



Determinants of Private Investment in Asean 5

Andi Nur Ilham, Retno Fitrianti

Hasanuddin University, Makassar, Indonesia
icame.unhas.ac.id

Abstract. This study analyses the determinants of private investment in five ASEAN countries, namely Indonesia, the Philippines, Malaysia, Thailand and Vietnam. This study incorporates corruption perception index variables that are rarely analysed comprehensively in the ASEAN context, especially in Indonesia, the Philippines, Malaysia, Thailand and Vietnam. The variable used is Foreign Direct Investment (FDI) as the dependent variable (Y), with independent variables, GDP (X1), interest rates (X2) and corruption perception index (X3). The data used in this study are secondary data obtained from various official sources during a certain period u. The analysis method used is panel data regression in 5 ASEAN countries from 2007-2022 to determine the effect of independent variables on FDI. Based on the estimation results, it can be concluded that simultaneously the GDP variable and the corruption perception index have a significant effect on the private investment variable in 5 ASEAN countries from 2007-2022. Partially, the interest rate variable has no significant effect on private investment in ASEAN 5.

Keywords: FDI, GDP, Interest Rate and Corruption Perception Index

1 Introduction

The Association of Southeast Asian Nations, or ASEAN, was founded in Bangkok on August 8, 1967. Indonesia, Malaysia, Singapore, Thailand, the Philippines, Laos, Cambodia, Brunei Darussalam, Vietnam, and Myanmar are among its ten member nations. With the goal of promoting regional economic growth, social advancement, and cultural development via cooperative endeavors based on equality and goodwill, ASEAN was established to encourage collaboration among these countries. By encouraging active collaboration and mutual aid across the economic, social, technological, scientific, and administrative spheres, the organization hopes to create a successful and peaceful Southeast Asian community while ultimately working toward common objectives. ASEAN has established long-term objectives, including the ASEAN Economic Community (AEC), which aims to facilitate the free movement of goods, services, investments, skilled labor, and overall economic integration capital.

According to UNCTAD (2021), foreign direct investment (FDI) is a vital element of a country's balance of payments. FDI denotes foreign investment characterized by long-term ownership and control by foreign investors, excluding investments made in the stock market. There are two categories of FDI: inward and outward FDI. Inward FDI refers to the total direct investment made by non-resident investors in the home

country. Conversely, outward FDI captures the value of direct investments made by residents in other countries. Inward direct investments, also known as direct investment in the home country, encompass all assets and liabilities of the company and include transfers between resident and non-resident companies. Outward direct investment pertains to investments made abroad, which include purchasing assets and liabilities that are transferred across borders, along with transfers between resident and non-resident enterprises. Outward direct investment is commonly referred to as overseas direct investment.

Today's developed and emerging nations might be considered to understand and evaluate one other's economic development. Capital flows are essential to the implementation of economic development plans in both developed and developing nations. The amount of capital that any nation in the world need varies according to its features, whether it is a developed or developing nation. Compared to emerging nations, developed nations require a comparatively less influx of cash to operate their economic policies. This condition arises because, in comparison to developing countries, industrialized countries have better supporting forces. Technology and infrastructure are examples of the supporting elements. According to economic development metrics, practically every developing nation in the globe lags behind wealthy nations. As a result, a significant amount of capital is required to propel economic development in developing nations and enable them to catch up to established nations.

Table 1. Investment Development in ASEAN Countries 5

Year	Indonesia	Philippines	Malaysia	Thailand	Vietnam
2018	1890982604	9948598823	8304480742	1374721981	1550000000
2019	2499355174	8671365873	9154921685	5518708214	1612000000
2020	1917507774	6822133290	4058769679	4947474466	1580000000
2021	2121308032	1198336332	2024515732 7	1515877377	1566000000
2022	2470202970	9492234668	1472597043 2	1123191601	1790000000

Source; World Bank, 2024

Investment development in five ASEAN countries (Indonesia, Philippines, Malaysia, Thailand and Vietnam) has a positive trend from 2018-2022. Indonesia experienced a significant increase in investment each year with the highest figure in 2022 amounting to 2470202970 as well as the Philippines investment development has shown consistent investment growth from 2018-2022. Malaysia's investment development experienced fluctuations in 2020 and slowly began to increase from 2021-2022. Thailand shows relatively stable investment growth with a slight significant increase in 2022 compared to the increase in investment in 2021. Vietnam experienced a significant increase in investment from 2018 which showed the highest increase in 2022. Overall, the five ASEAN countries (Indonesia, Philippines, Malaysia, Thailand and Vietnam) show a positive trend in investment growth.

Aspar, M. et al. [1] The findings of this study, which indicate that GDP has a positive and negligible impact on FDI in ASEAN nations, conflict with those of Fajar & Rudatin's research. [2] The study's findings are consistent with research by Melegy, which found that GDP significantly and favorably influences foreign direct investment in the ASEAN country region. [3] The findings demonstrated that private investment in Egypt is positively impacted by real gross domestic product.

Interest rates significantly and favorably affect private investment in ASEAN nations, according to research by Alkautsar and B [4] and Fitrianti [5]. The findings of this investigation are consistent with those of other studies. According to Pratiwi (2022), real interest rates significantly hampered foreign direct investment inflows into ASEAN nations. The findings of this study contradict those of a study by Fajar & Rudatin [2] that concluded interest rates had no bearing on foreign direct investment in ASEAN nations. Interest rates significantly and favorably affect foreign investment, according to Barorah et al.

Wilantari and associates, According to the study's findings, which are consistent with those of Alkautsar and B's research, the CPI significantly and favorably influences foreign direct investment in three ASEAN nations [4]. discovered that in five ASEAN nations, corruption significantly and favorably affects private investment. Additionally, this finding aligns with that of [6]. discovered that FDI is significantly impacted by the corruption perception index. Santoso's research [7] is not consistent with this study. Corruption control has a significant positive impact on FDI inflows. Jetin et.al [7] found that CPI has no effect on FDI. In addition to these studies, the *grabbing hand* theory and the *helping hand* theory explain that CPI or corruption can be an obstacle or a helper for investors to invest.

2 Methods

With a cross-section of five ASEAN nations—Indonesia, the Philippines, Malaysia, Thailand, and Vietnam—and a time series spanning 2007–2022, panel data was employed in this study. Transparency International, Country Economy, and the World Bank are the sources of the data. The analysis tool makes advantage of panel data regression. This panel data technique uses three estimations: REM (Random Effect Model), FEM (Fixed Effect Model), and CEM (Common Effect Model). The best model for this study was identified using the Chow, Hausman, and Lagrange multiplier tests. The F and t tests were also used to partially and concurrently assess the regression coefficient [8].

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + e_{it}$$

Description

Y : Private Investment

β_0 : Constant

$\beta_{1,2,3}$: Coefficient

X_1 : GDP

X_2 : Interest Rates

X_3 : Corruption Perception Index

e : Error (5% = 0.05)

i : Number of observations (cross section), namely 5 ASEAN countries

t : Number of time series data (2007-2022)

3 Results and Discussion

The research was conducted from 2007 to 2022 with a total of 80 observations. The panel data model used is REM.

Table 2. Chow Test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	5.259539	(4,72)	0.0009
Cross-section Chi-square	20.507485	4	0.0004

In the table

With a probability value of 0.0000, the estimation results are shown in table 1. Using the 5% (0.05) significant level, it is determined that the probability value is less than the alpha 5% (0.05) or significant, indicating that H0 is rejected and that REM is the proper model.

Table 3. Husman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob
Cross-section random	9.485673	3	0.0235

With a significance level of 5% (0.05), the estimation results in Table 2 show a probability value of 0.023. Since the probability value is less than the alpha value of 5% (0.05) or significant, it can be said that H0 is rejected and that the REM model is being used.

Table 4. Statistical Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	20.71781	0.903486	22.93098	0.0000
X1	-0.120131	0.047492	-2.529495	0.0135
X2	0.050119	0.042239	1.186547	0.2391
X3	0.054925	0.019037	2.885167	0.0051
R-squared	0.093975			
F-statistic	3.731342			
Prob(F-statistic)	0.014692			

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + e_{it}$$

$$Y = 20.71781 - 0.120131 + 0.050119 + 0.054925 + e$$

F test . Since the f-statistic value of 0.014 is less than the alpha 5% H0 rejected, according to the study's data processing results using Eviews, the independent variables GDP (X1), interest rates (X2), and the Corruption Perception Index (X3) all have an impact on the dependent variable Y, which is private investment in the ASEAN 5 countries (Indonesia, Philippines, Malaysia, Thailand, and Malaysia), at the same time.

T test . With a statistical t value of -2.529 and a prob value of 0.013 <0.05, the GDP variable (X1) is considered to have a substantial impact on private investment. Since the interest rate variable (X2) has a statistical t value of 1.186 and a prob value of 0.239>0.05, it can be said that private investment is not significantly impacted by the interest rate variable. It is possible to conclude that the Corruption Perception Index variable (X3) has a significant impact on private investment because it has a statistical t value of 2.885 and a prob value of 0.005 <0.05.

Coefficient of determination . According to the results of the regression, the coefficient of determination is 0.093975, which means that 93.97% of the variation in the private investment variable (Y) can be explained by the variation of the independent variables, specifically the GDP level (X1), interest rates (X2), and the

Corruption Perception Index (X3). The remaining 6.03 can be explained by factors that are not included in the model.

4 Discussion

The findings of this study are consistent with studies by Fajar & Rudatin [10], which found that GDP significantly influences private investment. The results of this study, which found that GDP has a positive and significant effect on FDI in the ASEAN country region, are likewise consistent with Melegy's research [3]. The findings demonstrated that private investment in Egypt is positively impacted by real gross domestic product. The findings of this study contradict those of a study by M. Aspar et al. [1], which indicated that FDI in ASEAN 5 countries is positively and marginally impacted by GDP.

Considering the outcomes of the data processing Private investment is unaffected by interest rates. The findings of this study are consistent with research by Fajar & Rudatin [2], which concluded that interest rates have little bearing on foreign direct investment in ASEAN nations. The study's findings contradict those of a study by Barorah et al., which indicated that interest rates significantly and favorably affect foreign investment. Contrary to studies by Alkautsar and B [4] and Fitrianti [5], which discovered that interest rates significantly and favorably influence private investment in ASEAN nations The findings of this investigation are consistent with those of other studies by Pratiwi [11] found that real interest rates proved to have a significant negative effect on FDI inflows in ASEAN 5 countries.

According to data processing findings, private investment in five ASEAN nations—Indonesia, the Philippines, Malaysia, Thailand, and Vietnam—is significantly impacted by the Corruption Perception Index. The findings of this investigation are consistent with those of Wilantari et al. [12] The findings demonstrated that in three ASEAN nations, the CPI significantly and favorably influences foreign direct investment. The findings of this investigation are consistent with those of studies by Alkautsar and B [4] discovered that in five ASEAN nations, corruption significantly and favorably affects private investment. This study is also consistent with those of Asbullah et al. [6] discovered that FDI is significantly impacted by the corruption perception index.

5 Conclusion

According to the estimation results, the private investment variable in ASEAN 5 nations from 2007 to 2022 is significantly impacted by both the GDP variable and the corruption perception index at the same time. In part, private investment in ASEAN 5 is not significantly impacted by the interest rate variable.

References

1. M. Aspar, Andi, Muh. Syarif, and Rosnawintang Rosnawintang, "Analysis of Determinants of Foreign Direct Investment (FDI) in ASEAN Countries," *Journal of Economic Development Progress (JPEP)* , vol. 5, no. 2, p. 83, 2020.
2. Fajar Nurbani Aslam and Ari Rudatin, "Analysis of Determinants of Foreign Direct Investment (FDI) Flows in the ASEAN Region," *Journal of Economic and Financial Policy* , vol. 1, no. 2, pp. 205-211, 2023.
3. Sahar Aboud Melegy and Asmaa, "Macro Determinants of Private Investment in Egypt: A Co-Integration Approach," 2024.
4. Putra Alkautsar and Syamsul Amar B., "Open Access The Effect of Macroeconomic Variables, Global Competition and Corruption on Private Investment in ASEAN+5 (Regional Comprehensive Economic Partnership)," no. 08, pp. 46-56, 2021.
5. Retno Fitrianti, *Indonesian Economy Today and Tomorrow Determinants of Private Investment in Indonesia (An Empirical Review)* , ed. Anas Iswanto et al. Unhas Press, 2023.
6. Muhamad Huzaifah Asbullah, Mohd Shahidan Shaari, Noorazeela Zainol Abidin, and Siti Nor Junita Mohd Radzi, "Determinants of Foreign Direct Investment (FDI)," *International Journal of Academic Research in Economics and Management Sciences* , vol. 11, no. 3, pp. 151-168, 2022.
7. Bruno Jetin, Jamel Saadaoui, and Haingo Ratiarison, *22 Asia in Transition The Effect of Corruption on Foreign Direct Investment at the Regional Level: A Positive or Negative Relationship?* Springer Nature Singapore, 2024. http://dx.doi.org/10.1007/978-981-99-9303-1_3 .
8. Abotaleb Kazemi Zahra Arabi, "The Effect of Government Spending on Private Investment in Iran during the Period 1341-1389," 2014.
9. D. N. Gujarati, *Fundamentals of Econometrics, Fifth Edition* . Jakarta: Salemba Empat, 2013. Translated by R. C. Mangunsong.
10. Rusdianti, "ANALYSIS OF FACTORS AFFECTING PRIVATE INVESTMENT IN INDONESIA 2008-2022," 2024.
11. Dwi Resti Pratiwi, "Analysis of Determinants of Foreign Direct Investment in ASEAN," *Journal of Budget: State Financial Issues and Problems* , vol. 5, no. 1, pp. 47-66, 2022.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

