

Do Institutional and Banking Cost Affect Investment in ASEAN?

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ABSTRACT

ASEAN is one of the actors in the world economy. With the launch of Forging Ahead Together, it is hoped that ASEAN can strengthen its economy and attract foreign investors to invest. The entry of large foreign investment into ASEAN is an opportunity for global investors. On the other hand, the factors that affect investment are from economic as well as non-economic. One important economic factor is banking costs because investment activities are inseparable from the presence of the financial sector which can cause costs and prices. Meanwhile, non-economic factors include institutional costs arising from the quality of a country's governance. This study uses a quantitative approach with panel regression analysis method to determine whether economic factors, namely bank costs or non-economic factors, affect the level of investment in ASEAN countries.

Keywords: ASEAN, Banking Cost, Institutional Cost

JEL Classification: G20, G21, G29

INTRODUCTION

The Association of Southeast Asian Nations (ASEAN) is one of the regional blocs to be reckoned with in political, economic and social terms. Founded in August 1967, ASEAN represents an economic bloc that generated USD 2.98 trillion (3.5% of Global GDP) in 2018 with a GDP growth rate of 4%-5% in the period 2011-2018. ASEAN GDP growth is above the world average growth in the 2011-2018 period (ASEAN, 2019). ASEAN as an economic bloc that is growing rapidly has become very attractive in the eyes of global investors. This is evidenced by the inflow of foreign investment of 154.7 billion USD in 2018, or 11.9% of the total world foreign investment. In addition, ASEAN is one of the regions that become global investors, contributing 69.6 billion USD, or 6.9% of the world's total investors (ASEAN, 2019).

Although ASEAN has become one of the important players in the world economy, ASEAN as one of the influential regional powers in the Southern Hemisphere is still able to develop its economy even more. With an economy of almost USD 3 trillion, investment of 11.9% is seen as still being able to be increased further by optimizing existing potentials and reducing barriers that can hinder investment inflows in the region. With the launch of the ASEAN Economic Community 2015 (AEC 2015) and ASEAN 2025: Forging Ahead Together as a continuation of AEC 2015, it is hoped that ASEAN can strengthen its economy and display an attractive image so that foreign investors want to invest in ASEAN.

Apart from the potential possessed by ASEAN, there are several problems faced by ASEAN member countries that hinder the entry of foreign investors. One of them is problems caused by non-economic factors, namely institutional/institutional problems, difficult and complicated bureaucracy, inadequate infrastructure, rigid labor market, tax regulations and labor salary problems (Urata & Ando, 2010; Ambashi, 2017). Even so, there are several studies that include several economic variables such as inflation (Abdul Hadi et al., 2018; Hoang & Goujang, 2018) and interest rates (Kaliappan, Khamis, & Ismail, 2015; Abdul Hadi et al., 2018; Sasana & Fathoni, 2019) to see the influence of economic factors on the entry of FDI (foreign direct investment) in the ASEAN region. Furthermore, it turns out that there have been several studies that looked at non-economic factors on FDI, one of which was Buchanan, Le, & Rishi (2012) which looked at the relationship between institutional quality and FDI using data from 164 countries and showed a significant effect. These results are reinforced by Kuzmina, Volchkova, & Zueva (2014) who conducted a study on the effect of governance quality and its effect on FDI in Russia and found that governance has a significant effect on FDI. Furthermore, studies conducted by Mathur & Singh (2013) and Karim, Karim, & Nasharuddin (2018) looked at the impact of corruption on FDI in 29 countries (Mathur & Singh, 2013) and ASEAN-5 (Karim, Karim, & Nasharuddin, 2018). The two studies show how countries with a low corruption perception index receive more FDI than countries with a higher corruption index. Of course, this is due to investor confidence in the government as a policy maker.

On the other hand, theoretically it is stated that the interest rate has an influence on investment decisions (Bano, 2018). Wuhan & Khurshid (2015) argue that the interest rate is one of the main factors for measuring macroeconomic conditions and changes in interest rates can influence investment decisions due to changes in the cost of capital. Therefore, the interest rate is one of the economic factors that is often used as a determinant variable of FDI. There are many studies that use interest rates, such as the study conducted by Cuyvers et al (2011) which examined the determinants of FDI in Cambodia; Singhania and Gupta (2011) in India; Faroh and Shen (2015) in Sierra Leone; Adhikary (2017) in South Asian countries (Bangladesh, India, Pakistan, Sri Lanka, and

Nepal; and Abdul Hadi et al (2018) in ASEAN countries. The above studies have mixed results on the effect of interest rates on FDI. This is in line with Bano (2018) which says that the effect of interest rates on investment has different results between studies conducted.

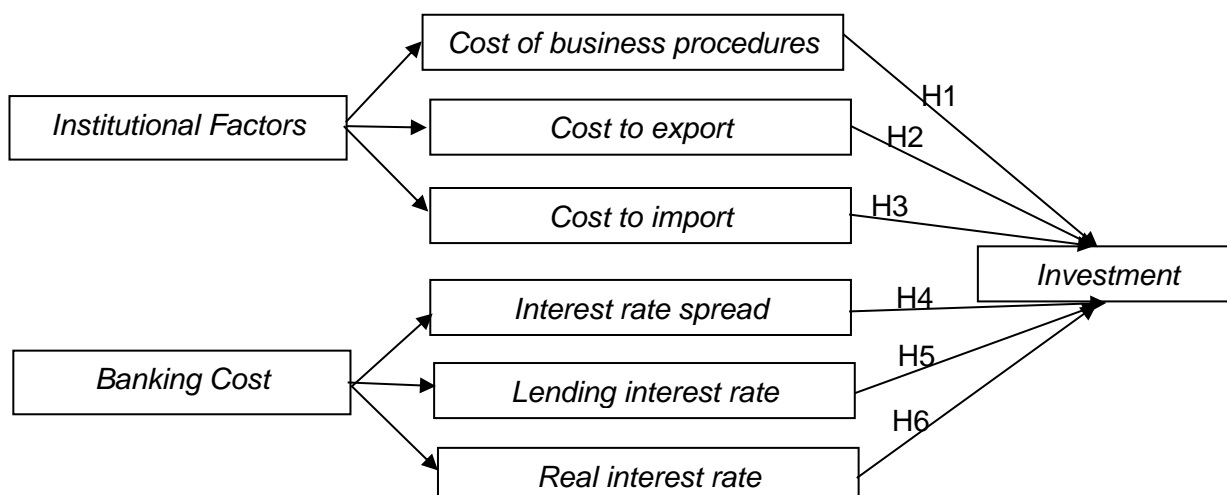
We are aware that investment is an important instrument in determining the level of development and even the welfare of a country. Low investment will affect the level of economic stability of a region and will directly impact the community where people will find it difficult to find work which will have an impact on poverty levels. This study focuses on comparing economic or non-economic factors that influence FDI in ASEAN. This research is expected to be able to contribute to the government in determining the strategy to increase investment by focusing on the most influential factors. So that in the future, investment will be more massive in ASEAN and will increase the level of development in each country in ASEAN.

LITERATURE REVIEW

Built based on investment theory as a basis for knowing the determinants of investment. Figure 1 shows the conceptual model used in this study. In the case of developing countries, the effect of institutional quality is not significant due to the weak institutional structure. In the study of Sabir et al., (2019) the positive relationship between institutional quality and FDI prevails in developed countries than in developing countries. Other research proves that the quality of institutions, especially in developing countries, because of the investment effect modulates economic growth from the FDI channel (Hayat, 2019). Research by Gani & Clemes (2015) shows that countries categorized as low and middle income have a better business environment. In his analysis, he revealed that success in reducing procedure costs when starting a business occurred in the case of Samoa compared to Pacific Island countries, thus creating a good and open business environment for investors. Therefore, the first hypothesis is:
H1. Business procedure costs affect investment

There are investment barriers, namely in terms of trade (trade barriers) in each country. Li et al., (2017) in their research reveal that the choice to export is not the best consideration for multinational companies due to high export costs that interfere with motivation for investment. The next hypothesis can be formulated as follows:
H2. Export costs affect investment

Figure 1. Conceptual Model



Source: Author, 2021

Furthermore, since 2014 the World Bank has included several variables such as export and import costs as practical trade barriers in a country. The advantages of openness arise from imports and investments in traded goods. The results of research from Choudri & Marasco (2013) and Do & Park (2020) show that reducing import costs (trade barriers) has an effect on a country's investment even though countries that depend on imports get smaller benefits from market openness. Thus, the next hypothesis is:

H3. Import costs affect investment

The interest rate spread is the difference between the interest received and the interest paid by the bank. Research conducted by Jimborean & Kelber (2017) shows that there is a significant relationship between the interest rate spread and FDI in Central and Eastern European countries. The hypothesis can be written as follows:

H4. Interest rate spread affects investment

Lending interest rate is one of the determinants that affect investment. The study conducted by Wei & Liu (2001) in Cuyvers et al. (2011) shows the economic relationship between FDI and the cost of borrowing (lending interest rate). In another study conducted by Gharaibeh (2015) showed a significant relationship between lending interest rates and FDI. Even so, there are studies that show that the influence of lending interest rates only has a partial effect, such as the study conducted by Adhikary (2017) which showed that of the five countries studied, only Sri Lanka had a significant relationship between the cost of borrowing and FDI. Abdul Hadi et al. (2018) examines the determinants of FDI by sector in ASEAN countries (extractive, manufacturing, assembly, and infrastructure) and shows that only the extractive sector shows a significant relationship between borrowing costs and FDI. Therefore, the hypothesis can be formulated as follows:

H5. Lending interest rate affects investment

The real interest rate is the interest rate that has included the element of inflation as a factor that erodes the purchasing power of money. A relatively low real interest rate will attract more financing along with incoming funds from FDI by providing a source of money that has low costs and a stable supply (Singhania & Gupta, 2011). Studies conducted to see the relationship between real interest rates and FDI have been carried out by eviş & amurdan (2007) who use data from developing countries and transition economies, Singhania & Gupta (2011) which focuses on India, Ebiringa & Emeh (2013) which focuses on in Nigeria, and Musyoka & Ocharo (2018) in Kenya. Of the several studies mentioned above, only Singhania & Gupta (2011) state that there is no relationship between real interest rates and FDI. While the other three studies show a significant relationship between the two. The hypothesis can then be formulated as follows:

H6. Real interest rate affects investment

RESEARCH METHOD

The type of data used in this study is quantitative data, while the source of data in this study is secondary data. Secondary data is a source of research data obtained by researchers indirectly through intermediary media. (Nur Atyka in Nur Indriantoro and Supomo, 2013). Secondary data is taken from the World Development Indicators.

In this study there are two types of variables, namely the dependent and independent variables. The dependent variable in this study is the cost of business start-up procedures (% of GNI per capita), cost to export, border compliance (US\$), cost to import, border compliance (US\$), interest rate spread (lending rate minus deposit rate, %), lending interest rate (%), real interest rate (%). while the independent variables in

this study are foreign direct investment, net inflows (% of GDP). Each operational definition of the variables used in this study.

Dependent variable:

- 1) Cost of business start-up procedures (% of GNI per capita) is the cost of registering a normalized business by presenting it as a percentage of gross national income (GNI) per capita.
- 2) Cost to export, border compliance (US\$) is the cost associated with compliance with economic customs regulations and with regulations relating to other inspections required for shipments to cross economic borders, as well as the time and cost of handling carried out in the country. port or border. Time and costs for this segment include time and costs for customs clearance and inspection procedures carried out by other government agencies.
- 3) Cost to import, border compliance (US\$) is the cost associated with compliance with economic customs regulations and with regulations relating to other inspections required for shipments to cross economic borders, as well as the time and cost of handling carried out in the country. port or border. Time and costs for this segment include time and costs for customs clearance and inspection procedures carried out by other government agencies.
- 4) Interest rate spread (lending rate minus deposit rate, %) is the interest rate charged by banks on loans to private sector customers minus the interest rates paid by commercial banks or similar banks for demand, time or savings deposits. However, the terms and conditions attached to these rates differ by country, limiting comparisons.
- 5) Lending interest rate (%) is the bank interest rate that usually meets the short- and medium-term financing needs of the private sector. These rates are usually differentiated according to the creditworthiness of the borrower and the purpose of the financing. However, the terms and conditions attached to these rates differ by country, limiting comparisons.
- 6) Real interest rate (%) is an inflation-adjusted loan interest rate as measured by the GDP deflator. The terms and conditions attached to loan interest rates differ by country, but limit their comparison.

Independent variable:

Foreign direct Investment (FDI) net inflows (%) are net inflows of investment to acquire a long-lasting management interest (10 percent or more of the voting rights) in a company operating in the economy other than the investor. This is the sum of equity capital, income reinvestment, other long-term capital, and short-term capital as shown in the balance of payments. This series shows the net inflows (new investment inflows minus disinvestments) in the reporting economy from foreign investors, and divided by GDP. The analytical method used in this research is panel data regression analysis, so the models used in this study are:

$$Y_{it} = \alpha_1 + \alpha_2 \text{Dummy_1}_i + \alpha_3 \text{Dummy_2}_i + \alpha_4 \text{Dummy_3}_i + \alpha_5 \text{Dummy_4}_i + \alpha_6 \text{Dummy_5}_i + \alpha_7 \text{Dummy_6}_i + \alpha_8 \text{Dummy_7}_i + \beta_2 x_1 \text{ }_{it} + \beta_3 x_2 \text{ }_{it} + \beta_4 x_3 \text{ }_{it} + \beta_5 x_4 \text{ }_{it} + \beta_6 x_5 \text{ }_{it} + \beta_7 x_6 \text{ }_{it} + u \text{ }_{it}$$

RESULTS

From the results of the model specification test, it is found that the most suitable model is the Fixed Effect Model (FEM) (Table 2 and 3). In addition, individual and time effects will be tested to ascertain the effect of bank units and time, namely between (1) the Individual Effects Model where the slope is constant, but there are variations in the intercept between individuals from 8 countries; and (2) a Time Effect Model where the slope is constant, but there are variations between time periods from 2015 to 2019. To test which assumptions are more appropriate, a hypothesis test for each assumption is

carried out using the technique of adding a dummy variable or Least Square Dummy Variable (LSDV).

Chow Test

Table 1. Chow Test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	40.464386	(7,26)	0.0000
Cross-section Chi-square	99.042229	7	0.0000

Based on the estimation results obtained the value of Prob (0.000) < (0.05). So H₀ is rejected, which means that the intercepts for all cross-section units are not the same, so the more suitable regression equation model is the Fixed Effect Model (FEM).

Hausman Test

Table 2. Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	20.454775	6	0.0023

With the help of Eviews obtained p value 0.0023 < 0.05. So H₀ is accepted, which means that the more suitable regression equation model is the Fixed Effect Model (FEM). So, it is found that the most suitable model is the Fixed Effect Model (FEM). In the time effect model (Table 1), what is taken into account is the effect of time (5 periods, namely 2015 to 2019) on FDI by involving 4 dummy variables representing the 5-time units. With the following equation:

$$Y_{it} = \lambda_0 + \lambda_1 \text{Dummy_2015} + \lambda_2 \text{Dummy_2016} + \lambda_3 \text{Dummy_2017} + \lambda_4 \text{Dummy_2018} + \lambda_5 \text{Dummy_2019} + \beta_2 x_1 i_t + \beta_3 x_2 i_t + \beta_4 x_3 i_t + \beta_5 x_4 i_t + u_{it}$$

Table 3. Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-49.53399	23.33845	-2.122420	0.0425
DUMMY_2016	-1.413389	2.532052	-0.558199	0.5810
DUMMY_2017	-0.304194	2.737584	-0.111118	0.9123
DUMMY_2018	-1.591333	2.784472	-0.571503	0.5721
DUMMY_2019	-0.421358	2.636237	-0.159833	0.8741
X1	-0.168976	0.068386	-2.470920	0.0196
LN_X2	34.09877	6.713390	5.079218	0.0000
LN_X3	-23.50616	3.984184	-5.899868	0.0000
X4	-0.761719	0.911466	-0.835707	0.4102
X5	0.580341	0.430993	1.346521	0.1886
X6	-0.202600	0.201642	-1.004748	0.3233
R-squared	0.695579	Mean dependent var		5.849540
Adjusted R-squared	0.590606	S.D. dependent var		7.693564
S.E. of regression	4.922640	Akaike info criterion		6.253983
Sum squared resid	702.7392	Schwarz criterion		6.718425
Log likelihood	-114.0797	Hannan-Quinn criter.		6.421911
F-statistic	6.626286	Durbin-Watson stat		0.353456
Prob(F-statistic)	0.000029			

Obtained p-value = 0.000029, meaning that with a significance level of 0.05 the model is declared fit or the regression equation describes the real situation. In the case of the analyzed data, it can be concluded that the value of FDI is influenced by changes in time in the period 2015 to 2019. So, from the two hypothesis tests above, it is found that the appropriate models are the Individual Effects Model and the Time Effects. Where the value of FDI is influenced by changes in cross section or individual changes (8 countries) and is influenced by changes in time. But based on the value of R², the effect of the time effect has an R² value of 0.6955, while the individual effect model has an R² value of 0.9738. This means that the effect of time on the overall impact does not change much, but has the most influential variables individually

The X1 variable in this study, namely the cost of business start-up procedures or the cost of starting a business, is included as a variable forming starting a business on the EoDB score. The cost of starting this business according to Bayraktar (2013) is one of the regulations set by the government that affects the interest of foreign investors to invest in their country. This is consistent with the results of this study that the cost of starting a business has a significant influence on FDI in ASEAN-8. In addition, the cost of starting a business, which includes taxes and user fees (fiscal factor) is also a more significant factor influencing FDI than financial factors such as interest rates (Ginevičius and imelytė 2011). Where, in this study it was also found that banking costs (variables X4, X5 and X6) were not significant in influencing FDI in ASEAN-8.

DISCUSSION

The results of this study are also strengthened by the results of the study of Contractor et al. (2020), that institutional regulation greatly affects FDI, this is because established institutional (government) policies show the quality of the government as well as the country. Thus, when foreign investors invest in countries with good institutional conditions, of course these foreign investors will be able to achieve more efficient costs.

ASEAN-8 with its various resources is certainly a destination for investors to invest. Investors will certainly choose a country that has policies that will make it easier for them to carry out their investment activities, including ease of transactions (exports and imports). Several studies such as research Babatunde (2011); Donghui et al. (2018); Liargovas and Scandalis (2012) found that FDI is strongly influenced by how a country responds to globalization through trade-openness. This is because trade-openness makes it easy for investors to sell their products abroad or get raw materials from abroad. In line with the results of this study, export costs (X2) and import costs (X3) have a significant effect on FDI in ASEAN-8 countries. Where export costs and import costs are a product of institutional regulations, such as the cost of starting a business (X1). According to Donghui et al. (2018), that the low cost of exporting and importing can increase the ease for investors to make technological transfers with other countries so that they will be able to increase their business productivity. In addition, this trade openness also provides a multiplayer effect on the economic growth of a country where trade liberalization is believed to be able to increase the demand for labor and have an effect on improving macroeconomic conditions of a country (Thanavelu, Ing, and Urata 2015).

CONCLUSION

Based on the results of the regression analysis, it can be concluded that non-interest factors such as costs to start a business, export costs, and import costs are factors that affect the level of investment in ASEAN-8. Meanwhile, interest rate factors such as interest rate spreads, loan interest rates and real interest rates have no significant effect

on FDI in ASEAN-8. This proves that foreign investment in ASEAN-8 is more influenced by institutional costs than interest (monetary) costs.

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DECLARATION OF CONFLICTING INTERESTS

The authors have no conflicts of interest to declare.

REFERENCES

- Abdul Hadi, A., Zafar, S., Iqbal, T., Zafar, Z., & Iqbal Hussain, H. (2018). Analyzing Sectorial Level Determinants of Inward Foreign Direct Investment (FDI) in ASEAN. *Polish Journal of Management Studies*, 7-17.
- Adhikary, B. (2017). Factors Influencing Foreign Direct Investment in South Asian Economies. *South Asian Journal of Business Studies*, 8-37.
- Ambashi, M. (2017). Asean as an FDI Attractor: How do Multinationals Look at ASEAN? Policy Brief Economic Research Institute for ASEAN and East Asia (ERIA), No. 2016-04.
- ASEAN. (2019). ASEAN Intergration Report 2019. The Asean Secretariat.
- Bano, S. (2018). The Dynamic Relationship between Real Interest Rate and Investment: An Empirical Analysis for Selected Pacific Island Countries. *International Journal of Economics and Financial Issues*, 131-141.
- Buchanan, B., Le, Q., & Rishi, M. (2012). Foreign Direct Investment and Institutional Quality: Some Empirical Evidence. *International Review of Financial Analysis*, 81-89.
- Choudri, E., & Marasco, A. (2013). Heterogeneous Productivity and the Gains from Trade and FDI. *Open Economies Review*, 339-360.
- Cuyvers, L., Soeng, R., Plasmans, J., & Van Den Bulcke, D. (2011). Determinants of Foreign Direct Investment in Cambodia. *Journal of Asian Economics*, 222-234.
- Do, M., & Park, S. (2020). Improving Agricultural Export Policies in Developing Countries: An Application of Gravity Modelling in the Case of Vietnam's Fishery Export. *Agris on-line Papers in Economics and Informatics*, 15-27.
- Faroh, A., & Shen, H. (2015). Impact of Interest Rate on Foreign Direct Investment: Case Study Sierra Leone Economy. *International Journal of Business Management and Economic Research*, 124-132.
- Gani, A., & Clemes, M. (2015). Business Environment and Investment Potentials in Selected Pacific Island Countries. *The Journal of Developing Areas*, 69-87.
- Hayat, A. (2019). Foreign Direct Investment, Institutional Quality, and Economic Growth. *The Journal of International Trade and Economic Development*, 1-20.
- Hoang, H., & Goujon, M. (2019). Determinants of Intra-Region and Extra-Region Foreign Direct Investment Inflow in ASEAN: A Spatial Econometric Analysis. *Applied Spatial Analysis*, 965-982.
- Kaliappan, S., Khamis, K., & Ismail, N. (2015). Determinants of Services FDI Inflows in ASEAN Countries. *Int Journal of Economics and Management*, 45-69.
- Karim, B., Karim, Z., & Nasharuddin, M. (2018). Corruption and Foreign Direct Investment (FDI) in ASEAN-5: A Panel Evidence. *Economics and Finance in Indonesia*, 145-156.
- Kuzmina, O., Volchkova, N., & Zueva, T. (2014). Foreign Direct Investment and Governance Quality in Russia. *Journal of Comparative Economics*, 874-891.
- Li, X., Chang, H. L., Su, C., & Dai, Y. (2017). Does Foreign Direct Investment Promote Exports in China? *China Finance Review International*, 185-202.
- Mathur, A., & Singh, K. (2013). Foreign Direct Investment, Corruption and Democracy. *Applied Economics*, 991-1002.

- Sabir, S., Rafique, A., & Abbas, K. (2019). Institutions and FDI: Evidence From Developed and Developing Countries. *Financial Innovations*, 1-20.
- Sasana, H., & Fathoni, S. (2019). Determinant of Foreign Direct Investment Inflows in ASEAN Countries. *JEJAK Journal of Economics and Policy*, 253-266.
- Singhania, M., & Gupta, A. (2011). Determinants of Foreign Direct Investment in India. *Journal of International Trade Law and Policy*, 64-82.
- Urata, S., & Ando, M. (2010). Study of Investment Climate of ASEAN Member Countries in Toward A Competitive Single Market: Sectoral Analysis. *Economic Research Institute for ASEAN and East Asia*.
- Wuhan, L., & Khurshid, A. (2015). The Effect of Interest Rate on Investment; Empirical Evidence of Jiangsu Province, China. *Journal of International Studies*, 81-90.