and intra-ASEAN investment is implementing an open and free investment understanding. The continuous inflow will encourage new investment, and reinvestment will encourage and ensure that the economic development of the ASEAN region becomes more dynamic

Research by [2] argue that foreign direct investment inflows depend on several factors, namely industrial factors (transportation, implementation, and production costs, as well as technological advantages and agglomeration of activities), commercial factors (market size, proximity to demand, risks and legal provisions for capital repatriation). On the other hand, foreign direct investment inflows can be influenced by various economic and non-economic factors. Non-economic determinants of foreign direct investment can be considered under governance indicators (quality of regulation, political stability, rule of law, etc.). According to the [3], good governance includes institutions and traditions in which authority in a country is driven. Various empirical studies have analyzed the effect of good governance on FDI. This study uses government effectiveness and political stability to see its effect on FDI. In addition, trade openness and workforce availability greatly influence investors' decisions to invest. However, there are differences in the results of previous research related to how the variables mentioned above affect FDI.

2. Theory, Literature Review, and Hypothesis

Based on the neo-classical investment theory, government policy is one of the main elements influencing investors' investment decisions [4]. Bouchoucha, N., Yahyaoui [5], in his research on the relationship between governance and foreign direct investment in African countries in 1996-2013, concluded that there is a positive relationship between government effectiveness and foreign direct investment in the economies of African countries. Drajat [6], in his research on the quality of government on foreign investment, concluded that government effectiveness did not influence the inflow of foreign investment in 10 ASEAN countries in 2009-2013.

According to the eclectic paradigm of [7], in developing countries, the flow of foreign direct investment still depends of them on political stability. Septiantoro et al [8] in their research on the effect of institutional quality on inflows of foreign direct investment in ASEAN in 2012-2016, concluded that political stability has a significant effect on foreign

direct investment. However. In research, [9] regarding ASEAN's competitiveness and foreign direct investment concluded that political stability did not significantly affect foreign direct investment in ASEAN in 2010-2020.

Based on research by [10] regarding the effect of trade openness on foreign direct investment in Vietnam from 2005-2019, it is concluded that trade openness has a significant positive effect on foreign direct investment in Vietnam. According to research by [11] regarding the effect of trade openness on foreign direct investment in ASEAN in 2005-2015, trade openness had a significant positive effect on foreign direct investment.

Based on research, [12] regarding the labour force and foreign direct investment in Vietnam from 1995-2018 concluded that the labour force positively and significantly influenced foreign direct investment in Vietnam. In addition, in research by [13] regarding the determinants of foreign direct investment in Bahrain from 1980-2013, it was concluded that the workforce positively and significantly influenced foreign direct investment.

2.1. Hypothesis:

It is suspected that government effectiveness, political stability, trade openness, and the workforce partially positively affected foreign direct investment in 10 ASEAN countries in 2015-2021.

It is suspected that government effectiveness, political stability, trade openness, and the workforce positively affect foreign direct investment in 10 ASEAN countries in 2015-2021 simultaneously.

3. Research Methods

The research was conducted using a quantitative approach. The data used is sourced from the World Bank. The analysis technique applied in this research is panel data regression analysis. This study uses the dependent variable, namely foreign direct investment, and the independent variable, namely government effectiveness, political stability, trade openness, and labour force. The scope of this research is 10 ASEAN countries in 2015-2021. The regression model applied in this study is as follows:

$$\text{LNFDI}_{it} = \beta_0 + \beta_1 \text{GE}_{it} + \beta_2 \text{PS}_{it} + \beta_3 \text{TO}_{it} + \hat{\alpha}_4 \text{LNAK}_{it} + e_{it}$$

Where:

LNIAL = LN Foreign Direct Investment (Million USD)

EP = Government Effectiveness(index)

SP = Political Stability (index)

KP = Trade Openness (Percent)

LNAK = LN Labor Force (Soul)

β_0 = Constant

β_1, \dots, β_4 = Regression Coefficient

e = Error Terms

Results and Discussion

3.1. Descriptive Statistical Analysis

This analysis explains the research results of a research object by providing a basic description of the research variables by looking at the average, middle, lowest, and highest values. The following are the results of the descriptive statistical analysis in this study:

TABLE 1: Results of Descriptive Statistical Analysis.

	FDI	EP	SP	KP	AK
Mean	15.641,893	0,223	-0,151	1,199	32,547,706
Median	7.432,572	0,203	-0,244	1,1	19,518,710
Maximum	120.439,465	2,325	1,616	3,383	136,201,932
Minimum	-4.845,359	-1,41	-2,066	0,33	204,352

Source: Eviews 10, 2023

Based on Table 1, the average (mean) FDI value of 10 ASEAN countries in 2015-2021 is 15,641.893 million USD. The median value is 7,432.572 million USD. The maximum (maximum) value is found in Singapore in 2019, which is 120,439.465 million USD, while the minimum or lowest value is in Thailand in 2020, which is -4,845.359 million USD.

According to the descriptive statistical analysis results, the average value (mean) of government effectiveness (EP) of 10 ASEAN countries in 2015-2021 is 0.223. The median value is 0.203. The maximum (maximum) value is in Singapore in 2020, 2.325, while the lowest (minimum) value is found in Myanmar in 2021, which is -1.41.

Based on the descriptive statistical analysis results, the average value (mean) political stability (SP) of 10 ASEAN countries in 2015-2021 is -0.151. The median value is -0.244. The maximum (maximum) value is in Singapore in 2017, which is 1.616, while the lowest (minimum) value is in Myanmar in 2021, which is -2.066.

Based on the descriptive statistical analysis results, the average value (mean) trade openness (KP) of 10 ASEAN countries in 2015-2021, namely 1,199. The median value is 1.1. The maximum (maximum) value is in Singapore in 2021, which is 3.383 or 338.3%, while the lowest (minimum) value is in Indonesia in 2020, which is 0.33 or 33%.

Based on the descriptive statistical analysis results, the average value (mean) labour force (AK) in 10 ASEAN countries in 2015-2021, namely 32,547,706. The median value is equal to 19,518,710. The maximum value (maximum) was found in Indonesia in 2020, equal to 136,201,932, while the lowest (minimum) value was found in Brunei Darussalam in 2015, equal to 204,352.

3.2. Panel Data Model Specification Test

This test determines the best model to use in this study. There are three-panel data models, Common Effects Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). Furthermore, three tests were carried out: the Chow test, the Hausman test, and the Lagrange Multiplier test.

TABLE 2: Panel Data Model Specification Test.

test	Prob	Decision
Chow	0.0000	FEM
Hausman	0.3459	BRAKE
Lagrange Multiplier	0.0000	BRAKE

Source: *Eviews 10, 2023*

3.3. Classic Assumption Test

3.3.1. Normality Test

Normality testing in this study was carried out using the Jarque-Bera method. Following are the results of the normality test in this study:

Based on the tests that have been carried out, the probability value of Jarque-Bera (0.120362) is greater than 5%, so it can be concluded that there is no normality problem.

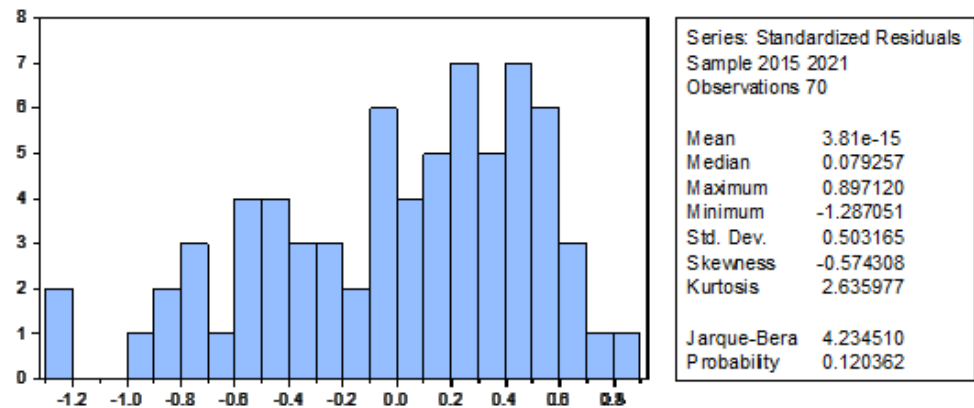


Figure 1: Normality Test Results. Source: Eviews 10, 2023.

3.3.2. Multicollinearity Test

Multicollinearity testing in this study is by testing the correlation coefficient between independent variables. The following are the results of the multicollinearity test in this study:

TABLE 3: Multicollinearity Test.

	EP	SP	KP	LNAK
EP	1.0000	0.7742	0.6650	-0.3419
SP	0.7742	1.0000	0.5851	-0.6381
KP	0.6650	0.5851	1.0000	-0.2769
LNAK	-0.3419	-0.6381	-0.2769	1.0000

Source: Eviews 10, 2023

Based on the test above, the value of the coefficient between the independent variables is less than 0.8, so it can be concluded that there is no multicollinearity problem.

3.3.3. Heteroscedasticity Test

Heteroscedasticity testing was carried out using the Glesjer method. Following are the results of the heteroscedasticity test in this study:

Based on the test above, the probability value of all independent variables is above 5%, so it can be concluded that there is no heteroscedasticity problem.

TABLE 4: Heteroscedasticity Test.

Variables	coefficient	Prob.
C	-0.016507	0.9795
EP	0.070842	0.4323
SP	-0.014481	0.8832
KP	0.000487	0.5953
LNAK	0.021588	0.5847

Source: Eviews 10, 2023

3.3.4. Autocorrelation Test

Autocorrelation testing was carried out using the Durbin-Watson method. The following are the results of the autocorrelation test in this study:

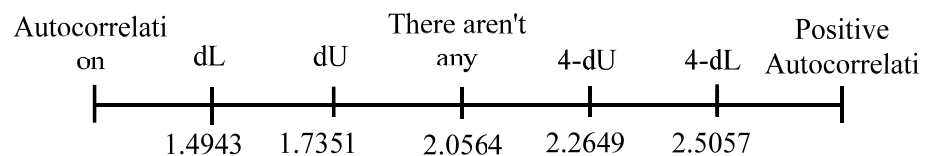


Figure 2: Normality test. Source: Eviews, 2023.

Based on the test above that the calculated value of 2.0564 lies between dU (1.7351) and 4 – dU (2.2649) so there is no autocorrelation problem.

3.4. Panel Data Regression Estimation Results

Based on the tests that have been done, the random effect model (REM) is the best regression model to apply. The following is the result of panel data regression estimation using the random effect model (REM) method:

Based on the estimation using the random effect model above, the regression equation is obtained as follows:

$$LNIALit = 9.237587 + 0.393507 EP + 0.096772 SP + 0.010598 KP^* + 0.726540 LNAK^*$$

Note: *Significant at $\alpha = 5\%$ or 0.05

3.5. Hypothesis test

TABLE 5: Estimation of Random Effects Model Regression.

Dependent Variable: LNIAL				
Method: Panel EGLS (Cross-section random effects)				
Date: 06/22/23 Time: 10:08				
Sample: 2015 2021				
Periods included: 7				
Cross-sections included: 10				
Total panel (balanced) observations: 70				
Swamy and Arora estimator of component variances				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	9.237587	1.672032	5.524766	0.0000
EP	0.393507	0.214013	1.838704	0.0705
SP	0.096772	0.199115	0.486012	0.6286
KP	0.010598	0.002318	4.571037	0.0000
LNAK	0.726540	0.100578	7.223627	0.0000
Effects Specification				
			S.D.	Rho
Cross-section random			0.450088	0.5734
Idiosyncratic random			0.388241	0.4266
Weighted Statistics				
R-squared	0.595590	Mean dependent var		6.958213
Adjusted R-squared	0.570704	S.D. dependent var		0.594693
S.E. of regression	0.389647	Sum squared resid		9.868606
F-statistic	23.93203	Durbin-Watson stat		2.056418
Prob(F-statistic)	0.000000			
Unweighted Statistics				
R-squared	0.894562	Mean dependent var		22.44803
Sum squared resid	17.46908	Durbin-Watson stat		1.161709

Source: Eviews, 2023

3.5.1. T-Test

The following are the results of the t-test in this study:

Based on the table above, it can be concluded that the effect of each independent variable on the dependent variable is as follows:

Government effectiveness only significantly affects foreign direct investment in the 10 ASEAN countries 2015-2021.

TABLE 6: T-test results.

Variable	Prob	Conclusion	Information
EP	0.0705	Accept H0	Not significant
SP	0.6286	Accept H0	Not significant
KP	0.0000	Reject H0	Significant
LNAK	0.0000	Reject H0	Significant

Source: Eviews, 2023

Political stability does not significantly affect foreign direct investment in the 10 ASEAN countries 2015-2021.

Trade openness significantly affects foreign direct investment in 10 ASEAN countries 2015-2021.

Labour force to foreign direct investment in 10 ASEAN countries 2015-2021.

3.5.2. F Test

The following are the results of the f-test in this study:

TABLE 7: F Test Results.

Df(k-1;n-k)	α	F-table	F-statistics	Prob.	Information
(4;65)	0.05	2.51	23.03203	0.00000	H0 is rejected

Source: Eviews, 2023

Based on the table above, the f-statistic obtained by 23.03203 is greater than the f-table of 2.51, so it can be concluded that government effectiveness, political stability, trade openness, and the workforce together influenced foreign direct investment in 10 ASEAN countries in 2015-2021.

3.5.3. Coefficient of Determination

Based on the regression estimation results, the coefficient of determination is 0.595590, which means that all independent variables (government effectiveness, political stability, trade openness and labour force) can explain variations in foreign direct investment of 59.55% and 40.45% explained by other variables.

3.6. Discussion

This study found that variable government effectiveness does not significantly affect foreign direct investment inflows in the 10 ASEAN Countries 2015-2021. This study's results align with research by Drajat (2022) that government effectiveness has no significant effect on foreign direct investment [6].

The insignificance of a variable does not mean that the independent variable does not influence the dependent variable. However, it is just that the sample in the study cannot prove the existing theory. In theory, government effectiveness makes it easy for investors to invest in a country to increase the value of foreign investment in that country. However, before making an investment decision, investors consider several factors. Corruption is one of the causes of ineffective government acceleration. The ineffective government allows bribery to occur by investors. This action can overcome the ineffectiveness of the government so that investors are not disturbed by the ineffectiveness of the government [6].

This study also found that political stability has no significant effect on foreign direct investment inflows in 10 ASEAN Countries from 2015-2021. This aligns with research conducted by Nairobi & Afif (2022) that political stability has no significant influence on foreign direct investment in ASEAN [9].

Good political stability greatly affects the entry of foreign investment into the country. If a country's political stability is unstable, this will affect investors' investment decisions. Sources of political instability, such as changes in government and laws and regulations, greatly affect the interest of investors [14]. In addition, political risks will arise due to unstable political conditions. High political risk will result in investors' doubts about investing. However, some investors consider political risk not too important in investing. This is because there is a political risk insurance guarantee that can guarantee the continuity of investment in the destination country. Therefore, political risk is no longer reviewed by investors before investing.

Trade openness in this study was found to have a significant influence on foreign direct investment inflows in 10 ASEAN Countries from 2015-2021. This aligns with research by [10] that trade openness significantly affects foreign direct investment.

For a country, trade openness can provide benefits in expanding market access to a wider area. The state of trade openness seeks to eliminate trade constraints and barriers to increase imports and exports. A country's trade balance is also influenced by trade openness [11]. For foreign investors, trade openness related to business has the following advantages: First, trade openness means they can easily import the necessary

supplies. Second, trade openness means foreign investors can export their products to the host country. Third, trade openness means the ease of export and import of their business partners, suppliers and buyers.

The workforce in this study was found to significantly influence foreign direct investment inflows in the 10 ASEAN Countries from 2015-2021. This aligns with research by Nguyen (2021) that the size of the labour force significantly influences foreign direct investment [12].

The labour force is one of the main factors of production. An increase in the number of workforce will have an impact on increasing production capacity. Increases in production capacity require a workforce, especially if the production process is labour-intensive. Labour-intensive production generally occurs in developing countries because one of the comparative advantages of developing countries is a large number of workers; large numbers of workers generally have relatively low wage rates, and wages are the main production cost for labour-intensive industries [3]. Investors will be very interested in investing their capital if production costs are low; thus, the higher the labour force will increase the amount of incoming investment. In addition, there is a need to improve the quality of the workforce from unskilled to skilled. This is because the quality of the workforce can help attract foreign investment into the host country [12].

4. Finding and Conclusion

Government effectiveness has no significant effect on foreign direct investment. This is because some investors commit acts that violate the rules, namely bribes, so some investors no longer need to see the effectiveness of the destination country's government. However, some investors are clean or do not take bribes. This indicates that the government must be able to increase its effectiveness, such as by making friendly policies or regulations for foreign investors.

Political stability has no significant effect on foreign direct investment. This can be due to political risk insurance so that some investors no longer see the political stability of the destination country. However, the government should still maintain conditions of political stability. This is because some investors still look at the political stability of a country before investing.

Trade openness has a significant effect on foreign direct investment. Therefore, the government can improve the quality of trade openness. In particular, it can be more oriented towards increasing trade openness towards export values and reducing the value of imported goods, encouraging the production and export of high-tech products.

The labour force has a significant effect on foreign direct investment. Therefore, the workforce must be given more attention; this is because the workforce is one of the factors that can determine the decisions of foreign investors. Improving the quality of the workforce through developing skills, education levels, and training the workforce to increase productivity.

5. Implications, Limitations, and Suggestions

In this study, it was found that the variables of government effectiveness and political stability did not have a significant effect on foreign direct investment. This needs to follow the existing theory, wherein the existing theory states that good governance (government effectiveness and political stability) greatly influences foreign direct investment inflows. So, this does not prove the hypothesis contained in this study.

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