

The Relationship Between Government Stability and Foreign Investment for Selected Asean Countries

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ABSTRACT

The current paper investigates the relationship between government stability and foreign direct investment for nine selected ASEAN countries. Based on the panel data analysis, it is identified that political stability, government effectiveness, and control of corruption are significant in explaining foreign direct investment while regulatory quality and rule of law are not. With the exception to government effectiveness, the remaining government stability variables that are significant show positive relationship with the inflow of capital where an increase in political stability and control of corruption lead to a higher level of foreign investment. The economic growth which is represented by the Gross Domestic Product is also identified to be a vital determinant of foreign investment. From the results, it is clear that government stability is an important factor in attracting foreigners to invest in the domestic markets of ASEAN and should not be taken lightly by the policymakers. Any adverse movement in government stability may disrupt foreign investment and ultimately affecting the economy.

INTRODUCTION

Foreign direct investment or simply known as FDI contributes significantly to the economic development of a nation. Melynk et al. (2014) for example believes that FDI is detrimental in stimulating the economic growth of host countries, especially for capital-scarce developing countries since FDI boost the

transfers of technology from developed markets. Based on the Catch-Up Effects on the Theory of Capital Deepening, Melynk et al. (2014) said that FDI that flows into a country will benefit local firms as they receive competitive advantage due to the application of new information, practice and method of production as well as management. The increase in productivity to the adaptation of new technology and management will ultimately enhance income and growth per capita.

Another explanation of the impact of FDI on economic growth is described by the Theory of Capital Widening. According to Tintin (2010), it is expected that FDI will lead to an increase in the stocks of physical capital in the host countries. By referring to the Solow (1956) growth model, the increase in physical capital that is fuelled by FDI will increase income per capita both in the short and long-run for the host country¹.

Previous researchers have identified that the volume of FDI is influenced by macroeconomic factors. Hoang and Bui (2015) for example conducted a study for ASEAN countries and identified that macroeconomic factors such as market size, economic liberalization, infrastructure, real interest rate, and exchange rate policy are found to have a significant impact on FDI inflows. This is similar to the analysis conducted by Tripathi et al. (2015) who also found significance in the relationship between market size, trade openness, interest rate, profitability and inflation towards the level of FDI in India.

Recent studies have also pointed out that foreign direct investment can be influenced by institutional factors. Karau and Mburu (2016) for example believes that control of corruption,

as well as the rule of law, are important in attracting foreign investors to invest in countries in Africa. Kurul and Yalta (2017) meanwhile identified that the lessening in the length of corruption and bureaucracy, positive development in the political atmosphere, and transparency and accountability among politicians contribute to the increase in foreign investment for developing markets.

Despite the growing significance of FDI on the economic development of ASEAN, there are limited researchers that have been conducted to identify how FDI can be influenced by institutional factors in this part of the world. Researchers that have conducted the study in the region covers only small parts of the institutional factors. Hoang and Bui (2015) for example examine the impact of political stability and institutional quality only while Bayar and Alakbarov (2016) are focusing on the aspect of the corruption control and rule of law. The other aspects of institutional factors, such as institutional accountability, absence of violence/terrorism and effectiveness of the government, are left unchecked yet may present to be significant in influencing FDI in the region.

It is both interesting and important to establish the relationship between the two considering the apparent movement of institutional factors in the region that may influence the influx of foreign investment. As can be seen from Figure 1, Singapore is leading the list in terms of FDI as a percentage of GDP and followed by Cambodia while the rest of the ASEAN countries experience FDI that is lower than 10 percent of the GDP throughout the years. The FDI is seen to exhibit a sudden drop in 2008 due to the financial crisis.

¹ Solow (1956) said that the increase in income per capita will then lead to the economic growth as long as the market is in the state of diminishing returns to capital.

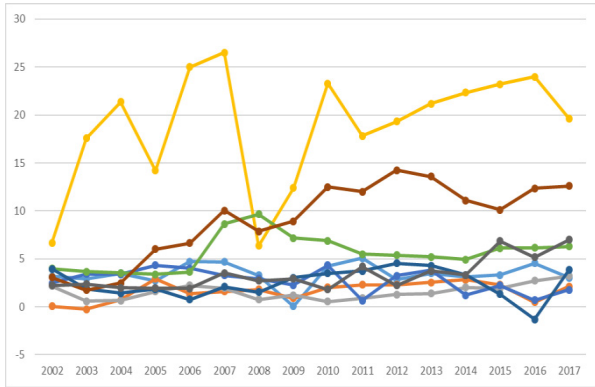


Figure 1 FDI as percentage of GDP

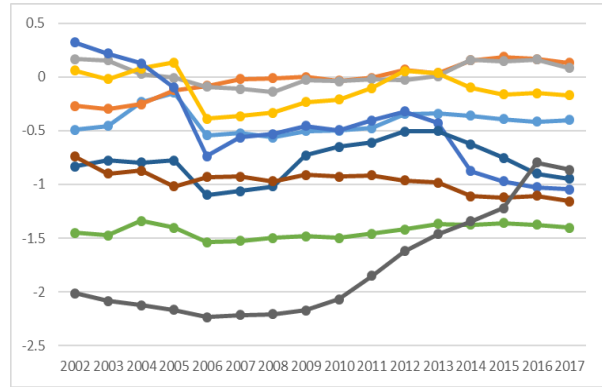


Figure 2 Voice and accountability

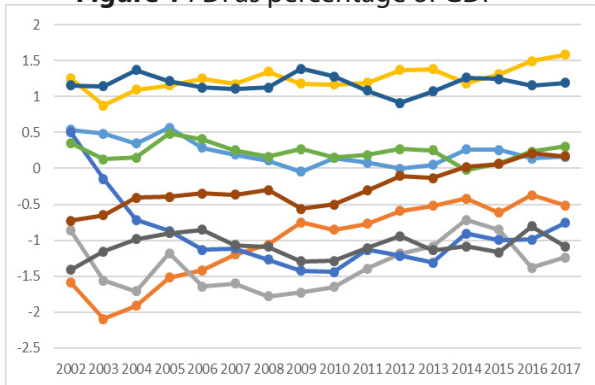


Figure 3 Political Stability

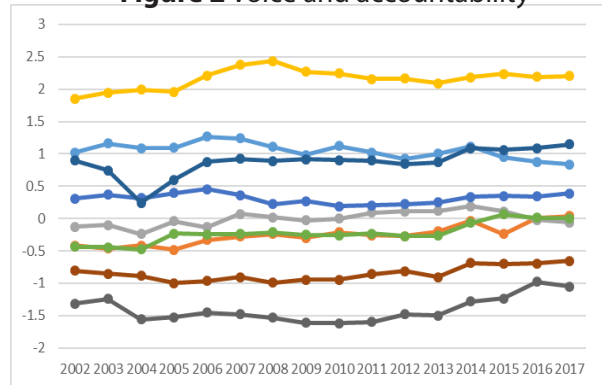


Figure 4 Government effectiveness

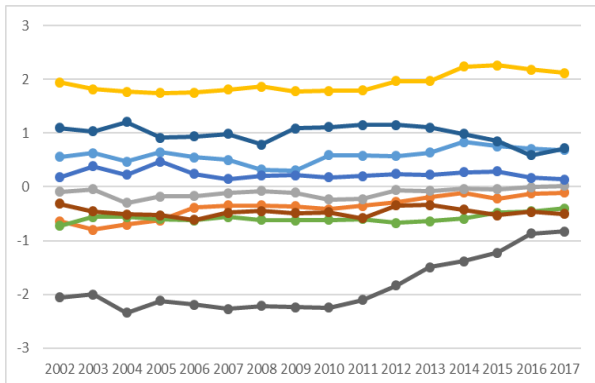


Figure 5 Regulatory quality

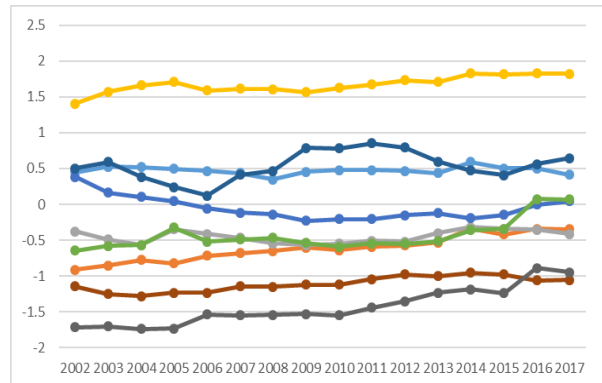


Figure 6 Rule of law

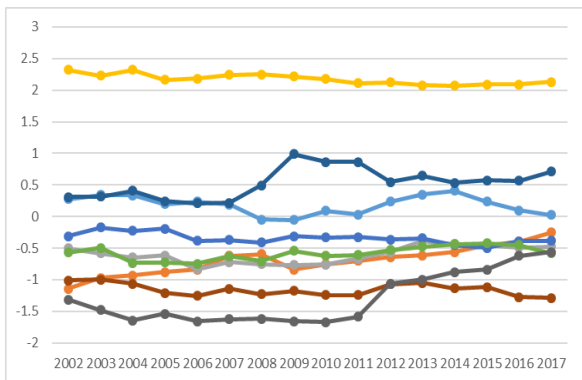
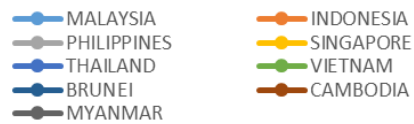


Figure 7 Control of corruption



Source: Worldwide Governance Indicators, 2019 Update

From Figures 2 to 7, it is also apparent that Singapore enjoys significantly higher institutional quality in the aspect of political stability, government effectiveness, regulatory quality, rule of law and corruption regulation. The other ASEAN countries meanwhile are left behind with little sign of development in the factors and closing the gap. Myanmar has the lowest rate in the indexes, and this is as expected since the country just moved back to democracy in 2012 from years of military-backed ruling and suffers from public unrest and humanitarian issues such as the Rohingya crisis.

The current paper contributes to the existing literature in two ways. First, it examines the impact of institutional factors towards FDI by focusing on the institutional determinants published by the Worldwide Governance Indicator. Second, the current paper utilizes panel data analysis to investigate the relationship between the variables, a method of analysis that is scarcely used to investigate the impact of institutional quality on FDI in the region. Apart from contributing to the body of knowledge, this study is also significant since the findings can be used as input to construct relevant policies in the region.

The organization of the current paper is as follows: Section 2 provides the review on previous literature by focusing on the discussion towards the relationship between institutional factors and FDI. Section 3 meanwhile discusses the variables of interest as well as methods used to establish the relationship. The empirical findings are discussed in Section 4 while Section 5 concludes the study.

LITERATURE REVIEW

In East African countries, Karau and Mburu (2016) conducted a study to investigate the connection between foreign investment with institutional, governance and economic factors over the period of 1996 until 2010. Based on

the Fixed Effects Model of regression, Karau and Mburu (2016) said that the institutional factors namely rule of law, corruption control, and infrastructure are positively related to the inflows of FDI except for political stability that has a negative association. However, Karau and Mburu (2016) explained that the negative relationship between political stability and FDI happen because of the existence of multicollinearity as there is an apparent relationship between political stability and corruption. Meanwhile, the findings of this study corroborate the Theory of Institutional FDI Fitness where it is believed that the level of attractiveness of a market to draw foreign investment is determined by the institutions, policies, and implementation. Based on this theory, the level of investment can be intensified as the obstacles faced by investors are reduced.

Based on 20 years of information retrieved from over 100 developing markets, Kurul and Yalta (2017) revisit the relation between institutional quality and flows of foreign investment. By employing a dynamic panel method, Kurul and Yalta (2017) demonstrate that not all indicators of institutional qualities can influence foreign investor's decision in emerging economies. This is however with the exception to the effectiveness of the authority, corruption regulation, and voice and accountability that have a positive relationship with FDI inflows. Kurul and Yalta (2017) added that the enhancements in the political system, the fall in the level of corruption and the length of bureaucracy, and transparency and accountability may improve the level of attractiveness of a particular market and entice the investors to invest more into the emerging economies.

Using annual data from 2002 until 2012, Peres et al. (2018) estimate the influence of institutional quality on inflows of investment. The 110 countries were separated into 41 developed countries and 69 developing

countries based on the features given by the World Economic Situation and Prospects 2014. For developed countries, the OLS regression results indicate that governance has a positive relationship with FDI inflows along with the strong control of corruption and stability of the rule of law. This implies that the improvement of institutional quality and together with sound macroeconomic environment will increase the inflows of investment. However, the situation is different for the emerging markets where good governance is not significant in attracting FDI due to the existence of other institutional problems such as poor control of corruption and rule of law. Peres et al. (2018) argue that institutional quality in emerging economies is not strong enough to improve the attractiveness of the markets for foreign investment.

Abdella et al. (2018) meanwhile analyze the influence of corruption, market liberalization, and political stability on foreign investment inflow in BRIC countries over the period of 2002 until 2016 by using Fully Modified OLS (FM-OLS) model. By referring to the results, Abdella et al. (2018) demonstrate that political stability and trade openness play an important role in attracting FDI while corruption has no significant effect². To explain the insignificant relationship between corruption and FDI inflows, Abdella et al. (2018) argue that it happens because foreign investors are more confident to invest in the BRIC markets by considering two other factors, namely the vast population of the BRIC markets and the steady economic returns, irrespective of the differences in the corruption levels.

ASEAN

The study conducted by Karim et al. (2012) aims to identify the influence of institutional quality on FDI inflows in Malaysia over the period of 1984 until 2009 by using the bound testing

² Alshammari et al. (2015) believe that this is because liberalization stimulates international investors to set up operations in the host market as there is a huge chance to export products from the market and gain competitive advantage internationally.

approach of the ARDL model. Five political risks consist of law and order, investment profile, government stability, corruption control, and the length of bureaucracy act as independent variables. Based on the findings, Karim et al. (2012) said that there was a positive and significant long-run relationship between corruption, government stability, and bureaucracy on the influx of investment into Malaysia. Meanwhile, bureaucracy and governmental stability have a positive and significant short-run relationship on Malaysia's FDI inflows.

Hoang and Bui (2015) analyze factors that explain the inflows of investment in six ASEAN countries that consist of Vietnam, Indonesia, Malaysia, Philippines, Singapore, and Thailand in the period 1991 until 2009 by using panel data method named Feasible Generalized Least Squares (FGLS). The macroeconomic factors such as the size of the economy, liberalization, infrastructural quality, real interest rate, and exchange rate policy are identified to be impacting FDI inflows except for inflation rate. Political stability and institutional quality meanwhile share a strong positive relationship with investment inflows. This means that greater political stability will encourage FDI flows to the region. Hoang and Bui (2015) also believe that good control of corruption helps to raise the quality of an institution, reduce unofficial costs, and thus improve the investment environment.

Studying the impact of governance in attracting foreign investment across provinces in Vietnam from 2006 until 2014, Doan and Lin (2016) utilizes the panel data analysis. Based on the Random Effects model, Doan and Lin (2016) argue that foreign enterprises are willing to invest in the regions or provinces whereby they can easily access necessary information at lower costs, spend less time on bureaucratic compliance and receive incentive support from local governance. In other words, the results show that FDI attraction is correlated with economic governance when governance is measured from private sector perceptions.

Investigating the interaction between corruption and FDI, Bayar and Alakbarov (2016) uses the data for 23 developing countries from 2002 until 2014. Based on the cointegration analysis, corruption control and rule of law are not significant in influencing investment inflows into the local economies across all data panel. However, the individual cointegrating coefficients indicate that corruption control has a negative impact while the rule of law has a positive impact on FDI inflows in Indonesia. Positive relationship meanwhile existed between control of corruption and FDI inflows in the Philippines. Malaysia and Thailand on the other hand exhibit insignificant impact of both corruption and rule of law.

On the other hand, Quah (2010) conducted a comparative analysis of trust and governance in the Philippines and Singapore. Quah (2010) argue that the higher trust level and governance in Singapore can be explained by its effective political leadership and succeeded in curbing corruption. While Philippines have a lower level of trust and governance due to the shabby political environment as well as the inability of the political leaders in the country to execute effective battle against corruption³.

METHODOLOGY

The current paper collected the data for nine selected ASEAN countries, namely Cambodia, Brunei, Malaysia, Myanmar, Indonesia, Singapore, Thailand, The Philippines, and Vietnam that span for 16 years from the Worldwide Governance Indicator dataset. The reason why this study focuses on the nine countries and excluded Laos and Timor Leste that are also members of ASEAN are

³ Besides that, Singapore has attracted more FDI inflows due to the formalized and efficient economic environment (Sesay, 2016).

due to the unavailability of data. The study utilizes six independent variables that measure institutional factors, namely i) Voice and Accountability, ii) Political Stability and Absence of Violence/Terrorism, iii) Government Effectiveness, iv) Regulatory Quality, v) Rule of Law and vi) Control of Corruption. The data for Foreign Direct Investment that proxies the inflow of investment for each country and the Gross Domestic Product meanwhile are obtained from the World Bank Databank⁴.

Voice and Accountability

Indicates the capacity of the people in the country to participate in determining their government, freedom to express their opinion, to form association, and the freedom of their media.

Political Stability and Absence of Violence/Terrorism

Measures the probability of political uncertainty and/or politically-induced social unrest, including terrorism.

Government Effectiveness

Accounts the opinions of the society on the state of public services, civil service and the extent of its autonomy from political influence. It also reflects the effectiveness of constructing and executing public policy and the integrity of the government's commitment.

Regulatory Quality

Reflects confidence of the society on the capacity of the authority to construct and enforce effective plans and rules that encourage the expansion of the private sector.

Rule of Law

Shows the level of trust of the people towards the law and to obey the law.

⁴ Gross Domestic Product is included in the analysis to represent macroeconomic variable that are identified to be significant in influencing FDI by other researchers (Amal et al. 2010; Erkekoglu & Kilicarslan, 2016).

Control of Corruption

Shows the ability to curb the problem of corruption.

$$y = \ln(\sqrt{(x^2 + 1)})$$

Since some of the institutional factors are negative in values, all variables are transformed into natural logarithm using the following procedure⁵:

Random Effects Model

According to Hill et al. (2008), random effects model assume that all individual differences are captured by the intercept parameters just like fixed effects model. But the difference is that in random effects model, the individual differences are treated as random rather than fixed.

The random effects model can be written as;

$$\begin{aligned} y_{it} &= \beta_0 + x'_{it}\beta + (\alpha_i + u_{it}), \quad i = 1, \dots, N \text{ (individual firms)}, t = 1, \dots, T \text{ (Time)} \\ y_{it} &= \beta_0 + x'_{it}\beta + (\alpha_i + u_{it}), \quad i = 1, \dots, N \text{ (individual firms)}, t = 1, \dots, T \text{ (Time)} \\ u_{it} &\sim \text{IID}(0, \sigma_u^2) \quad u_{it} \sim \text{IID}(0, \sigma_u^2); \quad \alpha_i \sim \text{IID}(0, \sigma_\alpha^2) \quad \alpha_i \sim \text{IID}(0, \sigma_\alpha^2) \end{aligned} \quad (1)$$

The first error component or α_i is an individual specific component of the error term that fixed over time and attributed to all of the error terms correlations. The second error component or u_{it} on the other hand is assumed to be uncorrelated and vary over time. The estimation of β_0 and β can be done using Generalized Least Square (GLS) estimator by transforming OLS estimators to obtain an equation that contains quasi-demeaned data:

$$\begin{aligned} (y_{it} - \vartheta \bar{y}_i) &= \beta_0(1 - \vartheta) + (x_{it} - \vartheta \bar{x}_i)' \beta + (v_{it} - \vartheta \bar{v}_i) \\ (y_{it} - \vartheta \bar{y}_i) &= \beta_0(1 - \vartheta) + (x_{it} - \vartheta \bar{x}_i)' \beta + (v_{it} - \vartheta \bar{v}_i), \end{aligned} \quad (2)$$

Where;

$$\vartheta = 1 - \psi^{1/2} \quad \psi = \frac{\sigma_u^2}{\sigma_u^2 + T\sigma_\alpha^2} \quad \text{and that } \psi = \frac{\sigma_u^2}{\sigma_u^2 + T\sigma_\alpha^2}. \quad (3)$$

The composite error term $v_{it} = (\alpha_i + u_{it})$ is serially correlated across time as α_i is present in each time period. But transforming the model into Equation (5) eliminates the serial correlation and leads to the error term $(v_{it} - \vartheta \bar{v}_i)$ that is now IID over individuals and time. In order to estimate the unknown variance components σ_α^2 and σ_u^2 in Equation (3). Feasible GLS estimator or EGLS can be used where $\hat{\sigma}_u^2 = \frac{1}{N(T-1)} \sum_{i=1}^N \sum_{t=1}^T \hat{u}_{it}^2$ meanwhile $\hat{\sigma}_\alpha^2 = \hat{\sigma}_B^2 - \frac{1}{T} \hat{\sigma}_u^2$. The estimator β_0 and β obtained from Feasible GLS is referred to as the **Random Effects** estimator.

⁵ The same method is used by Busse and Hefeker (2007) to maintain the initial sign of the variables.

RESULT OF ANALYSIS

Based on the Hausman test, Random Effects model is preferred over Fixed Effects model since the unique error terms (α_i) are identified to be not correlated with the regressors. Breush-Pagan Lagrangian test, on the other hand, indicates significant differences across countries and suggest the suitability of the Random Effects model over

the simple Pooled OLS. By referring on these two arguments, the current paper focuses on the results of Random Effects model. Regarding the robustness and the efficiency of the Random Effects model, it is identified that the overall R-Squared indicates that 78 percent of the observations are explained by the model. The Wald test meanwhile shows that all of the coefficients in the model are significantly different than zero.

Table 1 The results of random effects estimation on the institutional factors and foreign direct investment for selected ASEAN countries

Variables	Random Effects Model
Voice and Accountability	-0.3819 (0.2605)
Political Stability	0.6140*** (0.2158)
Government Effectiveness	-1.7203*** (0.4652)
Regulatory Quality	0.5351 (0.4285)
Rule of Law	0.2812 (0.6072)
Control on Corruption	0.9626** (0.4083)
Gross Domestic Product	1.2507*** (0.0864)
Constant	-9.5370*** (2.2814)
R-Square	0.7853
Wald Chi-Square	308.20
Probability (Chi-Square)	0.0000
Observation	142

Note: Dependent variable is the FDI in the US Dollar for nine individual ASEAN countries. All variables are expressed in natural logarithm. Standard errors for dependent variables are shown in parentheses with *, **, *** indicate statistical significance at 10%, 5%, and 1% level, respectively.

By referring to Table 1, there are four variables that are significant in explaining the movement of Foreign Direct Investment where political stability, control on corruption and GDP exhibit a positive relationship with FDI. It is identified that a 10 percent increase in political stability contributes to a 6 percent increase in FDI. A 10 percent increase in the control of corruption meanwhile causes the FDI to move in a similar direction by 9.6 percent while 10 percent increase in the

economic development that is represented by the GDP contributes to 12.5 percent of the increase in FDI.

Government effectiveness, on the other hand, is identified to be the most dominant factor that explains FDI as can be seen with its large coefficient value. However, the negative sign in its coefficient signals the inverse relationship between the two variables where a 10 percent increase in the effectiveness of the

government explains the reduction of inflows of investment from abroad by 17.2 percent. Voice and accountability, quality of regulation, and rule of law meanwhile are not significant in influencing the FDI at any level.

CONCLUSION

Results reveal that there are four variables that are significant in explaining the FDI for ASEAN countries. The positive relationship between political stability and FDI is consistent with the findings of Karim et al. (2012) and Abdella et al. (2018) who argue that higher levels of political stability on developing markets cause such markets to become more attractive to foreign investors. According to Amal et al. (2015), political stability presents an important influence on a market's business environment and a relevant characteristic for long-term ventures like the FDI. Rashid et al. (2017) meanwhile explain that foreign investors are more likely to invest in high political stability country due to the high confidence level. Political stability would also help the government to pay more attention to creating policies to improve the financial market and ultimately benefits foreign investors.

Control on corruption is also an important feature that determines the level of FDI and this finding is consistent with literature such as Karim et al. (2012). Wei (2000) believes that corruption has an adverse impact on FDI since it increases the costs for doing business as the investors have to provide some financial incentives to the officials in order to obtain licenses and permits. The positive and larger influence of GDP on FDI as can be seen on the higher coefficient value is as expected and similar to the findings of Amal et al. (2010) and Erkekoglu and Kilicarslan (2016). It signals the importance and relevance of economic factors over institutional factors when it comes to attracting foreign investors.

Consistent with the findings of researches such as that of Amal et al. (2010) and Berden et al. (2012), government effectiveness

is identified to have a negative relationship with FDI. Against the hypothetical relationship with FDI, Amal et al. (2010) suggest that the macroeconomic features from these countries are more dominant than the institutional factors or that there are conditions for such countries to advance even more on these macroeconomic features to possibly generate even more gains despite lacking in the institutional factors when it comes to attractiveness for foreign firms.

Based on the findings, it is clear how institutional factors are important in determining the level of FDI for the ASEAN region. Sound institutional factors are important in attracting foreign investors as it reduces uncertainty, cost and creates higher chances of generating revenue. This study, however, has its own limitations. First, it only considers the institutional factors from the host countries only without analyzing factors that determine the outflow of investment from the country of origin. Second, it excludes other macroeconomic factors that might be important in influencing FDI for the region as well. For further research, it is suggested that these features will be taken into account to extend the knowledge on this important topic.

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